Taming Tiger Country: Colonization and Environment in the Russian Far East,

1860-1940

DISSERTATION

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Abstract

This dissertation examines the relationship between colonization and environmental change in the Russian province of Primor’e between roughly 1860 and 1940. In doing so, it explores the ecological dimensions of Russia’s expansion across Asia and contributes a new perspective to the environmental history of the Russian Empire and Soviet Union. It contends that imperial competition over space and resources was the driving factor behind the environmental changes that occurred in Primor’e after 1860, yet also underlay the emergence of nature protection in the territory. From the outset of Russian colonization, Primor’e’s environment—both as an idea and a material reality—was contested, highly politicized, and intertwined with ethnic and social divisions. This contestation over space, resources, and nature had far-reaching consequences for the territory and its nonhuman environment.

Beginning in the late 1850s, the tsarist state sought to acquire Primor’e and colonize it with Russian and European settlers (including Ukrainians, Balts, Finns, and others) in order to take advantage of temporary Chinese weakness and to defend its eastern territories against other imperial powers. A territory that the Qing Empire had long preserved as a lightly-populated borderland, Russian authorities attempted to seize, demarcate, populate, and cultivate. Moreover, tsarist and (after 1922) Soviet authorities encouraged migrants to utilize Primor’e’s natural resources in order to lay claim to the
territory (along with its flora and fauna), and to provide a supply source for the Russian Far East.

However, Primor’e’s unique environment complicated Russian settlement efforts, particularly the transplanting of Russian-style agriculture and stock-breeding. Rather than producing a bounteous agricultural colony, settlers came to rely on hunting, fishing, wage-labor, and close economic relationships with migrants from China and Korea. Together, these groups precipitated significant environmental changes in Primor’e, including deforestation, a decline in many animal populations, erosion, and more frequent and violent flooding.

The ecological effects of settlement in Primor’e almost immediately prompted widespread concern among officials, scholars, and other educated elites. These figures interpreted ecological change as symptoms of broader threats to Russian colonization, including the supposedly “barbaric” and “backward” character of East Asian migrants and Russian and Ukrainian colonists. Environmental questions played a key role in defining and deepening ethnic and social distinctions in the territory, and resource policies emerged as attempts to exclude or control the use of nature by the “uncivilized.”

Elites responded to ecological changes with a kind of “green” civilizing mission: the belief that managing and protecting nature in a “rational” way was in the interests of Russian colonization. Tsarist and later Soviet leaders sought to make forestry, agriculture, fisheries, and the management of land mammals more “rational” through the application of planning, European science, modern technologies, and state oversight. In doing so, they laid the groundwork for several very successful conservation initiatives in
the twentieth century. “Rational” use, however, was oriented toward asserting
Russian/Soviet power in the Far East and bore the legacies of Primor’e’s ethnic and
social divisions. The result, beginning in the tsarist period and continuing into the Soviet
era, was an unprecedented degree of nature protection alongside environmental
exploitation, a combination rooted primarily in local conditions and historical experience.
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Introduction

Between 1858 and 1860, the Russian Empire acquired vast new territories in what is now known as the Russian Far East. First, with the Treaty of Aigun, came the left (northern) bank of the Amur River, the great artery that drains much of Mongolia, Manchuria, and Eastern Siberia. Then, through the 1860 Treaty of Beijing, Russia also acquired the area that became known as Primor’e—the Maritime Territory—a strip of land stretching from the Amur in the north to the Korean border in the south, and from the Sea of Japan in the East to the Ussuri River in the west (see figures 1 and 2).

Though contiguous with Siberia, Primor’e was in many ways an “un-Russian” space. With its maritime orientation, monsoon climate, mountainous terrain, and unusual collection of boreal and temperate wildlife—including, most famously, the Amur (Siberian) tiger—the territory’s environment stood out from other parts of the far-flung tsarist realm. In the mid-nineteenth century, it was the domain of the indigenous Nanai, Udeghe, Orochi, Ul’chi, and Nivkhi peoples and nominally part of the Qing (Manchu) Empire of China. Yet over less than a century beginning in 1860, more than half a million people settled in the sparsely-inhabited region, most of them Russians and Ukrainians, turning it from terra incognita (from the Russian perspective) into an integral part of Russia, as it has remained since.
This study explores how and why Primor’e became “Russian,” what inclusion in the Russian Empire and Soviet Union meant for Primor’e’s nonhuman environment, and what the territory’s experience can tell us about the environmental history of the Russian Empire and the Soviet Union. It examines how Primor’e’s environment changed under the influence of Russian colonization and how the province’s inhabitants and governments responded to environmental transformations, focusing on the period between 1860, when tsarist Russia acquired the province, and the 1930s, when colonization efforts came to a close. In doing so, it aims to contribute insights from the Russian experience to conversations about the historical relationships among empire, ecological change, and the environmental sciences. It also brings to the fore the role of the environment in the creation and governance of the Russian Empire and Soviet Union, emphasizing the interconnections among empire, ethnicity, and nature.

Contestations over nature lie at the heart of Primor’e’s story. From the 1860s onward, Primor’e’s environment was highly politicized, charged with a variety of meanings, and tied to the fate of Russia’s Far Eastern empire. This struggle over space and nature, I argue, was the driving force behind both the ecological changes that occurred in Primor’e and the efforts on the part of state and civil society to stem those changes. The tsarist state sought to acquire Primor’e, colonize it with Russian and European settlers (of varying ethnicities), and tame the territory’s “unruly” land, waters, flora, and fauna in order to better compete with other imperial powers in northeastern Asia. Doing so proved more complicated than many had originally envisaged, however, as Primor’e’s unique environment exerted a powerful influence on Russian and East
Asian settlement, hampering in particular the development of agriculture.

Colonization also precipitated a range of environmental changes—some intended by imperial authorities, most not—from deforestation to the near-disappearance of tigers and deer. Yet the environmental effects of colonization prompted outrage among the tsarist elite, who viewed these changes as part of broader threats to the imperial project. Tsarist and later Soviet officials saw environmental degradation as a manifestation of barbarism, backwardness, irrationality among Russian settlers and of the so-called “yellow peril,” the threat of being overwhelmed by East Asian migrants and/or attacked by China and Japan. As a result of this confluence of concerns, “nature” (both as an idea and as a material reality) came to play a key role in inter-ethnic relations and in constructions and actualization of ethnicity in the territory. The “yellow peril” here was in large part about deer, sable, trees, fish, and other elements of the Primor’e’s environment, while the use of nature came to be a key mark of distinction between “civilization” and “barbarism.” Both tsarist and Soviet governments sought to make the use of nature more “rational”: planned, orderly, informed by European science, employing modern technologies, and operating within environmental limits. In this view, conservation and “rational” colonization were complementary goals.

I argue that the pursuit of “rational” development defined conservation policy and resource use beginning in the late 1800s and continuing into the early Soviet period (1922-1945). The combination of stringent nature protection and environmental despoliation that characterized resource use in the Soviet Union followed a common logic: the belief that science and state oversight could effect “rational” development and
that such a course was in the interest of the state and nature. Such a view emerged in the

tsarist period in response to a combination of external competition and environmental
conditions, circumstances that remained largely the same after the Revolution. Making
Primor’e “Russian” (or “Soviet”) was less about conquering nature than utilizing and
conserving it in ways that complemented state- and empire-building in the Far East.

Figure 1: The Russian Federation and present-day Primorski krai (red)¹

Figure 2: Primor’e.²

² Author’s rendering of a map adapted from Atlas SSSR, 2nd Ed., Glavnoe upravlenie geodezii i kartografii pri Sovete Ministrov SSSR (Moscow, 1969), 56.
**Land, climate, and wildlife**

Primor’e was and remains a distinct part of Russia. As its name (“on the sea”) suggests, it is a maritime territory with strong climatic, geographic, and historical links to the wider Asia-Pacific region. In its climate it is more like Hokkaido than central Russia, or for that matter Eastern Siberia. Although its winters are dry and cold, in the summer the East Asian monsoon brings warm, moist air, along with abundant precipitation (see figures 4 and 5). As the monsoon meets the cold Tatar Current, flowing southward along Primor’e’s eastern shore, fog blankets the rugged coast and heavy rains fall throughout the interior. In late August and September, Pacific typhoons often make landfall here, bringing drenching rains, high winds, and flash flooding. Throughout the region, the summer months produce some three-quarters of the region’s total precipitation, a stark difference between Primor’e’s climate and that of European Russia.3

Also unlike most of Russia, Primor’e is mountainous, with level areas only along the seacoast and in river valleys. The Sikhote-Alin range, running north by northeast, forms the geological spine of the territory. An old, weathered range not unlike the Urals or Appalachians, the mountains of the Sikhote-Alin reach up to 6,800 ft., with steep slopes in the east where the mountains fall away rapidly to the Sea of Japan and a gentler incline in the west.4 In the east, streams and rivers drain directly into the sea, while those in the west empty into the Ussuri River, the province’s primary watercourse, which flows

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northward to meet the mighty Amur River at the city of Khabarovsk (see figure 7). Around the headwaters of the Ussuri is Lake Khanka (Chinese: Xingkai), the largest freshwater lake in northeast Asia. Khanka is broad and shallow, covering roughly 1,690 square miles but with an average depth of only 12 to 15 feet. Once surrounded by a vast expanse of marsh and lea—made famous by Akira Kurosawa’s 1975 film, Dersu Uzala (see figure 3)—the plain around Lake Khanka is today Primor’e’s agricultural heartland.

Primor’e’s geography, climate, and natural history combine to create unique environmental conditions and an astonishing range of flora and fauna. The area was a refugium (an unglaciated zone) during the Pleistocene ice age, enabling species to survive here that went extinct in other parts of Eurasia. Today, it boasts 100 endemic (globally unique) plant and animal species, and for this reason the Sikhote-Alin Mountains were declared a UNESCO World Heritage Site in 2001. The forests of Primor’e and neighboring Khabarovskii krai, known collectively as taiga (a term also used to describe boreal forests), are among the most biodiverse in Russia, with over 4,000 vascular plant species, including 64 varieties of trees. Because of its diversity and high levels of precipitation, Primor’e’s taiga is considered by some botanists to be a temperate rain forest or “boreal jungle,” one of the last of its kind in Asia. The taiga is also a place of constant flux, in large part because of its topography and hydrological regime. Most

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of the region’s watercourses are short and steep, originating in the mountains of the 
Sikhote-Alin and flowing quickly to the larger Ussuri and Amur rivers, or, on the east 
slopes, directly to the sea. In these streams and rivers, heavy summer precipitation can 
create raging, destructive torrents. River valleys and stream beds are often highly eroded 
and main channels frequently shift. In some places of the broken Sikhote-Alin, the 
watershed itself seems to change, as waterways flow down the slope opposite to their 
ultimate destination.\(^8\) In much of Primor’e, shallow soil induces trees to grow lateral 
roots such that they are easily uprooted in cases of floods or high winds. Arid winters 
leave the taiga dry and prone to wildfires by spring. Some species, such as Korean pine 
and cork trees are adapted to survive in low-level fires, while others grow quickly in 
burnt-out stands. The taiga’s diversity owes much to such shocks, which are constantly 
remaking the landscape.\(^9\)

Animal life is similarly diverse. Species typical of northern (or boreal) 
environments like sable, marten, moose, brown bear, wolverine, and lynx, share the 
province (though not necessarily the same local habitat) with wild boar, Himalayan black 
bears, several types of deer, raccoon dogs, and other temperate species. Most famously, 
Primor’e is also home to the Amur tiger, the world’s largest cat (see figure 6), as well as 
the nearly extinct Amur leopard. Its rivers, lakes, streams, and coastal waters are also 
rich in plant and animal life. As in much of the North Pacific littoral, salmon (humpback 
and pink) migrate up Primor’e’s rivers during annual spawning runs. The Amur and

\(^9\) V. K. Arsen’ev, *Voennno-geograficheskii i voenno-statisticheskii ocherk assuriiskago kraia, 1901-1911 g.g.* (Khabarovsk: Tipografiia shtaba priamurskago voennago okruga, 1911), 114–15.Rosenberg, 
Conservation,” 330.
Ussuri Rivers are also important habitats for sturgeon, catfish, pike, perch, and a variety of other species. The rocky seacoast is rich in crab, kelp, sea cucumbers (tre pang), and marine mammals. Lake Khanka and its surrounding wetlands are also a key stop-over point for tens of thousands of birds migrating between Siberia and more temperate regions to the south. Marveling at the profusion of wildlife on Lake Khanka, one visitor in the early twentieth century opined that Primor’e’s collection of flora and fauna were so strange and wondrous that they constituted either a “riddle or a joke of nature.”

Figure 3: Scene from *Dersu Uzala*. Dersu Uzala (right) and Vladimir Arsen’ev (left) on the shore of Lake Khanka.  

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Figure 4: The East Asian monsoon (right) and prevailing winter winds (left).

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Figure 5: Vegetation in the Amur-Primor’e region.\textsuperscript{13}

\textsuperscript{13} A. V Zhulidov, M. J Brannen, and National Hydrology Research Institute (Canada), \textit{Atlas of Russian Wetlands} Saskatoon: National Hydrology Research Institute, 1997), 238.
Figure 6: Amur tiger in the Ussuriiskii nature reserve.\textsuperscript{14}

Figure 7: The Ussuri River basin with major tributaries. Map displays current boundaries and river names.\(^\text{15}\)

**Historiography and arguments**

*Empires and environments*

This Far Eastern province was but one corner of the vast realm that comprised the Russian Empire and, from 1922 to 1991, the Soviet Union. At their height, these polities encompassed nearly one-sixth of the earth’s land surface, a space remarkable both for its extent and for its cultural and environmental diversity. There is, however, relatively little scholarship addressing the environmental history of the Russian Empire, and only slightly more on the Soviet Union. Historians have long invoked environmental factors in shaping elements of Russian history, from agricultural productivity to political institutions to the fate of invading armies, often in the tradition of environmental determinism.\(^\text{16}\) Yet the conscious examination of past relationships between society and the environment\(^\text{17}\) in Eurasia remains in its early stages, despite rapid growth in recent years (discussed below).

This study aims to contribute an environmental perspective to the study of Russian and Soviet empires while situating the Russian experience within conversations about the relationship between empires and their environments more generally. In contrast to much of the existing scholarship on imperialism and the environment, this study highlights the role of geopolitical factors—specifically, imperial competition—in driving ecological change and shaping the rise of conservation. It situates the rapid shift


\(^{17}\) This definition of environmental history comes from J. Donald Hughes, *What Is Environmental History?* (Cambridge: Polity Press, 2006), 1, 18.
from a political economy based on hunting, foraging, and territorial isolation to one centered on agriculture, industry, and rapid settlement within the competition for space, resources, and imperial prestige that spread across East Asia in the mid- to late-nineteenth century. This political, demographic, and economic transition produced rapid ecological changes in Primor’e, from deforestation and erosion to a decline in large mammal populations. At the same time, the tensions resulting from empire-building and settlement in the region also precipitated the emergence of conservationist sentiments, policies, and practices that had equally far-reaching consequences for Primor’e’s human and nonhuman inhabitants.

By “bringing nature in,” this work builds upon a large body of scholarship that has brought to the fore previously unexamined elements of the Russian imperial experience. Over the past 25 years, scholars have explored the complexity and diversity of the Russian Empire and Soviet Union, emphasizing in particular non-Russians’ role in the creation and function of both polities. Such studies have done much to offer a more detailed, balanced view of both the tsarist and Soviet empires, one that explains the unity and longevity of both polities in ways that previous accounts could not. ¹⁸ Similarly, this

study aims to highlight the role of nature in Russian imperial history, rather than taking it as a mere backdrop of historical events. It adheres to the belief that history is incomplete without an assessment of the interactions between humans and their environment. In the Russian Empire and Soviet Union, as elsewhere, the natural world created constraints and opportunities that shaped human existence. Adapting to new environments and changing those environments (wittingly or not) was an integral part of the imperial experience, shaping daily life, governance, science, and social interactions.

This dissertation also engages with two broad literatures within the field of environmental history: the study of ecological change in colonial contexts and the development of conservationism and environmental management. Of these, the first has examined how ecological factors (such as disease, climate, and invasive species) shaped European imperialism, particularly in the Americas, and has shown in great detail that the spread of certain lifeways (settled agriculture, global commerce, fossil-fuel based industries, for e.g.) during the early modern and modern periods represented a sea change in humans’ relationships with the nonhuman environment. Among the most prominent contributions to the study of empire and the environment are works that address what Alfred Crosby called “ecological imperialism,” biological exchanges that caused dramatic environmental changes as a corollary to imperial expansion and/or migration. Crosby pointed out that many of these transfers were partly unintended, and that


Europeans’ biological “portmanteau” of crops, weeds, diseases, and domestic animals deserves much of the credit for the success of European colonization and the creation of “neo-Europes” in the Americas, Australia, and New Zealand. A related line of inquiry is the study of intentional remaking of landscapes, including through the transfers of biota from metropole to colony or between colonies, as between Australia and California.

In accounting for the causes of environmental transformations of colonial spaces scholars have also drawn attention to the translation of political, economic, social, and cultural norms from metropole to colony. This line of scholarship has focused especially on capitalism, commerce, and/or the commodification of nature in ecological transformations, and on the interaction between these forces and indigenous lifeways in frontier zones. Among the formative works in this vein are those of William Cronon, whose *Changes in the Land* examined the impact of English colonists’ approaches to nature-use in New England. Cronon highlighted in particular the role that commodification of natural resources played in transforming the American landscape, a theme that he developed further in his *Nature’s Metropolis*. Similarly, scholars of the British Empire have emphasized the importance of commodity-oriented capitalism,


supported by imperial military and political power, in fundamentally altering human-nature relations from British Columbia to the Transvaal. Indeed, perhaps because they are oriented toward the Anglo-American world, most of the existing comparative works on empires and the environment focus on the commodification of nature and Euro-American capitalism as critical driving forces in global environmental history. Others have stressed the damage wrought by Europeans’ mechanistic, patriarchal, and/or exploitative worldview, which, according to some scholars, replaced more environmentally-friendly local beliefs.

Works addressing areas beyond the “Anglo” world have also stressed the role of commerce in ecological change, though they have generally placed more emphasis on population growth as well as technological and agricultural change. Environmental histories of China in particular have cited the force of population pressure and agricultural intensification in causing the slow but inexorable expansion of Han Chinese communities into previously remote peripheries, displacing indigenous peoples and wildlife in the process. Robert Marks, in his studies of China’s environmental history,

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has argued for a reorientation away from global capitalism toward a more general conception of intra- and inter-regional commerce, an argument that also resonates with the Latin American experience.\(^{25}\) Bringing many of these threads together, John Richards has argued that in the early modern world, rising populations, intensified land use, and increasingly globalized markets for natural commodities help explain the rapid expansion of settlement and resource frontiers throughout the world, and the associated ecological effects.\(^{26}\)

The environmental changes that accompanied settlement in Primor’e were broadly similar to those observed along settlement frontiers throughout the world, including elsewhere in Russia. In China, the Americas, South Africa, and Australia, farming expanded into lands previously utilized in different ways, displacing or absorbing pastoralists and hunter-gatherers. In European Russia, peasant agriculturalists had for centuries pushed further into forest and steppe zones, transforming the land and its nonhuman inhabitants in the process.\(^{27}\) The same was true on the edges of the tsarist empire, such as in the Caucasus Mountains, where deforestation also accompanied


Russian colonization, either as a by-product of settlement or a deliberate strategy aimed at subduing mountain peoples.\footnote{Thomas M. Barrett, At the Edge of Empire: The Terek Cossacks and the North Caucasus Frontier, 1700-1860 (Boulder, CO: Westview Press, 1999), 57–88; Nicholas B. Breyfogle, Heretics and Colonizers: Forging Russia’s Empire in the South Caucasus (Ithaca: Cornell University Press, 2005), 87–127.}

Similarly, in Primor’e among the principal effects of colonization was deforestation, a result of the rapid expansion of settled agriculture, an increased frequency in forest fires, and the introduction of commercial logging. Many parts of Primor’e’s taiga also underwent changes in species composition, as fires and logging selected against large conifers and allowed fast-growing deciduous species to take their place.\footnote{This particular dynamic was very similar to changes in forest composition in pre-modern Japan. Conrad D. Totman, The Green Archipelago: Forestry in Preindustrial Japan (Berkeley: University of California Press, 1989). See also Timothy C Weiskel, “Agents of Empire: Steps Toward an Ecology of Imperialism,” Environmental Review: ER 11, no. 4 (1987): 275–88; Elinor G. K Melville, A Plague of Sheep: Environmental Consequences of the Conquest of Mexico (Cambridge; New York: Cambridge University Press, 1994).} The loss of forest cover, combined with the territory’s hilly terrain and heavy rains, likely worsened flash flooding and contributed to soil erosion in river valleys. Finally, many animal species saw their numbers rapidly reduced under the combined pressure of habitat loss and hunting. Some aquatic species also became rarer, including sturgeon and, in the twentieth century, salmon. As elsewhere in the world, anthropogenic environmental effects in Primor’e resulted from complex interactions between humans and the local ecology and were seldom straightforward. Greater forest clearance, for instance, increased opportunities for some animal species, such as wild boar. Some animals, rather than being wiped out completely, seem to have migrated in response to human hunting and habitat loss.
While this study explores why we see environmental changes in Primor’e in the context of colonization, it also seeks to understand why such changes were not greater than they were. Indeed, a glance at a map of the region today shows that the province’s forest cover is noticeably greater than in neighboring Manchuria and that tigers have persisted here while being almost entirely extirpated from China (see figures 8, 9, and 10). Into the early nineteenth century, most of Manchuria (with the exception of its central plain, high peaks, and the vicinity of a few settlements) and nearly all of Primor’e were covered with forests, and tigers were common in both regions.30 In the late nineteenth and twentieth centuries, both experienced deforestation, poaching, and other ecological effects of settlement and development, but the change was substantially greater in Chinese territory. Part the reason for this discrepancy, I argue here, lay in Russian elites’ embrace of conservation as a tool of empire-building and imperial administration.

Figure 8: Forest cover in Primorskii krai (right), Heilongjiang, and Jilin provinces (left).\textsuperscript{31}

\textsuperscript{31} Google Maps, “Primorskii krai, Russia,” accessed March 7, 2016, https://www.google.com/maps/place/Primorsky+Krai,+Russia/@45.2855722,130.2200741,1665718m/data=!3m1!1e3!4m5!3m4!1s0x5faadb57dee96537:0x7e7b7d06607faafe!8m2!3d45.0525641!4d135.
Figure 9: Estimate of the distribution of the Amur tiger in the mid-nineteenth century.32

Competition with rivals in northeast Asia (Britain, China, and Japan) was the main motivation for Russian colonization of Primor’e during the tsarist era. Throughout the period under consideration, it was security concerns and territorial control, more than demand for resources or market pressures, that motivated tsarist and Soviet efforts to colonize Primor’e with Russian subjects and to alter who was using Primor’e’s natural resources and in what ways. This is not to say that tsarist or Soviet authorities controlled how Primor’e’s inhabitants engaged with nature on a day-to-day level, nor that the environment neatly conformed to imperial policy. As will be discussed below, the

Figure 10: The current distribution of tigers in Asia.\textsuperscript{33}

\textsuperscript{33} Marks, China, 2.
opposite was often the case. Nevertheless, the decisions of a relatively small circle of officials were integral to initiating and sustaining Russian settlement in the territory, often at great expense to the state. After Russia acquired Primor’e, migrants from European Russia (including present-day Ukraine and Belarus, the Baltic provinces, and Finland) were reluctant to migrate to the new territory, particularly because sparsely-occupied, fertile lands remained in areas that were more accessible, such as western Siberia and Kazakhstan, throughout most of the late-tsarist period. The state initiated, encouraged, and to a great extent coordinated settlement of the territory and the expansion of resource-extraction industries, primarily because officials believed peopling the territory was necessary to hold it. Such concerns remained paramount in the early Soviet era as well, when the region’s insecurity, together with an influx of East Asian migrants, motivated settlement efforts. Making Primor’e “Russian” entailed concerted state efforts and a very deliberate policy of colonization. Moreover, officials directed Russian and European settlers to make use of particular resources—especially fisheries—lest they remain in the hands of East Asians. This “use it or lose it” mentality was a key element of resource policy in both tsarist and Soviet Primor’e periods.

While economic and demographic factors were relevant in Primor’e’s history, they cannot fully explain why Russians colonized Primor’e and why they did so at this point in history. True, surplus population in European Russia was in some sense a prerequisite for settlement of Primor’e during the late tsarist and early Soviet eras (which was mostly voluntary), and both tsarist and Soviet officials looked to the Asia-Pacific region (especially China and Japan) for natural commodities markets. Tsarist officials
also alternately encouraged, accepted, or were forced to accept settlers from China and Korea, who faced population pressure at home. However, tsarist and Soviet states also pushed against the force of regional population pressure and the draw of natural commodities markets. Forest and sea products attracted seasonal migrants and settlers from China and Korea and became an important source of income for Russians and other settlers after they had arrived. However, tsarist and Soviet governments sought to interdict or control the trade of forest and sea products, leading to conflict with East Asian migrants and occasionally with Russian settlers as well. Both states also sought at various times to restrict East Asian migration altogether—in part because of the effect of commodities trades—by enacting draconian policies in the 1910s and again in the 1930s. The manner in which these states attempted to colonize Primor’e with Russian subjects often occurred in the face of regional demographic and economic trends, rather than because of them. Nor did “ecological imperialism” play much of a role in either Russian colonization or in the environmental changes that occurred in Primor’e. As we will see, Russian settlers experienced great difficulty in transplanting biota from their homelands to Primor’e and in cultivating its lands.

**Green imperialism and the green civilizing mission**

The tension between imperial goals, on the one hand, and demographic, economic, and biological realities, on the other, informed Russian elites’ responses to ecological change and exerted a powerful influence on the rise of conservationism in Primor’e. Likewise, nature played a key role in shaping the interaction between imperial
and Soviet elites and Primor’e’s various peoples, especially with regard to ideas of “predatory” or “rapacious” East Asians. In this regard, the region’s experience resonates strongly with that of other European empires and the United States, where empire, conservation, and the environmental sciences developed in interaction with one another. Similarly, conservation in Primor’e was closely connected to the “asymmetries of power” characteristic of colonial environmental management, the ways in which power inequalities shaped knowledge, expertise, and control with respect to nature.34

Although Russia is not often associated with environmental stewardship, this study shows that there was widespread concern for the state of the nonhuman environment among educated Russians in late-tsarist and early Soviet Primor’e. Nearly every account of Primor’e written after 1860 that addressed Primor’e’s forests, fisheries, and animal life ascribed ecological change to human action. Conspicuously absent from such works are celebrations of humanity’s “conquest over nature” or providentialism, the belief that environmental changes simply reflected God’s will. Instead, tsarist (and subsequently Soviet) elites viewed natural resources as finite and considered most ecological changes to be detrimental to the interests of the state and those of settlers. As I argue here, conservationism rose to the fore in Primor’e in large part because contemporaries associated ecological change with threats or obstacles to Russian colonization of Primor’e: including the influx of East Asian migrants; the state’s limited reach in the territory’s interior; and peasants’ supposed backwardness and failures as colonists. The particular form of nature protection that emerged in Primor’e was firmly

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conservationist, insofar as it was concerned with conserving resources for future human use, rather than protection of nature from use for its own sake. Some, such as the famous explorer Vladimir Arsen’ev, levelled a critique that ascribed intrinsic value to untrammeled nature, much like preservationists in the United States at the same time. But Arsen’ev’s preservationist views were exceptional, and in most cases he too embraced conservationist ideas. 35

The close links between conservation and empire-building in Primor’e evoke the experiences of other settler societies. Late tsarist Primor’e experienced what Richard Grove has called “green imperialism,” the emergence of conservationism and environmental thought as a response to rapid changes in colonial environments and as part of a critique of empire. 36 Grove’s work focused on the early modern British, French, and Dutch empires, while other scholars have found a similar interplay between colonialism, conservation, and the science of ecology throughout the British Empire in the nineteenth century. In the Russian context, Ryan Jones has shown that naturalists working for the tsarist empire in the North Pacific during the eighteenth century also rethought their ideas about human-nature relations—and about the Russian Empire.

35 On the distinction between conservationism and preservationism, see especially Donald Worster, Nature’s Economy: The Roots of Ecology (San Francisco: Sierra Club Books, 1977), 150–54; Stephen Brain, Song of the Forest: Russian Forestry and Stalinist Environmentalism, 1905-1953 (Pittsburgh, Pa.: University of Pittsburgh Press, 2011), 2; Christine Oravec, “Conservationism Vs. Preservationism: The ‘Public Interest’ in the Hetch Hetchy Controversy,” Quarterly Journal of Speech 70, no. 4 (November 1984): 444. Irena Beu has argued that Arsen’ev was a preservationist, not a conservationist. See Irena Beu, “A Journey towards Environmental Wisdom: Environmental Themes in V.K. Arsenyev’s Thought and Writing with Special Reference to His Books Devoted to Dersu Uzala” (Ph.D. diss., Victoria University, 1998). Arsen’ev is not the focus of this study, but the evidence presented here (particularly in Chapter 3) suggests that he most commonly espoused conservationist ideas, especially in his works of non-fiction, private writings, and studies produced for the state.

itself—as a result of having witnessed the over-hunting of aquatic mammals in the North Pacific.\textsuperscript{37} Similarly, the impact of agriculture on the south Russian steppes was particularly critical to the development of soil science, as David Moon has shown, and to broader reconceptualizations of humanity’s impact on nature.\textsuperscript{38}

This study is consistent with such works in that it shows that the imperial experience was important for the articulation of environmentalist thought in Russian Primor’e. Russian elites in in the region were just as concerned with changes in their imperial environments as the European naturalists, physicians, and others described by Grove and Jones, and here too reaction against rapid ecological change contributed to the emergence of conservationism, just as in India, the United States, and elsewhere.

However, conservationism in Primor’e was also distinct from what Grove called “green imperialism.” First, it emerged much later chronologically, at a time when environmental thought was already well developed. Primor’e was a late addition to the empire—acquired only in 1860—Russian naturalists and other specialists arrived with past experiences in mind. Their critiques of Chinese land-use practices, for instance, began almost immediately after Russia’s annexation of the territory, illustrating a familiarity with anthropogenic deforestation.\textsuperscript{39} Some observers made reference to deforestation elsewhere in the empire or in the Americas (see Chapters 3 & 4), indicating

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\item \textsuperscript{39} As Moon has shown, Russian naturalists were concerned with the climatic impact of deforestation as early as 1833. See Moon, “The Environmental History of the Russian Steppes: Vasillii Dokhuchaev and the Harvest Failure of 1891,” 2005, 109–110; David Moon, \textit{The Plough That Broke the Steppes: Agriculture and Environment on Russia’s Grasslands, 1700-1914} (Oxford: Oxford University Press, 2013), 95–117.
\end{itemize}
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that they were aware of the ecological changes attendant to colonization and wished to avoid repeating past mistakes. In addition, as Jane Costlow and others have noted, deforestation had become a major concern among Russian artists and rural reformers by the mid-nineteenth century.\textsuperscript{40} Second, scientific and other elites largely invoked environmental concerns in support of the tsarist and Soviet states empire-building in Primor’e, rather than as part of a critique of imperialism.

A more appropriate description of the relationship between conservation and imperialism in Primor’e is that of a “green” civilizing mission—the belief that Russia, as the bearer of enlightenment and/or European civilization, was better placed to manage natural resources than non-Russians or than the peasant masses.\textsuperscript{41} Tsarist officials and other educated elites sharply criticized East Asians, primarily seasonal migrants but also some permanent residents, as well as peasant settlers from European Russia for their role in deforestation and overhunting. In the case of Chinese, Koreans, and (after about 1890) Japanese, Russian observers associated ecological degradation as evidence of East Asian “barbarism” and “rapaciousness,” forming part of a wider discourse on the so-called “yellow peril.” Similarly, elites viewed deforestation at the hands of peasant settlers as a product of backwardness, moral failings, and peasants’ deficiencies as agricultural colonists. In this view, East Asians were using too many “Russian” resources, while


peasants were using them inefficiently, yielding both ecological destruction and low agricultural yields.

In the case of East Asians, environmental change and disputes over the use of natural resources had important consequences for the relationships between these peoples and the tsarist and Soviet states. Chinese hunting, Japanese fishing, and (in the Soviet period) Korean land- and water-use contributed to the idea that these peoples were rapacious, greedy, immoral, and/or primitive. Conflicts over resource-use contributed to periodic (and sometimes violent) crackdowns on Chinese migrants, clashes at sea with Japanese fishermen, and to tensions leading up to the deportation of Koreans and Chinese from the Soviet Far East in 1937-38.

In viewing land- and resource-use by peasants, as well as East Asian hunters, gatherers, and fishermen as barbaric and ecologically destructive, Primor’e’s elites echoed their counterparts in other colonial contexts. In Prussia’s Polish territories, as Jeffrey Wilson has shown, German foresters used the misuse of forests as an excuse to dispossess Poles of woodlands. Similarly, in India, British (and subsequently Indian) foresters targeted practices among indigenous groups that they regarded as “backward” and harmful to the forest. 42 Diana Davis, in her study of French Algeria, has found that French scholars and colonial authorities developed a declensionist narrative that blamed

Africans and Arabs for environmental degradation.\textsuperscript{43} The main difference in Primor’e was that the Russian peasantry itself—one of the main instruments of colonization—blurred the line between civilization and barbarism, as it did in elsewhere in the tsarist empire. In this sense, Primor’e’s experience is perhaps closer to that of Latin America or the United States, where early conservation efforts often excluded social undesirables of various ethnicities, including that of the colonizers.\textsuperscript{44}

This study also draws attention to the importance of environmental use (and abuse) in conceptions of ethnicity and nationality during late-imperial and early Soviet periods. While the study of national identity, inter-ethnic relations, and nationality policy in the Russian Empire and the Soviet Union has flourished of late, few scholars have acknowledged the place of nature in forming and mediating relations between different peoples in the Russian and Soviet contexts. Dana Lynn Sherry and Willard Sunderland have pointed out that tsarist officials—in particular those in the Resettlement Administration—were deeply concerned with rearranging the distribution of people so that they better matched the distribution of resources.\textsuperscript{45} This was certainly true in

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Primor’e as well, where the Resettlement Administration sought out migrants who matched particular ecological-economic niches: Balts and Finns for coastal fisheries; Russians and Ukrainians for farming; and Koreans—considered especially good pioneers—to carve settlements out of virgin forest. The connections between ethnicity and environment could also be negative, however. The image of the rapacious, “predatory” Chinese exploiting Primor’e’s animals and peoples because a common trope in writings on the territory. From the 1890s onward, the same rhetoric applied to Japanese fishermen. Similarly, Soviet authorities claimed that Korean farmers were “predatory” owing to their supposed misuse of land- and water-resources. And while concepts of innate ethnic or racial difference became more pronounced in the late tsarist era, the links between environment and ethnicity/nationality remained strong from the 1860s through the 1930s.46


46 Although beyond the scope of this study, the role of nature use in defining and actualizing ethnic and national difference may have accorded well with contemporary ideas connecting “the environment” (variously defined) to ethnicity and nationality during the Soviet period. Marxism emphasized the idea that nationalism (along with other elements of identity) derived from a person’s environment, here denoting one’s socio-economic milieu (rather than nonhuman nature). Environmentalist understandings of difference lost ground in the late 1930s and 1940s, when a primordialist view of nationality (i.e. one that was fixed to heredity) was ascendant. However, the Soviet leadership never abandoned the environmentalist element Marxist theory. Indeed, the Stalinist leadership famously endorsed the Lamarckian theories of Trofim Lysenko, which emphasized environment over genetics. Beginning in the 1960s, the determining role of the natural environment in shaping national character found expression in the works of Lev Gumilev, who argued that environmental influences (such as solar radiation) determined the “passion” and characteristics of the peoples of Eurasia. Gumilev’s works remain very popular in present-day Russia. See especially Mark Bassin, “Nurture Is Nature: Lev Gumilev and the Ecology of Ethnicity,” Slavic Review 24, no. 4 (2009): 872–97. On the tension between environmental and primordial understandings of nationality in the Soviet Union, see especially David L. Hoffmann and Annette F. Timm, “Utopian Biopolitics: Reproductive Policies, Gender Roles, and Sexuality in Nazi Germany and the Soviet Union,” in Beyond Totalitarianism: Stalinism and Nazism Compared, ed. Michael Geyer and Sheila Fitzpatrick (Cambridge: Cambridge University Press, 2009), 102–103; Yuri Slezkine, “The USSR as a Communal Apartment, or How a Socialist State Promoted Ethnic Particularism,” Slavic Review 53, no. 2 (July 1, 1994): 437; Martin, The Affirmative Action Empire, 442–51.
Rational development, empire- and state-building

Responses to environmental change in the late tsarist era—in particular, the embrace of “rational” development as a means to successfully colonize Primor’e without undermining its resource base—also speak to debates in Soviet environmental history and to the question of continuity between pre- and post-revolutionary eras. Early scholarship on the Soviet Union’s environmental history stressed the idea that the country had a uniquely bad environmental track record. Instances of “ecocide,” such as the disaster at Chernobyl or the desiccation of the Aral Sea, came to stand in for the Soviets’ catastrophic rates of pollution and the (mis)management of natural resources. Some argued that the environmental complacency in the Eastern Bloc could be partly ascribed to Marxism-Leninism, which held that ecological problems were a product of capitalist relations of production, and would not exist in a socialist (or communist) society.47 Others, also stressing the Soviets’ uniqueness, emphasized the gross inefficiencies of the Stalinist command economy.48 More recently, scholars have argued that Soviet ecological damage was on the whole not so much worse than what occurred in the West during the same period (particularly if one includes the impact of Western consumption on the Global South), and that Soviet attitudes toward nature were part of a common

Enlightenment heritage that was antagonistic toward nature. In addition, Douglas Weiner showed that, contrary to popular belief, the Soviet Union was at the forefront of ecology in the 1920s, when it enjoyed robust nature-protection efforts and institutions. Foremost among these were the USSR’s remarkable system of zapovedniki, inviolable state reserves earmarked for scientific study, not tourism. Although Soviet ecologists and the zapovednik system suffered under the narrow utilitarianism of the Stalin years, Weiner argued, they retained their integrity and value throughout the Soviet era.

The stark contrast between the zapovedniki, on the one hand, and “ecocide” on the other was evident in Primor’e as well, particularly after World War II. Some parts of the territory were subject to industrial pollution, logging, and mining, while others enjoyed unprecedented levels of protection. The survival and revival of the Amur tiger, which was nearly extinct in the 1920s, is a testament to the achievements of Soviet conservation, as is their decline since the collapse of the Soviet Union in 1991.

I argue here that the extremes of nature protection and resource exploitation in Primor’e had common roots in the pursuit of “rational” development, a concept that emerged in the pre-revolutionary era and gained further state support after the Revolution. Rational development appealed to tsarist and Soviet elites because it seemed to offer a means to reconcile the goals of colonization with concerns about environmental

degradation. Tsarist officials sought to colonize and develop the province to keep it in Russian hands, and they invoked conservation to oust East Asians or limit their activities, and to make peasant agriculture more efficient. To square the circle of conserving resources while pursuing an active program of colonization and resource-development, tsarist officials (and others) sought to effect rational use: using resources in a way that was sustainable, informed by science, and that employed modern techniques and technologies. In this regard, it was a form of “scientifically informed government,” and as with regard to resettlement programs and nationality policy, the idea of rational use evinced much continuity between tsarist and Soviet periods.\(^5^2\)

In this regard, this study largely accords with Stephen Brain’s conclusion that the Stalin-era resource policy was not (as Weiner suggested) antithetical to nature protection. Brain argues that the Soviets’ embrace of technocracy, science-based management of natural resources, and emphasis on the collective good were compatible with a particular form of environmentalism—and consistent with some variants of pre-revolutionary ecological thought, including a kind of sylvan Slavophilism associated with the forester

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Dmitrii Morozov. In Primor’e, the ethos of “rational development” was certainly technocratic and collectivist from the outset. However, it was much closer to the Enlightenment rationalism that underpinned conservation elsewhere in the world than to the Romantic nationalism that Brain highlights in his work.53

In practice, “rational development” meant seeking to control deforestation by peasants and East Asian hunter-gatherers, while also, beginning in the early 1900s, supporting the expansion of industrial timbering, which Far Eastern officials and many among Primor’e’s intellectual elite believed was more rational than allowing peasants to log whatever and wherever they wished. Similarly, rational use meant exerting greater oversight over fisheries but also encouraging Russian subjects to fish more, and investing in capital-intensive fishing vessels that would reduce Russian dependence on the Japanese. It meant the creation of game and forest reserves, but also expanded exploitation of especially valuable species. The same dualistic approach can be found in the early Soviet era, with the new government continuing many pre-revolutionary initiatives and keeping some of the same staff. The belief that conservation and Russian colonization were complementary appeared well before Marxism-Leninism appeared on the scene, and would not have been out of place in the Progressive-era United States.54

Soviet leaders’ attitude toward Primor’e’s natural world was less triumphal antagonism than a belief that rational development would fulfill state needs without undermining the

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53 Brain, Song of the Forest: Russian Forestry and Stalinist Environmentalism, 1905-1953.
region’s “natural capital.” As a result, the new Soviet administration proved attractive to pre-revolutionary technical intelligentsia in part because it professed a commitment to scientific planning and rational development.

In this sense, environmental management in Primor’e blurs the line between state- and empire-building (if the two can be separated at all). While conservation measures became wrapped up in colonization, they also required a strong state to be of any effect. The tsarist state was thin on the ground, particularly in the nineteenth century, attenuating efforts to either protect nature or bring about rational use of resources. Primor’e remained undergoverned in the 1920s and 1930s, but comparatively the Soviet state put greater resources, personnel, and determination into initiatives begun before the war, including industrial fishing and forestry, the creation of nature reserves, and land reclamation.

The emergence of “rational development” in Primor’e is, then, in large part a story of continuity rooted in common circumstances and ways of thinking. The sources of continuity between pre- and post-revolutionary eras are many: geographical and climatic conditions; proximity to large East Asian populations; the presence of rival states and empires; distance from central Russia; poor communications to the Far East; commonalities in the education and training of elites; continuity in state personnel and institutions; and the continuation of state-sponsored migration from European Russia to the Far East.

To be sure, there were clearly moments of major change and points of inflection within long-term trends. Foremost among these was Stalin’s “revolution from above”
between roughly 1928 and 1938, the rapid transformation of the Soviet Union into an industrial power and the many social and cultural upheavals that accompanied it. In Primor’e, too, industrialization, collectivization, cultural revolution, and the purges wrought many changes over the course of the 1930s. Collectivization radically changed land tenure in the countryside and precipitated the flight of thousands of rural-dwellers to Manchuria. Fisheries, an industry in which foreign and private firms persisted into the early 1930s, became a state-run enterprise by the end of the decade. Between 1926 and 1936, large swathes of territory—Primor’e’s zapovedniki and other reserves—were set aside for nature protection, and their scope expanded from a narrow range of game species to whole ecosystems. Far Eastern elites, many of whom had trained and worked in tsarist Primor’e and chose to stay after the Revolution and Civil War, were decimated during the purges of 1937-39. And collectivization, together with forced deportations in 1937-38, violently removed nearly 200,000 Koreans and Chinese from Primor’e, suddenly altering the region’s demographic composition.

Still, while the 1930s were certainly a time of great change, some of these transformations—such as the creation of an industrial fishing fleet and state management of hydrological works—represented an acceleration or amplification of already-existing designs, plans, attitudes, and trends. Moreover, in examining particular elements of Primor’e’s environment and its exploitation, it becomes clear that major changes in the use and protection of nonhuman nature occurred somewhat unevenly across space and time, though their center of gravity rests around 1930. Among the greatest changes in Primor’e’s physical landscape, for instance, came about not during collectivization but
during the 1920s, as Korean farmers spread wet-rice agriculture to the region, irrigating thousands of acres in the process. Similarly, the introduction of sea-going, industrial fishing vessels and the displacement of Japanese fishermen from Primor’e’s coastal waters occurred gradually, beginning before the 1917 Revolutions and gaining strength with increased investment during the First and Second Five Year Plans (1928-1932 and 1933-1937, respectively). (Indeed, Soviet dominance of Primor’e’s coastal waters was not complete until after World War II, when the Japanese fleet lay in ruins.) State protection of wildlife became gradually more robust and comprehensive through the 1930s and 1940s, and its successes depended only in part on the *zapovedniki* created in the 1930s. More broadly, the willingness and ability of the Soviet state to manage, utilize, and protect natural resources certainly accelerated in the 1930s, but the ends to which administrators employed state power were largely consistent with those that prevailed in the 1920s and, indeed, before the Revolution.

**Sources and scope**

*Why Primor’e?*

For a number of reasons, Primor’e is a particularly good lens for examining the relationship between the Russian Empire and its environment. First, Primor’e was acquired relatively late, in 1858, giving us a baseline against which to measure subsequent changes. In most of Siberia and elsewhere in the empire, the first Russian incursions occurred many years or even centuries earlier, when documentation is much

55 The purges and dekulakization of Russian and European settlers being the main exceptions.
56 China formally ceded the territory to Russia in 1860, but the first settlements appeared in 1858.
sparser. In Primor’e, mapping and surveying of the territory occurred at the same time as Russia’s acquisition of the territory, providing a better picture of the changes that accompanied settlement. Moreover, because of its distance from central China and the migration restrictions imposed on Chinese subjects by the Qing (Manchu) Dynasty (1644-1912), Primor’e was very sparsely inhabited at the time of Russian acquisition. In fact, its population had probably been higher in earlier centuries, making the sudden arrival of Russian and European settlers all the more dramatic. To be sure, Primor’e was not static before 1860. It was inhabited by several different indigenous peoples—the Nanai, Udeghe, Orochi, Ul’chi, and Nivkhi—whose land-uses had changed over the centuries, shifting away from agriculture after the medieval era—and it was embedded in the broader political economies of China and Korea, as will be discussed below.

Nevertheless, Russian settlement, as well as smaller but significant migrations from China and Korea began only in the late 1850s and represented a sudden shift in land- and resource-use.

Second, Primor’e’s environment attracted a great deal of attention from Russian and foreign observers from the 1850s onward. Naturalists and other scholars, many of them affiliated with the Russian Geographical Society (RGO), were eager to explore the new territory and document its abundant and unusual flora and fauna. State officials, travelers, and journalists were also keen to assess Primor’e and its resources. Beginning in the 1880s, the Resettlement Administration and other state offices became particularly concerned with mapping and cataloging the Far East with a view to peasant settlement.

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57 The Qing restricted Han Chinese migration to Manchuria (including Primor’e and the Amur Valley) and Mongolia for reasons discussed in Chapter 1.
As a result, there is a rich documentary record dealing with the natural world from a fairly early stage.

Given Primor’e’s unique ecology and history, it should be emphasized that this study does not take the region to be a microcosm for the whole of the Russian Empire. My intent is rather to contribute one particular perspective to Russian environmental history. The Russian Empire and Soviet Union contained a great diversity of lands, climates, and peoples, and many close regional studies, like this one, are necessary for a comprehensive view of Russia’s environmental history to begin to emerge. That said, this study traces attitudes toward nature, rational resource use, and environmental questions that resonate strongly with existing scholarship on Russian environmental history and state-building. This, in turn, points to cultural, intellectual, and institutional commonalities—in the Resettlement Administration’s views on the role of agriculture and the “correct” relationship between settlers and the land, for instance—that Primor’e shared with other parts of the empire, particularly Central Asia and the southern steppes.

The chronological scope of the study (1860 to 1940) encompasses the period of Russian and Soviet colonization, which stretched from the tsarist period into the early Stalin era. The revolutions of 1917, together with the Civil War and foreign intervention (1918-1922), represented a pause, not a break, in settlement, so this study includes the post-revolutionary era as well. During the 1920s and 1930s, state resettlement programs continued to bring settlers from European Russia to Primor’e, much as they had before the Revolution. Soviet resettlement officials even referred to this as “colonization” and despite the Soviet Union’s anti-colonial stance, the term itself fell out of use only

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gradually. The more natural point of disjuncture is World War II, not the Revolution. During the war, Soviet authorities directed population and resources toward the front in Europe, and after 1945 migration to the territory was more of an urban phenomenon, not mass settlement of the countryside. In addition, the deportation of Chinese and Koreans from the Russian Far East in 1937-38, the collapse of Imperial Japan (and the Soviet Union’s resulting naval dominance of its eastern seas), and the reconfiguration of China and Korea fundamentally changed the political, strategic, and demographic calculus in the region.

**Geographical scope**

The province of Primor’e lies in the southeastern corner of the present-day Russian Federation, bounded by Chinese Manchuria, North Korea, and the Sea of Japan. Today, the term “Primor’e” refers only to Primorskii krai, which occupies the area between roughly 130°E to 139°E, and 42° N (the Korean border) to 48°N at the boundary with Khabarovsk krai, a total area of about 64,000 square miles, or roughly the size of Wisconsin. However, this study will also examine the area between Primor’e’s current northern border and the Amur River, as well as the whole length of the Ussuri River (part of which is now within Khabarovskii krai), which is about twice as large as present-day Primorski-krai (see figure 11). I use “Primor’e” as shorthand for all of the Russian territory south of the Amur and east of the Ussuri River.

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Among the reasons for using this broader definition of Primor’e is its geography. It has major bodies of water on three sides (the sea to the east, the Ussuri River to the west, and the Amur River to the north), and many commonalities in vegetation, climate, and fauna. Another reason for adopting such a definition of Primor’e is historical. This was the region acquired from China through the Treaty of Beijing, the north bank of the Amur having been ceded in 1858. In addition, for the period under study, most of the north bank of the Amur was administratively separate from the south. As a result, documents and publications concerned with Primor’e’s forests, fisheries, animal life, and other parts of the nonhuman environment generally addressed the southern portion of Primor’e.

59 Google Maps, “Primorskii krai, Russia,” accessed March 7, 2016, https://www.google.com/maps/place/Primorsky+Krai,+Russia/@45.285722,130.2200741,1665718m/data=!3m1!1e3!4m5!3m4!1s0x5faadb57dee96537:0x7e7b7d06607faafe!8m2!3d45.0525641!4d135.0525641!4d135.
Russia’s Pacific littoral, i.e. the area south of the Amur. Fluctuations in Far Eastern boundaries can make comparing population figures and other statistics across different periods problematic, so where necessary I indicate the official territorial designations, but otherwise this study will keep to a geographical delineation of Primor’e.

The Russian Far East underwent a dizzying series of territorial and administrative rearrangements between 1860 and 1938. For the purposes of this study, the most important territorial divisions are: Primorskaia oblast’, the Priamur Governor-Generalship, and the Soviet-era Far Eastern Territory (Dal’krai). During the tsarist era, Primor’e was part of the Primorskaia oblast’ (the Maritime Province), which initially encompassed the whole Pacific coast (including Kamchatka, the lower Amur River, and Sakhalin Island). Until 1884, Primorskaia oblast’ was in turn part of the gargantuan Governor-Generalship of Eastern Siberia, after which it was included in the Priamur Governor-Generalship. In 1909, the oblast’ split into three: Primorskaia oblast’, the Sakhalin Island oblast’, and Kamchatka oblast’. All three, along with the Amur oblast’, remained parts of the Priamur Governor-Generalship. Primorskaia oblast’ was comprised of five districts (uezds): the Ol’ga district, stretching along the eastern shore almost to Nikolaevsk; the Nikol’sk district, in southern Primor’e; the Ussuri Cossack okrug along the Chinese border; the Iman district, in north-central Primor’e; the Khabarovsk district; and the Udsk district, around the mouth of the Amur (see figure 12). Finally, throughout the tsarist period, the southern half of present-day Primor’e was

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60 S.A. Vlasov, Istoriia Dal’nego Vostoka Rossii: Kurs lektsii (Vladivostok: Dal’nauka, 2005), 45, 56. The territories that comprised the Primorskaia, Amur, Sakhalin, and Kamchatka oblasts were known as the “Far Eastern Vice-Regency” between 1903 and 1905, but reverted to their previous designation after the Russo-Japanese War.
known informally as the South-Ussuri krai, and the area to the north, the North-Ussuri krai; this study will address both of these areas and all but the Udsk district.

During the Civil War, Primor’e was formally under the jurisdiction of Admiral Kolchak’s White government, though Red (Communist) partisans contested much of the territory and Japanese forces had a hand in the administration of much of Primor’e and were the dominant force in coastal waters. Between 1920 and 1922, after Kolchak was defeated, Primor’e was nominally part of the so-called Far Eastern Republic, a buffer state that the Bolsheviks established (and influenced behind the scenes) mainly to appease the Japanese. After Soviet power came to stay in 1922, Primor’e underwent a series of territorial changes. Initially, the lands of present-day Primor’e were included in a large Primorskaia guberniia (Maritime Province), which encompassed Vladivostok, Nikol’sk-Ussuriisk, Spassk, Khabarovsk, and Nikolaevsk districts, which roughly coincided with the former Primorskaia oblast’. Primorskaia guberniia was part of a Far Eastern oblast’, which stretched north to the Arctic Ocean. In 1926, the region became the Far Eastern krai, or simply Dal’krai, while most of Primorskaia guberniia became known as the Vladivostok okrug. Four years later, the okrugs were abolished such that smaller sub-units, known as raions, became the constituent parts of Dal’krai. In 1932, however, southern Dal’krai was divided into Primorskaia, Ussuri, and Khabarovsk oblasts. In 1938, Dal’krai was abolished altogether in favor of two separate krais, Khabarovskii and Primorskii, with the latter encompassing most of the former Primorskaia and Ussuri oblasts, borders that have persisted almost unchanged to the
present. Finally, the Sino-Soviet split led Soviet leaders in 1972 to change the names of major rivers and other features in Primor’e so that they appeared less Chinese. Among those discussed in this study are the Iman (now Bol’shaia Ussurka) River, the Vaku or Vaka (Malinovka) River, the Daubikhe (Arsen’evka) River, and the Suchan (Partizanka) River (see figure 16 in Chapter 1). Here I use the pre-1972 names, with the current names in parentheses.

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A. S. Vashchuk et al., Etnomigratsionnye protsessi v Primor’e v XX veke (Vladivostok: DVO RAN, 2002), 67.
Figure 12: Primorskaia oblast’ in 1909.62

Sources

My approach with this project has been to examine historical sources addressing Primor’e’s forests, waterways, fisheries, and animal life in order to establish a picture of the territory at mid-century and then to trace changes over time. In examining written materials addressing colonization and ecological change, however, I was struck by the fact that environmental questions were both more prominent than I expected and also more politicized. Consequently, in addition to tracing ecological changes and environmental management over time, a major part of this study involves interrogating how observers in the late-tsarist and early Soviet eras approached environmental questions, and how understandings of nature informed interactions between the state, Russian and European settlers, East Asian populations, and indigenous peoples.

This approach has meant that the sources I analyze to understand prevailing conceptions of nature and nature-use—which I argue were deeply influenced by concerns about Primor’e’s security, economic growth, and demographic makeup—are by necessity often those that I depend upon for evidence of environmental change. In critiquing the ways in which contemporaries were writing about nature, I do not mean to suggest that their accounts were always unreliable. Unless otherwise noted, the historical materials I draw upon here—both Russian and foreign—were fairly consistent with one another on environmental questions. With regard to ecological degradation caused by Chinese migrants, which tend to be the most politically charged, studies of neighboring China and
Manchuria suggest that similar changes were taking place in those regions. Moreover, I have sought throughout this study to show the interplay between ideas and action, between “paper realities” and “changes in the land.”

The earliest sources addressing environmental questions came from naturalists, foresters, and explorers in the employ of the state or the RGO, or both. I also consulted the records of the governors-general of Eastern Siberia and Priamur, military governors of Primorskaia oblast, and the Imperial Navy, which was involved in administration during the first years of Russian rule. Taken together, these documents give a partial view of Primor’e’s natural world—they mainly address with areas accessible to the coast or major rivers—but they are nonetheless invaluable for understanding Primor’e at the outset of Russian colonization. I also compared historical works to scientific studies of Primor’e’s forests, hydrology, fisheries, and animal life that rely on twentieth-century observations and/or physical data to get a sense of long-term environmental trends.

For later periods, I relied on similar types of sources—state archival documents, the works of naturalists and geographers, travelogues, peasants’ petitions, and memoirs—to document ecological changes and responses to them. Foremost among the archival materials were the records of the Resettlement Administration, which established an office in southern Primor’e in 1883. Until 1896, the Resettlement Administration was part of the Ministry of Internal Affairs, and subsequently of the Ministry of State Domains (MGI) and its successors, the Ministry of State Domains and Agriculture.

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(MGIZ) and the Main Administration of Agriculture and Land Use (GUZZ). All of these bodies were deeply concerned with questions related to Russian settlement and resource-use. These government offices encompassed a great number of technical personnel—including land surveyors, foresters, agronomists, statisticians, physicians, and veterinarians—who in European Russia more commonly worked for the zemstvos, the organs of local self-government established in 1863. I also draw upon the records of the Siberian Committee, which was responsible for coordinating migration to Siberia and the construction of the Trans-Siberian railroad; state envoys from St. Petersburg; the offices of the Priamur governors-general; and the Ministry of Internal Affairs, which included the police and local peasant and indigenous overseers (krest’ianskie and inodcheskie nachal’niki), the Siberian equivalent of European Russia’s land captains; and on the records of Primor’e’s voluntary hunting societies, which formed in the 1880s.

Similarly, for the Soviet period this study relies on the records of administrative organs, including the Resettlement Administration (which retained its name and much of its pre-revolutionary staff), the Far Eastern Revolutionary Committee (Dal’revkom), various divisions within the People’s Commissariat of Agriculture (Narkomzem) and its successors, and Primor’e’s zapovedniki; along with letters from Soviet citizens, and the memoirs and writings of natural scientists. There are far more studies of Primor’e by environmental scientists for the period after 1922, which have been particularly important

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65 As Peter Holquist has noted, the Ministry of Agriculture, which included the Resettlement Administration, became the Commissariat of Agriculture under the Soviets, but retained three-fifths of its prerevolutionary staff, the most of any ministry/commissariat. Holquist, “In Accord with State Interests and the People’s Wishes,” 175.
in addressing the early twentieth century ecological change and nature protection efforts during the Soviet era.

Compared to official and scholarly writings, documentation produced by settlers themselves is relatively rare, with a few notable exceptions. Many letters and petitions from Russian and European settlers have been preserved in state archives, and where possible I draw upon them here. Equally valuable are the memoirs of settlers and their descendants, which have served as useful sources for charting the experiences of individual families. The voices of Primor’e’s indigenous peoples are, unfortunately, rarest of all, and here I rely heavily on the accounts of Russian and European explorers, ethnographers, and state officials who described indigenous peoples and their relationships to Primor’e’s lands, waters, and animal life (addressed in Chapter 1).

To those familiar with studies of settlement in the Americas or Australia, the lack of emphasis in this study on the indigene-settler encounter might seem odd. However, discussions and policies regarding land and resources very rarely addressed indigenous peoples, much less solicited their input. This was perhaps because indigenous populations were so small (under 14,000 throughout the period under study, and often much less), and perhaps also because contests over land and resources were chiefly

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66 Especially Sergei Afanas’evich Khudiakov, “Avtobiografiia” (University of Hawai’i at Manoa, 1989); Iurii Iankovskii and Valerii Iankovskii, Nenuni: Dal’nevostochnaia Odisseia (Vladivostok: Rubezh, 2007); Valery G. Yankovsky, From the Crusades to Gulag and Beyond, trans. Michael Hintze (Elliott Snow, 2007); Rock Brynner, Empire and Odyssey: The Brynners in Far East Russia and Beyond, 1ST ed. (Steerforth, 2006).
between Russians and other migrants (especially Chinese and Koreans), which drowned out indigenous perspectives.

_A note on terminology_

In general, nearly all written accounts of Primor’e in the tsarist period, and most from the Soviet period, come from those whom I refer to as “elites.” This term can have connotations of wealth or high social status, but I define it here very broadly to include all of the territory’s literate, educated population. Thus, it encompasses civilian officials (both high and low); military officers; natural scientists; technical personnel; journalists and publicists (both Russian and foreign); and prominent merchants and settlers. Though these groups constituted a small part of Far Eastern society, they produced the vast majority of the written records dealing with environmental questions. And while they were a diverse group (both in terms of occupation and national origin), their understandings of humans’ relationship with nature were fairly consistent.

This study uses the term “colonization,” a term that I believe best reflects the

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68 Among the primary works addressing Primor’e’s indigenous peoples are I.A. Lopatin, _ Gol’dy Amurskie, Ussuriiske i Sungariiske_ (Vladivostok, 1922); V. K. Arsen’ev, _Lesnye liudi udygeitsu_ (Vladivostok: Knizhnoe Delo, 1926); A. V. Smoliak, _Ul’chi: Khoziaistvo Kul’tura i Byt v Proshlom I Nastoiaschchem_ (Moscow: Nauka, 1966); Iu. A. Sem, _Namaitsu: Material’naia Kul’tura (Vtoraia Polovina XIX - Seredina XX v.)_ (Vladivostok: Izdatel’stvo akademiia nauk, dalnevoostchnoe otdelenie, 1973).
transformation of Primor’e during the period under study. In contemporary Russia, many associate this word (kolonizatsiia) with overseas Western colonization, and consequently it carries strong negative connotations. Russian historians are less squeamish about describing tsarist imperialism as a form of colonialism, though most employ more politically neutral terms like “settlement” (zaselenie, rasselenie, or vodvorenie), “resettlement” (pereselenie), or osvoenie, which literally means “to make one’s own,” and perhaps comes closest to the definition of colonization used here.69 I employ the term “colonization” to indicate the act of populating and altering a previously foreign region so that it resembles and serves the interests of the mother country. I do so to emphasize that the goal of tsarist and Soviet officials in Primor’e—who themselves used the word “colonization” and were “fully aware of the colonial dimensions of their work”70—was broader than simply a matter of demographics. Colonization meant making Primor’e secure, productive, and civilized. Doing so required enrolling Russian and other settlers as a means to this end, and it also entailed cultivating, taming, and (later) rationally managing the land itself. There were thus cultural and ecological components of the imperial project that “colonization” captures better than “settlement.” I use the latter here to refer to the more narrow process of peopling the territory.


69 Sunderland, Taming the Wild Field: Colonization and Empire on the Russian Steppe, 3–4.
Most of those who came to settle Primor’e were Russians: they were tsarist subjects (and later Soviet citizens), spoke Russian, and were by and large Orthodox Christians. However, many non-Russian peoples also settled in Primor’e during the late imperial and Soviet periods. Consequently, “settler” here refers broadly to the peoples who migrated to Primor’e to reside on a permanent basis. This includes a wide range of peoples from across the Russian Empire and Soviet Union, as well as resident Koreans and Chinese, along with the handful of Europeans and Japanese. I use the term “seasonal migrants” to refer to those (primarily Chinese and Koreans, as well as Japanese fishermen) who migrated to the territory on a seasonal or irregular basis for hunting, fishing, gathering, wage-labor, trade, or other purposes.

Who were “Russian” settlers? Contemporary sources rarely distinguished between ethnic Russians or Ukrainians, grouping all under the rubric of “Russians” (russkie), and often used the legal form of “Russian” (rossiiskii) to describe all non-Asian Russian subjects, including Balts and Finns. To acknowledge the diversity of these groups, I use the designation “Russian and European” settlers to encompass to all of those who came to the east from present-day Russia, Belarus, Ukraine, Poland, Finland, the Baltic states, as well as the handful who came from non-Russian territories in Europe. For the sake of brevity, I refer to Russian territories west of the Urals (including Finland and Russia’s Polish territories) as “European Russia.” The migration of Finns, Balts, and others is addressed directly in Chapter 1 and where relevant I distinguish between these

71 I.e. those who lived in Primor’e permanently, whether or not they were Russian subjects and/or Soviet citizens. For a discussion of Koreans’ status in the Russian Far East, see Chapter 1.
72 Or those originating in what is now Belarus, though these were comparatively few.
73 On the distinction between these two forms of “Russian,” see Geoffrey A Hosking, Russia: People and Empire, 1552-1917 (Cambridge, Mass.: Harvard University Press, 1997).
groups and the Russian/Ukrainian majority.

If “settlers” were post-1860 newcomers, who were the “indigenous” peoples? A small number of Chinese and Koreans lived in Primor’e when the Russians arrived. In a sense, they were “native” to the region, though few (if any) had lived there for multiple generations. Also, the Tungusic Nanai, Udeghe, and Orochi were closely related to the Manchu, the ruling dynasty in China, and some had intermarried with Manchu and Han Chinese. Nevertheless, to avoid confusion this study uses the term “indigenous” to refer to the Udeghe, Orochi, Nanai, Ul’chi, Tazy,74 and Nivkhi peoples who had inhabited Primor’e for many centuries, distinguishing them from those Chinese and Koreans whose presence in the territory was more recent. Where applicable, I note the overlap and blurring of lines between these groups.

Chapter outline

The first chapter of this study is about goals and means. It explores what it meant to make a place “Russian” in the nineteenth century, focusing on what tsarist-era elites hoped to accomplish in the territory, and provides an overview of migration to the territory during the 1860-1914 period. It examines why Russian officials acquired Primor’e and sought to colonize the territory, arguing that imperial rivalries in northeast Asia underpinned both the decision to seize the territory from Qing China and policy regarding migration. Officials sought, first and foremost, to make Primor’e secure from Chinese (and later Japanese) invasion. They also strove to ensure that the territory would

74 See discussion in Chapter 1 on the identity Tazy, whose ethnic identity was somewhat contested.
be agriculturally productive enough to support itself as well as the army and navy.

Indeed, many looked to Primor’e and the Amur Valley as a potential “breadbasket” in the east. To this end, the state attracted thousands of settlers from European Russia, who arrived in three successive waves during the tsarist era (1860-1880, 1881-1905, 1907-1914), each larger than the last. They also enrolled many non-Russian settlers in the colonial project, particularly those who seemed beneficial to the economy, including Europeans, Koreans, and Chinese. This chapter also examines how officials and naturalists thought about Primor’e’s natural world during the early stages of colonization, showing that many sought to make the territory tamer and drier so that it would be more amenable to settlement.

The second chapter examines the same time period, but focuses on how settlers lived in and interacted with their new environment. It argues that, far from being a case of ecological imperialism or a smooth transition from one end of Eurasia to another, Russian and European settlement in Primor’e occurred in the face of major difficulties in adapting crops, livestock, and practices imported from the west. Instead of replicating lifeways of their homelands, Russian and European settlers adapted and diversified their household economies to account for Primor’e’s environmental particularities, as occurred on other peripheries of the Russian Empire. The difficulties involved in introducing Russian/Ukrainian-style agriculture into the territory also contributed to the in-migration of East Asian migrants, who were better able to farm in Primor’e’s damp climate. The result was a mixed space in which no one people—or the biota they brought with them—

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was predominant. Finally, this chapter examines how the resulting variegated, multi-ethnic rural economy reshaped environments, causing or contributing to widespread deforestation, decline in the populations of several animal species, and erosion and flash flooding.

The third chapter focuses on reactions to ecological change, showing that Primor’e’s elites came to associate ecological change with barbarism, backwardness, and with general threats to the success of colonization. Their attitude toward those using natural resources on a daily basis—peasants, Cossacks, and East Asian migrants—reflected a “green” civilizing mission that posited a connection between backwardness and environmental degradation, or conversely enlightenment and environmental stewardship. Elites saw connections between deforestation, overhunting, and overfishing, on the one hand, and the challenges posed by East Asian migration to the territory, namely their potential to act as a fifth column in time of war, their economic dominance of the interior, and their ability to flout Russian laws and authority, on the other. When discussions turned to Russian and Ukrainian peasant settlers around the turn of the century, elites argued that their compatriots’ backwardness and moral lassitude were responsible for poor agricultural performance, extensive farming practices that resulted in widespread deforestation, and a higher incidence of forest fires, which together contributed further to East Asian migration.

The fourth, fifth, and sixth chapters examine how the “green” civilizing mission laid out in Chapter 3 shaped the emergence of conservationism in the territory, and how it led to policies aimed at curtailing backward or “predatory” uses of natural resources
while simultaneously encouraging the expansion of rational exploitation. Because Primor’e’s administrators associated environmental degradation with broader challenges to Russian colonization, they believed that what was good for colonization was also good for nature. To reconcile imperial needs with environmental conditions and limits, they sought “rational” use of land, forests, fish, and land mammals.

Chapter 4 explores the interconnections between forests, land-use, water-use, and conservation, highlighting the divergent approaches to land and forest-management undertaken in the late-tsarist and early Soviet periods. It shows that forest conservation measures emerged primarily to control the supposedly backward or predatory practices of Russian and Ukrainian peasant settlers and East Asians, particularly seasonal migrants. Yet beginning in the early 1900s tsarist administrators simultaneously promoted the development of commercial, export-oriented timbering, which they regarded as innately more modern and rational. After 1922, Soviet leaders adopted very similar policies and put greater force and resources behind both. In this chapter, I also argue that forest use was partly a matter of conserving timber resources, but also attracted attention because elites associated deforestation with flooding, erosion, and inefficient agriculture. By the First World War, agronomists and other state officials were seeking alternative methods of making Primor’e agriculturally productive, ones that would not cause further deforestation. The Resettlement Administration began to implement drainage and flood-prevention schemes in 1910. Along with the introduction of rice agriculture into Primor’e by Korean refugees during the war, hydrological management offered the possibility of developing intensive agriculture that would make more rational use of the
available resources. Soviet planners seized upon intensive agriculture, water control, and rice cultivation as a means to further colonize Primor’e with Russians, and in this way to counteract Korean migration. Finally, water-use became an important point of tension between Soviet authorities and Korean migrants, with the former seeking to replace Koreans’ supposedly predatory practices with more rational, less labor-intensive methods. Ultimately, the Koreans themselves were replaced—shipped to Central Asia—and Russian colonists took their place. In this way, Soviet planners’ attempt to make agriculture in Primor’e more “rational” coincided with the NKVD’s making the province more Russian.

Chapter 5 examines the development of Primor’e’s fisheries, arguing that both tsarist and Soviet governments viewed the exploitation of aquatic resources as a zero-sum competition with their regional rivals, China and Japan. Both were concerned about fish stocks and sought to bring about more scientific management of this valuable resource; both also sought to restrict the activities of Chinese and Japanese fishermen, whom officials deemed a strategic threat and a source of ecological degradation; but both also encouraged Russian subjects to take up fishing and other maritime trades so as to displace East Asians from coastal waters. Beginning in the early 1900s, tsarist administrators also sought to develop a more modern, industrial fishing fleet in order to better compete with the Japanese, a task that took on added urgency after the Russo-Japanese War (1904-5) and the Russo-Japanese Fishing Convention of 1907, which granted the Japanese extensive fishing rights in Russian waters. After the Revolution, the Soviet government continued both conservationist and developmentalist approaches, seeking to bring
fishermen (including Finns and Balts) to the East, develop a fleet of large, modern fishing vessels, and gradually squeeze the Japanese from Soviet waters. Here I argue that although the Soviets invested heavily in scientific study of aquatic resources with a view to rational, sustainable development, their attempt to out-do the Japanese led to a “race to the bottom,” such that major fish stocks (particularly salmon) went into decline.

Finally, Chapter 6 examines the fate of Primor’e’s land mammals, showing that what began as a set of exclusionary, narrowly-oriented conservation initiatives in the prerevolutionary period evolved into the nature-protection institutions of the Soviet era, which were responsible for the preservation of Amur tigers, spotted deer, and other rare species. Tsarist elites associated a decline in certain animal species primarily with East Asian hunters, and less frequently with Cossacks and peasants. Early conservation policies were aimed at controlling the activities of such groups. Here, Primor’e’s voluntary hunting societies played a major role in the development of animal conservation, but did so in large part so they could undertake more “rational” or “cultured” exploitation of animals, especially spotted deer, elk, and goral (a type of mountain goat). They created Primor’e’s first game reserves, which, much like their counterparts in the United States, were socially exclusionary. Some prominent landowners (along with a few peasant communities) also began farming spotted deer, around the turn of the century. Contemporaries believed both the reserves and deer farms were a more rational use of a diminishing resource. During the Soviet period, scientists gained the support of state officials for the expansion of Primor’e’s nature reserves and deer farms. While scientists proposed Primor’e’s zapovedniki as means to more rationally
produce valuable resources (deer antlers and pelts), they eventually broadened their mission to include conservation of nearly all species. This, combined with the militarization of Primor’e’s border and stronger state presence in the interior, provided the conditions in which nature-protection flourished in ways that it had never before.
Chapter 1:  
“Even here we will make Russia”: Imperial Ambitions and Settlement in Primor’e

In December 1866, Rear Admiral P. V. Kazakevich, the first military governor of Primor’e, wrote to his superiors requesting settlers for the province’s southern coast. Chinese and Korean migrants, he wrote, travelling to the territory every year, dominated local fisheries and other industries. If the pace of Russian settlement was not altered, he argued, the province would soon become a “second China.” Only the migration of settlers from European Russia and the displacement of the Chinese and Koreans from regional trade could “make the territory (krai) Russian.”¹

This chapter examines why and how figures like Kazakevich sought to make Primor’e “Russian,” and what doing so meant to officials and other elites in the late tsarist period (1860-1914). It focuses primarily on motivations and intentions, while also providing an outline of the means by which tsarist officials sought to populate, develop, and defend the newly-won territory. In doing so, I aim to elucidate the forces underpinning Russian colonization of the territory and the environmental transformations that accompanied it.

¹ Russian State Naval Archive (RGA VMF) F. 909, op. 1, d. 44, ll. 27ob-28.
In 1850, Primor’e was a sparsely-populated region inhabited by indigenous hunter-gatherers who likely numbered between 9,000 and 15,000 individuals. Yet by 1914 it boasted nearly half a million people, most of them Russian subjects, engaged in farming, fishing, timbering, mining, and many other industries, who contributed to deforestation, erosion, and a rapid decline in many animal populations. This transition, I argue here, was rooted in the imperial rivalries that took hold of northeastern Asia during the mid- to late nineteenth century. Environmental historians have identified a number of salient factors driving ecological change in the modern and early modern periods, including population growth, the expansion and intensification of settled agriculture, heightened demand for energy and resources, the development of global markets for natural commodities, and the emergence of strong, growth-oriented states.

While these factors were relevant in Primor’e as well, the ecological changes that occurred in late nineteenth century Primor’e occurred primarily because Russian officials sought to secure the empire’s eastern flank and viewed settlement and cultivation of the land as a means to this end. That is, tsarist leaders decided to annex Primor’e, settle it

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2 V. M. Kabuzan, *Kak zaselialsia Dalʹnii Vostok: Vtoraia polovina XVII-nachalo XX* (Khabarovsk: Knizhnoe izdatel’stvo, 1973), 79. Population figures from the 1860s and earlier are very approximate. Estimates for the total population of Primorskaia oblast’, which in 1860 included Primor’e, the middle and lower Amur, and Russia’s entire Pacific coast, range from 15,600 to 35,100. The number and distribution of natives, Chinese, and Slavs in 1860 is not known precisely. See A. S. Vashchuk et al., *Etnomigratsionnye protsessi v Primor’e v XX veke* (Vladivostok: DVO RAN, 2002), 10–12.

3 As a result of changes in agriculture, stabilizing disease regimes and, in the late-nineteenth and twentieth centuries, advances in medicine, epidemiology, and public health.

with imperial subjects, and develop its resources, primarily to serve strategic goals, not to relieve population pressure or to serve the interests of capital.

Russian colonization was a very deliberate decision made primarily on the belief that populating and developing a borderland zone would assure its security. As a result, between 1860 (when Russia acquired the territory) and 1880, state officials offered land, tax exemptions, and other incentives to settlers. Faced with rising tensions in the Pacific, Russian officials continued to actively encourage migration of Russian subjects to the territory throughout the late nineteenth and early twentieth centuries, often at great expense to the state. Two more waves of migrants—one arriving between 1881 and 1905, another between 1906 and 1914—brought an additional 425,000 Russian subjects to the territory.\(^5\) In both waves, strategic factors were key considerations spurring state support for migration.

To be sure, making Primor’e “Russian,” was more of an ill-defined geopolitical aspiration than a narrowly nationalistic or ethno-centric project. Tens of thousands of non-Russian peoples, primarily Chinese and Koreans, also migrated to Primor’e during the late tsarist period and played a key role in its colonization. Here, geopolitics was not the only factor at play: population pressure pushed many Koreans and Chinese from their homelands, and market demands for sea and forest products attracted tens of thousands of itinerant hunters, gatherers, and fishermen from abroad. Nevertheless, the government’s goal of colonizing the territory contributed a great deal to non-Russian migration. While administrators sought to keep Primor’e in the empire, they accepted—and in many cases

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encouraged—the settlement of non-Russians, including Europeans, Koreans, and Chinese, groups whose economic value often outweighed officials’ suspicions and security concerns.

While populating Primor’e was a flexible and fairly cosmopolitan endeavor, laying claim to the territory and its abundant natural resources was a major source of contention between the Russian state and non-Russian (chiefly East Asian) peoples from the outset. In the 1850s and 1860s, officials sought to claim, catalog, and map Primor’e, a process that was as much symbolic as it was practical. Moreover, as Kazakevich’s comments above suggest, many were also concerned with claiming and utilizing Primor’e’s land, flora, and fauna, such that the exploitation of natural resources worked for the benefit, rather than detriment, of the Empire. Although very few Chinese or Manchu lived there, Primor’e’s fish, ginseng, sable, deer, and other organisms drew thousands of seasonal hunters and foragers to the territory, a fact that unsettled administrators and scholars alike.

In settling Primor’e, Russian imperial elites also sought to encourage the development of agriculture and other industries, which (in their view) would serve geopolitical ends while making the landscape more “Russian” and cultured in appearance. Unlike the Qing, they were not content to glean ginseng and sable from the taiga, but sought instead to introduce sedentary agriculture, and in doing so to make the territory more civilized, more productive, and less wild. In the early days of settlement, many Russians viewed the introduction of settled agriculture as an essential task of colonization, both because of its practical benefits—feeding the army and navy—and
because of its association with civilization and with the Russian *narod*, the peasantry. In this regard, they followed in a long tradition of borderland colonization that drew close ties between Russianness and agriculture.⁶ Some even looked to land clearance as a means of making the region more amenable to settlement, since (in their view) deforestation would reduce the territory’s dampness and heavy rains. Such a view was consistent with those concerned with the desiccation of the southern steppes, though here observers sought the opposite result.⁷ Finally, many contemporaries believed that colonization would entail removing especially dangerous animals, such as Amur tigers, which were among the most unusual and exotic (from Russian point of view) features of the new territory. Making the Primor’e Russian was first and foremost about ensuring its security, but populating, cultivating, and “taming” the land were also key elements of this broader goal.

I. Before Russia

If Kazakevich and other tsarist officials wanted to make Primor’e “Russian,” what was it before 1860? Most obviously, it was home to several thousand indigenous inhabitants, the Nanai, Udege, Orochi, Ul’chi, and Nivkh peoples. It was also formally part of China, tied to the Middle Kingdom by tribute and trade. Although very few Chinese lived there, Qing leaders considered Primor’e, along with Manchuria, part of


their patrimony and demanded regular tribute from its indigenous peoples. They also sought to maintain it as a territorial buffer, and to this end restricted Chinese migration northward. In a sense, the “land” itself belonged to the indigenous peoples, who interacted daily with the nonhuman environment, but Primor’e’s flora and fauna were enmeshed in a broader political economy that tied it to China and to a lesser extent to Korea and Japan. There were, then, a variety of different peoples interacting with and using Primor’e’s land, flora, and fauna in a number of ways before Russian settlement began. Russian colonization entailed the introduction or reintroduction of different forms of exploitation (settled agriculture, e.g.) among older pre-existing relationships, not the sudden arrival of anthropogenic exploitation of nature.

**Indigenous Primor’e**

Primor’e’s indigenous peoples, who lived primarily by hunting and foraging, had a formative influence on Primor’e’s environment, but compared to settler populations a half-century later they were few and sparsely scattered, and their ecological impact circa 1860 was fairly localized. At the time of Russia’s acquisition of Primor’e, they numbered an estimated 9,000 to 15,000, scattered across a territory roughly the size of Oregon. They lived in small, mobile kin groups, relying primarily on a combination of hunting, gathering, fishing, and horticulture, and living in seasonal camps known in Russian as *stoibishcha* (sing. *stoibishche*). Though relatively few, indigenous peoples interacted with and shaped Primor’e’s environment in a variety of ways. The taiga was

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an essential source of food, fuel, fiber (in the form of furs), and trade goods. In areas around their settlements, indigenous groups cleared vegetation to encourage the growth of fruit trees, berries, and quick-growing deciduous trees, which attracted game. Fire was a common hunting tool, and it likely had a significant, if localized, impact on the taiga, as it has in hunter-gatherer societies around the world.9

Hunting was an important part of indigenous economies, particularly for the Udeghe, Orochi, and Nanai peoples of the Ussuri basin. Indigenous peoples were expert hunters and trappers, employing intricate snares, pits, and other traps such as drawn bows released by trip lines, known in Russian as samostrely (“auto-shooters”). According to the Polish-Russian explorer Nikolai Przheval’skii, a Nanai hunter typically bagged between five and twenty sable skins per winter, though the catch varied year to year. A later observer estimated that an average Udeghe hunter usually caught one deer, three elk, one to two otters, one fox, and up to ten musk deer, sable, and squirrels annually, and this at a time when game populations had diminished. Besides serving as a key source of nourishment, hunting provided prestige, stories, and a vital training ground for the young.10

Indigenous peoples also made use of Primor’e’s rich riverine, lacustrine, and maritime ecosystems for subsistence. As on the Pacific west coast of North America, annual runs of salmon—in this case chum (*keta, Oncorhynchus keta*) and humpback salmon (*gorbusha, Oncorhynchus gorbuscha*)—were essential to nourish both themselves and their hunting dogs. Indigenous fishing techniques were quite sophisticated. The Nivkhi, living along the coast, used nets, harpoons, and large, ocean-going dugout canoes, while the Nanai and Udeghe of the interior used detachable harpoons attached to fish-bladder floats, or, for smaller prey, fishing nets, some of them quite massive. British traveler Ernest Ravenstein wrote that during spawning season, natives stretched across a river enormous hemp nets, held in place by cork floats, lead weights, and trestles, with only one opening. “At this opening the Goldy [Nanai] lies in wait with his ordinary fishing net, and the number of fish he is thus enabled to take, with little trouble, is enormous.”

Fish also provided a source of clothing. According one nineteenth-century observer, the “fish-skin Tatars” of the Amur and Ussuri regions sewed clothing and boots out of fish skins, as they were completely waterproof, allowing one equal protection in snow and water. Taken together, indigenous exploitation of aquatic species in the mid-nineteenth century was substantial. Nikolai Sliunin, a physician who wrote extensively on the nature and indigenous peoples of the Far East, estimated that the


Nanai and Udeghe consumed 1.5 tons of fish per person for subsistence. A more recent estimate suggests that together the native groups of the Amur basin (which includes much of present-day Transbaikal, Khabarovsk krai, Amurskaia oblast’, and Chinese Manchuria) caught roughly 10,000 to 12,000 metric tons of salmon annually, about 4 percent of the total run.

Tradition and religious belief bound Primor’e’s indigenous peoples closely to the natural world. Although traditions varied, all practiced some combination of animism and shamanism, vesting spiritual significance in animate and inanimate nature, and in those capable of communicating between human and spirit worlds. The beliefs of Tungusic groups (i.e. all but the Nivkhi) were similar to their northern cousins, such as the Evenk, and reflected a broad spiritual heritage of the nomadic peoples of Siberia and Mongolia. Their traditions were based on a belief in a basic spiritual equivalency between human and nonhuman worlds. That inhabited by humans, known among Tungusic peoples as the taiga, lay between a higher realm of spiritual beings and an underworld of the deceased, all of which had precisely the same topography and existed in parallel. Shamans played a key role in discoursing with spirits and ancestors, and creating connections between the taiga and other planes of existence. They saw a basic equality in human and nonhuman life, in both physical and spiritual senses. As the Soviet ethnologist Lev Shternberg wrote, the peoples of the Far East believed the

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15 Judith Roche and Meg McHutchison, First Fish, First People: Salmon Tales of the North Pacific Rim (Seattle, Wash.: One Reel : University of Washington Press, 1998), 90.
surrounding world was populated by kin, and that these “tribes of living creatures” had “the same social organization.” Most believed that they had descended from animals, such as tigers or bears, or that their ancestors had intermixed with them in the distant past.\textsuperscript{16}

Although we must be careful to avoid idealization of native lifeways, it is difficult to deny that indigenous peoples’ beliefs emphasized respect and moderation in their interactions with nonhuman nature. The rivers and sea, for instance, were considered home to a powerful water god who might take the form of an old man, a fish, or some other animal. With this in mind, the Ul’chi of the lower Amur believed that water was to be treated with great respect that and no fishermen was to take more from it more than his family required.\textsuperscript{17} Having common ancestors implied that some animals were clan members, and humans were to adopt particular behavior toward these kinsmen when encountered in the bush. The Udeghe, Orochi, and Nanai considered tigers, for instance, either ancestors or the manifestation of a powerful spirit, known as \textit{kuty mafa} among the Udeghe and \textit{amba} among the others. They would not shoot at a tiger’s prey, nor abscond with the remains of a kill. If a tiger were killed accidentally in a trap, the Udeghe interred the animal in a tomb. They believed that animal spirits might offer assistance in time of need, and that humans should return the favor; Udeghe folklore includes many tales of people healing wounded tigers or feeding their young in time of need. Bears occupied a position of similar status in the native pantheon, particularly among the Nivkhi of the


\textsuperscript{17} Roche and McHutchison, \textit{First Fish, First People}, 91–92; Smoliak, \textit{Ul’chi: Khoziaistvo Kul’tura I Byt v Proshlom I Nastoisonschem}, 29–38.
lower Amur and Sakhalin. To be sure, such beliefs did not prevent indigenous peoples from selling pelts—even those of tigers—to Chinese traders or sending tribute, in the form of furs, to Beijing. 

Primor’e’s indigenous peoples shaped the region’s environment in many ways, and how they had done so had varied a great deal in the past. Closely related to Manchu and Jurchen peoples, the forebears of the Nanai and Udeghe had long been involved in the power struggles and economy along the northern frontiers of China and Korea, and had often joined such peoples to form regional confederacies. The most powerful, known as the Bohai Culture (698-907), supported a relatively dense population centered south of Lake Khanka. Its peoples raised grains and vegetables and sold the valuable products garnered from the surrounding taiga and the seashore, including ginseng, animal pelts and organs, seaweed, and deer antlers.

The Mongol invasions of the thirteenth century destroyed the Bokhai and the region never recovered its former prominence. Because of the region’s economic and demographic decline after the medieval period, and perhaps because of prevailing assumptions about Siberian indigenous peoples, early Russian explorers believed Primor’e’s indigenous peoples were simple hunter-gatherers who had never known agriculture or iron-age technologies. The nature of medieval Primor’e became known to Russians only gradually through the accumulation of oral histories and physical evidence. Russian colonists, plowing their “virgin” lands in the nineteenth century, often found

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18 Startsev, Kul’ura i byt udegeitsev (vtoraia polovina XIX-XX v.), 294–97.
ancient farming implements in fields that had long since grown over. Subsequent archaeological work has revealed the full scale of local economic life, which was far more extensive and complex than early Russian explorers believed. Even in the mid-nineteenth century, the Nanai were familiar with ironworking, using charcoal fires, anvils, and bellows to construct spearheads and other implements. They practiced horticulture, growing tobacco, millet, and a handful of other cultivars. They also traded with the Chinese and/or Manchu for a variety of goods, including tobacco and flintlock (fitil’nyi) muskets, and kept a variety of domesticated animals imported from settled peoples, such as pigs and cats. In sum, although indigenous peoples seemed to live almost exclusively by hunting, gathering, and fishing when the Russians arrived, they did not live in timeless equilibrium with their surroundings. Rather, they were embedded in a dynamic ecosystem on which they depended for their material and cultural existence and which they had shaped in a variety of ways.

**Chinese Primor’e**

As the foregoing suggests, the Manchu and Chinese had strong connections to Primor’e, and in particular to its flora and fauna. From the perspective of Primor’e’s nonhuman environment, connections with China had mixed effects. On the one hand, tribute-trade connections contributed to the exploitation of forest and sea products. On

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the other, Qing migration policies—partly a result of the Qing court’s interest in maintaining sources of tribute—contributed to low population densities. As a result, anthropogenic pressures in Primor’e were quite different from those that prevailed in central China, where settled agriculture had long since deforested much of the empire, or for that matter in the territory itself once settlers began arriving in greater numbers.

It would not be accurate to say that Primor’e was a province of the Qing Empire in the nineteenth century like Shandong or Hubei, but the Manchu and Chinese were an integral influence on the region’s cultural and economic life. Late Soviet scholarship on the Far East downplayed or outright ignored Chinese historical influence in Primor’e, but the fact is that China, and to a lesser extent Korea, had exerted a strong cultural and material influence in the region for centuries before Russians ever stepped foot there. Many Nanai and Udeghe spoke some Chinese; early Russian explorers, including Przheval’skii and Nikolai Aliab’ev, found that Chinese was the *lingua franca* ("like French in Europe") among natives of the Ussuri. Indeed, one Tungusic group, known as Tazy, was considered among early Russian ethnologists to be indigenous-Chinese *metis* who had been almost completely assimilated into Chinese culture. In the absence of women in their settlements, many Chinese exiles took indigenous wives. Their

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24 Arsen’ev suggested that the term Tazy derived from the Chinese word *datszy*, the equivalent to the Russian *inorodets*, which could be applied to many indigenous peoples. Arsen’ev, *Voenna-geograficheskii i voeno-statisticheskii ocherk ussuriiskogo kraia, 1901-1911 g.g.*, 175. Long thought to be an Udeghe or Orochi clan, the tazy were only recognized as a separate ethnic group in the 1990s. See Startsev, *Kul’tura i byt udegeitsev* (*vторая половина XIX-XX в.*), 5–6.

25 James, *The Long White Mountain, or A Journey in Manchuria*, 438; V.V. Gaponov, *Istoriia taezhnogo prirodopol’zovaniia Iuzhno-Ussuriiskogo regiona* (Vladivostok: WWF Russia, 2005), 140.
cultures integrated native traditions with imported elements in complex amalgams that varied by clan, ethnic group, and location.²⁶

Natural resources were at the center of China’s connections to Primor’e and its peoples. Primor’e and the rest of Manchuria were known in China as a source of ginseng, furs, animal organs (which had medicinal uses) and other forest products. Such items were highly valued in China, where they were either absent to begin with, or had grown as a result of habitat loss and human exploitation.²⁷ Manchuria had supplied China with sable, freshwater pearls, ginseng, and animal organs (used for medicinal purposes) long before the Qing took power in 1644. Indigenous peoples paid tribute, usually in the form of furs, which provided an immense source of income to those that could market the pelts in population centers. The scale of tribute and trade exchanges appears to have been substantial. According to Chinese sources, for instance, the eleventh-century court of the Liao dynasty (907-1125) received 65,000 sable pelts in tribute from the lower Amur and Ussuri rivers.²⁸ (By comparison, at the height of the Siberian fur trade in the seventeenth century, the harvest of sable was between

approximately 200,000 and 400,000 sable pelts per year from across all of Siberia.\(^{29}\)

Some Chinese also went to the northeast themselves to hunt and forage. Though there were few Chinese living in the province in 1860, Chinese maps show that they were familiar with the territory. According one legend, during the Bokhai period some 10,000 hunters descended on Primor’e every year from China and Manchuria to catch sable, fox, deer, and other animals.\(^{30}\)

The forest riches of Manchuria were especially important for the Qing. According to David Bello, the Qing were dependent “on the region’s biodiversity for its very existence,” first as a source of wealth that fed their rise to power, and later as a key part of their cultural identity.\(^{31}\) The Manchu believed maintaining hunting and foraging grounds was a political necessity, since they deemed it essential to preserving their culture and their status as frontier warriors.\(^{32}\) Many forest products came from what is today Primor’e; although imperial reserves were confined to Manchuria proper, the long arm of the tribute state reached also to the peoples of the Ussuri, Amur, and Sikhote-Alin. The Nanai, Udeghe, and Orochi brought sable furs from the Ussuri and Iman valleys, and were permitted to sell any surplus pelts. Others paid tribute of fox, sable, and sea otter pelts to Chinese officials along the coast, who in turn sold them to traders in Manchuria. Tribute extraction could be brutal and exploitative, though some sources suggest


\(^{32}\) Ibid., 3–6.
Primor’e’s indigenous peoples remembered such arrangements with fondness after the Russian annexation.\(^{33}\)

As a result of tribute relationships, the Qing court had a financial interest in keeping the northeastern frontier forested and full of animal life. However, the effect of “imperial foraging” on Manchuria was evident by the early nineteenth century. Sable, in particular, became increasingly scarce. By 1810, the annual sable harvest from Manchuria had fallen to less than 6,000 animals, and continued to decline through the nineteenth century.\(^{34}\) The exhaustion of resources in Manchuria pushed foragers further afield. Already in 1685, scarcity of Manchurian ginseng led many into Nanai lands along the middle Amur and its tributaries. In 1810 peoples living near the Tatar Strait (probably Nivkhi or Ul’chi) sent 2,600 sables to Beijing, while another group brought another 5,400.\(^{35}\) As will be discussed in subsequent chapters, Chinese foragers continued their search for forest and sea products in Primor’e even after Russia’s acquisition of the territory, in part because of scarcity in central Manchuria.

While tribute, foraging, and hunting grounds tied Qing China to the northeast, Manchu leaders also sought to isolate their homeland from the influence of Han Chinese. The Qing established a boundary of earthworks and willow trees, known by the rather poetic name the “Willow Palisade,” along the southern edge of Manchuria, beyond which


non-Manchus were forbidden. As with foraging and hunting reserves, the Qing exclusion policy was intended to preserve their culture and frontier hardiness, while preventing the formation of the sort of alliance between Chinese and frontier peoples that had brought them to power in 1644. Another reason for preventing migration to the northeast was the court’s income: the Qing had an official monopoly on ginseng, sable pelts, and other forest products. As a result, Manchuria, as well as Primor’e and the Amur Valley were kept deliberately under-populated, even in the face of population pressure in central China. Security was to be found in space; the sparse population that Russian explorers found in the nineteenth century was the result of a very deliberate choice on the part of the Qing.  

To be sure, many Chinese did go beyond the Palisade, despite the prohibitions. Officials allowed starving peasants to migrate to Manchuria in 1811, for instance, in order to relieve pressure on overpopulated regions. In southern Manchuria, the Qing sought to organize estates under their bannermen, using Han Chinese only for labor if necessary, but the Chinese proved better agriculturalists and by 1850 predominated in these areas. Primor’e was more remote but was nevertheless known to Chinese and Manchu trappers, fishermen, and foragers diggers by the nineteenth century.  

Still, the Chinese presence in Primor’e and outer Manchuria was slight. Although the numbers are contested, it is clear that very few Chinese or Manchu actually lived in

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Primor’e when Russians began arriving in the late 1850s. There were a handful of permanent Chinese residents, mostly exiles or runaways who eked out a precarious existence in the taiga. The Jesuit priest De la Brunière, the first European to describe Primor’e, found during his travels in 1855 that nearly all of the 800 Chinese living along the Ussuri River were, in his words, vagrants, murderers, or highway robbers, “whom crime and the fear of punishment have compelled to exile themselves into these deserts, where they are placed beyond the reach of the law.”38 Chinese farmers could also be found along the Suifun River and in other parts of southern Primor’e, typically living in isolated homesteads known as fanzy (singular: fanz).

Manchu officials had a few posts along the Amur, but were not thickly settled. The Japanese surveyor Mamiya Rinzō visited a Manchu post at the river’s mouth, but found it was only occupied during the summer.39 As James Reardon-Anderson has shown, Han Chinese migrants in southern and central Manchuria—let alone Primor’e—were largely “reluctant pioneers,” sojourning in the northern territories during the agricultural season and returning to their home villages during the winter. It was only in the late-nineteenth century that many began to stay permanently as whole families. The Palisade, though somewhat porous, did restrain mass migration in Manchuria until the Qing began to remove restrictions on settlement in the northeast, beginning in the mid-1800s.40

38 James, The Long White Mountain, or A Journey in Manchuria, 435.
In this way, the political economy of China’s northeastern frontier under the Qing linked Primor’e to Beijing, but also ensured that it was a space apart. Tribute and trade connections brought forest and sea products to the Qing court and Chinese markets; the Qing’s policy of “keeping Manchuria Manchu” entailed discouraging settlement of the northeast. Making Primor’e Russian, in contrast, involved quite the opposite approach.

II. Making the land Russian: Why?

Why did the Russian Empire acquire Primor’e and make it “Russian” in the first place? The primary concern of the tsarist officials responsible for the seizure of the Amur Valley and Primor’e was Russia’s strategic situation in the Far East, which they believed would be improved by expansion into and colonization of these regions. Making Primor’e “Russian” first involved making it Russian on the map—and, indeed, making the map itself. Officials viewed settlement was a way to claim territory, and it also offered a means to supply a far-flung empire with a reliable agricultural base. Finally, settling Primor’e—primarily with peasants and Cossacks—had important cultural connotations. Cultivating the land was a means to making an otherwise alien landscape more “Russian,” while taming its forests and tigers suggested the advancement of civilization.

Acquiring Primor’e

Russia’s acquisition of the Amur and Primor’e reflected the idea that “empty” spaces in the Far East, rather than providing a useful buffer, had become a strategic
liability. Until the mid-nineteenth century the eastern boundary between China and Russia was a vaguely-defined, broad buffer zone, a state of affairs that had served the interests of both empires since the Treaty of Kiakhta in 1725. With the weakening of Qing China, however, made evident during the First and Second Opium Wars, Russian leaders believed their long-time neighbor was vulnerable to encroachment by Western European powers, which could in turn threaten Russia’s eastern flank. In addition, the discovery in 1849 that the Amur River was navigable along its whole lower course opened the possibility that British ships could sail into Eastern Siberia virtually unopposed.41

This new vulnerability, as well as the opportunities presented by Qing decline, led a handful of ambitious tsarist officials serving in Siberia to undertake the seizure of the Amur Valley. Foremost among these men was the Governor-General of Eastern Siberia, Nikolai Murav’ev (later dubbed “Amurskii” for his exploits), who, along with Rear Admiral Evfimii Putianin, led the Russian effort to secure the Amur Valley. With the tacit approval of Nicholas I (and, after 1855, the blessing of Alexander II), Murav’ev led expeditions down the Amur in 1854, 1855, and 1857. In 1855, during the Crimean War (1853-56), an Anglo-French force attacked Petropavlovsk, the capital of Kamchatka, confirming fears of vulnerability in the east. Murav’ev’s voyage down the Amur enabled him to defeat the allied landing party, giving Russia a rare victory in an otherwise disastrous war.

Murav’ev’s efforts were rewarded in 1858 with the Treaty of Aigun, which granted Russia the Priamur, the lands of the upper Amur River to its confluence with the Ussuri (at present-day Khabarovsk), together with the north bank of the river below that point (see figure 13). The area south of the Amur and east of the Ussuri—i.e. Primor’e—was to be a joint possession, ostensibly to guard against European encroachment on these lands. Because the wording of the Aigun treaty was ambiguous with regard to Primor’e, however, Murav’ev sent Cossacks and naval personnel to southern Primor’e in order to stake a claim. Murav’ev also sent geographical expeditions to the Amur and Ussuri regions under Richard Maak and Mikhail Veniukov, naturalists affiliated with the

Figure 13: Territory acquired by Russian through the treaties of Aigun (tan) and Beijing (pink).  

Russian Geographical Society (RGO), in order to gather knowledge about the territories. On separate trips, the two travelled down the Amur and up the Ussuri to map and study the area, including its peoples, flora, and fauna.

Finally, when French and British forces invaded China during the Second Opium War, Russian diplomats, under the leadership of Count Nikolai Ignat’ev, announced that Russia would serve as a mediator in peace negotiations. In doing so, Ignat’ev extracted formal Chinese assent to Russian control of Primor’e through the Treaty of Beijing. The Qing felt this loss keenly, particularly because it locked their access to the Sea of Japan, but could do little at the time. Qing officials thought that they could regain Primor’e at a later date, but ultimately the emperor’s ceding the territory to Russia proved to be permanent.44

During these negotiations, acquisition of the Amur and Primor’e depended on knowing and mapping the land and its resources. Russian officials sought to replace a liminal borderland with defined borders, and used the ambiguities of space that had previously prevailed in Primor’e to stake a definitive claim. The Manchu and Chinese were familiar with Primor’e and the Amur region, but their maps were vague, incomplete, and did not adhere to European cartographic standards, a fact that Russian negotiators quickly seized upon in arguing against Qing claims to the region. The detailed geographical information gathered by Maak, Veniukov, and others between 1855 and

44 The Korean king, Kojong, was not consulted during these negotiations, but he was reportedly pleased to learn that the Manchu, his adversary, had lost territory. Jong Khon Kim, Russko-koreiskie diplomaticheskie otosheniiia v 1884 - 1904 gg. (Moscow: Izd. Rossiiskogo universiteta druzhby narodov, 2001), 87–88.
1858 helped make the claim that Russians had greater knowledge of Primor’e than the Chinese.\(^{45}\)

While borders along the Amur and Ussuri were fairly unambiguous,\(^{46}\) the border south of Lake Khanka was determined by the same sort of “militant geography” that Murav’ev employed in his bid for Primor’e and the Amur as a whole. In 1860, he sent surveyors—led by future military governor Kazakevich—to stake out the border, and when their Qing counterparts did not appear, the surveyors tried to push the boundary further into Manchuria, hoping to extend it to the Muleng River. Eventually Chinese surveyors arrived and forced him back. One result of this battle of the surveyors was that the Russo-Chinese boundary unevenly divided Lake Khanka between the two powers.\(^{47}\)

Initially, making the land itself “Russian” was a symbolic—and quite nationalistic—act. In contrast to earlier bouts of expansion, when Muscovite and imperial officials were content to retain local place names, in Primor’e they were intent on renaming prominent features to make them more “Russian.”\(^{48}\) In the wake of defeat in the Crimean War, Russian imperial elites sought to reassert the empire’s prestige among the Great Powers through a new round of empire-building. This national-imperial \textit{ressentiment} is evident in place names given to prominent parts of Primor’e’s landscape. Thus, “Port May”—named by a British naval commander—became “Vladivostok” (“Ruler of the East”). The new city’s long, narrow harbor, previously known in Chinese


\(^{46}\) With the exception of some islands, which were the source of conflict between Russia and the Soviet Union in 1969.


as *Haishenwei* (Sea Cucumber Cliffs) became the “Golden Horn,” a reference to the famous harbor of Istanbul, the city whose capture had long been a goal among Russian foreign policy makers. Other names also evinced a sense of imperial mission: a large island offshore from Vladivostok became known simply as Russian (Russkii) Island; the peninsula opposite was named after Murav’ev-Amurskii himself; and the narrow neck of sea between the two called the “Eastern Bosporus,” another reference to Istanbul.⁴⁹

⁴⁹ One curious exception to this cartographic nationalism was Vladivostok’s main thoroughfare, *Amerikanskaia* (American) Street, named in honor of the US-built frigate, the *Amerika*, that explored Primor’e’s southern coast in 1859. The choice (changed to *Leninskaia* in 1924, and subsequently to *Svetlanskaia*) reflects the relatively warm relations between the two countries in the nineteenth century, and of the appeal of the United States had in Russia, particularly among Russian liberals. On nineteenth century Russians’ admiration for the United States, see especially Bassin, *Imperial Visions: Nationalist Imagination and Geographical Expansion in the Russian Far East, 1840-1865*; Bassin, “The Russian Geographical Society, the ‘Amur Epoch,’” and the Great Siberian Expedition 1855-1863.”
People and agriculture: the first wave

Changing names on a map could not make Primor’e “Russian,” however. To do so, and to ensure the region’s military and food security, tsarist officials opened the region to settlement and offered a variety of incentives to would-be colonists. Administrators believed that colonization and development of the Amur region and

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Primor’e was essential to defending these territories from the Qing and—by extension—the British.\(^{51}\) Because of the strategic importance attached to the territory, settlement was a fairly deliberate process, as officials directed settlers to particular regions that they hoped to make more densely populated and productive.

From the outset, Murav’ev and other officials were intent on putting boots (and bast sandals) on the ground in order to back up the empire’s territorial claims and to provide sources of supply. As Murav’ev explained to the tsar’s brother, Grand Duke Constantine, in the autumn of 1858, “...the reinforcement of our maritime positions in the Priamur urgently demands the rapid settlement of the country.” The supply of military units, he wrote, “would not be assured except by the development of local productive forces, an objective that is unrealizable without a larger population.”\(^{52}\) In the same year, Murav’ev implanted a group of Cossacks—dragooned from the Transbaikal Host—on the banks of the Ussuri River at its confluence with the Amur. By 1862, the Ussuri Cossack Infantry Battalion, part of the Amur Cossack Host, had formed 16 stanitsas (military settlements) on the Ussuri River and its tributaries, plus one on the western shore of Lake Khanka. As we will see, although they played an important role in reinforcing Primor’e’s security, the Ussuri Cossacks were less than successful economically.\(^{53}\)


\(^{53}\) Russian State Historical-Military Archive (RGVIA) F. 5294, op. 1, d. 55, 1-9ob; RGA VMF F. 410, op. 2, d. 4179, l. 24.
In order to people the Far East, Murav’ev, in consultation with the Imperial Senate in St. Petersburg, drafted an edict (ukaz) that in 1861 legalized migration to the Amur and Primorskaia (Maritime) oblasts, as well as to the Altai region in southern Siberia. Murav’ev and the Senate considered populating these borderlands an urgent matter. There was no general legislation for settlement in Siberia at the time, but the empire’s tenuous hold on regions recently acquired from China demanded that the state make an exception.\(^{54}\) The incentives offered to those willing to settle in the Far East are also indicative of the importance attached to these regions. Migrants could receive up to 100 desiatinas (270 acres) of land\(^{55}\) per household, a 20-year exemption from taxation, permanent release from the poll tax,\(^{56}\) and temporary exemption from military service. Individuals and villages could also purchase additional land for 3 silver rubles per desiatina. By law, migrants were to migrate at their own expense, but Murav’ev earmarked 150,000 rubles per year to Russian and European settlers, and extended additional loans to those seeking to purchase tools and livestock.\(^{57}\)

Murav’ev’s successors also drew close links between settlement, defense, and food security. Throughout the 1860s, officers serving in the Far East believed they could not defend Primor’e or the Amur if the Qing decided to attack.\(^{58}\) M. S. Korsakov, Governor-General of Eastern Siberia after Murav’ev, warned St. Petersburg in 1868 that


\(^{55}\) For details on land allocations, see below.

\(^{56}\) A tax on individual male household members, levied on members of the lower social estates (peasants and townsmen). From 1863 to 1886, when it was abolished, the poll tax was levied on peasants only.


the weakness of Russia’s naval presence in the Pacific threatened to counterbalance its strength in the west. Improving their position could only occur, however, when the military could “rely on the population,” he argued, from which the armed forces could “receive manpower [and] provisions.” Thus, he argued the primary goal in the Far East was “energetic settlement” of the new eastern territories through the allocation of state resources and the development of trade.\(^{59}\) Similarly, a naval commission sent to study the Far East in 1870 concluded that more settlers were needed if Russian military forces were to have a secure source of food and fodder.\(^{60}\)

Concern with provisions had a long history in the Russian Far East, as supply problems had dogged Russia’s North Pacific colonies, including Alaska, since the eighteenth century. Primor’e and the Amur, with their rich soils and mild climate, seemed to have the potential to be a productive agricultural base.\(^{61}\) As Bassin has shown, imperial boosters in St. Petersburg believed the Far East held the key to unlocking the immense natural riches of eastern Russia, and they were extremely optimistic about the potential of the Amur and Ussuri valleys to supply not only the Russian North Pacific, but to also export produce to other Pacific countries.\(^{62}\) Indeed, the promise of Primor’e

\(^{59}\) RGA VMF F. 410, op. 2, d. 4178, ll. 27-8.
\(^{60}\) RGA VMF, F. 410, op. 2, d. 4183, 433.
and the Amur Valley in particular were among the reasons for Russia’s sale of Alaska, which, in comparison, seemed less promising as a colony than the new territories.  

Some of the earliest accounts of the region reflect a belief that Primor’e held great possibilities for agricultural development, especially the area around Lake Khanka. To the south and east of the lake, visitors found a large area of marsh and grassland that seemed promising as a base for peasant settlement. Early explorers were quick to regard the Khanka grasslands as black-earth steppe reminiscent of southwestern Russia and Ukraine, though in soil composition and moisture content they are closer to marshy mea than the dry landscape evoked by the term “steppe.” Maak, who travelled the region in the 1850s, found the banks of the Ussuri River, Primor’e’s primary north-south waterway, and the plain around Lake Khanka “extremely favorable” for the development of agriculture, stock-breeding, and even viticulture, and practically devoid of humans.  

Similarly, another early account praised the area’s fertile soils, “beautiful virgin forests,” good pasturage, and “a climate as favorable as any to the existence of man.”  

State officials were also sanguine about Primor’e’s prospects for agricultural development. Kazakevich, tacitly recognizing that Primor’e was emptied, not empty, pointed out that the ruins of old settlements augured well for the development of agriculture, suggesting that southern Primor’e could “become the granary [chitnitsa] of

64 Richard K. Maak, Puteshestvie po doline reki Ussuri (St. Petersburg, 1861), vi; Richard K. Maak, Puteshestvie na Amur, sovershennoe po rasporiazhenniu Sibirskogo otdela Russkogo geograficheskogo obshchestva v 1855 godu (St. Petersburg, 1855), 189; Bassin, Imperial Visions: Nationalist Imagination and Geographical Expansion in the Russian Far East, 1840-1865, 176.
the whole region.” Another naval officer observed that the South-Ussuri area was “without doubt the best place for agriculture in the Priamur,” with “black-earth areas of steppe” that could provide for the development of grain and oil crops, not to mention orchards and vineyards. Primor’e’s potential to serve as an agricultural base for the Russian Far East acted as another motivation for settlement, one closely related to officials’ desire to buttress the region’s security.

**Second and third waves**

Similar concerns were evident in two more waves of settlement, the first of which occurred between 1881 and 1905, the second between 1907 and 1914. Officials remained keen to attract more colonists to the Far East, particularly when faced with renewed international tensions in the 1880s and then war in 1904-1905. Although many factors—such as demographic changes in European Russia, the expansion of steamship routes and the construction of the Trans-Siberian railroad—contributed to Russian migration to Primor’e and to other parts of the Far East, security continued to be the primary factor in motivating officials to open and encourage settlement in this particular part of the empire.

During the first twenty years after Russia’s acquisition of the territory, the slow pace of settlement, combined with continued tensions with China, motivated more concerted efforts to colonize the territory. Although the state offered enjoyed legal and financial incentives, few migrants came to Primor’e in the years immediately after

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66 RGA VMF F. 909, op. 1, d. 44, 16-17.
67 RGA VMF F. 410, op. 2, d. 4179, ll. 11ob.
annexation, mainly because of the distances involved—the overland voyage from European Russia could take up to two years. Fewer than 17,000 Russian subjects, mostly peasants, arrived between 1860 and 1881. At the same time, throughout the 1860s and 1870s, tsarist leaders remained concerned with Chinese and British encroachment in the Far East. As Kimitaka Matsuzato has argued, policy toward Asiatic Russia in the late nineteenth century was characterized by what he calls Russia’s “South Ussuri complex,” the fear that China, with Great Britain firmly behind it, would invade vulnerable Russian territories, first and foremost southern Primor’e. The threat was not illusory, though the supposed Anglo-Chinese collusion certainly was. The Ili Crisis (1879-81), a dispute regarding the Russo-Chinese border in Turkestan, heightened tensions between the two powers. The Chinese established arms factories in Manchuria in the 1870s in order to buttress defenses, and in 1883 a Chinese general led an unsuccessful attack on the Russian border in the area of Pos’et Harbor in southern Primor’e in an attempt to regain access to the Sea of Japan. The creation of the Priamur Governor-Generalship in 1884, which encompassed most of the Amur and Maritime oblasts (see figure 14), emerged from a long debate over how best to defend the vast region.68 In addition, concerns about Chinese irredentism helped convince skeptical tsarist officials that mass migration to Siberia and the Far East was in the empire’s interest.69

Far Eastern commanders drew a close connection between security and settlement of Primor’e and the Amur, both for purely military reasons (having enough Russians

69 V. M. Kabuzan, Emigratsiia i reemigratsiia v Rossii v XVIII-nachale XX veka (Moscow: Nauka, 1998), 111–12.; Vashchuk et al., Etnomigratsionnye protsessi v Primor’e v XX veke, 10.
there to defend the territories) and to ensure adequate supplies. In 1883, for instance, Governor-General of Eastern Siberia, D. G. Anuchin warned that because of the light Russian presence in southern Primor’e and distance from reinforcements, he could not adequately defend the region in the event of an attack.\(^70\) Primor’e’s military governor, P. F. Unterberger, was particularly concerned with food security, pointing out that Russia’s eastern domains could not supply themselves in the event of war. He estimated that for lack of local supply, the South-Ussuri region was forced to import each year some 6,800 tons of grain from European Russia and abroad, along with some 12,000 head of livestock, mostly from Manchuria. Only rapid settlement, he argued, could shift the balance in Russia’s favor.\(^71\)

As a result, beginning in the 1880s officials pursued more effective means of populating Primor’e and the Amur region, primarily with peasants from central Russian and Ukrainian provinces. Following the establishment of a sea route between Odessa and Vladivostok in 1880, Governor-General Anuchin proposed to transport settlers by sea at state expense to the Far East from the densely-populated regions of Ukraine and southern Russia. Soon the so-called “Volunteer Fleet”—comprised of ships originally purchased from Germany for use against Britain during the Anglo-Russian war scare of 1877\(^72\)—began moving settlers from Odessa to Vladivostok. To coordinate this second wave of settlement, the Resettlement Administration established a South-Ussuri office in 1883 under the leadership of Fedor Busse, a long-time zaamurets who served on the staff of the

\(^{70}\) RGA VMF F. 410, op. 2, d. 4046, l. 214.
\(^{71}\) RGVIA F. 99, op. 1, d. 87, ll. 21ob-22.
\(^{72}\) A result of the Russo-Turkish War of 1877-78.
East Siberian Governor-General and Primor’e Military Governor beginning in the 1860s, and who was the first chairman of the Society for the Study of the Amur Region (OIAK). The Resettlement Office oversaw sea transportation, monitored settlers’ health, and allocated resettlement plots once they arrived. In total, approximately 243,000 migrated to the Far East, primarily by sea, between 1882 and 1907, the so-called “second wave” of settlement. Most sea-borne settlers in left-bank Ukraine and southern Russia, areas that were thickly populated and fairly close the Black Sea, whence they sailed to the Far East.

Far Eastern officials also looked to bolstering the population of Cossacks in the Amur and Ussuri valleys during the 1880s and 1890s, an initiative that aimed at border security. The Ussuri Cossacks became a separate host (voisko) in 1889, when they were formally separated from the Amur Host to the north. They were concentrated in a Cossack district (okrug) along the upper and middle Ussuri and in border zones in the south. Despite their initial problems settling along the river, the Ussuri Cossack population reached 7,200 by 1894, and could field a modest force of 200 mounted Cossacks. By the 1890s, the need for both greater military force and economic development led the Committee for the Siberian Railroad, whose wide-ranging responsibilities included overseeing settlement, to attract Cossacks to the Ussuri. The Committee put great stock in the “great colonizing abilities” of these warrior-farmers, who could (in theory) simultaneously defend Russian territory, cultivate the land, and

73 Trans-Amurite,” i.e. resident of Primor’e.
raise livestock. The Committee allocated some 336,000 rubles to the transportation and installment of willing families, attracting some 300 households from the Don, Orenburg, Transbaikal, and Ural hosts.\textsuperscript{75}

After the Russo-Japanese War, the need for settlement and economic self-sufficiency in the Far East seemed more pressing than ever. As one envoy to the Far East, Boris Ivanitskii, put it in 1909, settlement of Primor’e, the “base of our Far Eastern domains [vladenii], has political significance of the first order.”\textsuperscript{76} In March of 1906, the newly-formed Council of Ministers wrote to the head of the Main Administration for Agriculture and Land Management (GUZZ), Alexander Nikol’skii, demanding that he increase the pace of settlement in regions “important to military matters,” along with the development of agriculture, stock-breeding, and the formation of food reserves.\textsuperscript{77}

Beginning in 1908, Prime Minister Stolypin also adopted a more active approach on the Pacific, establishing a Committee for the Settlement of the Far East, and pressing for the construction of a railroad between Chita and Khabarovsk.\textsuperscript{78}

In the post-1905 era, many peasants did not need official encouragement to leave densely-populated areas in European Russia and Ukraine, but incentives to settle in the Far East meant more and more of them undertook the trans-continental journey.\textsuperscript{79} The


\textsuperscript{76} Russian State Historical Archive (RGIA) F. 391, op. 3, d. 1178, l. 8ob.

\textsuperscript{77} RGIA F. 391, op. 3, d. 257, l. 1.

\textsuperscript{78} Railroad workers were offered land (15 desiatinas) if they chose to stay in the Far East. Vlasov, 2010. On the size of land allotments, see below.

\textsuperscript{79} Treadgold, The Great Siberian Migration: Government and Peasant in Resettlement from Emancipation to the First World War, 70–71, 205–23.
state’s interest in settling the Far East, combined with Stolypin-era land reform and support for resettlement generally, greater awareness among peasants of opportunities in the East, and the construction of the Trans-Siberian and Chinese Eastern Railroads, coalesced to produce the third and largest “wave” of migrants to Primor’e. In total, an additional 170,000 migrants arrived in the lands that now constitute Primor’e between 1907 and 1917, increasing the population of Russian subjects in Primorskaia oblast’ to 485,735 by 1914 (see table 1).80

Because the Far East bordered potential enemies and remained lightly populated, the Resettlement Administration continued to offer incentives to those willing to settle in the Far East. The state also subsidized the costs of migrants’ journeys, and provided a start-up loan of up to 200 rubles per family upon arrival.81 GUZZ also invested tens of thousands of rubles in surveying and draining land in the Ussuri watershed between 1911 and 1916, an initiative explicitly intended to open unsettled border areas to colonists (see Chapter 4). In sum, because Primor’e was strategically valuable—and vulnerable—throughout the tsarist period (and, as we will see, in the Soviet era as well), state officials initiated, encouraged, and facilitated settlement of the territory.

80 Kabuzan, Dal’nevostochnyi krai v XVII - nachale XX vv.: istoriko-demograficheskii ocherk; Kabuzan, Emigratsiia i reemigratsiia v Rossii v XVIII-nachale XX veka; Stephan, The Russian Far East: A History; Vashchuk et al., Etnomigratsionnye protsessi v Primor’e v XX veke, 10–21.
81 RGIA F. 391, op. 3, d. 1178, l. 20ob.
Table 1: Population of Primorskaia oblast’, 1861-1916 (permanent residents) 82

<table>
<thead>
<tr>
<th>Year</th>
<th>Russian subjects (excl. Koreans)</th>
<th>Indigenous Koreans (Russian subjects)</th>
<th>Chinese Korean subjects</th>
<th>Total foreign subjects (incl. Europeans)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1861</td>
<td>12,148</td>
<td>9,195</td>
<td>-</td>
<td>923</td>
<td>22,266</td>
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<tr>
<td>1881</td>
<td>29,225</td>
<td>11,287</td>
<td>-</td>
<td>21,504</td>
<td>62,016</td>
</tr>
<tr>
<td>1897</td>
<td>120,514</td>
<td>14,502</td>
<td>-</td>
<td>54,996</td>
<td>190,012</td>
</tr>
<tr>
<td>1907</td>
<td>240,189</td>
<td>12,505</td>
<td>16,965</td>
<td>18,821</td>
<td>290,336</td>
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<tr>
<td>1911</td>
<td>395,210</td>
<td>12,505</td>
<td>17,080</td>
<td>116,125</td>
<td>523,840</td>
</tr>
<tr>
<td>1914</td>
<td>485,735</td>
<td>15,294</td>
<td>19,277</td>
<td>116,472</td>
<td>619,234</td>
</tr>
<tr>
<td>1916</td>
<td>461,548</td>
<td>13,767</td>
<td>21,639</td>
<td>104,540</td>
<td>579,954</td>
</tr>
</tbody>
</table>

Agriculture and civilization

From the perspective of tsarist officials in the Far East, settlement had immediate, practical benefits: enabling them to stake a claim to a newly-acquired territory and to provide “manpower and provisions” to military forces stationed there. That said, their emphasis on developing Primor’e’s potential as an agricultural base also reflects deeply-held cultural associations between agriculture, civilization, and Russianness. Making Primor’e Russian entailed not just settlement, but also the cultivation and taming of the land itself.

Since at least the early eighteenth century, Russians ascribed to the Enlightenment view that humans progressed from nomadism to settled agriculture. Many regarded the settlement of peasants on the southern steppes, as well as the “conversion” of nomadic peoples to agricultural lifeways, as the advancement of civilization. Policy toward the

82 Kabuzan, Dal’nevostochnyi krai v XVII - nachale XX vv.: istoriko-demograficheskii ocherk, 164, 226–28. These statistics are based on state censes (perepisi) and include populations of southern Primorskaia oblast’, i.e. not Sakhalin Island, Kamchatka, or Chukhotka. The figures for the oblast’s Chinese population are conservative estimates.
indigenous peoples of Siberia (including in the Far East) also reflected this belief, offering a different legal status to those who decided to settle in permanent dwellings. 83

The view that agriculture was a marker of civilization (or at least progress toward it), remained strong in Russia in the late nineteenth century when the empire acquired new territories in Central Asia and the Far East. Sunderland has pointed out many observers believed the physical changes that accompanied farming signified that the land itself was becoming more Russian. Thus, peasants “made Russia” in the Altai Mountains, he writes, and created a landscape that looked like “real” Russia near Tashkent, in Central Asia. 84 Throughout the empire, cultivation was a key part of making a place Russian, whether in taming the “wild field” or settling the Central Asian steppes. As the P. Golovachev wrote, “wherever the settler-farmer (prishelets-zemledelets) has cast his grain, there Russia's rule (gospodstvo) has grown and taken root forever.” 85 Along many settlement frontiers, there was a close association between the Russian peasantry, farming, and Russianness. To be sure, those working the land did not need to actually speak Russian or practice Orthodoxy. Nevertheless, cultivating the land was one element of Russianness among many, a step on the road to civilization. 86

Similarly, historical accounts from 1860s Primor’e evince the view that agricultural settlement would help make Primor’e more “Russian.” Military Governor Kazakevich, for instance, wrote in 1868 that making the Far East Russian was “possible

85 Quoted in Ibid., 225.
86 Sunderland, Taming the Wild Field: Colonization and Empire on the Russian Steppe, 61–63, 74–77.
only…through its settlement by native Russian farmers [korennymi Russkimi zemledel’tsami],” who would populate the land and cultivate it.\(^{87}\) Similarly, the physician and traveler A. V. Eliseev remarked that peasants had transformed “a little corner (ugolok) of Manchuria into a genuine Russian corner.”\(^{88}\) Most famously, Przheval’skii wrote that a Russian peasant he met near Lake Khanka believed “even here we will make Russia [my i zdes’ Rossiiu sdelаем].” N. Aliab’ev, who published an account of the Far East two years after Przheval’skii’s, related that when consoling a homesick Russian settler, he pointed out that Primor’e was “barely Russia.” The woman responded: “No father... even here we will make Russia.” Another early account, possibly based on Aliab’ev’s, repeated the story of settlers missing their homelands but expressing the same determination: “even here we will make Russia.” Whether Primor’e’s first Russian and Ukrainian settlers were brimming with national pride is questionable—the similarity between these passages suggests some borrowing—but these accounts reflect commentators’ belief in the power of the peasant farmer to transform an alien landscape.\(^{89}\)

**Deforestation and desiccation**

Early accounts also illustrate that Russian visitors to Primor’e sought to effect physical changes in Primor’e’s landscape that would make it not only more cultivated,

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\(^{87}\) RGA VMP F. 909, op. 1, d. 44, ll. 26-ob


but also less damp, rainy, and wild. Primor’e did not experience landscape transformations that were as intentional and specific as in New Zealand, for instance, but in the early days of Russian colonization, some did look forward to a time when the land and its nonhuman inhabitants would be tamer and more cultivated.  

In particular, many observers believed that partial deforestation of Primor’e would be an advancement, as it would help dry the territory’s climate. Moon has highlighted the belief that agriculture would civilize the southern steppes, and even that cultivation could make the land and climate more amenable to Russian life. Primor’e landscape presented nearly the opposite problem. To contemporaries, it was simply too forested, with dense vegetation reminiscent of a jungle, and too humid. The same dessicationist logic applied, but augured for drying the land, not increasing atmospheric moisture.

Early visitors to Primor’e found the region’s high humidity, damp summers, and dense coastal fog problematic. The dampness complicated the growing of certain dry-land crops and encouraged the growth of fungus (see Chapter 2), while plentiful surface water provided ideal conditions for insects such as mosquitoes, flies, gnats and others, often known collectively known as gnus. Primor’e has a profusion of such insects, some of which are not found elsewhere in Russia. One type of wasp native to northern China, Manchuria, and Primor’e, for instance, can, in rare cases, kill a full-grown human on its

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Perhaps the most colorful description of Primor’e’s *gnus* comes from de la Brunière, who travelled through the territory in 1855. Of insect life he wrote:

> I have not words to express to you the multitude of mosquitos, gnats, wasps, and gadflies which attacked us at every step. Each of us, armed with a horse’s tail fixed on an iron prong, endeavoured to strike them, and this weak defence only served to render the enemy more vicious in his attacks….if, at times, I raised my hand to my face, I crushed ten or twelve with one blow. Two wretched horses, which carried the baggage and occasionally our persons, lay down panting in the midst of the grass, refusing to eat or drink, and could by no means be induced to march.

Przheval’skii found *gnus* no less irritating, remarking that the “mosquitoes, flies, and gadflies [were] in such quantity that one who hasn't seen it with his own eyes cannot understand.” As a result of these flying pests, what little horse-breeding did occur in Primor’e was confined to the shoreline, where sea breezes kept insects at bay.

Some contemporaries believed Primor’e’s forests themselves were responsible for what they saw as Primor’e’s excessive humidity. In March 1859, M. I. Veniukov claimed that the “labor of man” would improve Russia’s Far Eastern territories, clearing forests, draining swamps, and reducing the number of insects. Similarly, Ivan Nadarov, an army officer who wrote extensively on the Far East, argued that Primor’e’s dampness resulted from “excess forest vegetation,” and that fires would therefore “bring a great benefit to the krai, drying places and allowing for ventilation of the taiga,” which would also reduce the number of insects. Drying the land also promised to solve the problem

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93 Quoted in James, *The Long White Mountain, or A Journey in Manchuria*, 425.
94 Przheval’skii, *Puteshestvie v Ussuriskom krae*, 1867-1869 g., 56.
of fungus; as one resettlement official reported, by reducing moisture, could also reduce the incidence of fungus among peasants’ crops.\textsuperscript{97}

The belief that deforestation would improve Primor’e’s climate was widespread and persistent. One of the earliest European visitors to the Ussuri River, an English writer named Ernest Ravenstein, also wrote that a “superabundance of forest land” caused the excessive moisture of the Ussuri region. Though this would “injuriously affect agriculture for some time to come,” he wrote, with the partial destruction of forests, the climate would become drier, observing that this had been the case on the upper Amur and in South Africa.\textsuperscript{98} Similarly, a state forester commented that the density of forests in Primor’e was “too great,” leading to rot and impoverishment of the soil.\textsuperscript{99} Another Russian commentator, writing in the 1890s, found that with its thick forests, Primor’e was like Germany in the time of Tacitus, but with peasant settlement the taiga would retreat “before man, drying little by little the timeless swamps and reducing the number of insects.\textsuperscript{100} Only in the early twentieth century did a local meteorologist question the view that removing forests to reduce atmospheric moisture in the territory.\textsuperscript{101} In the face

\textsuperscript{97} RGIA F. 1273, op.1, d. 409 l. 58.
\textsuperscript{98} Ravenstein, \textit{The Russians on the Amur}, 401. It has been noted that many Europeans, beginning as early as the seventeenth and eighteenth centuries, believed there was a connection between deforestation, erosion, and drought. See David Moon, “The Environmental History of the Russian Steppes: Vasilii Dokuchaev and the Harvest Failure of 1891,” \textit{Transactions of the Royal Historical Society} 15 (December 2005): 149–174.
\textsuperscript{100} M. Berezhnikov, \textit{Obocrenie fabricno-zavodskoi promyshlennosti Primorskoi oblasti v 1896 godu (doklad Priamurskomu General-Gubernatoru chinovnika osobyh poruchenii, inzhener-tekhnologa M. Berezhnikova)} (Khabarovsk: Tipografiia Kantseliarii Priamurskago General-Gubernatora, 1897), 33.
of an unfamiliar and challenging environment, many Russian observers hoped that peasant settlement and agriculture would help dry the land.

Tigers

Another way in which Russians sought to change Primor’e was in reducing the number of large predators, particularly tigers. Without doubt one of the most fearsome and unusual —and “un-Russian”—sights for Russians and Ukrainians in the Far Eastern taiga was the Amur tiger. According to Aliab’ev, newcomers did not know what to think the first time they saw the strange animals. He related a story of two Cossacks who saw a tiger in the bush, and not knowing what it was but seeing its colorful fur, unwittingly walked right toward the animal. (They survived.) Russian soldiers and Cossacks, Aliab’ev wrote, revered tigers less than indigenous peoples, but learned to treat them with respect, referring to them with the polite form of you (vy), and praising God when they survived crossing paths with the beasts.102

Stories of tigers and tiger attacks were legion in travelogues and journalistic writing on the region, perhaps playing on public demand for the exotic. Aliab’ev, for instance, wrote that the “Terror of this place is the Bengal [sic] tiger,” which could be found everywhere in the Ussuri krai, particularly near Lake Khanka and along the southern seashore, near Ol’ga and Pos’et Bays. During lean winters tigers preyed on dogs, livestock, and people in settlements, and nearly all hunters had seen the animals, or at least fresh tracks, at one point or another. Aliab’ev wrote that although attacks on

humans were rare, two or three Russians had been killed by tigers in the areas he visited, and several soldiers told him chilling tales of encounters in the taiga. In one case, a tiger had apparently tracked and eaten a soldier in the Ol’ga area, walking in the man’s footprints to hide its own tracks.\textsuperscript{103} A widely reported story told of a tiger in the village of Kozlovskaja, in the Khanka district, that allegedly broke through the roof of a stable and killed two horses. When help arrived, the tiger jumped back through the roof and managed to kill several pigs before making its escape.\textsuperscript{104}

At the same time, some accounts celebrated the idea that Russians would tame the land and best its most fearsome predator, in contrast to Primor’e’s previous inhabitants. Przheval’skii noted that the Nanai feared and worshiped tigers, falling to their knees in prayer if they saw one and bowing down to tiger tracks. But with the coming of Russians, he wrote, who “almost every year kill tigers,” many Nanai had begun to “doubt in the omnipotence of this god and already crawl before it less.”\textsuperscript{105} Similarly, Atkinson enthused: “Here the tiger and leopard rule, but the time is approaching when Russian colonists will dispute their right, and either kill or drive them into other regions.”\textsuperscript{106} In his account of Primor’e, written around the turn of the century, Sergei Iuzhakov echoed Atkinson almost word for word, writing that the tiger had been “truly the tsar of the country” before the arrival of the Russians. Local peoples looked upon tigers as on “a

\textsuperscript{103} Ibid., 69–70, 73–74.
\textsuperscript{105} Przheval’skii, \textit{Puteshestvie v Ussuriiskom krae}, 1867-1869 g., 92.
\textsuperscript{106} Atkinson, \textit{Travels in the Regions of the Upper and Lower Amoor, and the Russian Acquisitions on the Confinces of India and China ...}, 375.
higher being,” and the Chinese and Koreans submitted meekly to predation by the animals. But with the coming of the tsarist empire, all this changed: now “the tiger has learned to respect man and beware entering into conflict with a European, who differs greatly from a Chinese or Korean.” Part of making Primor’e “Russian,” in the eyes of contemporaries, involved changing and civilizing the region: cutting back the taiga, drying the swamps and marshes, and prevailing over its wild animals. Officials pushed for rapid colonization of Primor’e to meet practical ends of empire-building, but colonization also signified Russia’s transformative role as a civilizing power in the east.

III. Making the land Russian: How?

Where and how people settled

Thus far, this chapter has addressed why and how tsarist officials sought to colonize Primor’e in very broad terms. The following section examines who these settlers were and where they actually settled. It shows that in practice many of those enrolled in making Primor’e “Russian” were not Russian in their ethnicity or native language. Russianness was a flexible concept, albeit one that became more focused on ethnicity by the early 1900s. Making Primor’e Russian entailed securing the territory for the empire and developing its productive capacities—particularly its potential for agriculture. Consequently, officials tolerated and even welcomed non-Russian peoples if they deemed them useful, particularly for economic growth.

Settlement patterns

Settlement—and the ecological transformations that occurred as a result—came in fits and starts and was unevenly distributed across Primor’e. The areas of densest settlement were along the southeastern coast (near Vladivostok), in the upper Ussuri valley, and in the plain around Lake Khanka, areas that were relatively flat and which had fertile alluvial soils. In coastal regions, first-wave settlers founded the villages of Ol’ga (1860), Permskoe (1864), Vladimir-Aleksandrovo (1864), and Shkotovo (1865); in the Khanka plain, Turii Rog (1863), Kamen’-Rybolov, and Troitskoe (1866); and Razdol’noe and Nikol’skoe (later the city Nikol’sk-Ussuriisk, now Ussuriisk) in the Suifun (Razdol’naia) River valley (1866). Second-wave settlers founded new villages in the same regions but also pushed eastward into the foothills of the Sikhote-Alin, to and into the Suchan (now Partizanskaia) river valley (see figure 15).
Figure 15: Settlements in southern Primor’e.\textsuperscript{108}

1. Pos’et (founded in 1860)  
2. Grodekovo (1899)  
3. Turii Rog (1863)  
4. Troitskoe (1866)  
5. Kamen’-Rybolov (1866)  
6. Spasskoe (1886)  
7. Markovskaya (1867)  
8. Iman (1895)  
9. Ol’ga (1860)  
10. Permskoe (1864)  
11. Chuguevka (1903)  
12. Vladimiro-Aleksandrovske (1864)  
13. Shkotovo (1865)  
14. Razdol’noe (1866)  
15. Nikol’skoe (after 1868, Nikol’sk-Ussuriisk, now Ussuriisk)  
16. Vladivostok (1860)

\textsuperscript{108} Image adapted from \textit{Atlas SSSR}, 2nd Ed., Glavnoe upravlenie geodezii i kartografii pri Sovete Ministrov SSSR (Moscow, 1969), 56.
Figure 16: Rivers and major geographical features in southern Primor’e.  

<table>
<thead>
<tr>
<th>Rivers</th>
<th>Other geographical features</th>
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<tbody>
<tr>
<td>Tiumen’ River</td>
<td>A. Murav’yev-Amurskii Peninsula</td>
</tr>
<tr>
<td>Suifun (Razdol’naia) River</td>
<td>B. Russian (Russkii), Popov, and Rikord Islands</td>
</tr>
<tr>
<td>Sintukhe (Komissarovka) River</td>
<td>C. Amur Bay</td>
</tr>
<tr>
<td>Mo (Mel’gunovka) River</td>
<td>D. Ussuri Bay</td>
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<tr>
<td>Sungacha River</td>
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</tr>
<tr>
<td>Ussuri River</td>
<td></td>
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<td>Vaku (Malinovka) River</td>
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<tr>
<td>Iman (Bol’shaia Ussurka) River</td>
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<td>Kolumbe River</td>
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<td>Tetiukhe (Rudnaia) River</td>
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<tr>
<td>Avvakumovka River</td>
<td></td>
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<tr>
<td>Suchan (Partizanskaia) River</td>
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</tbody>
</table>

109 Image adapted from Atlas SSSR, 2nd Ed., Glavnoe upravlenie geodezii i kartografii pri Sovete Ministrov SSSR (Moscow, 1969), p.56
Among these early settlers were Old Believers, a predominantly Russian-speaking religious group that had been historically subject to persecution. Old Believers came from the Transbaikal and Siberia in the 1870s and 1880s, drawn east by the sparsely-populated land, exemption from conscription, and the absence of Orthodox priests. Many settled in the area around St. Ol’ga Bay; the river that empties into the bay, the Avvakumovka, attests to their legacy in the area.\(^{110}\) Among these migrants were Leontii (1836-1913) and Ekaterina (1847-1912) Khudiakov, Old Believers whose ancestors had migrated to Siberia in the early 1700s, and who settled in the Suifun (Razdol’naia) valley in 1881. The Khudiakovs’ grandson, Sergei (b. 1911) later documented his family’s recollections and experiences, providing a unique view of peasant life in late-tsarist Primor’e.\(^{111}\)

The first Cossacks in Primor’e settled (or, rather, were placed) along the Ussuri River near its confluence with the Amur in 1858. There, 54 families formed three stanitsas, Korsakova, Kazakevich, and Nevel’skaya. Between 1860 and 1863, 400 new families arrived, along with 800 low-ranking Cossacks, swelling the Cossack settlements to 760 households. In 1860 the Ussuri Cossacks became a separate infantry battalion within the Amur Cossack host.\(^{112}\) By 1870, their population stood at roughly 5,000

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\(^{110}\) The Archpriest Avvakum was a leader of the Old Believer movement in the seventeenth century and was exiled to Siberia. Iu.V. Argudiaeva, “Etnicheskaia istoriia staroobradoscev Primor’ia,” Zapiski Obshchestva izuchenia Amurskogo kraia, no. 33 (1999): 144.


individuals situated primarily on the middle Ussuri. In the 1890s, arrivals from the Don, Transbaikal, and other Cossack hosts founded new stanitsas further upriver, and southwest of Lake Khanka, near the Chinese and Korean borders.

By the turn of the century, many of the most desirable areas of settlement were occupied, albeit not densely, by Cossacks and starozhily, the so-called “old-timers” who had arrived before 1900. Consequently, the Resettlement Administration directed thousands of third-wave Russian and European settlers—often known as novosely, or “newcomers”—to the valleys of the Iman, Vaku, and Khor Rivers, which flow into the lower Ussuri. Compared to southern Primor’e, these areas tended to be heavily forested, remote from existing settlements, and especially prone to flooding.

How peasants actually occupied and used land in Primor’e was a haphazard process that became more regulated only in the 1880s. During first and second waves, there was little state oversight over where, exactly, settlers established themselves. The 1861 ukaz’s stipulation that allotments be no larger than 100-desiatinas suggests a certain precision in the amount of land settlers could legally occupy. However, early on there was little or no monitoring of who settled where or of how much land they used. In the 1860s and 1870s, peasants simply claimed land by plowing it, or by plowing a perimeter of a plot of land they wanted. Land surveying for the purposes of resettlement (as opposed to topographical mapping by the military) did not begin until 1884, after the establishment of the South-Ussuri office of the Resettlement Administration, and proceeded slowly thereafter. In 1887, resettlement officers reported that they had not

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114 Coquin, La Sibérie: peuplement et immigration paysanne au XIXe siècle, 665.
even surveyed already-settled areas, and noted that peasants regarded the shape and extent of their holdings as changeable. Surveyors laid out new allotments, but also had to negotiate with peasants already settled in the territory.\textsuperscript{115} More remote areas, such as the Ussuri’s northern tributaries or some of the rivers flowing from the eastern Sikhote-Alin into the Sea of Japan remained un-surveyed into the late 1890s or in some cases later.\textsuperscript{116}

When third-wave settlers began arriving, the Resettlement Administration had a better knowledge of the settlement zones, so novosely had somewhat less leeway in creating their own boundaries. In addition, whereas before 1901 European and Russian settlers had been able to claim 100 desiatinas per family, afterward they were entitled to only 15 desiatinas (40.5 acres) per male household member, which generally amounted to less land per family.\textsuperscript{117} The reduction of allotments was partly in response to a diminishing supply of accessible land, but—as will be discussed in Chapter 4—may also have resulted from officials’ irritation with peasants’ low-intensity use of the land.

There were no hard-and-fast rules regarding which lands were allocated for settlement. After its establishment, the Resettlement Administration generally allocated plots to settlers (most of whom were Russian or Ukrainian) on the basis of negotiations with peasant scouts (khodoki), who selected land for their communities in European

\textsuperscript{115} The need to negotiate with settlers regarding the size of their allotments is discussed briefly a “Report on the Resettlement of Peasants by Sea to the South-Ussuri Region in 1891,” probably authored by Fedor Busse. State Archive of Primorski krai (GAPK) F. 1, op. 1, d. 32, l. 85.
\textsuperscript{116} Russian State Historical Archive of the Far East (RGIA DV) F. 1, op. 5, d. 661, ll. 3-3ob.
\textsuperscript{117} Vlasov, Istoriia Dal’nego Vostoka Rossii: Kurs lektsii, 57. At this time, land allocations differed for Korean and Chinese settlers (see below).
Russia. Scouts and government surveyors sought out plots that seemed amenable to agricultural settlement: those with level terrain, adequate and fertile soil, land that could be cleared without too much difficulty for plowing, open areas of grassland for hay, and access to water, timber, and (if possible) roads. Settlers and the resettlement organs sought to avoid areas that were rocky, marshy, uneven, or completely covered with forest, which effectively eliminated much of eastern Primor’e, which was very mountainous and largely remained the domain of indigenous peoples. The Resettlement Administration delineated resettlement plots mainly in Primor’e’s river valleys, along the southeastern seashore, and around Lake Khanka. For instance, in 1899 the Resettlement officer Rittikh warned against putting settlers in areas that lacked open spaces between forests and waterways, or in areas that were prone to flooding. He stressed that some areas, such as the basins of the Khor and Kiia Rivers were “undoubtedly unsuitable” for agriculture (though the Resettlement Administration eventually sent many settlers there as well).

One way that settlers and resettlement officials may have determined which lands were suitable for agriculture was by observing that someone else was already farming there or had done so in the past. For instance, in 1883, 250 families sent 20 scouts to Primor’e in search of land. As one resettlement officer wrote:

Keeping in mind the strategic significance of resettlement, and on the other hand the necessity of indicating [to the scouts] areas suitable enough that the economy appearing here can be consolidated in the fastest possible time, I offered them the valleys of the

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120 RGIA F. 1273, op. 1, d. 409, ll. 10ob, 12.
Maikhe, Lefu, and Sankhezy rivers [which flow into Lake Khanka from the south]. Settlement of these places is necessary for implanting a Russian population on the border and along the main communication routes [used by] foreign Chinese in the basins of the Daubikhe, Suchan, and other rivers of our coast that are inhabited by significant numbers of Chinese.

This particular report is striking in its frank view of settlement and land use as a zero-sum contest between Russians and Chinese, and also because the scouts selected lands already occupied by Chinese, which may be why the resettlement officer thought they would be amenable to settlement in the first place. The Resettlement Administration subsequently ousted the Chinese from these areas, even though some had been in Primor’e since before 1860 therefore were legally entitled to reside there.¹²¹

Russian and European settlers may also have displaced indigenous peoples, though there are few records of this and the Resettlement Administration did not abet such evictions, as it did with Chinese. According to Arsen’ev, settlers frequently ousted indigenous peoples from their villages, making unwilling nomads of previously sedentary or semi-sedentary denizens, by claiming they were Chinese. Arsen’ev found this particularly ironic in light of the tsarist government’s policy of encouraging nomadic peoples in Siberia to settle. After touring along Primor’e’s coast in 1911, he implored the Governor-General to ensure that indigenous peoples were allocated land, since “peasants do not want to recognize their land rights and drive them away. Among the Tazy there are families who have moved seven times.”¹²² Misunderstandings, he wrote, occurred constantly, and as a result the Tazy were driven away, “went into the mountains and

¹²¹ RGIA F. 391, op. 1, d. 24, ll. 1-9.
¹²² In the margins of Arsen’ev’s report, someone wrote “What a disgrace!” regarding peasants’ evicting of natives.
decided to as before take up the example of their fathers and uncles,” taking up the nomadic lifestyle once more. 

**Making Primor’e Russian? Non-Russian migrations**

While Russian elites spoke of making Primor’e “Russian,” and supported the physical displacement of Chinese by Russian settlers, the territory’s population was ethnically, culturally, and linguistically diverse throughout the tsarist period. Officials were, first and foremost, concerned with ensuring Primor’e remained a part of the empire, and (as discussed above) viewed the peopling of the territory, claiming its natural resources, and developing it economically as instrumental to this goal. Consequently, they were willing to allow non-Russians to settle in the territory if they believed these newcomers would contribute to colonization of the region. In this, migration policy in Primor’e was consistent with a venerable tradition of Russian borderland settlement. Non-Russian peoples had long played an integral role in settling and stabilizing the empire’s frontiers, and they continued to do so even in an age of rising nationalism.

That said, ethnicity was one variable in the colonial equation, with many officials expressing a vague aspiration that non-Russians would somehow merge with Russians, or at least with Russian culture. Also, ethnicity became an increasingly important

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consideration toward the end of the imperial period, leading to a more restrictive
migration policy as it concerned East Asian peoples.

From the outset, tsarist officials sought to attract foreigners who might help
colonize the territory and develop it economically. The government’s 1861 legislation
explicitly approved settlement by both Russians and foreigners in the Amur and
Primorskaia oblasts. After 1882, foreigners no longer received the tax exemptions or
land allotments available to Russian subjects, but they were still permitted to settle in the
region. In addition, from 1860 to 1901 and from 1904 to 1909 Vladivostok was a
porto franco, or free-trade zone, a measure intended to encourage merchants to set up
shop in the port city. While never a large share of the population, foreign merchants,
including Britons, Germans, and Americans, did come to Vladivostok during the first
years of settlement.

Among Primor’ye’s most famous foreign settlers was Yulius Bryner, a man who
ran away from his native Switzerland, made his way to the Pacific, and eventually
became a shipping agent in China. In the mid-1870s, Bryner moved to Vladivostok,
where he started an import-export business. Soon, Bryner became one of the region’s
most successful merchants, ultimately founding a shipping company (which exists in

125 Indeed, the edict was titled “Rules for the Settlement of Russians and Foreigners in Amur and
Primorskaia oblasts.”
126 Vashchuk et al., Etnomigratsionnye protsessi v Primor’ye v XX veke, 10.
127 Natalia A. Beliaeva, Ot Porto-Franco k tamozhne: ocherk regional’noi istorii rossiiskogo
protektionizma (Vladivostok: Dal’nauka, 2003).
128 Ia. A. Babrenko, “Rasselenie krestianstva v iuzhno-ussuriiskom krae vo vtoroi polovine XIX v.,”
Rossiia i ATR, no. 3 (2009): 104.; V. M. Kabuzan, Kak zaselalsia Dal’nii Vostok. Vtoraja polovina XVII-
nachalo XX V. (Khabarovsk: Kn. izd-vo, 1973), 61, 99, 227–229; L. V. Aleksandrovskaia, Opyt pervogo
morskogo pereseleniia v Iuzhno-Ussuriiskii krai v 60-kh godakh XIX veka: dokumental’no-istoricheskoe
povestvovanie (Vladivostok: Obschchestvo izucheniiia Amurskogo kraia (OIAK), 2003); Stephan, The
modified form even today) as well as one of Primor’e’s largest mining operations.

Bryner’s grandson, the actor Yul Brynner, was born in Vladivostok in 1920. Another prominent settler—though not a foreigner, exactly—was Michael Iankovskii, a Pole who had participated in his country’s 1863 uprising. Exiled to Siberia, Iankovskii in 1874 found his way to Primor’e, where he established a prosperous farm on the Sidemi peninsula, which lies in the Amur Gulf, opposite Vladivostok (see figure 16). Iankovskii and his family became quite wealthy by raising horses—the coast being one of the few areas where this was possible—as well as spotted deer.129

Some officials were also keen to attract people with particular skills, even if they were not ethnic Russians. Most notably, there was an effort (discussed in more detail in Chapter 5) running from the 1880s to the 1920s to attract fishermen to the region, particularly Finns and Balts. While the Resettlement Administration’s main concern in this case was settlers’ ability to fish, they believed Balts were Russian enough for the purposes of colonization. As Alexander Krivoshein, head of the Land Section of the Ministry of Internal Affairs (MVD), wrote in 1898, “when placed face to face with Chinese and Japanese, [Balts] will naturally join with the Russian population and, with time, will merge with it completely [vpolne s nim sol’iutsia].”130

In addition, officials were happy to accept various non-Russian Slavs who wished to migrate to the Far East. Mark Bassin has noted that Russian imperial boosters viewed the acquisition of the Amur through the lens of pan-Slavism, hoping that Czechs and

130 RGIA F. 1273, op. 1, d. 294, 18-19ob.
Slovaks, unsatisfied with their lives in America, would come to the Far East and merge with their brother Slavs. “After one month,” wrote Alexander Gil’ferding, a philologist employed by the Foreign Ministry, the Czechs, Slovaks, and others “would be speaking Russian, and their children would be indistinguishable from the Russians.” Nothing came of this vision, but resettlement officials later invoked the idea that Russian and non-Russian populations would merge in the east to Balts as well.¹³¹

A very large group of Slavic settlers that did make the voyage were Ukrainians, who constituted by far the largest non-Russian group in Primor’e. Contemporaries rarely distinguished Russians and Ukrainians, but according to the census of 1897, fully three-quarters of peasant settlers originated in present-day Ukraine, and though most identified as Russian, roughly half of these probably spoke some form of Ukrainian.¹³² Ukrainians’ predominance in many parts of rural Primor’e was reflected in the names of settlements, such as Poltavka, Kievka, and others. Indeed, beginning in the early twentieth century,


¹³² That is, roughly one-third of all peasant settlers in 1897 spoke Ukrainian dialects of one sort or another. Vashchuk et al., *Etnomigratsionnye protsessi v Primor’e v XX veke*, 12.
Primor’e became known in some circles as Zelenyi Klin’, or the “green triangle,” a Far Eastern Ukrainian homeland.133

**East Asian settlers and seasonal migrants**

Most strikingly, tsarist officials were also willing to enroll Koreans and some Chinese in the task of colonization, despite concerns about the territory’s demographic balance and security. Migration policy vis-à-vis Chinese and Koreans became much more restrictive after 1880 and again after 1905, and one finds occasional references to assimilating Koreans, but these peoples remained in great numbers throughout the tsarist period. While demographic and economic trends in China and Korea pushed many into Russian territory, Russia’s colonization of Primor’e also contributed to their immigration, a fact that stands in stark contrast to the anti-Asian rhetoric of the time.

Perhaps as many as 1,000 Chinese and Manchu already resided in Primor’e in 1860. Through the Treaty of Beijing, they retained extraterritorial rights as Chinese subjects, including the right to exercise their own local courts, and the obligation to pay taxes to the Qing Emperor (who regarded Russia’s acquisition of Primor’e as temporary).134 Officially, the Russian government recognized the landholdings of resident Chinese, though as we have seen sometimes disregarded their rights in practice. Even less welcome were those Chinese who came to Primor’e seasonally to trap, hunt, and gather ginseng, mushrooms, and other forest products, generally operating outside

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the state’s limited reach. Finally, groups of Chinese bandits known as hung-huzy (“red beards”)\textsuperscript{135} terrorized much of the territory, as they did in neighboring Manchuria, and even engaged in open conflict with Cossacks and sailors.

Despite these difficulties, Russian officials actually encouraged some Chinese to migrate to Primor’e, primarily for economic reasons. An 1868 letter from Governor-General of Eastern Siberia M. S. Korsakov is indicative of the tensions that emerged between a desire for rapid colonization and concerns about East Asians, and how the former could trump the latter. Korsakov wrote that Primor’e and the Amur would be secure only when the military “could depend on the population, preferably a co-national [soplemennoe] one” for “manpower and provisions.” Thus, “energetic settlement” and the rapid development of “civic-mindedness [grazhdanstvennosti] and trade” were to be the state’s main priorities.\textsuperscript{136} Given the urgent need for settlement, he argued, most places should be open to “all nations, both European and Asian,” including the Chinese. While the Chinese, he wrote “are at the present time dangerous to Primorskii krai, they could be useful for it in the context of colonization.” He maintained, however, that Koreans and Chinese should not settle near the border. In this view, Korsakov sought to

\textsuperscript{135} The origin of this name is not clear. It has been suggested that it derived from an epithet for Cossacks (hence “red beards”) during the seventeenth century, and was later applied to Chinese bandits. See Lee, \textit{The Manchurian Frontier in Ch’ing History}, 1970, 94; Stephan, \textit{The Russian Far East: A History}, 64.

\textsuperscript{136} As Daniel Brower has shown, Russian reformers thought saw inculcating grazhdanstvennost’ among the peoples of Turkestan as part of the empire’s civilizing mission. The meaning of this term was variable; among liberals, writing in the 1870s and 1880s, it generally denoted “civilization” or “civic-mindedness,” and/or a willingness to take up the rights and responsibilities of imperial subjecthood. Later, conservatives adopted it but shifted its meaning to lie closer to ethno-national conceptions of “Russianness.” Judging by the context in which he used it, it seems Korsakov had the original meaning in mind.
make use of foreign migrants for the purposes of colonization without worsening Primor’e’s strategic position.\textsuperscript{137}

True to his word, Korsakov arranged (through diplomats in Beijing) for some 150,000 Chinese to come to Russian territory temporarily, regarding them as a “hardworking and developed” population. Private merchants followed suit, arranging contracts with groups of Chinese workers.\textsuperscript{138} With the construction on the Trans-Siberian and Ussuri railroads, begun in 1891, along with mining and other industries, there was greater demand for laborers that the Russian population simply could not meet. Thousands of Chinese and Korean workers came to Primor’e as migrant workers, travelling between Russia and China or Korea throughout the year. According to the empire’s first full census (in 1897) there were roughly 11,000 Chinese, Korean, and Japanese subjects in Primor’e, but estimates for the total number of non-subjects from neighboring countries indicate that these populations were much greater, especially during the summer work season. One Chinese source put the population of their co-nationals in Primor’e at 20,000 already in 1885, while Russian estimates were closer to 13,000.\textsuperscript{139} Government statistics in 1910 assessed the total foreign population in Amur and Maritime oblasts at 133,500, while unofficial estimates were closer to 325,000 for the Chinese alone. Part of statisticians’ challenge lay in the seasonal and often clandestine

\textsuperscript{137} RGA VMF F. 410, op. 2, d. 4178, ll. 27-8, 31, 46.
\textsuperscript{138} Sorokina, Khoziaistvennaia deiatel’ nost’ kitaiskikh poddannykh..., 29–31.
\textsuperscript{139} Lee, The Manchurian Frontier in Ch’ing History, 1970, 90.Sorokina, Khoziaistvennaia deiatel’ nost’ kitaiskikh poddannykh..., 37.
nature of migration across a porous border. Surveyors conducted the census of 1897, for instance, during the winter, after the majority of seasonal Chinese migrants had left.

After 1880, tsarist officials sought to better control Chinese migration, even as they accepted the economic value of Chinese labor. In 1882, the governor-general’s office limited settlement benefits to Russian subjects and placed Primor’e’s Chinese population under the jurisdiction of Russian courts, including those who had been in Russian territory before 1860 (and who therefore remained Chinese subjects). Seeking to balance fears of Chinese immigration with rising demands for cheap labor, Governor-General A. N. Korf, in 1886, introduced a passport system designed to control the flow of Chinese and Koreans across the border. As Erich Lohr has shown, Korf probably adopted the method from Germany’s Gastarbeiter system, introduced shortly before, which regulated Russian labor in Germany. The Chinese had to pay higher passport fees than other nationalities, renew their visas every month (for a fee), acquire a separate work document, and pay special taxes. The passports did not stop Chinese entering the territory, but ensured they did not become Russian subjects, making eviction easier.

Chinese officials objected unsuccessfully to the passport regime, arguing the policy

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140 Sorokina, Khoziaistvennaia deiatel’nost’ kitaishikh poddannykh..., 49.
142 Lohr, Russian Citizenship, 78. Sorokina, Khoziaistvennaia deiatel’nost’ kitaishikh poddannykh..., 41–44.
conflicted with the provisions of the 1860 treaty, and made vague threats about unrest in border regions should it be introduced.\textsuperscript{143}

Thousands of Koreans also migrated to Primor’e in the years after annexation. A small Korean population probably already existed in southern Primor’e before 1860, and soon many more migrated to the territory, fleeing famine in their home country.\textsuperscript{144} Koreans who arrived in the 1860s and 1870s enjoyed land grants and tax benefits similar to those enjoyed by Russians and other settlers.\textsuperscript{145} They generally settled the southwestern part of the territory, particularly around Pos’et Harbor, near the Korean border. Already in 1868, Koreans predominated in many places and remained a large proportion of the rural population throughout the imperial period.\textsuperscript{146}

Russian administrators looked much more favorably upon Korean migrants, whom they saw as productive, loyal subjects, and as a people amenable to assimilation into Russian culture. In 1868, an investigative commission argued that although Koreans stood at a “very low stage of civic-mindedness [grazhdanstvennost’],” they could be “useful for [Russian] interests,” particularly if they “merged with the Russian population” and adopted Russian “customs, language, and faith.”\textsuperscript{147} And indeed some degree of “merging” did take place: Koreans accepted Russian authority, many willingly learned

\begin{thebibliography}{147}
\bibitem{143}Sorokina, \textit{Khoziaistvennaia deiatel’nost’ kitaiskikh poddannykh...}, 199–201.
\bibitem{145}Vlasov, \textit{Istoriia Dal’nego Vostoka Rossii: Kurs lektsii}, 47.
\bibitem{146}Babrenko, “Otnosheniia russkikh krest’ian i koreiskikh pereselentsev na iuge Dal’nego Vostoka vo vtoroi polovine XIX - pervoi treti XX vv.,” 18–19.
\bibitem{147}RGA VMF F. 410, op. 2, d. 4179, l. 22ob.
\end{thebibliography}
Russian and in some cases even converted to Orthodoxy.\textsuperscript{148} An army officer touring Eastern Siberia and the Far East in the late 1870s estimated that half of Primor’e’s Koreans had converted.\textsuperscript{149} In addition, Koreans often settled in Primor’e as whole families—in contrast to Chinese migrants, who were mostly single men—which likely raised their status in officials’ eyes.\textsuperscript{150} A 1910 commission on resettlement, for instance, observed that Koreans were less problematic than Chinese in part because nearly a third of them were women, which (in the eyes of the commission) raised their moral character.\textsuperscript{151}

While Koreans enjoyed much more lenient policies than Chinese migrants, restrictions appeared for them as well. Those who had resided in the newly-minted Priamur (which included Primor’e and the Amur region) before 1884 could become Russian subjects if they settled permanently and renounced their status as Korean subjects. Unlike the new controls on Chinese migrants, Russian officials did not impose these conditions unilaterally; they were part of a broader treaty with Korea through which King Kojong of Korea, who sought Russian protection against China in exchange for trading rights and other privileges.\textsuperscript{152} Nevertheless, in 1886 Koreans, along with the Chinese, were officially barred from settling in border areas, and as of 1888 Koreans

\textsuperscript{149} RGA VMF F. 410, op. 2, d. 4046, 36-7ob
\textsuperscript{150} Siegelbaum and Moch, Broad Is My Native Land: Regimes and Repertoires of Migration in Russia’s Twentieth Century, 73.
\textsuperscript{151} RGIA F. 391, op. 4, d. 513, l. 34. As Abby Schrader has discussed in her study of the Siberian exile system in the early nineteenth century, Siberian administrators believed exiles’ “barbarity” stemmed from an extreme gender imbalance and sought to attract greater numbers of women to the east. Abby M. Schrader, “Unruly Felons and Civilizing Wives: Cultivating Marriage in the Siberian Exile System, 1822-1860,” Slavic Review 66, no. 2 (Summer 2007): 230–56
\textsuperscript{152} Kim, Russko-koreiskie diplomaticheskie otnosheniia v 1884 - 1904 gg., 101–3.
could only immigrate by acquiring special documentation from Russian authorities. In addition, whereas in earlier years Koreans could legally occupy the same 100-desiatina land grants available to Russian and European settlers, after 1882 they could receive only 15 desiatinas per household. Soon afterward they, along with other foreigners, were barred from purchasing land anywhere in the Priamur.  

Conclusion

The acquisition of Primor’e was an unexpected coup for Russia, and one with far-reaching consequences for the region’s human and nonhuman inhabitants. Before 1860, Primor’e was inhabited primarily by indigenous peoples who relied on hunting, fishing, and foraging. These peoples shaped the territory’s environment in a variety of ways but were relatively few in the mid-nineteenth century. The region and its peoples also had close and long-standing connections to China, and these too played a significant role in the utilization of Primor’e’s resources. Tribute and trade had linked China to Primor’e for centuries, and several hundred Chinese hunters, exiles, fishermen, and others lived or sojourned in the territory before and after Russian acquisition. The Qing court contributed to the exploitation of valuable forest and sea products, but also sought to keep the northeast lightly populated. Primor’e was in some sense a space apart, whose “primeval” landscape was partly a human creation.

Russian colonization, in contrast, was an attempt to acquire, study, settle, and use this space and its resources in the interests of empire-building. Far Eastern officials, who

believed that populating Primor’e and developing its resources was necessary to retain the territory, initiated and directed the settlement of thousands of peasants, Cossacks, and others in the region. State assistance was particularly important in settling Primor’e with Russian subjects, given its distance from European Russia and the availability (especially before 1900) of available land further west. Settlers themselves decided where they would settle and how, but collaboration with state organs was an essential part of the settlement process throughout the tsarist period.

While making Primor’e “Russian” was partly a question of claiming land and resources, Russian officials and other elites also wanted to make Primor’e more cultivated and civilized, and in particular sought to convert Primor’e’s landscape into a productive agricultural zone. During the early stages of Russian colonization, contemporary observers believed turning Primor’e’s thickly forested, mountainous lands into fields and pasture would make the climate drier and help make the land itself tamer, more civilized, and better suited to settlers from European Russia.

In practice, “Russian” colonization involved a great variety of peoples, many of them non-Russians, because the need to settle and cultivate such a distant periphery often outweighed ethno-national considerations. Tsarist authorities welcomed Europeans, Ukrainians, Balts, Finns, and others, while tolerating—or in some cases encouraging—the migration of Koreans and Chinese to the region. Primor’e quickly became a highly diverse place, and would remain so into the Soviet era.
Chapter 2: 
Environment, adaptation, and ecological change

As we have seen, a great deal of optimism surrounded the acquisition of Primor’e in 1858-60. Given the territory’s temperate climate, lush vegetation, and abundant animal life, many believed Primor’e was soon to become a productive, economically developed Russian province—a granary in the East. This chapter examines how settlers fared in the new territory, how they interacted with the surrounding environment(s), and how the realities of life in the territory compared to the sanguine visions discussed in the previous chapter.

By examining the role of nonhuman nature in shaping colonization (and vice versa), I argue here that settlement of Primor’e led to economic, demographic, and ecological effects that—not surprisingly—diverged significantly from the visions of state officials and other representatives of Far Eastern educated society. Rather than a Far Eastern breadbasket, Primor’e developed a highly mixed economy in which settlers relied only partly on agriculture to meet their needs. Instead of “making the land Russian,” settlement of the territory resulted in a space in which Russian and European settlers coexisted with and depended on East Asians.¹ The ethnic and economic diversity that

¹ Such ethnic, economic, and cultural mixing, together with the inability of the tsarist state to establish its hegemony in Primor’e’s interior, was similar to the experiences of other frontiers and “edges” where societies and cultures have blended together and become interdependent. In this sense, it evokes the beginnings of the sort of “creolization,” as occurred in the Americas and on other frontiers. However, because this blending was short-lived—beginning far later than in most European colonies and ending abruptly in 1937-38—one cannot really speak of the emergence of a “creole” culture in Primor’e. On the
resulted from settlement is essential to understanding the environmental changes that developed after 1860, because although officials’ strategic and political goals determined why Russian settlement occurred in Primor’e at this point in its history, it was the settlers and seasonal migrants themselves who determined how the land and its resources were actually used. The ways in which they did so—such as shifting agriculture and gathering medicinal products for Chinese markets—caused changes in the extent and composition of forests and a rapid decline in certain animal populations.

Part of the reason Russian settlement evolved as it did lay in the fact that the flora and fauna that accompanied Russian and European settlers to the Far East proved difficult to transplant to Primor’e. In his work on ecological imperialism, Alfred Crosby called Siberia a “neo-Europe manqué” because although colonized at roughly the same time as the Americas, it was so ecologically similar to the rest of Eurasia that Russian colonization encountered few biological obstacles (or advantages). In Siberia, Crosby argued, there was no Eurasian version of the “Columbian Exchange.” Only the cold, dry climate slowed the movement of Neolithic crops, livestock, and peoples into Siberia.\(^2\) To a degree, this was the case in Primor’e as well. It was contiguous with the rest of the continent, and Russians’ biota did not out-compete native species in the manner of dandelions in North America or rabbits in Australia. Biological hangers-on did not

inadvertently clear the path for settlers from European Russia, and as a result they could not easily transfer their way of life to the region. At the same time—tigers aside—Primor’ë was not a torrid jungle where local conditions and diseases greatly impeded settlement.

Instead, Primor’ë lies somewhere in between these two extremes. It was similar enough to the rest of northern Eurasia to make the transfer of “Russian” biota and lifeways possible. Yet it was also ecologically distinct (even from Eastern Siberia and most of the Russian Far East), different enough to impede the transfer of biota from west to east. What imperial boosters viewed as a relatively warm, fertile territory turned out to be a difficult one for the introduction of the agricultural and stock-breeding practices to which Russian and European settlers were accustomed. The damp, maritime-continental climate, particularly its monsoon rains and summer typhoons, hindered the cultivation of some of the grain crops that settlers brought with them. Flooding was the biggest problem for Russian and European settler-farmers, and boggy soils and fungus also caused difficulties. Keeping livestock from European Russia or Siberia was also a challenge because of insect parasitism and zoonotic diseases, as well as occasional predation by large mammals. On the whole, settlers’ biota did not clear the way for a replication of the agricultural lifeways of European Russia or wholly remake Primor’ë’s ecosystems. Their experiences highlight the fact that “Siberian” migration encompassed a very diverse space, and even subtle environmental differences could greatly affected the outcome of settlement.

The environmental conditions that Russian and European settlers encountered contributed to the creation of an ethnically and economically mixed space. By taking
advantage of Primor’e’s initial abundance of fish and game, as well as opportunities for wage labor, peasant settlers and Cossacks found ways to adapt their household economies to the new environmental conditions and, in some cases, even become fairly prosperous.

More importantly, East Asian settlers and seasonal migrants—principally Chinese and Koreans—filled vital economic niches in the region’s economy. Labor and food shortages in the region as a whole contributed to the simultaneous migration of Chinese and Koreans, who came to the territory in smaller but significant numbers at the same time. Russian and European settlers became deeply interdependent with both groups. The resulting ethnic and economic heterogeneity did not match officials’ hopes for the territory, but it did suit migrants’ economic needs.

Finally, the ways in which Russian and East Asian migrants used the land and its resources—how they farmed, hunted, fished, and gathered valuable plants—caused a number of changes in Primor’e’s flora and fauna. Principal among these was deforestation, caused mainly by logging, land clearance, and fires. Several animal species, such as sable, deer, and tigers, also went into decline. These changes (with the exception of tigers’ near-disappearance) were deeply disturbing to many among Far Eastern society, for reasons that will be explored in Chapter 3. Although imperial elites did seek environmental changes that might make Primor’e tamer, drier, and more civilized, the actual environmental impact of settlement did not match their visions for the territory.
I. A Land of Rain and Fog: Environmental Obstacles to Settlement

Climate and agriculture

Russian and European settlers encountered a number of difficulties in establishing new lives in Primor’e, and foremost among them was the climate. Although generally temperate, Primor’e’s climate had a few peculiarities that proved significant for the introduction of Russian-style agriculture and stock-breeding. First, monsoon winds and late-summer typhoons brought heavy rains, fog, and humidity that frequently ruined crops and, in some cases, threatened life and limb. Second, winters were cold and dry, with little snow cover to insulate seeds planted in the autumn. Though these challenges were not insurmountable, they did slow the development of agriculture among Cossacks and peasant settlers.

The settlers who began arriving in Primor’e in 1858 brought with them a variety of crops and domestic animals (as well as microbes) from European Russia and Ukraine. Some of the earliest migrants came to Primor’e from Eastern Siberia, but most (particularly those who came after 1880) originated in the steppe and forest-steppe provinces of Ukraine and south-central Russia, especially the Chernigov, Poltava, and Kharkov provinces.¹ (These regions, along with other Central Black Earth provinces, provided most of the migrants to Siberia in general, though comparatively fewer came to Primor’e from the Lower Volga and more from the Black Sea littoral.)² Although there was certainly much local variation in their home provinces, peasant settlers had generally

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¹ Russians and Ukrainians from these areas had already made a significant environmental transition: that from the forest regions of European Russia to the dry steppe. Moon, The Plough That Broke the Steppes, 2013, 18–19.
relied on a handful of grains for the bulk of their caloric intake: rye, spring and winter wheat, oats, barley, buckwheat, and potatoes. In the steppe provinces, Russians and Ukrainians had shifted their agricultural practices over the course of several centuries, growing more wheat and less oats and rye than in the north of European Russia. Peasants and Cossacks also grew vegetables in kitchen gardens, and those living in more southerly latitudes also grew melons, pumpkins, and other heat-tolerant plants. Unfortunately, we hear little about which strains of plants or types of livestock in particular that Russian and European settlers brought to Primor’е. During the first years of settlement, grains and livestock seem to have come primarily from the Transbaikal, and later (after 1880) from southern Russia and Ukraine. According to the agronomist Nikolai Kriukov, among the latter was girka, a type of soft spring wheat adapted to arid grasslands (and which was also introduced to Kansas around the same time).

In any case, adapting crops to Primor’е from elsewhere in the empire proved difficult. The territory’s precipitation regime was very different from that which prevailed in southern Russia and Ukraine, where summers were hot and dry and winters tended to be snowy (see figure 17). In Primor’е, summer fog, dampness, and especially flooding made farming much more difficult for peasant settlers and Cossacks than early visitors, such as Maak, Veniuukov, and various military officers had initially thought. One Russian settler wrote in 1864 how rye—a key crop in northern and central Russia—grew well

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initially but turned to straw under the influence of fog blowing off the sea, while there
was simply “no hope for barley and wheat.” Kriukov, having travelled extensively
through the territory in the 1880s, found that dampness and summer rains caused grain to
grow long in the stem and leaf, while seeds went underdeveloped. Besides that, the
moisture contributed to the growth of fungus, disease, and weeds, swelled furniture, and
ruined leather. The problem of farming rye and wheat in a damp, maritime climate was
most apparent in southwestern Primor’e, near the Korean border. One resettlement
official, A. A. Rittikh, wrote that Russians who had settled in the area were simply unable
to farm effectively due to excessive moisture.

7 Agafonov, Kazach’i voiska Rossiiskoi imperii; Petrov, Istoriia kitaitsev v Rossii, 1856-1917, 429.
8 Kriukov, Ocherk sel’skago khoziaistva v Primorskoi oblasti, 46–47.
9 RGIA F. 1273, op. 1, d. 409, ll. 20-24.
Figure 17: Average monthly precipitation and temperatures in Vladivostok (A), Tver’ (northeastern Russia) (B), and Kharkhov (eastern Ukraine) (C).

Primor’e’s high summer humidity also provided good conditions for a form of stem rust known locally as “drunken grain” (pianyi khleb) that led to illness (not drunkenness) among settlers. According to Sergei Khudiakov, the grandson of Russian settlers who had come to Primor’e from Siberia in the 1880s, the fungus frequently rendered their wheat inedible for either people or animals.¹¹ Peasants in affected villages reported that “drunken grain” was an annual occurrence, and all agreed that the main culprit was the moisture caused by spring and summer fog. In 1887, the Ministry of Internal Affairs invited a Moscow agronomist to examine the fungus, which was determined to be a form of stem rust, *Puccinia graminis*, and which may have spread from native Amur barberry bush (*Berberis amurensis*).¹²

While summers were damp and rainy, Primor’e’s winters were relatively dry, with less snow cover than in most of European Russia. Without the insulating effect of thick snow, the ground in many areas could freeze to a depth of six to eight feet. Consequently, winter wheat and rye—crops that are planted in the fall and stay in the soil through the winter—grew poorly in most parts of Primor’e.¹³ Rittikh wrote that the unreliability of snowfall and “frequent freezing of the earth” led most Russian and Ukrainian settlers to limit their planting of these crops.¹⁴ Similarly, an informational pamphlet produced by the Resettlement Administration in 1907 advised new settlers in

¹² Russian State Historical Archive of the Far East (RGIA DV) F.1, op.’4, d.846, ll. 3-5; Russian State Historical Archive (RGIA), f.1273 op. 1 d. 409 (1899), ll. 58; RGIA DV, F. 1, op.’4, d. 1957, l. 27.
¹⁴ A.A. Rittikh, *Pereselencheskoe i krest’ianskoe delo v Uzheho-Ussuriiskom krae* (St. Petersburg, 1898), 41–42.
Primor’e to avoid winter crops except in areas of heavy snowfall, since “Where there is little snow, [winter grains] freeze.” Consequently, settlers shifted their focus to crops, such as buckwheat, barley, and oats, which they planted in the spring.

If Primor’e’s climate erected hurdles for the Russian and European migrants, the greatest menace to settlers’ crops—and settlers themselves—was flooding. Some flooding occurred during spring snow-melt or with the arrival of the monsoon in June, but the most powerful floods came in the wake of typhoons, which struck in August or early September when crops were already planted but had yet to be harvested. As Kriukov wrote, floods hung “like a ‘sword of Damocles’” above peasant and Cossack settlers, who, “not understanding the peculiarities of the Ussuri climate, paid cruelly and more than once.” In 1861 and 1863, flooding destroyed most of the harvest in the Ussuri valley, requiring state aid to save the population from starvation. Many settlers also lost their homes, even those that stood on relatively high ground. Late-summer flooding came again in 1865 in both Amur and Ussuri valleys. The situation was similar in southern Primor’e, where flash floods inundated several villages, killing settlers and livestock. In 1868, the head of the military post at St. Olga Bay reported that as a result of “nearly continuous rains for half a month and driving, tropical downpours,” floods had swept through the Avvakumovka River valley, destroying settlements and killing a few settlers. The military governor dispatched grain to relieve the beleaguered peasants.

16 Kriukov, Ocherk sel’skago khoziaistva v Primorskoj oblasti, 46.
17 V.E. Timonov, Ocherk glavneishikh vodnykh putei Priamurskogo kraia (St. Petersburg: Tipografiia Ministerstva Putei Soobschsteniiia, 1897), 85.
18 The Avvakumovka empties into Ol’ga Bay.
before the start of autumn. Similarly, in the marshy Khanka plain, the journalist Nikolai Aliab’ev found one village that had relocated its fields 15 km from its original settlement location after repeated inundations.

Summer inundations remained a problem for settlers well into the twentieth century. Between 1904 and 1915, peasant and Cossack communities throughout southern Primor’e periodically experienced flooding that washed out fields, destroyed homes and outbuildings, killed livestock, and occasionally caused human casualties as well. The most frequent and destructive flooding occurred in areas along the Iman, Vaku, and Khor Rivers, tributaries of the lower Ussuri, which were some of the last to be settled by Russian migrants. These rivers flow down the west slopes of the Sikhote-Alin Mountains then meander through a broad lowland, forming a marshy estuary where they meet the Ussuri. As a result, they could rise rapidly and unexpectedly during summer precipitation. For instance, “non-stop pouring rains” between July 12 and 16, 1905 caused the Iman and Bikin to swell suddenly, partially or completely flooding 48 villages. On the Bikin, water stood 15 feet deep in two villages and did not fully recede until the end of August. The head of the South Ussuri resettlement district estimated that nearly 2,430 acres of farmland had been flooded on the Bikin, a loss valued at 26,000 rubles, and noted that similar damage had been experienced downstream. Similarly, a flood in early August of 1911 raised the Iman’s water level by 7 feet, which meant that the water's edge advanced 800 feet. The Khor River, further north, and other tributaries of

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19 RGIA DV F. 1, op. 4, d.121, 1-2, 10-11, 26, 83; RIGA DV F.1, op. 4, d. 38, 1-3.
20 Aliab’ev, Dalekaia Rossiia: Ussuriiskii krai, 89–90.
21 RGIA F. 1, op.4, d.2096
22 RGIA DV F. 1, op. 4, d. 2100, 1. 6.
the Ussuri experienced similar flooding.\textsuperscript{23}

Besides the initial damage, flooding could aggravate problems with disease and food supplies. Flooding could lead to the loss of valuable soil. Kriukov, for instance, noted that flooding on the Suifun and Suchan in 1880 ruined the soil in the vicinity “beyond all recognition.”\textsuperscript{24} Cossacks around one stanitsa on the Ussuri reported widespread flooding in 1910 that made much of their allotment too marshy or rocky to farm.\textsuperscript{25} Floods in 1907 destroyed fields and hay meadows among newly-settled residents along the Iman. In the wake of the floods, an MVD investigator warned that because flood victims lacked food and in some cases shelter, epidemics of flu and typhus, which had already claimed dozens of lives, might become worse.\textsuperscript{26} The waters also washed out roads, and could even damage railroad bridges, making it more expensive to transport grain to settlers’ villages or for peasants to market their produce in nearby towns. As the head of resettlement affairs in the Iman region wrote in 1909, “floods, fires, livestock die-offs, etc.… All of these, combined with the sluggishness [inertnost’] of emigrants from southern Russia, make [the situation] very difficult and too taxing for most settlers,” many of whom required state assistance (in the form of grain) to make it through the winter.\textsuperscript{27}

**Consequences for settlers and Cossacks**

Primor’e’s damp, monsoon climate made life difficult for Primor’e’ Russian and European settlers and Cossacks, particularly those who arrived during the first years after

\textsuperscript{23} RGIA F. 391, op. 4, d. 1273, ll. 5-8.
\textsuperscript{24} Kriukov, Ocherk sel’skago khoziaistva v Primorskoj oblasti, 46.
\textsuperscript{25} RGIA F. 702, op.5, d.244, 1-7.
\textsuperscript{26} GAPK F. 1, op.1, d.33, 48-54
\textsuperscript{27} GAPK F.1, op. 1, d. 32, ll. 153-54
Russian annexation. The Ussuri battalion of the Amur Cossack Host (which became a separate host in 1889), was among the first units to settle in the territory. They were also dismally poor throughout the 1860s and 1870s, and managed to survive only because of emergency grain supplies from the army. For reasons that are not entirely clear, Cossacks had settled in in areas vulnerable to summer flooding, leading to the destruction of crops, hayfields, and livestock. Finding persistent poverty in Cossack stanitsas on the Ussuri, explorer Nikolai Przheval’skii observed that in the settlements of the Ussuri Cossack battalion, grain grew well in the spring, “and it brings joy to the heart,” but “in summer either water floods it or rain crushes it, or worms eat it, and you barely collect anything for all your labor.”

Even without flooding or some other catastrophe, agricultural output was low in the Cossack stanitsas. According to the battalion commander, yields ranged from 3:1 for rye to less than 1:1 for wheat and barley. (By comparison, Hoch estimates grain yields in Central Russia before Emancipation at around 4.5:1 or higher.\(^\text{29}\)) Gains in one year might upset by calamity the next. The 1876 harvest, for instance, was good, but in 1877 the commander again reported that his unit needed assistance, having lost crops and roughly a third of their hayfields to flooding, dampness, and parasites. An 1870 report on the state of Russian military forces in the Priamur stated that the Ussuri Cossacks “in much worse condition even compared to peasants settled on the lower Amur,” where the climate was harsher. Not only did Primorskaia oblast’ as a whole lack grain, the author wrote, but the farming population could not even feed itself. The Ussuri Cossacks could

\(^{28}\) Nikolai Mikhailovich Przheval’skii, *Puteshestvie v Ussuriiskom krae, 1867-1869g.* (Moscow: Gosudarstvennoe izdatel’stvo geograficheskoi literatury, 1947), 44.

produce only a third of their total supply needs, with state granaries supplying the remainder.⁰³⁰ One account quipped that the Ussuri Cossacks’ main occupation was not agriculture, but “procuring government provisions.”⁰³¹ Even the future anarchist leader Prince Peter Kropotkin, who served as a lieutenant (sotnik) with the Amur Cossacks, investigated the persistent poverty among the Ussuri battalion and attempted (unsuccessfully) to assist them.⁰³²

Peasants were generally more successful farmers than the Cossacks. In 1876, for example, the peasant supervisor of the Khanka district reported that settlers there had produced 1,820 tons of grain during the previous year, yielding a 3:1 return. In the 1890s, official statistics the same region saw yields as high as 9:1 for many crops, albeit in an especially good year.⁰³³ That said, peasants too encountered unpredictable harvests and adverse environmental conditions. Even in the relatively productive Khanka district, peasants reported that fungus routinely affected part of the wheat and barley crop. In 1874–77 and again in 1892 there were infestations of “worms”; and in 1905, 1907, and 1908, flooding destroyed half of peasants’ hayfields.⁰³⁴ Agricultural productivity was also

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⁰³⁰ RGA VMF F. 410, op. 2, d. 4183, ll. 242-ob.  
⁰³¹ RGA VMF F. 410, op. 2, d. 4179, l. 98.  
⁰³² Aliab’ev, Dalekaia Rossiia: Ussuriiskii krai, 65.; Peter Kropotkin, Memoirs of a Revolutionist (New York: Dover, 1971), 213. In his memoirs, Kropotkin claimed that he proposed a plan for assisting the Ussuri Cossacks, but that the proposal “went into the hands of some old drunkard, who would squander the money and pitilessly flog the unfortunate Cossacks for the purpose of converting the m into good agriculturalists.” Lackluster Cossack agriculture was not unusual. As Thomas Barrett has shown, the Terek Cossacks had similar difficulties trying to farm while fulfilling service obligations in the north Caucasus. Barrett, At the Edge of Empire: The Terek Cossacks and the North Caucasus Frontier, 1700–1860, 98–108.  
⁰³⁴ Ibid., 82–83.
very uneven. In 1870, most settler districts could not supply their needs—one district (okrug) in the north produced even less than the Cossacks.\textsuperscript{35}

Moreover, good local yields did not translate into regional self-sufficiency. In the 1870s, three-quarters of the grain requirements for the Primorskaia oblast’ still came from Russian stores in the Baltic Sea. Although production increased with the arrival of second-wave settlers, between 1893 and 1895 the quartermaster in Vladivostok still had to import 5,274 tons of grain from European Russia and 12,000 head of livestock, largely from Manchuria, to feed military personnel, which the local commander understandably saw as a strategic liability.\textsuperscript{36} Even as the agricultural population swelled in the early twentieth century, residents of Vladivostok could not acquire adequate supplies from the surrounding province. In 1910, Vladivostok imported 746 tons of grain, along with much of its eggs, meat, and dairy products.\textsuperscript{37} The region as a whole remained dependent on imported food throughout the tsarist era (and into the early Soviet period).\textsuperscript{38} Poor internal transportation may have accounted for some of the deficit, but clearly agricultural settlements in Primor’e had not become Russia’s breadbasket on the Pacific.

\textit{Livestock and zoonotic diseases}

Bringing livestock from European Russia or Siberia to Primor’e also proved to be a challenge. As discussed in Chapter 1, the territory’s swarms of insects weakened domestic animals. Horse- and cattle-breeding was generally confined to certain parts of the coast, where winds kept insects at bay. In addition, large predators, particularly

\textsuperscript{35} RGA VMF F. 410, op. 2, d. 4183, l. 242-ob.
\textsuperscript{36} RGA VMF F. 909, op. 1, d. 44, l. 10; RGVIA F. 99, op. 1, d. 87, ll. 21ob-22.
\textsuperscript{37} Eggenberg. \textit{Sel’skoe khoziaistvo v Primorskoi oblasti}, 4.
tigers, were also known to kill livestock. Finally, many of Primor’e’s domestic animals
died as a result of zoonotic diseases, such as hoof-and-mouth disease, rinderpest, anthrax,
glanders (a lung infection), and rabies, as well as infections caused by insect bites.
Zoonotic diseases exacerbated the problem of keeping livestock, particularly among
Cossacks, whose duties demanded an adequate supply of horses. As a result, the region
imported much of its meat, milk, and draft animals, in large part from neighboring states.
In 1910 alone, Primor’e imported 10,280 head of cattle from Manchuria, along with
20,891 slaughtered livestock, mostly from Mongolia.39

A handful of livestock losses came as a result of predation by tigers, particularly
during the first decades of settlement. According to one widely-reported account, a
single tiger killed 22 head of cattle and horses in a village in 1869. Perhaps to deal with
this particular animal, the peasant nachal’nik of the Lake Khanka district, the curiously
named Captain Melville (Mel’vill’), wrote his superiors requesting shot and powder for
local peasants, who needed to defend themselves against an aggressive tiger. Dogs were
also a frequent target; one village reportedly lost 25 dogs in 1866 alone.40 The Polish
exile Michael Iankovskii, who settled on the Sidemi Peninsula opposite Vladivostok,
claimed that in his first 15 years in Primor’e he lost over 50 horses to tigers, along with
dozens of dogs, pigs, and smaller livestock. Not coincidentally, the Iankovskiis
eventually became known as expert tiger hunters.41 Similarly, in 1878, a peasant on the
lower Amur requested permission to move his family to Amur oblast’, citing the fact that,

39 Veterinarnoe Otdelenie Oblastnogo Pravleniia, Svedeniia o veterinarno-sanitarnom sostoianii
Primorskoi oblasti (Vladivostok: Tipografiia Primorskago Oblastnogo Pravleniia, 1913), 25.
40 Atkinson, Travels in the Regions of the Upper and Lower Amoor, and the Russian Acquisitions on the
Confines of India and China ..., 375–76; Aliab’ev, Dalekaia Rossia: Ussuriiskii krai, 77; Imperatorskoe
41 Yankovsky, From the Crusades to Gulag and Beyond, 10; Iu. M. Iankovskii, “Polveka Okhoty Na
besides damage inflicted by floods and drought, he had lost all his livestock to tigers. According to Dmitrii Shreider, the residents of Shkotovo lost 50 horses to tigers over the course of one year. Striking back, the peasants killed five of the predators in two weeks, though the tigers’ pelts and organs were worth less than the horses they had killed.

Flooding and diseases were even more serious problems. In 1865, the Military Governor of Primor’e wrote to the governor-general of Eastern Siberia to request horses and cattle, since settlers’ were “constantly decreasing” because many had drowned in floods, and also had low birth rates. In 1877 the commander of the Ussuri Cossack battalion reported high death rates among the unit’s horses. Beginning in mid-winter, he wrote, horses died as a result of disease and a shortage of fodder. Similarly, according to H. E. M. James, a member of the Indian Civil Service who travelled through the Russian Far East in 1886, Cossacks in Primor’e relied on horses from the Transbaikal, but the horses were “difficult to acclimatise [sic], and a large number have been lost by an unaccountable epidemic of blindness.” In 1883, rinderpest and an unidentified lung disease struck livestock “of the Russian and Manchurian type,” killing many animals, particularly on Korean farms, and forced veterinarians to quarantine or slaughter the remainder. Soon afterward, the Priamur Governor-General’s office issued pamphlets to Cossacks and peasants outlining measures for the prevention of anthrax infection.

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42 RGIA DV F. 1, op. 5, d. 283, l.11
43 D. I. Shreider, Nash Dal’ni Vostok. (Tri goda v Ussuriiskom krae) (St. Petersburg: A.F. Devrien, 1897), 315–22. Amur tigers (particularly males) have a very low population density in the wild. The fact that one village contended with so many of the animals, and that new ones quickly replaced five others, suggests either that the tiger population in the area was unusually large and dense, or that Shreider and/or one of his interlocutors was exaggerating. Dale Miquelle, pers. comm., January 28, 2012.
44 RGIA DV F. 1, op. 4, d. 38, ll. 1-4.
45 RGIA DV F. 1, op. 4, d. 465, l. 2.
46 James, The Long White Mountain, or A Journey in Manchuria, 350.
47 RGIA F. 391, op. 1, d. 24, ll. 63-64.
48 RGVIA F. 5294,op. 1, d. 86, ll. 6-16, 44.
When the head veterinarian for Primorskaia *oblast*, D. V. Korsak, arrived in 1898, he found the population “positively ravaged by zoonotic diseases.” In that year, 1898, rinderpest along the Korean border killed 263 cattle before it was contained. Korsak suggested that the disease had been imported from Korea and Manchuria and would continue to be a problem so long as the trade continued without adequate oversight.

Part of Primor’e’s problem with zoonotic diseases stemmed from its acute shortage of veterinarians. Indeed, among the region’s infrastructural deficiencies, administrators considered a lack of veterinary care one of the most serious. In 1901, for instance, the military governor of Primorskaia *oblast*, N. M. Chichagov, wrote to Governor-General Nikolai Grodekov to request money for Korsak. According to Chichagov, Korsak could barely support his family, and was doing important work to fight rinderpest. Similarly, there were not enough veterinarians to combat outbreaks of anthrax. After heavy losses to Cossacks’ livestock in 1907, Governor-General Unterberger ordered vaccination of all horses in the Priamur (i.e. in Primor’e and in the Amur *oblast*) in 1907, but a dearth of trained staff meant only about a fifth of the territory’s 25,000 horses—located primarily in Cossack stanitsas—were vaccinated. During the following winter, the veterinary section of Primor’e’s MVD wrote that zoonotic diseases had reached “unparalleled proportions,” in part due to low vaccination rates. The head of the Iman resettlement district in 1910 called for more veterinarians for the “struggle with zoonotic diseases.” As it was there were no veterinary clinics, no

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50 RGIA DV 702.5.362, ll. 49-50
51 Ibid., ll. 82-3
52 RGIA DV 702.5.56, ll.32-4, 37-8.
medical instruments, and no medicines.\textsuperscript{53} In 1913, Governor-General Gondatti requested 35,000 rubles from St. Petersburg for additional veterinary staff, citing the need to confront outbreaks of anthrax and pyroplasmosis (a blood disease), which were especially bad in the Nikol’sk-Ussuriisk area.\textsuperscript{54}

To be sure, it is difficult to know how large the total losses to zoonotic disease actually were. According to the oblast’ Veterinary Section, the period of “enormous losses to zoonotic diseases” had passed by 1913, and livestock deaths were in decline. Rinderpest killed some 1,146 animals in 1901, but only 350 in the following year and 109 in 1903. Deaths jumped to 1,460 in 1908, but given that there were nearly 200,000 cattle in the oblast’ by this point, the losses seem to have been relatively minor.\textsuperscript{55} Anthrax usually had even less effect, though a major outbreak occurred in 1913, killing 2,000 animals in southern Primor’e.\textsuperscript{56} One of the province’s head statisticians, Alexander Menschchikov, recorded death rates that were similar, or even lower.\textsuperscript{57}

Nevertheless, in settler households even minor losses could exacerbate poverty, particularly among third-wave settlers, who were generally poorer than their predecessors. As the head of the Iman district observed, the loss of a single horse or oxen could be disastrous to some newcomers.\textsuperscript{58} One official’s “very conservative” estimate for the cost of a horse or bull in 1910 was 100 rubles, and a dairy cow might cost between

\textsuperscript{53} RGIA 391.4.1288, l. 11.
\textsuperscript{54} RGIA DV 702.5.56 ll. 102-3.
\textsuperscript{55} Veterinarnoe Otdelenie Oblastnogo Pravlenia, Svedeniia o veterinarno-sanitarnom sostoianii Primorskoi oblasti, 9.
\textsuperscript{57} A. A. Men’shchikov, Opyt issledovaniia ekonomicheskogo polozhenia novoselov 1906, 1907, 1908 g.g. v Primorskoi oblasti, po dannym podvorno-statisticheskogo obsledovaniia v dekabre 1908 i ianvare 1909 godov, ed. M.N. Savinskii (Vladivostok: Tipografiia Primorskogo Oblastnogo Pravlenia, 1909), 42–43.
\textsuperscript{58} RGIA 391.4.1288, l. 11.
300 and 350 rubles in 1915, beyond the means of most settlers.\(^{59}\) Moreover, deaths from imported disease were but part of total losses. The head of resettlement affairs in Primorskaia oblast’, a veterinarian named V. E. Khutsev, estimated annual livestock losses at 11.4 percent (3,420 head) for the oblast’ as a whole, with a rates as high as 30 percent in some areas.\(^{60}\) The newly-settled Iman region, for instance, had acquired 1,082 head of cattle in 1907, but immediately lost 250 of these, and during the subsequent three years deaths outpaced births. Besides zoonotic diseases, Khutsev cited a lack of fodder, bad roads, brain, lung, and eye infections, birth defects, and hoof injuries as causes of the high death rate. He also wrote that peasants were reluctant to seek help, partly because they did not understand that illnesses could become epidemic, partly because even if they realized the danger, it was hard to find a veterinarian to treat or vaccinate livestock. According to Khutsev, the resulting shortage of cattle and horses was a major drag on production.\(^{61}\)

State officials and stock-breeders were unequivocal about the source of the diseases: Manchuria and Korea. Officials in 1907 argued that settlers needed more horses and cattle, but varieties imported from Manchuria would have to be inoculated against rinderpest before being transported across the border.\(^{62}\) One observed that outbreaks of rinderpest in 1908 had been primarily in areas near the Manchurian border, whence the disease spread to other areas.\(^{63}\) S. I. Konrad, who raised deer and horses on a profitable estate in southern Primor’e, was also concerned that Russian stock-breeders

\(^{59}\) V. E. Gluzdovskii, *Primorsko-Amurskaia okraina i severnaia man’chzhuriia* (Vladivostok: Dalekaia Okraina, 1917), 90.

\(^{60}\) Somewhat suspiciously, this rate takes the total number of animals to be exactly 30,000.

\(^{61}\) GAPK F. 1, op. 1, d. 33, l. 27.

\(^{62}\) Ibid. ll. 78-9.

\(^{63}\) RGIA DV F. 702, op. 5, d. 56, l. 37-8.
had little protection from zoonotic diseases spreading from Manchuria and Korea.\textsuperscript{64}

Similarly, the Veterinary Section pointed out that outbreaks of rinderpest invariably originated in areas with railroad links to Manchuria or at river crossings on the Chinese border. Its officials contended that China’s “enormous” problem of infectious diseases compromised Primor’e’s sanitation and food security. Moreover, because they could not inspect imported cattle (or meat) before they arrived, Russian veterinarians believed there was “no possibility of changing the situation.”\textsuperscript{65} There was some screening for rinderpest, anthrax, and pyroplasmosis at the border itself, but the diseases continued to cross the border.\textsuperscript{66}

\textbf{Human diseases}

On the whole, then, raising horses, cattle and other livestock in Primor’e proved to be a persistent problem for settlers and veterinary officials alike. This element of Russians’ biological “portmanteau” did not travel well. True, settlers did have something of an ecological advantage—in Crosby’s sense—in the realm of human disease. Epidemic diseases in Primor’e, as in so many parts of the world, had devastating effects on many indigenous communities. However, because Primor’e’s indigenous populations were so few to begin with, their (temporary) decline did not open up land or other resources for Russian settlement.\textsuperscript{67}


\textsuperscript{65} Veterinarnoe Otdelenie Oblastnogo Pravleniia, \textit{Svedeniia o veterinarno-sanitarnom sostojanii Primorskoj oblasti}, 8–9.

\textsuperscript{66} Gluzdovskii, \textit{Primorsko-Amurskaia okraina i severnaia man ’chzhuriia}, 90.

\textsuperscript{67} Lee, \textit{The Manchurian Frontier in Ch’ing History}, 1970, 45.
Given the close connections between Primor’e, China, and Korea, it is possible that some of the territory’s indigenous peoples were exposed to crowd diseases before the Russians’ arrival. In the 1700s, Qing officials tried to bring tribute missions from Manchuria and the Ussuri region to the capital in the winter, when smallpox was less prevalent, in order to avoid exposing tributaries from Manchuria and the Ussuri region to the disease, suggesting that the Chinese were aware of the vulnerability of frontier peoples. However, anecdotal accounts the Nanai, Nivkhi, and other groups did not have much immunity to smallpox or other epidemic diseases when Russians began arriving in the late 1850s. The ethnographer S. Patkanov, who studied the indigenous peoples of Siberia for many years, estimated that in southern Primor’e, Nanai and Orochi/Udeghé populations fell from 425 individuals to 245 as a result of smallpox epidemics in 1877 and 1881. According to Arsen’ev, diseases utterly devastated indigenous communities in Primor’e’s interior, including that of Arsen’ev’s now famous guide, Dersu Uzala, who lost nearly his entire family to smallpox. Similarly, in 1903, an outbreak of smallpox struck Nivkhi villages on the lower Amur. Russian miners brought smallpox to one Nivkhi village, who then passed it to residents of several different villages when they gathered for their annual bear festival. The disease infected 209 Nivkhi, and of these 164, or 80 percent, died. While the Nanai, Udege, Orochi, Ul’chi, and Nivkhi may have

68 Those which circulate in large, dense, and interactive populations. Crowd diseases generally immunize survivors, are often present in the host population as childhood infections, and can survive indefinitely (rather than killing off its host population). J. R. McNeill, Mosquito Empires: Ecology and War in the Greater Caribbean, 1620–1914 (Cambridge University Press, 2010), 9.
69 At the time of these surveys, Russian ethnographers (including Patkanov) and state officials conflated these two groups, though they consider themselves separate ethnic groups. See Sasaki, “Hunting Activities and Forest Management of the Udeghé People in Krasnyi Yar in the Russian Far East,” 87.
71 RGIA DV F. 702, op. 5, d. 62, ll. 107-119.
been exposed to smallpox, measles, and other diseases at some point in the past, such illnesses remained epidemic (rather than endemic), contributing to depopulation of indigenous peoples.

Yet there is little to suggest that epidemics opened new lands to settlement, certainly not in the manner of European colonization of the Americas. Local depopulation of indigenous peoples likely occurred, but in Primorskaia oblast’ as a whole populations seemed to have remained relatively stable. Kabuzan estimates the total indigenous population in 1861 to be 9,195 individuals, yet state records suggest that it increased to over 11,000 by 1897 and continued to rise thereafter. Part of this “increase” was likely due to better population surveys in the 1890s and early 1900s, but nevertheless there is little evidence of the sort of demographic collapse that might have facilitated Russian settlement.  

Moreover, the diseases that Russian and other settlers brought with them affected their own communities as well, mainly because they lacked adequate medical staff and sanitation. In 1875, doctors distributed smallpox vaccinations to settlers, but the disease remained widespread, affecting peasant communities as well as indigenous ones in 1877 and 1881. The growth of settler populations in the late nineteenth century made it difficult for the limited number of medical staff to treat settlers. Third-wave settlers were particularly vulnerable to disease. In 1907, for instance, new settlers from Russia brought a typhus epidemic to the Iman region, where it spread to the Ussuri Cossacks.

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73 “Report of the medical inspector E. Ia. Noksa to the military governor of Primorskaia oblast’ regarding smallpox inoculation of children in the Khankaikskii district” (February 4th, 1875), in Goncharova, Gorchakov, and Troitskaia, Iz istorii zaseleniia khankaikskogo raiona: dokumenty i materialy, 35.
74 RGIA DV F. 702, op. 5, d. 362, ll. 43-5; RGIA DV F. 702, op. 5, d. 362, ll. 74-6.
Poor sanitation and nutrition on the railroad itself and in temporary housing provided to new settlers in Primor’e also contributed to the spread of disease. The doctor assigned to the Iman resettlement district, K. Optovtsev, visited settlers’ barracks on the Iman in December, 1907. He found “impossible crowding” and “unimaginable” lack of hygiene. Before his arrival, he wrote, no one had been vaccinated for smallpox, and Russian settlers regarded vaccinations with skepticism, since in their words, they were “going to die of something anyway, either from smallpox or from hunger.” Similarly, in January 1908 the military governor of the Primor’e reported that new settlers on the Vaku River and its tributaries were almost all sick with “smallpox, scabies, scurvy from malnutrition, and, among children, mumps.” Some were dying from hunger, and the prospect of a typhus epidemic hung over the whole region. Four years later, sanitary conditions among settlers had improved somewhat, but diseases such as typhus and smallpox remained a constant danger.75

While diseases conferred an epidemiological advantage on Russian, European, and East Asian settlers vis-à-vis indigenous peoples, the latter were not an impediment to colonization to begin with, and in any case poor public health infrastructure meant that disease was a problem for settler populations as well. On the whole, the flora, fauna, and microbes that accompanied Russian and European settlers to Primor’e did not confer great advantages upon the newcomers. Crops from European Russia and Ukraine proved difficult to adapt to the damp climate, and animals suffered from parasites, predators, and disease. The fact that newcomers to Primor’e were able to survive—and in some cases, even thrive—is a testament to their flexibility and perseverance, and to the advantages conferred by the imperial state, which provided emergency assistance, some

75 GAPK F. 1, op. 1, d. 33, l. 47.
II. Compromises and cooperation

To farm or not to farm?

In the face of unfamiliar environmental conditions and poor infrastructure, Russian and European settlers adopted a number of strategies. First, many adjusted their approach to farming in ways that were better-suited to Primor’e, though they very rarely adopted the crops and methods of their East Asian neighbors. Second, in light of the abundance of fish and wild animals and the difficulties involved in farming, many settlers diversified their household economies to make use of other opportunities. Creating a granary in the Far East appealed to imperial officials, but given the conditions, those who actually worked the land understandably preferred to make their livelihoods through a combination of farming, wage labor, hunting, fishing, and other trades.

Growing “European” crops in Primor’e was not impossible, and Russian and European settlers found ways to adjust to local conditions. One was to simply stop growing crops that did not take, or change the timing and order of planting. Whereas in some parts of European Russia, for instance, rye constituted one-third of peasants crops, in Primorskaia oblast’ it accounted for only three percent of the total. Winter wheat was also absent from most of the territory. Instead, peasants focused on growing spring wheat, buckwheat, potatoes, and millet, which tended to fare better in most areas. The most common system of crop rotation (both in Primor’e and in the Amur valley) was to plant buckwheat first, because it helped clear weeds, then wheat (if it would grow), then

76 Gluzdovskii, Primorsko-Amurskaia okraina i severnaia man’chzhuriia, 85.
oats, and to continue with this latter crop over several years until the land was exhausted.  

A related strategy was to use swidden (perelozhnaia) and long-fallow (zalezh) agriculture, practices common to much of Siberia (and, in earlier periods, European Russia). Such methods, while not very productive on a per-acre basis, mitigated risk by spreading crops out over a wide area and took advantage of the initial fertility of the soil. Those employing the long-fallow system cleared a plot of land by girdling and/or burning the trees, and then cultivated crops on the same plot of land for usually four to five years before moving onto another area. The use of long-fallow agriculture meant that about one-fifth of the land was under cultivation at any one time. Peasants who used these methods made very little use of manure, since they had little need to restore soil fertility, and perhaps also because livestock were not abundant. When the land was exhausted, they moved on to a new area, clearing the forest there and leaving the old field fallow. They might return to their original plot, but only after many years. Doing so meant that peasant and Cossack lands were less productive than if they had been under intensive cultivation, but it also required less labor. In addition, the new growth that followed forest clearance, and on fallow fields, attracted valuable game species, such as deer and sable (discussed below).

Many peasants also diversified their household economies beyond farming. In a territory rich in fish, game, and other resources, with difficult access to markets, complete

78 Pyne, Vestal Fire, 288–302.
80 Coquin, La Sibérie: peuplement et immigration paysanne au XIXe siècle, 665.
reliance on agriculture was unnecessary and often imprudent. Nearly all settlers hunted and fished to varying degrees, and many participated in the lucrative trade in forest products, such as ginseng and furs.\textsuperscript{81} Arsen’ev found that the Chinese in the region of Ol’ga Bay grew more agricultural products than local peasants, for whom “hunting and fishing comprise almost their main occupation.”\textsuperscript{82} Facing mediocre harvests, the Khudiakov family, for instance, supplemented their diet with other forms of sustenance, including fruit (which grew wild), boar, and deer. The eldest Khudiakov sons worked at a local lumber mill, where they were paid cash to supply workers with ducks and pheasants, and the family also sold deer antlers to local Chinese merchants. Although agricultural ventures did not always thrive, wage labor and hunting could fill the gap.\textsuperscript{83} Similarly, Michael Iankovskii took to breeding horses that could withstand the local conditions on the Sidemi Peninsula, where sea breezes kept insects at bay. One of the Iankovskii’s most profitable ventures was raising spotted deer, having penned in a group of deer that wandered onto Sidemi in 1888.\textsuperscript{84}

As we will see in Chapter 3, imperial elites did not feel settlers’ mixed economies, which produced little grain for the army and navy, accorded with their goals for colonization. However, while it may not have fed Primor’e’s military garrisons, settlers’ approach probably yielded a more diverse and nutritious diet than had they relied solely on grain-farming.

\textsuperscript{81} Ibid., 672–73.
\textsuperscript{82} Arsen’ev, “Polevye dnevniki ekspeditsii V.K. Arsen’eva 1906 goda,” 36.
\textsuperscript{83} Khudiakov, “Avtobiografiiia,” 36–44.
\textsuperscript{84} Yankovsky, \textit{From the Crusades to Gulag and Beyond}, 10; N.A. Baikov, \textit{Iziubr i iziubrevodstvo} (Kharbin: Obshchestvo izucheniia man’chzhurskogo kraia, 1925), 12.
East Asian connections: Food, land, and labor

Even more critically, Russian and European settlers managed in the new territory by relying on Primor’e’s Chinese and Korean inhabitants. The interdependence between these peoples, like the varied household economies described above, did not match elites’ hopes for the creation of a “Russian” province, but it was critical to settlers’ livelihoods in several ways.

First, Chinese traders played a vital role in moving goods around, into, and out of the territory. Cossacks and peasants in the Ussuri valley relied on Chinese traders for staples like millet, tea, and tobacco, trading fur, silver, crafts, and other items in exchange. There was also a bustling trade in alcohol and opium along the border. In general, Ussuri Cossacks enjoyed good relations with their Chinese neighbors; many understood Chinese and spoke it well. 85 Chinese junks were the mainstays of coastal shipping in the nineteenth century, while the trade in Chinese medicinal products (like ginseng, deer antlers, and animal organs) brought income to many households, both Russian and East Asian. Sorokina estimates the volume of Chinese trade in just the South-Ussuri krai (the southern half of Primor’e) at 1.5 million rubles in 1889 and 6 million in 1894. Some of those Chinese traders who were Russian subjects were members of the merchant estate (soslovie), Chinese merchants outnumbered Russians and Europeans combined in the second and third guilds of that estate. 86

Second, East Asian settlers were essential to feeding the territory and supplying it with basic items of consumption. Chinese farmers, responding to local demand, grew millet and wheat for sale to their Russian neighbors. Koreans were especially prominent

86 Sorokina, Khoziaistvennaia deiatel’nost’ kitaishkikh poddannykh..., 63–67.
in market gardening, supplying cities, villages, and military posts with much of their vegetables.  

Under A. F. Fel’dgauzen, Military Governor of Vladivostok (1880-1886), there were 1,000 Chinese farmers on Russkii (Russian) Island supplying crops to Vladivostok’s main fortress. Similarly, H. E. M. James, having interviewed a Cossack commander near Pos’et harbor, wrote that the local colony of Russian farmers was “…not doing very well. The Colonel informed us they did not grow enough food to support themselves, and the Government had to import flour to save them from starvation.” As a result, the local Cossacks welcomed Korean farmers, who produced a great deal more food than previous settlers and whom they considered “docile, industrious, and well behaved.”

Two decades later, when Fridtjof Nansen travelled through Primor’e, he noted that because Vladivostok was so dependent on the Chinese community for food and other goods, the Chinese responded to attempts to crack down on illegal migrants by raising prices on basic foodstuffs, forcing authorities to relent.

While migrants from European Russia achieved only middling gains in terms of agricultural productivity, East Asian settlers who took up farming thrived, producing far more per person (and per unit of land) than Russian or Ukrainian peasants. Chinese and Korean farmers shared some crops with their Russian neighbors—such as potatoes and cabbage, for instance—while others (such as foxtail millet, corn, and soybeans) they alone raised. Even those crops that all groups shared, however, tended to grow better on Chinese and Korean farms. Chinese strains of wheat and millet, for instance, were better suited to Primor’e’s cool, damp planting season than variants brought from Siberia or

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87 Ibid., 52.
88 James, The Long White Mountain, or A Journey in Manchuria, 353.
89 Nansen, Through Siberia the Land of the Future, 390. Nansen is best known for his arctic expeditions, his humanitarian work with the League of Nations, and his idea to have the League provide stateless persons with documentation, the so-called “Nansen passports.”
European Russia. The Chinese, accustomed to heavy summer rains, tended to plant their crops in raised beds, a labor-intensive method but one better able to protect seeds from rot and rain, and they were also careful to avoid areas prone to flooding.\textsuperscript{90} They may also have constructed earthen embankments to protect against floodwaters.\textsuperscript{91}

Strangely, Russian and Ukrainian migrants rarely adopted the methods of their East Asian neighbors. Kriukov contrasted Russians’ farms with those of local Korean settlers, observing that Korean farming methods were an “unattainable ideal for our peasants.”\textsuperscript{92} Observing colonists’ failure to adapt to local conditions, he even spoke of the “Russian peasant’s complete inability for colonization.” It is possible that Russian and European settlers adopted Chinese or Korean crops and methods, but if they did so they left little evidence of such experimentation.\textsuperscript{93}

The experience of one Cossack family illustrates both the rarity of adopting East Asian agriculture and the potential returns in doing so. In 1898, a Cossack officer named Savinskii and his family settled a plot of land in northern Primor’e. Initially, the Savinskii family relied on “Russian labor and Russian crops,” but with a shortage of workers they began to hire Koreans, who introduced different crops and their system of planting in raised furrows with seed drills. In the early years of the Savinskii homestead, a small amount of arable precluded the possibility of fallowing, leading to soil depletion. They also had difficulty keeping livestock, particularly horses, sheep, and goats, which suffered from insects. However, according to Ol’ga Savinskaia, the introduction of “superior Asian crops” and methods had revolutionized the farm. Russian crops on

\begin{thebibliography}{99}
\bibitem{90} Petrov, \textit{Istoriia kitaistei v Rossi}, 1856-1917, 427–28.
\bibitem{91} Kriukov, \textit{Ocherk sel’skago khoziaistva v Primorskoi oblasti}, 46.
\bibitem{92} Ibid., 49.
\bibitem{93} Coquin, \textit{La Sibérie: peuplement et immigration paysanne au XIXe siècle}, 671.
\end{thebibliography}
virgin soil had produced yields of 7-8:1, whereas Asian crops regularly yielded an output of 20:1 or 30:1 for beans, or even more for foxtail millet. Some “European” crops, such as potatoes and buckwheat, grew well, Savinskaia said, while rye, wheat, and barley were more fickle. The Savinskiis combined Asian and European crops but relied exclusively on furrow-planting and the use of seed drills. Her family’s experience seems to have been the exception that proved the rule: most Russian and European settlers were reluctant or unwilling to follow the example of Primor’e’s Chinese and Korean farmers.94

**Land Rentals and Opium Cultivation**

There were good reasons for Russians’ reluctance to take on new agricultural practices. Chinese and Korean methods were labor-intensive, requiring meticulous cultivation of raised furrows and constant weeding. As T. N. Sorokina has pointed out, by the turn of the century railroads, mines, and other employers paid twice as much for Russian labor as for East Asians’; adopting such methods would be a poor use of resources, particularly when other work was available. Moreover, by the early 1900s, Manchurian grain was plentiful in Primor’e, dissuading Russian and European settlers from growing surplus grain for the market.95

More importantly, Slavic migrants had privileged legal access to land, so they could simply rent out their holdings to Chinese and Koreans. Only Koreans who could prove long-term residency could gain acquire the lands they worked as property. Russian and Ukrainian settlers, as discussed above, were granted plots by the local branch of the

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95 Sorokina, *Khoziaistvennaia deiatel’nost’ kitaishkikh poddannykh...*, 57–58.
Resettlement Administration, and in practice often they simply occupied the lands they wanted, even if East Asians or indigenous peoples were already living there. As a result, it had become common practice by the early 1900s for Russian and Ukrainian peasants to lease part of their allotments to Chinese and Koreans. One study estimates that in some parts of Primor’e, 98 percent of the East Asian population rented land. Renting out land was particularly widespread among Cossacks and in communities of starozhil, long-time Russian settlers. Some were able to live solely off rents, like petty landowners, giving them time for other pursuits, such as hunting, fishing, logging, or, in the case of Cossacks, military service. In 1900, the Ussuri Cossack host received 1,739 rubles in rent, primarily from Chinese and Koreans, plus 1,016 rubles in fees from these groups for the use of mills and other services, such as providing security. In 1910, a mere 72,000 Cossacks occupied some 15 million desiatinas (about 40.5 million acres) of some of the best bottomlands in the Ussuri and Amur valleys. With constant service obligations and more territory than they could use, Cossacks not surprisingly rented plots to non-Russians.

Even Russian and European settlers who arrived after 1900, who had smaller land allotments, rented land to non-Russians. In February 1908, a resettlement official reported that in one village on the lower Ussuri he found Chinese who had been ordered to leave to make way for Russian settlers, but who instead agreed to pay the newcomers (in kind) to rent land. As a result, the Russian settlers did not want the Chinese to

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96 Babrenko, “Otnosheniia russkikh krest’ian i koreiskikh perselestsev na iuge Dal’nego Vostoka vo vtoroi polovine XIX - pervoi treti XX vv.”
97 Vashchuk et al., Etnomigrantsionnye protsessi v Primor’e v XX veke, 40.
98 Gluzdovskii, Primorsko-Amurskaia okraina i severnaia man’chzhuriia, 72; Kutuzov and Ivanov, “Kazachestvo na russko-kitaiskoi granitse,” 46; Sorokina, Khoziaistvennaia deiatel’nost’ kitaishkikh poddannyh..., 58–60.
100 Ibid.; Gluzdovskii, Primorsko-Amurskaia okraina i severnaia man’chzhuriia, 72.
leave. These transactions did not produce written contracts, but observers found that Russian and European settlers, with their near-monopoly on legitimate land-holding, could charge Chinese and Koreans twice as from than from their compatriots. It is a testament to the productivity of Chinese and Korean settlers that they were able to pay such high rents while maintaining their own livelihood. Russian and European settlers also gave forested areas to Koreans rent-free on the condition that they undertook the backbreaking work of clearing and de-stumping the land. They could then farm the more easily worked soil themselves, or continue to lease it out.

A related source of income for Russian and European settlers, particularly in the early 1900s, was opium. The cultivation and sale of opium was technically legal until 1915, although officials still prosecuted opium smugglers, and contemporary accounts suggest that opium poppies were widely cultivated in Primor’e by the end of the nineteenth century. Already in 1881, Vsevelod Krestovskii, who had served with the navy in the Far East, noted that the Chinese grew opium in Primor’e and observed that Russian peasants had also taken up the crop. In 1887, an envoy from the Governor-General’s chancellery found opium among Chinese in the Ulakhe Valley (among other “evils,” such as illegal logging and trapping). During his 1906 expedition, Arsen’ev found opium plantations on the Akhobe and Tetiukhe Rivers, which flow into the Sea of Japan, and a new “flood of Chinese” harvesting ginseng and opium on the tributaries of

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101 GAPK F. 1, op. 1, d. 33, l. 67.
102 Vashchuk et al., Etnomigratsionnye protsessi v Primor’e v XX veke, 40; Gluz dovskii, Primorsko-Amurskaia okraina i severnaia man ’chzhuriiia, 82.
103 Petrov, Koreiskaia Diaspora v Rossii: 1897-1917, 161–62.
104 RGA VMF F. 401, op. 2, d. 4046, l. 249ob.
105 RGIA DV F. 1, op. 5, d. 661, l. 3ob.
the upper Ussuri. He himself took opium while recovering from illness in a Chinese settlement.  

For Russian and European settlers, permitting opium cultivation on their land was highly lucrative. They could charge up to 50 to 70 rubles per desiatina if opium was grown on the land, as opium was worth 200 rubles per pud (36 lb.), according to an 1895 estimate. Growing opium poppies was legal until 1915, but there are few statistics on this crop, making estimating the scale of the trade difficult. For instance, official sources state that in the Ol’ga region, 458 desiatinas of opium poppy were sown in 1911, producing 182 pud of opium. In contrast, a local official wrote that in the coastal area that he administered—which was just one part of the Ol’ga district—peasants rented 40,500 acres to Chinese, who in turn devoted 8,000-9,500 acres of this land to opium. Nevertheless, it is clear that opium cultivation was common in remote parts of Primor’e by the early 1900s, perhaps because the Qing government was cracking down on the trade in China at that time. 

Attempts to halt opium production illustrated the close interdependence between Russian and European settlers and their Chinese and Korean tenants, as well as the weakness of the tsarist state in Primor’e’s interior. In 1910 there was a brief military campaign aimed at destroying opium plantations and arresting opium traders, but the

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107 Vashchuk et al., Etnomigratsionnye protsessi v Primor’e v XX veke, 40–45; Kutuzov and Ivanov, “Kazachestvo na russko-kitaiskoi granitse,” 45.

108 Vashchuk et al., Etnomigratsionnye protsessi v Primor’e v XX veke, 40.

effect was temporary.\footnote{Vashchuk et al., \textit{Etnomigratsionnye protsessi v Primor’e v XX veke}, 40–45. Why the state sought to half the growing and trade in opium while it was still technically legal is not clear.} In May 1915, the tsar’s Soviet of Ministers banned the planting, import, selling, and possession of opium, and soon afterward Primor’e’s foresters set about deporting Chinese and Koreans engaged in the trade, characterizing these groups as “depraved foreigners.”\footnote{RGIA DV, F. 94.o. 1, d. 49. ll. 20, 40-1.} However, the law prompted local resistance. In June 1915, a Cossack woman identifying herself as the wife of Capt. Esaul Shestakov, who lay wounded in a St. Petersburg hospital, warned that non-compliance and unrest would result if authorities tried to enforce the anti-opium law. Shestakova pointed out that with her husband gone, she had been forced to rent land to Chinese farmers who planted opium instead of grain because, she maintained, flooding had damaged the grain crop. She claimed that in Poltavskii okrug (on the middle Ussuri) 45,900 acres were sown with opium poppy, and of these 8,000 had been earmarked for destruction, which would bring ruin to renters and Cossack families alike. “This is the state,” she wrote, “in which a mother and wife of an active-duty army officer finds herself.”\footnote{State Archive of the Russian Federation (GARF) F. 102 op. 2e, delproizvodstvo 73, d. 33, ll. 1-3.}

Governor Gondatti pushed for interdiction of the opium trade and expulsion of the Chinese, but others disagreed. Remarkably, the Ussuri Cossack ataman sided with Shestakova, and the Soviet of Ministers eventually agreed that the Chinese would be allowed to collect and sell the 1915 crop they had already planted. It is not clear what happened to Primor’e’s opium cultivators (or their landlords) in 1916; state documents indicate that “an extensive area [had] once again been sowed with poppy” in that year along the Chinese Eastern Railway’s leasehold in Manchuria, but are silent about Primor’e. In any case, after the 1916 season, revolution, civil war, and foreign
intervention precluded any further anti-opium campaigns for several years. But the prominent role of East Asian migrants in Primor’e’s economy and their interdependence with Russian settlers remained a basic part of rural life until the deportations of the 1930s.

**Coda: Bandits and labor competition**

To be sure, relations between settlers from European Russia and Primor’e’s Chinese and Koreans were not all a matter of cooperation and interdependence. Among the more serious threats to settlers, particularly in the early years of colonization, were roving bands of Chinese bandits, the *hung-huzy* (“red beards”). These groups comprised a very small number of the Chinese in Primor’e, but they were a genuine menace, terrorizing inhabitants of all nationalities, especially during the early years of Russian settlement. In 1868, a group of *hung-huzy*, hearing gold had been discovered on Askol’d Island, near Vladivostok, entered Russian territory and attacked the villages of Nikol’skoe and Shkotovo (north and northeast of Vladivostok, respectively), destroyed a nearby military post, and then occupied the island. Eventually, Pacific flotilla sailors and Ussuri Cossacks had to be mobilized against them, successfully ousting the *hung-huzy* from the island.\(^{113}\) The so-called “Manzy War” left many of the *hung-huzy* dead and others sentenced to hard labor.\(^{114}\) In another incident, *hung-huzy* attacked Sidemi Peninsula, killing the wife of the Finnish sea captain Fridol’f Gek and abducting his son.

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\(^{113}\) Kutuzov and Ivanov, “Kazachestvo na russko-kitaiskoj granitse,” 45.

\(^{114}\) “Manzy” was a somewhat derogatory term for Chinese in the Russian Far East. Pozniak, “Politika rossiiskoi vlasti v otnoshenii immigrantov na Dal’nem Vostoke vo vtoroi polovine XIX - nachale XX v.”
The threat of *hung-huzy* attacks remained serious enough in the 1880s and 1890s that the Khudiakov family built a stockade and watch towers to defend their family farm.¹¹⁵

Not surprisingly, much of this violence was reciprocal. Michael Iankovskii and his Korean workers hunted down some of the *hung-huzy* who had attacked Gek’s family. Iankovskii famously spotted one of the bandits lying in wait behind him, thereby earning the nickname “Nenuni” (four-eyes), because he seemed to have eyes in the back of his head.¹¹⁶ As discussed above, Russian settlers forced Chinese residents from their land—and occasionally did the same to indigenous peoples, claiming they were Chinese.¹¹⁷ Ussuri Cossacks allegedly ambushed and sometimes killed Korean migrants—known as “White Swans” because they dressed in all-white garments—hoping to steal gold dust or other goods as their victims voyaged home. Ferdinand Ossendowski related a discussion with his Cossack guides in which the latter happily admitted to robbing and murdering Koreans to steal gold, antlers, ginseng, mushrooms, sables, and other goods. “[H]ow could we allow them to take all this when it would be of good use to use Christians?” one Cossack asked, adding that he believed Koreans were not really people, but “reptiles, and they are numerous as ants!”¹¹⁸

Another source of tension between these groups was competition from East Asians in wage labor markets. Beginning in the 1890s, East Asian seasonal migration

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boomed alongside demand for labor in railroad construction and gold-mining industries.\textsuperscript{119} By the following decade, East Asians (mainly Chinese) dominated certain industries. Of the 2,655 miners working in southern Primor’e in 1910, 1,932 (73 percent) were Chinese, versus 664 Russians (25 percent). According to G. N. Romanova, Chinese constituted 82 percent of unskilled laborers, 79 percent of the carpenters, and nearly all of the masons and bricklayers in Primorskaia and Amurskaia oblasts. Anti-Asian legislation on the eve of World War I only temporarily reduced the number of Chinese in the territory, as renewed demands for labor during the war forced a softening of migration policy.\textsuperscript{120}

\textit{Novosely}, struggling to establish themselves on marginal lands, were often desperate for part-time work and complained to state officials when they faced Chinese competition. The head of resettlement affairs in the Iman region, for instance, wrote in 1909 that new settlers lacked employment prospects because Chinese workers, living without their families, demanded far lower wages than Russians and Ukrainians who had to support their whole household.\textsuperscript{121} Even according to a very pro-Russian envoy from the Resettlement Administration, A. M. Kazarinov, the \textit{novosely} were neither as cheap nor as skilled as the Chinese. Russian managers, seeking to turn a profit, very reasonably preferred to hire non-Russians. Kazarinov visited new settlements on the Iman and Vaku Rivers in northern Primor’e in 1907-1908, where he found a local timber merchant, Streletskii, who chose to employ 70 illegal Chinese migrants instead of Russians.\textsuperscript{122}

\textsuperscript{120} Vashchuk et al., \textit{Etnomigratsionnye protsessi v Primor’e v XX veke}, 38; Romanova, “Ekonomicheskaia deiatel’nost’ kitaitsev na rossiiskom Dal’nem Vostoke: torgovlia, predprinimatel’stvo, zaniatnost’” (konets XIX - nachalo XX v.),” 85.
\textsuperscript{121} GAPK F.1, op. 1, d. 32, ll. 149-52.
\textsuperscript{122} GAPK F. 1, op. 1, d. 33, ll. 52-57.
The interaction between Russians, Europeans, and East Asians in Primor’e, then, was not without friction, but on the whole the two groups became closely interdependent and cooperation was the norm. Chinese and Koreans, both legal residents and illegal migrants, contributed a great deal to the region’s economy, even if, as Sorokina has pointed out, their presence seemed to be in conflict with the tsarist government’s basic strategic goals. From Russian and European settlers’ perspective, interaction with East Asians—through trade or the rental market in land—was an important part of making a living in Primor’e. In combination with changes in farming and diversification of household economies, such interactions offered many advantages to those trying to live in an unfamiliar and difficult environment.

III. Changes in the land

If Primor’e’s nonhuman environment exerted a powerful influence on those who journeyed to and settled in the territory, the reverse was also true. The particular shape of economic life in Primor’e—with its mix of hunting, foraging, fishing, farming, and trading—had significant effects on the territory’s flora and fauna. As discussed above, some early visitors thought deforestation and a decline in certain animal populations—such as tigers—would make the territory more habitable, civilized, and Russian. However, many of the changes that occurred as a result of Russian political control and settlement went beyond this vision, or even, as in the case of flooding, made them more difficult to achieve.

Among the most noticeable transformations was the reshaping of the taiga. Nearly every account of Primor’e published after 1880 that discusses forests attests to the

123 Sorokina, Khoziaistvennaia deiatel’ nost’ kitaiskikh poddannykh…, 5.
disappearance of vegetative cover around peasant settlements and deep in the interior. Many observers—Russian and foreign, officials and unofficial—cited agricultural settlement, logging, and—especially—an increased incidence of forest fires as the main causes of deforestation. Many also remarked upon changes in certain animal populations as a result of hunting, gathering, and habitat loss. Finally, anthropogenic deforestation likely contributed to erosion and a greater incidence and severity of flash floods. Settlers (Russians, East Asians, and others), seasonal migrants, and indigenous hunter-gatherers all played a part in these changes, as will be discussed in more detail in Chapter 3.

*Flora: Primor’e’s forests, c. 1860*

“The Ussuri territory is a land of forests! At least it was before Russian settlers arrived. [Now] the Ussuri territory is burning!”

—Vladimir Arsen’yev, *Geographical Notes (1911)*

What was the state of Primor’e’s forests in the mid-nineteenth century, when Russian and European migrants began arriving in the territory? Although there are several detailed descriptions of the taiga from the 1850s and 1860s, it is still difficult to know with much precision the extent and composition of Primor’e’s forests at onset of Russian settlement. Still, in examining contemporary accounts, palynological evidence, and studies of forest ecology in the late-twentieth century Primor’e, some general features stand out.

First, the taiga was almost certainly more extensive in 1860 than it was even a half-century later. Although no one measured the extent of Primor’e’s forests at that point, all accounts indicate that forests covered the vast majority of the territory, save for

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124 Arsen’yev, *Voenno-geograficheskii i voenno-statisticheskii ocherk ussuriiskago kraia, 1901-1911* g.g., 113.
grassy or marshy areas around Lake Khanka and along the Sungacha River. Early visitors were impressed by the size and density of Primor’e’s forests. Budishchev, who conducted the first study of the forests of the Far East, wrote that the forest extended from the shore up into the mountains: “In general,” he wrote, “here on the shore are inexhaustible forest riches.” Similarly, a naval commission, sent to study the territory in 1868, noted “an abundance of forest lands” and that with few exceptions all inhabitants were “completely provided for by nature. Fuelwood can be found everywhere in adequate quantities.” Naval officers in the 1860s also pointed out that Vladivostok—much of which was deforested by the 1890s—was well-suited to being the region’s main port because of its abundance of construction materials. Others found that the whole Ussuri territory was made up of “dense, primeval forest” of pines, spruce, and various deciduous species. The Khudiakov family, arriving in 1881 on the Suifun River, found forests that stood “like a wall” around their settlement, as well as cedars, oaks, lindens, fruit trees, and “endless ash forests” in the vicinity. Based on such early accounts, agronomist V. V. Gaponov estimates that nine-tenths of present-day Primor’e was covered in forests of various types in the mid-nineteenth century. Even in 1901, forest occupied an estimated 80 percent of the territory’s surface.

125 Quoted in Khisamutdinov, Terra incognita, ili, Khronika russkikh puteshestvi po Primor’iu i Dal’nemu Vostoku.
126 RGA VMF, d. 4179, ll. 40b-5; d. 4183, ll. 174ob-175
130 Sil’nitskii, Kulturnoe vlianie ussuriiskoi zheleznoi dorogi na iuzhnho-ussuriiskii krai, 103.
The first Russians to visit Primor’e also often commented on the size of the trees they saw. On his 1857 expedition, one explorer reported finding oak trees seven feet (funt) in diameter, while Budishchev found pines and spruce trees standing over 130 feet.\(^{131}\) In one area, Maak admired large, century-old trees covering ancient fortifications.\(^{132}\) The British traveler Ravenstein, who voyaged through much of Manchuria and Siberia, marveled at the “density and the size and beauty of the trees” near the confluence of the Ussuri and Amur.\(^{133}\) The commander of the Siberian flotilla wrote in 1868 that southern Primor’e abounded in “mighty vegetation,” particularly 30 to 50 km away from the seashore, where winds and fog did not hinder “proper tree growth.” He noted elm trees up to 150 feet high and six feet across, along with lindens, oaks, maples, and pines of comparable size.\(^{134}\) On the other hand, both the navy and Maak observed that large trees suitable for construction purposes were sometimes only found far from the seashore or from the river valleys where most soldiers, Cossacks, and settlers lived. Cossacks on the Ussuri, for instance, took to the mountains during the winter to find building materials.\(^{135}\)

Second, Primor’e’s forests were (and remain) highly diverse. The explorers Veniukov, Maksimovich, von Schrenck, and Maak discovered an immense range of species living together in the Amur and Ussuri valleys, including dozens hitherto unknown to European science.\(^{136}\) Budishchev believed Primor’e’s forests could be divided into three broad bands: a northern region, dominated by conifers; a southern


\(^{132}\) Maak, *Puteshestvie po doline reki Ussuri*, 46.

\(^{133}\) Ravenstein, *The Russians on the Amur*, 184.

\(^{134}\) RGA VMF F. 410, op. 2, d. 4178, ll. 90-91.

\(^{135}\) Maak, *Puteshestvie po doline reki Ussuri*, 10; RGA VMF F. 410, op. 2, d. 4183, l. 24ob.

band, in which mixed deciduous forests prevailed; and an intermediate zone in which the
two intermingled. Within these broad divisions, many species lived side-by-side.
Veniukov found extensive stands of pines (kedr), larch, and spruce trees in the
mountains, while Maak observed that the right (southern) bank of the Amur, was
“densely covered with mixed forest,” with Korean pine and Jezo spruce predominating in
coniferous stands. The Ussuri itself, Maak wrote, was lined with “beautiful deciduous
forest,” along with Daurian larch and numerous conifers. He noted a transition from
coniferous forests at higher altitudes to those dominated by to oak and lindens, or birch,
elm, and aspen further down. Similarly, a naval commission reported in 1868 that the
ridges near the Ussuri, in Cossack territory, were covered in mixed forest of fir, spruce,
pine (kedr), along with some larch, maple, birch, oak, elm, ash, walnut, and other trees.

Third, anthropogenic influence on forests in the mid-nineteenth century when
Russia took control was likely at low ebb compared to earlier or later periods, but it was
still significant. Contemporary accounts suggest that indigenous peoples rarely used
timber from beyond the immediate vicinity of their villages. Budishchev, for instance,
observed that indigenous groups living in Primor’e “seldom use[d] the forest for their
needs,” though many of them lived amid thick [dremuchago], wild stands. Only the
Nivkhi, he wrote, made use of the valuable large trees for construction purposes.

(1868): 367–86.  
139 RGA VMF F. 410, op. 2, d. 4179, l. 95  
141 *Sbornik glavnikh oﬀitsial’nykh dokladov po upravleniui Vostochnoi Sibiri*, vol. 5, 2nd ed., Lesa
Priamurskago Kraia 1 (Khabarovsk: Tipograﬁia Kantseliarii Priamurskogo General-Gubernatora, 1898),
29–31. Budishchev was a colonel in the Imperial Forestry Corps who spent several years in the Far East
before succumbing to disease. Parts of his work were published soon after his death in 1868 in an article
titled “Opisanie lesov chasti Primorskoi oblasti,” *Zapiski Sibirskogo otdela IRGO* no. 9-10 (1867-8), the
rest in 1885 and a later edition (Budishchev, *op cit*).
However, Primor’e’s taiga was a dynamic environment that was constantly changing under anthropogenic and non-anthropogenic influences. Agriculture and horticulture, though conducted on a very limited scale, already occupied some of the land. Early visitors found that the Nanai near present-day Khabarovsk raised beans, wheat, pumpkins, cucumber, cabbage, and other crops. When he visited what would become Vladivostok in 1855, the British sailor J. M. Tronson found forests in some areas, while elsewhere the local Chinese cultivated barley, buckwheat, millet, and vegetables. “We experienced no difficulty in procuring potatoes,” he wrote, as well as cucumbers, beans, and onions, and vegetable marrow. Elsewhere, indigenous peoples cleared forests around their settlements to encourage the growth of fruit trees, berries, and quick-growing deciduous trees. Both indigenous peoples and the Chinese also burned forests to create feeding grounds for ruminants, and to drive game. De la Brunière found that both groups commonly used fire along the Amur to hunt, as they could “find no easier means of compelling the game to quit their retreat.” In later years, most observers ascribed the use of fire in hunting to the Chinese exclusively, but indigenous peoples certainly employed it as well.

Going back even further, pollen records indicate that the share of large trees in what is now Primor’e declined as early as 8,000 years ago as a result of swidden agriculture, opening space for the advance of grasses and other fast-growing plants. The introduction of settled agriculture (including dry rice crops), during the medieval period,

144 Astaf’ev, Pimenova, and Gromyko, “Izmenennie estestvennykh i antropogennykh faktorov lesnykh pozharov v sviazi s istoriei zaseleniia, razvitiia i khoziaistvennoi deiatel’nosti v regione,” 34.
145 James, *The Long White Mountain, or A Journey in Manchuria*, 432.
along with numerous weeds, also affected the region’s vegetative composition. The grasslands around Lake Khanka, for instance, may have been a product of anthropogenic deforestation. Much of what Maak, Budishchev, and other early visitors saw was likely secondary forest. Nazarenko points out that the pine stands (sosniaks) they mentioned in their accounts, for instance, are typical of secondary forests, not old-growth. He also suggests that early human settlement may have influenced biodiversity of plant and bird life in the territory.¹⁴⁶

Compared to later eras, anthropogenic pressure on Primor’e’s taiga in 1860 was limited. However, the diversity that Russian and European observers found in the taiga in mid-nineteenth century Primor’e was a product of both the territory’s soil, climate, and topography, on the one hand, and human influence on the other. Contemporary sources suggest that the taiga covered the vast majority of Primor’e’s land surface, but also that it varied a great deal even within the small portion of the territory surveyed during these early years.

*Changes and agents of change*

The effect of human action on Primor’e’s forests undoubtedly increased after 1858 as newcomers (Russian, Chinese, and Korean) cleared land, burned wood as fuel, and used fire for hunting and agricultural purposes. Deforestation was initially localized around settlements, riverbanks, and along the relatively populated southwestern coast, but by the early 1900s it seems to have been widespread also in Primor’e’s interior. As early as 1859, Maak observed that peasants in Turii Rog, on Lake Khanka, had already

¹⁴⁶ Nazarenko, “Khoziaistvennaia deiatel’nost’ kak faktor rosta bioraznoobrazii...”
deforested the environs of their village.\textsuperscript{147} Similarly, Budishchev, travelling in the region in 1859 and in the 1860s, found that there was a “great depletion of forests and even greater field and steppe fires” in certain areas around new settlements. Russians, he wrote, used forest resources much more than natives had, and the composition of vegetation surrounding settlements had noticeably changed to favor shrubs and other fast-going species, which Budishchev rightly believed would help grazing animals. Cossacks cleared large areas around their settlements through logging and by starting fires to clear brush and, according to one observer, to facilitate the gathering of pine nuts. Budishchev found that when the fires set by Cossacks (or Chinese) got out of control, they spread into the taiga beyond.\textsuperscript{148}

As more settlers arrived in Primor’e over subsequent decades, deforestation became more noticeable. One forester, sent to study the South-Ussuri Region in 1886, found that long-settled areas of peasant, Cossack, and Korean settlement already suffered from a lack of wood. In some places, it took three to five days to find and transport timber that was adequate for construction of homes and other buildings.\textsuperscript{149} In light of the enormous stumps he found on the Kiia River, agronomist Nikolai Kriukov wrote in 1893 that the “destruction of the forest occurred and is occurring here at a monstrous scale,” as a result, in his view, of logging and uncontrolled burning by indigenous peoples and other “rabble” (\textit{sbrod}).\textsuperscript{150} Residents of Shkotovo, near Vladivostok, told the journalist Dmitrii Shreider that the forest had once bordered their homes, but logging and fires had driven it...
far away. The forest, Shreider wrote in 1897, once “boundless, dense, and impassable,” was “already insufficient for supplying the local population.” “The taiga of old,” he continued, “is melting away and disappearing before the double influence of axe and fire.” Citing the testimony of one long-time settler, Shreider suggested that fires affected at least one-eighth of the forest annually.151

After the turn of the century, the impact of settlement on the taiga was unequivocal. Sil’nitskii wrote in 1901 that “the high quality of timber, especially in areas close to settled points or serving for Chinese hunts, is quickly diminishing through forest fires and selective logging.”152 Similarly, in 1903 long-time settlers recalled that southern Primor’e’s hills and ridges had been covered with “primeval forest,” but now some 60-80 miles inland from the coast was largely denuded of large trees.153 A decade later, peasants in some parts of the previously remote Iman district had to travel 20 to 30 km to find firewood, even in areas that had had excellent forests only 5 to 10 years prior.154 The same was true in Cossack lands. According to the Resettlement Administration, by the turn of the century the Ussuri Cossacks had “significantly exhausted the forests near their settlements, as well as those growing on the banks of the Ussuri.” To be sure, the Resettlement Administration also reported that much of the lower Ussuri valley was almost entirely covered with forests, including Korean pine, spruce, lindens, cork, ash, and fruit trees. There was no danger, in the Resettlement Administration’s view, that timber reserves would be exhausted. Shortages in Cossack

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152 Sil’nitskii, *Kulturnoe vlianie ussuriiskoi zheleznoi dorogi na iuzhno-ussuriiskii krai*, 106.
153 Iuzhakov, “Po Ussuriiskomu Kraiu,” 543.
lands were evidently a local phenomenon, perhaps because a lack of roads hindered access to more remote forests. Nevertheless, the overall trend was toward a reduction in the extent of Primor’e’s forest.

By the First World War, deforestation touched nearly every part of the territory. In 1912, Vladimir Arsen’ev estimated that roughly two-thirds of the territory had been subject to fire or logging of some kind (see image 18). (In 1914, the state department responsible for agriculture and forestry made a more conservative estimate—one-third of the Sikhote-Alin affected by fire—possibly drawing on Arsen’ev’s work.) Much of the Sikhote-Alin, Arsen’ev wrote, was simply “bald,” and with forests went birds, sable, and other animals. He believed the only “primeval” taiga remaining in the upper reaches of the Sikhote-Alin, and warned that unless Primor’e’s residents learned to care for the forest, “the Ussuri territory will very quickly will find itself without forest and without animals.” He wrote that “nearly the whole coastal region and the Sikhote-Alin are bare. The forest remains only here and there in small patches. Starting from the Avvakumovka River […] and further to the north […] there is not one stream where there has not been a fire.”

155 RGIA F. 391, op. 3, d. 1152, ll. 164-ob.
156 GARF F. 387, op. 17, d. 67789, l. 3ob.
158 Astaf’ev, Pimenova, and Gromyko, “Izmenennie estestvennykh i antropogennych faktorov lesnykh pozharov v sviazi s istoriei zaseleniia, razvitiia i khoziaistvennoi deiatel’nosti v regione,” 34–35.
Figure 18: Arsen’ev’s map of burned forests in Primor’e (c. 1911)  

Alongside a reduction in the extent of the taiga came changes in its composition. The most obvious change was the shift from forests dominated by conifers to those in which broad-leaved trees were more common. Quick-growing deciduous species, including shrubs and Manchurian oak, tend to prevail where fire is common, and had become particularly widespread by the late-nineteenth century around settlements. Budishchev was the first to observe that frequent fires around Russian and Chinese settlements result led to coniferous forests being replaced by deciduous ones, such as oak, birch, and aspen. If fires were frequent enough, grasses replaced trees.\textsuperscript{160} The foresters Petropavlovskii and Urusov, comparing the current distribution of species with those described by Budishchev and others, conclude that conifers’ share of Primor’e’s taiga declined from around 57 percent of total woodlands in 1859 to 32 percent by the end of the twentieth century, while primary growth forests comprise only 12 percent of the total in southern Primor’e. Such estimates must be considered approximate, but they are consistent with the trends in forest composition observed in late-tsarist Primor’e and in the twentieth century.\textsuperscript{161}

As the comments cited above suggest, the main cause of deforestation was fire. Forest fires occur naturally in Primor’e; because nearly all precipitation falls during the summer months, the taiga can become extremely dry and fire-prone in the winter and spring. Nevertheless, intentional burning of brush, fields, and forests by humans, as well as carelessness, greatly increased the frequency of such fires after 1860. The Chinese living in or migrating to Primor’e employed fire for protection and to assist with hunting.

During his 1859 expedition, Budishchev noted that the “Chinese love[d] to destroy the forest around their homes” in order to make hunting easier, usually using fires. (Deer, sable, and other animals liked to feed on the shoots and other new growth that followed forest clearance.) One of Primor’e’s first forestry officials, Lt. Petrovich, complained to the Governor-General that the Chinese used fires to ward of tigers and leopards, and to facilitate the hunt for deer and goral, thereby contributing to wildfires. To be sure, the Chinese in Primor’e—who were effectively self-governing for most of the tsarist period—punished those who set a fire and damaged someone’s property, as well as those set fires out of season. Nevertheless, the use of fire for hunting was a well-established practice in their communities.

Russian and Ukrainian settlers also employed fire, though primarily for agricultural purposes, a practice they shared with farmers in many parts of the world. While intended to clear dead grass and enrich the soil, such fires often spread to the surrounding taiga. Both Russian and foreign observers made note of this habit. H. E. M. James, for instance, observed that in winter residents of the Pos’et region burned dry grasses in order to improve the soil and to facilitate nut-gathering. As a result, the mountains in the area looked “black and repellent.” Kriukov believed fires were common throughout the region mainly because locals burned grasses on their fields, which spread to undergrowth and thence to mature trees. “The older the town, the less

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164 Astaf’ev, Pimenova, and Gromyko, “Izmenennie estestvennykh i antropogennykh faktorov lesnykh pozharov v sviazi s istoriei zaseleniia, razvitiia i khoziaistvennoi deiatel’nosti v regione,” 34.
166 James, *The Long White Mountain, or A Journey in Manchuria*, 352.
wood there is around,” he wrote. By 1880, some villages already had enclosures set aside for fuel wood.  

The historian and publicist Sil’nitskii characterized fires as “the scourge of all the Ussuri forests,” one particularly common in spring and fall, when peasants burned their fields and meadows. He also identified unextinguished campfires and the Chinese practice of driving beasts into traps as other causes of wildfires. “The small size of the Russian population,” he wrote, “and the abundance of annually-arriving the Chinese-Korean wandering and labor element does not allow for the adoption of all the necessary measures against forest fires.”

One official in the Resettlement Administration, A. A. Rittikh, wrote that fires in Primor’e occurred frequently, mostly started “deliberately by the population to prepare the land for plowing and to dry low-lying places.” Some fires grew quickly to an unmanageable size, destroying trees, hayricks, and sometimes whole villages, along with their grain stores. Nansen noticed frequent fires as he travelled northward from Vladivostok in 1913. “It is easy to understand,” he wrote, “why there is so little forest here; it is constantly being burnt.” When field-fires spread into the woods, “nobody cares very much, and they may burn for weeks, without anyone being able or wanting to stop the fire.” The Sikhote-Alin, Nansen wrote, was still home to the “primeval forest, the endless taiga,” but much of it had has been “burnt [sic] by the natives and by the Chinese, in order, amongst other purposes, to facilitate the search for harts’ [deer] and elks’ horns.”

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167 Coquin, La Sibérie: peuplement et immigration paysanne au XIXe siècle, 678; Kriukov, Ocherk sel’skago khoziaistva v Primorskoi oblasti, 86,137.
168 Sil’nitskii, Kulturnoe vlianie ussuriiskoi zheleznoi dorogi na iuzhno-usssuriiskii krai, 105. Sil’nitskii had been employed by the office of the Governor-General (1884-1893), and served as editor of the newspaper Priamurskie Vedomosti (1894-1903, 1905-1908). Stephan, The Russian Far East: A History, 335.
169 RGIA, F. 1273, op. 1, d. 403, ll. 59-60.
170 Nansen, Through Siberia the Land of the Future, 326,334.
Besides fire, land clearance, construction, and commercial logging were also significant sources of deforestation. Russian and Ukrainian peasants, as well as Cossacks, cleared woodlands to plant their crops and of course relied on the forest for fuel. Because settlers depended on swidden or long-fallow agriculture, they cleared more land than their numbers would suggest. Between 1911 and 1917, the area of land under cultivation in the Priamur increased by 42 percent, proportionally more than in United States, Canada, or Australia at the same time, despite the fact that populations grew little.\textsuperscript{171} Alexander Men’shchikov, a statistician who conducted numerous studies of rural life in the Far East, found that even in long-established communities, starozhily had increased the extent of their arable land, meadows, and hayfields at the expense of forests during the first decade of the twentieth century.\textsuperscript{172}

Logging for construction and sale also had an effect. Settlers used wood to build their homes and outbuildings, and the forest also served as a source of pitch, charcoal, and other materials. Settlers in Primor’e generally preferred larch for construction purposes, if they could find it, as it was sturdy and rot-resistant. They also logged and sold timber (especially Korean pine) to merchants, who then re-sold it in markets in Vladivostok and in Pos’et harbor.\textsuperscript{173} In the late-tsarist period, there was great demand for timber in forest-poor China and in industrializing Japan. Though firewood was too bulky to export from Primor’e, Chinese merchants profited from the export of high-value species, like yew and pine/cedar. Russian timber merchants also took advantage of their position in the Far East, though their exports remained low during this period due to poor

\textsuperscript{173} Sil’nitskii, Kulturnoe vliatie ussuriiskoi zheleznoi dorogi na iuzhno-ussuriiskii krai, 106.
infrastructure, legislation that directed timber to internal markets, and American competition. Conifers generally provided the best construction and ship-building materials, and were therefore in highest demand. Preference for these species in particular helps explain the transition from coniferous to deciduous forests noted above. Although the transition to a deciduous-dominated forest was a matter of concern for contemporary officials, naturalists, and others, settlers themselves seem not to have minded. As Conrad Totman has shown in the case of Japan, farmers who relied on the forests primarily for fuel wood and fodder functioned quite well with forests of deciduous species, which could be coppiced and quickly replaced in the wake of fire or logging.

Finally, a rather unusual source of deforestation in Primor’e was the Chinese practice of using felled oak trees to cultivate shitake mushrooms. Rotting oak logs provided a fertile substrate for the mushrooms, which were highly valuable. In the 1880s, one pud (36lb) of dried mushrooms was worth between 15 and 20 silver rubles. Resident and migrant Chinese cut down oak trees then returned months or years later to harvest the result. The mushroom trade was active when Russians first began arriving in Primor’e; de la Brunière made note of this particular practice in 1851, as did

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174 Sorokina, Khoziaistvennaia deiatel’nost’ kitaiskikh poddannykh..., 90; Man’ko, Lesnoe delo na rossiiskom Dal’nom Vostoke, 86–93.
176 K. Skal’kovskii, Russkaia torgovlia v Tikhom okeane: Ekonomicheskoe izsledovanie russkoj torgovli i morekhodstva v Primorskoj oblasti Vostochnoi Sibiri, Koreie, Kitae, Iaponii i Kalifornii (St. Petersburg: Tipografiia A.S. Suvorina, 1883), 46. A note on the value of the ruble: the ruble fluctuated a great deal over the course of the nineteenth century. In 1810, the value of the ruble was set at 18 grams of silver. In 1885, the ruble was pegged to the French franc (itself pegged to gold) at a rate of 1 franc = 4 rubles, the equivalent of 0.74 grams of gold. As of 1897, when Russia adopted the gold standard, the ruble was equivalent of 2 ¾ francs, the equivalent of 0.77 grams of gold (0.025 troy ounces), or roughly $0.47 USD. See Peter Lindert and Boris Mironov, “Russia_Ag_content_ruble_1535-1913,” Global Price and Income History Group, February 2006, accessed April 3, 2016, http://gpih.ucdavis.edu/files/Russia_Ag_content_ruble_1535-1913.xls; National Mining Association, “Historical Gold Prices- 1833 to Present,” accessed April 3, 2016, http://www.nma.org/pdf/gold/his_gold_prices.pdf. In 1910, one ruble was worth about $0.51 USD. Carroll Davidson Wright, The New Century Book of Facts: A Handbook of Ready Reference (Springfield, Mass.: King-Richardson Company, 1910), 568.
Przheval’ski during his travels in the 1860s.\textsuperscript{177} Farming oak trees for mushrooms was one of the first forest-related practices that administrators banned, but it nevertheless continued into the early 1900s. As will be discussed in Chapter 3, Russian discussions of deforestation almost invariably touched on the mushroom trade, which garnered great scorn from Russian officials and explorers.

**Deforestation and erosion**

One possible effect of Russian settlement and deforestation was erosion along Primor’e’s waterways, which may have contributed to an increased incidence of flash flooding. As noted above, flooding became more frequent and intense after roughly 1900. To be sure, a variety of other factors besides human activity shaped (and continue to shape) flooding. Among the most important were fluctuations of climate and local weather conditions. Also, the same period witnessed an increasing number of new arrivals settling on volatile rivers (such as the Iman and Vaku), and better documentation of settlers’ situation. Still, there is considerable evidence suggesting that floods were indeed getting worse, and that anthropogenic deforestation was a contributing factor.

Accounts from the first decade of the twentieth century emphasize the unusual volume and violence of flooding, including in long-inhabited areas, like along the Avvakumovka River valley (in the Ol’ga district) and in the Khanka plain. For instance, residents of Kamen’-Rybolov, on Lake Khanka, some of whom had lived in Primor’e since 1866, told surveyors that floods in 1905, 1907, and 1908 had been unusually destructive, ruining their crops and low-lying hayfields. Semyon Solomiuka, a peasant

\textsuperscript{177} James, *The Long White Mountain, or A Journey in Manchuria*, 438; Przheval’ski, *Puteshestvie v Ussuriiskom kraye, 1867-1869 g.*, 15,85.
who had lived in the Ol’ga district since 1900, wrote that flooding had suddenly become much more serious after 1904. Moreover, he observed that floods had washed away topsoil, leaving less arable land for the growing population of settlers.\textsuperscript{178} Similarly, one group of Russian settlers moved their community three times before settling in Shkotovo, northeast of Vladivostok, having most recently abandoned the Ol’ga region because of flood damage.\textsuperscript{179} In 1911, representatives of an Udeghe community described a similar worsening of floods along the Bikin River, where they had recently settled. In a petition for state relief, they wrote that they had built their village on high ground and had resided there without incident for some time. But the unusual, “enormous” floods of the previous years had destroyed much of their holdings. It is not clear how long this Udeghe community had lived on the Bikin, but their testimony complements the records of Russian settlers who believed flooding was getting worse.\textsuperscript{180}

In a few cases, contemporary observers drew direct connections between deforestation, erosion, and flooding. As David Moon has shown, Russian scientists were already worried about deforestation and erosion in the steppes of southern Russia and Ukraine, so it should come as no surprise that we hear similar observations regarding Primor’e.\textsuperscript{181} One resettlement official, for instance, observed that allotment areas had “been subject to real changes: in one, as a result of forest destruction, there [had] been

\begin{footnotes}
\footnotenum{178} GAPK F. 1, op. 1, d. 32, ll. 191-3.
\footnotenum{179} D. I. Shreider, \textit{Nash Dalʹnit Vostok. (Tri goda v Ussuriiskom krae)} (St. Petersburg: A.F. Devrien, 1897), 315..\footnotenum{180} RGIA DV, F. 1, op. 4, d. 2306, 62-4.
\end{footnotes}
significant erosion of the soil,” leading to “alluvial deposits” in nearby rivers. Another figure to make this connection was Captain A. V. L’vov, a military engineer hired by the Governor-General’s office to examine the Khanka basin in 1896. L’vov’s task was to assess the possibility of future settlement in the region, if necessary by draining marshes. However, after touring the area L’vov decided that draining wet soils would cause more flooding downhill, and he believed that further deforestation in the western Sikhote-Alin would have the same effect. With the forests gone, he wrote, rain and meltwater ran rapidly downhill to the lake, rather than percolating slowly through the forest soils. “Floods,” he reported, “noticeably strengthening with every year, can only be explained by the increased cutting of forests and developing agriculture,” since in meadows and fields, cleared of vegetation, “less water is held by the soil and more of it flows into the rivers.”

Interestingly, L’vov also pointed out the level of Lake Khanka had risen dramatically in the late 1880s. By the time of his survey, ships could dock alongside the village of Kamen-Rybolov, where five years before they had been forced to stop more than a mile from shore. He believed this, too, was a result of deforestation and erosion uphill. One settler, G.D. Kalugin, also observed the rise in Khanka’s level. Kalugin retired from the army in 1875 to raise livestock on the Khanka shore, and even supplied horses to crown prince Nicholas (the future Nicholas II) when the latter traveled through

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182 RGIA F. 391, op. 3, d. 624, ll. 10ob-1.1
the territory in 1891. However, by 1896 Khanka had risen so much that it covered Kalugin’s allotment, forcing him to move to the nearby town of Nikol’skoie.\footnote{Goncharova, Gorchakov, and Troitskaia, \textit{Iz istorii zaseleniia khankaiskogo raiona: dokumenty i materialy}, 55–56.}

While there is little convincing evidence to suggest that settlement and deforestation altered Khanka’s water levels, it is plausible that human action did contribute to erosion and flooding along streams and rivers. Recent studies of the Khanka basin suggest that deforestation almost certainly aggravates flooding in the mountain streams around Khanka, and possibly contributes to siltation at the mouth of the Sungacha, the lake’s sole outlet (see figure 16), which would raise the level of the lake, as L’vov suggested.\footnote{V. B. Bazarova et al., “Variation of the Lake Khanka Level in the Late Holocene, Primorye,” \textit{Russian Journal of Pacific Geology} 2, no. 3 (2008): 272–76; Mikhail Grigor’evich Vas’kovskii, \textit{Gidrologicheskii rezhim ozero Khanka}, ed. V.N. Glubokov and V. G Fedorei (Leningrad: Gidrometoeizdat, 1978); Biologo-pochvennyi institut Akademii nauk SSSR, \textit{Okhrana Prirody Na Dal’nom Vostoke : [Sbornik Statej]}, ed. Nikolai Grigor’evich Vasil’ev (Vladivostok: DVNTS AN SSSR, 1976).}


However, because it is so shallow, Lake Khanka’s level can fluctuate dramatically as a result of changes in precipitation. It has undergone several drastic advances and regressions during the last 200,000 years as a result of climate-driven precipitation changes and alluvial accumulation in the Ussuri River valley.\footnote{Yun Zhu et al., “Environmental Evolution of Xingkai (Khanka) Lake since 200 Ka by OSL Dating of Sand Hills,” \textit{Chinese Science Bulletin} 56, no. 24 (2011): 2604–12.} Data from a measuring station at the confluence of the Amur and Ussuri rivers, where water levels here peaked in 1896, suggest that precipitation in the Amur basin may
simply have been higher at the time of L’vov’s survey. L’vov’s broader point about the relationship between settlement, deforestation, and erosion, however, seems plausible.

**Fauna: Early impressions**

Changes in the populations of certain land mammals were also apparent by the end of the nineteenth century. Hunting and forest destruction clearly reduced the numbers of deer, elk, and sable, whose decline was well documented. We hear comparatively little about the now-famous Amur tigers and leopards—perhaps because they were less sought-after and difficult to track—but the available evidence suggests that a combination of hunting and habitat loss probably had a negative effect on large predators as well. That said the impact of human settlement in Primor’e was complex. While some animal populations declined (often rapidly), others seem to have benefited from or adapted to the presence of many more humans in the region, at least in the short term.

As with forests, we can gain only a partial picture of animal life in mid-nineteenth century Primor’e based on contemporary accounts and historical ecology. Local ecologists and zoologists have attempted to infer the size of past faunal populations based on population densities in nature reserves, the carrying capacity of Primor’e’s ecosystems, past forest distribution, historical hunting catches, and other factors. V. V. Gaponov, drawing on the work of G.F. Bromlei and others, estimates that Primor’e may have been home to up to 6,000 moose, 80,000 to 120,000 elk, 25,000 spotted deer, and 250,000 to 300,000 musk deer in the mid-nineteenth century, along with large populations of sable, raccoon dogs, tigers and other species that later became rare. As
with his estimates of forest cover, such numbers must be taken as approximate. Gaponov carefully incorporates the available historical accounts into his estimates, but unfortunately the data before 1950 are very thin. All we can say is that many animal populations were likely much greater than in subsequent years.  

Early Russian accounts of Primor’e’s wildlife emphasized an abundance of wildlife in the mid-nineteenth century throughout the region, while animal life appears to have abounded in northern Primor’e and the central Sikhote-Alin until about 1900. Tronson, for instance, found that deer, pheasants, quails, and other wildlife were plentiful even in the vicinity of present-day Vladivostok, when his fleet visited in 1855. Similarly, Przheval’skii observed some 40 spotted deer in the vicinity of Vladivostok, and that venison was cheaper and more abundant than beef. Another early account (from 1868) attested that the “beasts in the forest” along the Ussuri, in lands recently occupied by Cossacks were many: “bears, goat, boar, leopard (bars), badger, deer, fox, sable, and many others” (not to mention “millions of mosquitoes and flies”) abounded along the river. According to Afansii Khudiakov, his family had “no problem with [getting] meat” in the form of deer, geese, swans, and “clouds of ducks” from the forests and waters of the Suifu (Razdol’naia) Valley, in southern Primor’e, in the 1880s.  

Even toward the end of the century, many were impressed by an abundance of wildlife in Primor’e. In March, 1895, for instance, a forest guard arrested four Chinese

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hunters who in two weeks, armed with two guns, had killed 60 goral and deer.”¹⁹⁴ One foreign visitor observed in 1903 that “Roebuck [roe deer] in immense quantities are taken in the Ussuri district,” that deer remained the cheapest available meat, and that bear, lynx, tigers, and waterfowl still abounded, if not around Vladivostok itself.¹⁹⁵ Arsen’ev, on his 1906 expedition, found that remote parts of the eastern Sikhote-Alin (along the Li-Fudzin river, e.g.) were “rich in wildlife,” bear, deer, game-birds, tigers, and other animals.¹⁹⁶

At the same time, it is clear that certain animal populations came under significant anthropogenic pressure in the late nineteenth century, foremost among them spotted deer (*Cervus Dubowksi nippon*), elk (*Cervus elaphus xanthopygus*, also known as red deer), and sable (*Martes zibellina*). Primor’e’s sable was less valuable than its northern cousins, whose coats were darker and thicker, but there was nevertheless demand for the animals both in China and in Russia. Of even greater value were the spring antlers of spotted (sika) deer and Manchurian elk. Locally known as panty (from the Tungusic word for antlers, *funtu*), spring antlers were extremely valuable in the Chinese medical tradition, as the antlers’ velvet could be rendered into a substance employed in a variety of medicines. Consequently, deer and elk were highly sought-after. Chinese, Koreans, Russians, and indigenous peoples hunted deer and elk for their antlers, which they sold to Chinese traders, since only the Chinese knew how to render the antlers into the medicinal substance. Other animals were also valued for their medicinal properties, including

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musk-deer (*kabarga*) for their musk glands, tigers for their bones, pelts, and internal organs, and bears for their gall bladders, to name a few examples. 197

Fluctuations in spotted deer and elk populations are among the best documented changes in Primor’e’s fauna. Kriukov found that in the early 1890s residents of Shkotovo, where hunting deer and elk had once been common and easy, hunters had great difficulty finding prey. The “surrounding forest has been cut down,” he wrote, “and the elk have been scared away, partly by frequent gunshots, partly by tigers, which reside in the nearby forests,” making it more difficult to find deer. 198 Similarly, Dmitrii Shreider, after speaking with local settlers and a Chinese hunter, concluded that “the determined hunt for this beast [spotted deer] has in no small part contributed to its disappearance from the surroundings of inhabited places.”199 In 1913, Y. M. Iankovskii, the son of Michael Iankovskii, recalled even 20 years before deer wandered across Primor’e in great herds, offering even the most mediocre hunter an easy source of meat and antlers. But “remorseless and thoughtless slaughter,” he wrote, had almost emptied the territory of wild deer. 200 Human action was not the only factor at play; heavy snowfall could decimate spotted deer populations, since the animals had much greater difficulty grazing in the winter. Between 1909 and 1979, there were 11 recorded die-offs of deer (about half the population died) as a result of heavy snowfall. But whereas such events were regular and cyclical, increased human hunting led to a rapid and sustained decline in spotted deer populations. 201

The price of antlers, which steadily increased between 1870 and 1914, also indicate that deer and elk became rarer during this period. In 1877, Ivan Nadarov found that on the lower Ussuri, panty were generally worth 75 to 80 rubles, and later investigations in the same area found similar prices. According to another official, antlers in southern Primor’e were worth between 150 and 400 rubles in 1879, and Shreider reported that a price of 200 (silver) rubles was common.\textsuperscript{202} In contrast, Kriukov, whose work was published in 1893, wrote that hunters could sometimes get 800 rubles for antlers.\textsuperscript{203} In Chinese Manchuria in 1886, H. E. M. James noted that panty could garner between 50 and 60 pounds, i.e. between 630 to 760 rubles.\textsuperscript{204} In the 1890s, the Vladivostok Society for Amateur Hunters (VOLO), which organized deer farms on islands near Vladivostok (see Chapter 6), sold their panty for between 250 and 375 rubles, with some fetching up to 800. By 1906, according to Arsen’ev, the most valuable antlers could garner as much as 1,200 rubles for a single pair, an extraordinary sum.\textsuperscript{205}

Similarly, most accounts suggest that the number of sable in southern Primor’e and along the Ussuri fell during the 1860s and 1870s. According to Ivan Nadarov, every year sables and raccoon dogs became “fewer and fewer” in Russian territory because of Nanai hunters, some of whom crossed into Russian territory in search of the animals.\textsuperscript{206}


\textsuperscript{203} Kriukov, Ocherk sel’skago khoziaistva v Primorskoi oblasti, 315.

\textsuperscript{204} James, The Long White Mountain, or A Journey in Manchuria, 13. This translates to about $250 to $300 at the time.

\textsuperscript{205} Arsen’ev, “Polevye dnevniky ekspeditsii V.K. Arsen’eva 1906 goda (prodolzhenie),” 48. The value of deer antlers evidently continued to increase across the region; according to Nikolai Baikov, in Chinese Manchuria in 1925, some pairs of antlers were worth over $1,000. Baikov, Izjubr i izjubrevodstvo, 10.

Aliab’ev found that hunters on the Ussuri usually caught 20 to 30 sable in a season, whereas during Maak’s journey ten years prior the catch was usually closer to 50 animals. “In recent times,” Aliab’ev wrote, “the yield (dobycha) has decreased very noticeably, such that the price of a pelt has increased significantly,” from three to five rubles in the 1860s to between six and twenty by 1872, and was twice this figure by 1911. As with antlers, sable prices fluctuated considerably and did not depend solely on human hunting. Nevertheless, by the turn of the century, if not earlier, the quantity of sable in Primor’e had clearly fallen into decline.

Who was doing the hunting? Indigenous peoples were certainly involved in the trade, as they had been before the Russians’ arrival, and were by all accounts the most skilled sable-hunters. Beginning in the late 1800s, they also hunted more dangerous quarry, such as bears, with rapid-firing guns rather than spears and knives. The Chinese hunted various animals themselves—particularly deer and elk—as did, on a smaller scale, Korean, Russian, and European settlers, as well as Cossacks. One government source, citing Arsen’ev’s research, claimed that each year 40,000 Chinese and Korean hunters descended on the forests of Primorskaia and Amur oblasts, extracting some 150,000 sable worth 9 million rubles. There is no way to verify these numbers, as the total number of hunters operating in the taiga was extremely difficult to estimate. Still, even small numbers of hunters could have a significant effect. In the 1860s, the Ussuri Cossacks,

207 Aliab’ev, Dalekaia Rossiia: Ussuriiskii krai, 64.
209 Arsen’ev, for instance, believed 1900 was the turning point. RGIA DV F. 702, op. 5, d. 143, ll. 52-52ob.
210 GARF F. 387, op. 17, d. 67789, l. 3ob.
though they did not hunt full time, regularly caught 300 to 500 sable skins each year.\textsuperscript{211}

According to one account, in the 1870s four Nanai hunters could catch 100 elk in just a few days.\textsuperscript{212} Similarly, in 1906 Arsen’ev spoke with a Korean hunter who had caught 12 sable in a season, along with 100 musk deer. He also encountered a group of Chinese hunters who had amassed, among other things, well over 1,000 lb. of deer tendons alone.\textsuperscript{213}

One of the most remarkable and efficient trapping methods employed in Primor’e, primarily by Chinese, were the so-called \textit{zaseka} pit traps (\textit{lu-deva} in Chinese), a system of abatis or fences that created a narrow corridor to channel game toward waiting pits, which were up to 15 feet deep and often lined with spikes. The trapper left gaps in the fence line with pit traps just beyond the gaps. Animals caught in the corridor would jump through the gaps only to fall to their deaths. \textit{Zaseka} were usually 200-300 feet long, but sometimes extended for over 2.5 km, and might employ up to 40 pit traps. By all accounts, the \textit{zaseka} traps worked with deadly efficiency, enabling trappers to catch thousands of animals each season. Though intended for deer and elk, they killed animals indiscriminately. Tigers and bears could escape if not injured in the fall, but for most other large mammals the traps were fatal. Moreover, the dried wood of the \textit{zaseka} provided ideal fuel for wildfires, and sometimes hunters used fire to drive game towards them.\textsuperscript{214}

\textsuperscript{211} RGA VMF F. 410, op. 2, d. 4179, l. 5.
\textsuperscript{212} Imperatorskoe moskovskoe obschestvo sel'skago khoziaistva. Komitet gramotnosti, \textit{Amur i Ussuriiskii krai}, 111.
Tigers

What of the Amur tiger, the symbol of the Far Eastern wilderness? As with other species, early historical accounts suggest that the animal was relatively common, even—in the eyes of some—over-abundant. According to Tronson, tigers often roamed around Chinese settlements in present-day Vladivostok, where locals were “obliged to surround their houses with stockades in order to ward off his attacks.” Similarly, Atkinson wrote that in the Amur Valley, “neither the Manjourian officers nor the people are able to keep horses; they speedily become food for these feline ravagers.” Maak, who personally encountered one of the animals, believed there were many all along the Ussuri and around Khanka, though around certain Chinese settlements there were none. Aliab’ev believed tigers were found throughout the region as far north as 52 degrees latitude.

Tigers likely became rarer over the course of the late nineteenth century, but it is difficult to know how this population changed, and when. The price of tiger pelts alone does not indicate that the animal became significantly rarer in the nineteenth century. Maak found that Chinese merchants would pay between 15 and 25 taels for a tiger pelt. Ten years later, Aliab’ev observed that the price of tiger pelt had risen significantly “especially since the arrival of the Russians,” up to at least 30 to 50 silver rubles. Another account put the price of a tiger pelt in 1883-1884 in the same range. Around the same time, James reported that Cossacks in southern Primor’e occasionally killed a tiger, whose pelt fetched as much as 150 rubles. According to Shreider, by 1891

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216 Maak, Puteshestvie po doline reki Ussuri, 115.
218 This amount of silver would have been the equivalent of £5 to 8 or 140 to 220 rubles, based to the exchange rates in the 1840s. Maak, Puteshestvie po doline reki Ussuri, 115. Hosea Ballou Morse, The International Relations of the Chinese Empire (London: Longmans, Green, and Company, 1918), xliii.
tiger pelts were worth 60 to 70 rubles apiece, indicating a slight increase from earlier decades but less than James’s estimate.219

Contrary to what some scholars have written,220 tigers were not widely regarded as a game species in the nineteenth century, mainly because they were simply too dangerous. Amur tigers hunt by stealth, so they are accustomed to tracking prey and can often tell if they are being followed. As a result, they are known to circle back on the human tracking them in order to strike from behind. They are also extremely intelligent and—according to some accounts—vengeful, holding personal grudges against certain individuals (who might have shot at them or stolen a kill, for instance).221 Members of Vladivostok’s gentlemanly hunting society considered it hazardous to undertake tiger hunting for sport. “Hunting it is extremely dangerous,” wrote one hunter, “and therefore every year there is no rarity of human victims.”222 Similarly, the English traveler Wirt Gerrare wrote that tigers were “too plentiful” in Primor’e and difficult to hunt. In India, he explained, one could shoot from the relative safety of an elephant while beaters flushed a tiger out of the bush. In contrast, in Primor’e one had to hunt from the ground. Doing so was dangerous in winter and nearly impossible in the summer, when dense foliage reduced visibility.223

That said, the residents of Primor’e certainly killed tigers, but mainly because they considered them pests. Russian and European settlers saw tigers animals as a

219 Aliab’ev, Dalekaia Rossiia: Ussuriiskii krai, 70; Imperatorskoe moskovskoe obschchestvo sel'skago khoziaistva. Komitet gramotnosti, Amur i Ussuriiskii krai, 151; James, The Long White Mountain, or A Journey in Manchuria, 350; Shreider, Nash Dal'nii Vostok. (Tri goda v Ussuriiskom krae), 315–22.
221 For a colorful recent account of this phenomenon, see John Vaillant, The Tiger: A True Story of Vengeance and Survival (New York: Vintage, 2010).
222 RGIA DV F. 702, op. 2, d. 299, l. 104.
223 Gerrare, Greater Russia: The Continental Empire of the Old World, 196–97. Gerrare was the penname of William Oliver Greener. RGIA DV F. 702, op. 2, d. 299, l. 104.
scourge (bich), because of the threat they posed to domesticated animals, particularly horses and dogs. Tigers, like sable and deer, were also the object of commercial hunting. Chinese merchants valued tiger pelts, organs, and bones, though not nearly as much as, for instance, deer antlers. According to Arsen’ev, as late as 1911, Russian hunters killed 50 to 60 tigers per year across the whole of the Priamur.\footnote{Arsen’ev, Kratkiy voenno-geograficheskii i voenno-statisticheskii ocherk Ussuriiskogo kraia 1901-1911 gg., 118.} Considering that the maximum recorded size of the Amur tiger population since estimates began (in 1959) was between 428 and 505 individuals, an annual catch of 50 to 60 tigers was probably a significant share of the total.\footnote{Pikunov et al., The Amur Tiger: History, Distribution, Population Dynamics, Ecology, and Conservation Strategies, 2010, 47.}

Another way that humans affected tiger populations was by killing their prey—deer, elk, goral, and other large mammals—and by reducing the available habitat. As Evgenii Smirnov and Dale Miquelle have shown, the factor that correlates most strongly with the size of tiger populations in Primor’e is the availability of prey, particularly of deer.\footnote{Evgeny N. Smirnov and Dale G. Miquelle, “Population Dynamics of the Amur Tiger in Sikhote-Alin Zapovednik, Russia,” in Riding the Tiger: Tiger Conservation in Human-Dominated Landscapes (Cambridge: Ca, 1999), 61-70; Aramilev, “Sika Deer in Russia,” 493.} The over-hunting of ungulates, then, likely had a significant effect higher up the food chain. Predation of livestock may have counter-balanced the loss of natural prey species, but this would have carried significant risks, as it invited retribution from gun-wielding colonists. Tigers may have been able to switch to some other prey, such as boar, but they were, nevertheless, in direct competition with human populations for food.
Figure 19: I. M. Iankovskii and his son with their catch in Manchuria, c. 1925.  

**Animal responses?**

While anthropogenic pressure on Primor’e’s wildlife undoubtedly increased in the late-imperial period, that pressure was not uniform—it affected various species and geographic areas in different ways, and some animals may have responded to increased human presence by expanding or changing their range. For instance, Arsen’ev reported that, based on the testimony of Nanai hunters, several types of animals—including boar, deer, and tigers—migrated from the western slopes of the Sikhote-Alin to the more remote eastern side. The Nanai hunters believed that deer and elk had begun to move east and north because of human hunting, such that “in the west there are none at all.” Strikingly, they also claimed that tigers had undertaken a long-term migration (over the

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course of 70 to 80 years) from Manchuria to the east, such that “one meets [them] here more frequently.”

Similarly, settlement seems to have disrupted the regular migration of goral (mountain goats) through Primor’e, which several early observers noticed but apparently no longer occurs. The animals, now endangered, are today confined to the Lazovsky Zapovednik and a few other locations in present-day Primorski krai, but they were previously much more widespread. For instance, according to one early account, the Nanai knew the migration routes of goral and caught them as they crossed the Ussuri. State documents suggest that Russian and European learned to do the same, catching the animals as they massed for their winter migration, and that tigers followed the movement of the goral herds. Given that goral were widely sought-after and, apparently, easy to hunt, human action may have been responsible for the end or reorientation of these migrations, which are not discussed in later studies.

Settlement and its attendant effects may have benefited some species in the short term. To a point, deforestation can be a boon to grazing species like deer, sable, and boar. The berry-producing shrubs that sprout up in burnt- or cut-over stands nourish mice and other rodents, which in turn provide food for sable. Similarly, deer and other ungulates thrive in “edges”—areas of ecological transition, including those generated by human action. Selective cutting can “increase the forage opportunities for [spotted] deer because grasses and sedge, oak seedlings, and young, broadleaved softwood species grow

230 RGA VMF F. 410, op. 2, d. 4179, l. 98; RGIA F. 391, op. 1, d. 13, l. 29ob.
rapidly.” Conversely, spotted deer voraciously consume vegetation, even stripping bark from trees, to the point that they have been known to contribute to erosion in Japan and New Zealand, where their numbers have exploded. Thus, declining deer populations may have offset some of the effects of anthropocentric deforestation. Finally, decline in some animal populations may have opened up niches for others. The Nanai hunters with whom Arsen’ev spoke, for instance, told him that the number of boar in the Sikhote-Alin had significantly increased between the 1870s and the time of Arsen’ev’s expedition (in 1906-1907). If ungulates like deer and elk were hard hit by human hunting, it may be that more resources were available for boar.

**Conclusion**

Between 1860 and 1914, tens of thousands of migrants from Russia and other parts of the tsarist empire attempted to build new lives in Primor’e. With its temperate climate, fertile soils, and plentiful precipitation, conditions for settlement in Primor’e seemed to imperial officials more propitious than elsewhere in Russia’s Asian domains, and indeed the Russian Far East as a whole enjoyed rapid growth during the last years before World War I. At the same time, it would not be accurate to say that settlers, as officials hoped, had “made the land Russian” in demographic or cultural sense, or in terms of recasting the landscape to make it more cultured and cultivatable. In the first decade of the twentieth century, the region had more Chinese and Korean inhabitants than ever before, and although thousands of settlers (mostly Russians and Ukrainians)

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232 Aramilev, “Sika Deer in Russia,” 489.
worked the land it had not become the breadbasket of the East that officials had hoped for.

A major reason for the emergence of Primor’e as a site of economic interdependence and ethnic heterogeneity lay in the environmental conditions of the territory and settlers’ responses to those conditions. When Russian and European colonists began arriving in the mid-nineteenth century, Primor’e’s natural world was rich in fish, game, and timber, and enjoyed a relatively moderate climate. However, because of the unfamiliar climate and local biota, settlers encountered difficulties in recreating the life they had known in European Russia or Ukraine. As a result of dampness and heavy summer rains, the grain harvest was fickle and flooding was an ever-present threat. Pests, disease, and predation carried off or weakened livestock. Some settlers were able to adjust their approach to farming and integrate other sources of nourishment and/or income into their household economies, often with success. Yet on the whole, the biota that accompanied settlers to Primor’e did not greatly facilitate colonization. The territory remained a net importer of grain, livestock, and other goods, dependent on shipments from European Russia or from the surrounding region (mainly Manchuria) and vulnerable to attack and blockade by foreign powers.

In addition, the demands for food and labor engendered by Russian and European settlement opened a space for the migration of non-Russians—Chinese and Koreans—into the territory. There were many reasons for these peoples to migrate to the Russian Far East during the late imperial period. A few came before Russian annexation, pushed by hardship in their homelands or pulled by the draw of valuable forest products. In the context of colonization, an additional reason for East Asian migration was the difficulty
involved in introducing Russian agriculture into the territory, which meant that there was always market for grains and vegetables grown on Korean or Chinese farms. It also meant that East Asian farmers, who had limited access to land-holding in tsarist domains, rented land from Russian settlers on a massive scale. The result was a close interdependence between Russians, Europeans, Koreans, and Chinese, one that did not sit well with authorities (as we will see in the next chapter), but which was a major boon for peasants and Cossacks.

Finally, the particular set of relations that evolved in nineteenth and early twentieth century Primor’e—the ways in which Russians, Koreans, Chinese, and indigenous peoples interacted with each other and with the natural world—had significant consequences for the nonhuman environment. Land clearance, logging, and forest fires caused deforestation around settlements and in some cases in the territory’s interior, reducing the extent of Primor’e’s taiga and changing its composition. Changes in the forests also likely contributed to erosion and, possibly, aggravated flooding, which worsened in the early 1900s. Several animal populations shrank as a result of commercial hunting, notably deer, elk, and sable. Settlement, hunting, and trapping may also have changed the distribution and behavior of certain animals, and opened some niches to less-sought after species.

In this way, tsarist officials’ decision to annex and colonize Primor’e—to populate it with (primarily Russian) settlers, to provide an agricultural base for the military, and to civilize it—combined with the ways in which residents actually utilized the land and its resources, had very real consequences for the natural world. In most cases, these changes were not those—like a drying of the territory’s climate—that mid-
nineteenth century observers had hoped for. Instead, by the 1880s, Far Eastern elites began to look upon environmental changes with apprehension outrage, and as a symptom of the failures of colonization.
Chapter 3:
The Green Civilizing Mission

The changes in Primor’e’s environment that took place in the decades after 1860 did not go unnoticed. On the contrary, they attracted attention from many quarters: from the explorers and naturalists who first scouted the region, Resettlement Administration officials, peasant and indigenous nachal’niki, emissaries from St. Petersburg, foresters, agronomists, journalists, and other Russian observers, as well as foreign visitors. This chapter explores how these imperial elites understood and interpreted environmental change in Primor’e during the late tsarist period, since their interpretations, I argue, shaped the particular forms of conservation that emerged during this era and after the Revolution (addressed in chapters 4 to 6).

Contemporary accounts of environmental change are striking for a number of reasons. First, they demonstrate consistent and widespread concern for the state of Primor’e’s environment. Here one finds little “conquest of nature” rhetoric or celebratory providentialism. Rather, almost immediately after acquiring Primor’e, observers voiced criticism about the use of natural resources and “changes in the land.”¹ Second, these accounts show that observers viewed environmental questions as part of a broader set of challenges facing Russian colonization of Primor’e. The use and abuse of nature drew so much attention, I argue, because contemporaries regarded environmental

change as a result of barbarism, backwardness, and the “yellow peril”—the same forces that (in this view) impeded the task of making Primor’e secure, productive, civilized, and more or less Russian. In response, they adopted a kind of “green” civilizing mission that connected civilization with rational nature-use, and came to believe that colonizing Primor’e complemented, rather than conflicted with, stewardship of the natural world.

The discourse surrounding environmental change was closely intertwined with anxieties regarding Primor’e’s strategic vulnerability and its large population of East Asian migrants. Concern with the so-called “yellow-peril”—the fear of being overwhelmed by East Asian migration or invasion—is well documented, but scholars have paid little attention to the ways in which environmental questions informed this phenomenon, despite importance of resource disputes in regional conflicts, such as the Russo-Japanese War.2 Elites addressing environmental questions almost always criticized Chinese and Korean hunters and/or Japanese fishermen for their exploitation of nonhuman nature. They saw in burnt forests and dwindling animal populations evidence of Asian “barbarism,” contributing to the image of the “predatory” Chinese (or Korean or Japanese) voraciously spreading north into Russian territory. Observers also viewed environmental despoliation as an affront to Russian prestige and imperial authority; as a theft of Russian wealth; or as potential military threat. In this way, nature—both as an idea and as a material reality—played a key role in shaping the relationship between the tsarist state and Russian elites, on the one hand, and East Asian migrants, on the other.

When the discussion turned to Russian and European migrants, elites argued that peasant settlers and Cossacks had precipitated environmental changes because of their alleged barbarism, backwardness, and/or irrationality—the same deficiencies that (elites believed) threatened to undermine colonization. In this view, rational use of nature was part of “correct” colonization, while deforestation and over-hunting was a product of irrational resource-use and short-sightedness. Moreover, officials and other observers believed that by creating wood shortages, settlers made their lives more difficult and impeded further settlement.

Observers interpreted ecological degradation—and deforestation in particular—at the hands of peasants and Cossacks as an indication of backwardness and of their failings as “cultural pioneers” (*kulturträgers*). As Willard Sunderland and Alexander Morrison have shown, peasant settlers occupied an ambiguous position in the Russian imperial *imaginaire*. They served as instruments of the Russia’s civilizing mission, but to some, peasants were themselves insufficiently “civilized” to fulfill this role, and instead subverted imperial hierarchies in Central Asia and elsewhere in the empire.

A similar dynamic was at play in Primor’e. Here, observers viewed wise nature-use as one element of “civilization,” and one that Russian and Ukrainian peasant settlers seemed to lack. They argued that the land-use practices employed by settlers, specifically swidden (*podseka*) and long-fallow (*zalez*) agriculture, led to both deforestation and low productivity. The latter was of particular concern in a province

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3 From the German *kulturträger*, vehicle or transmitter of culture. Today this word has a negative connotation in Russian (perhaps because of its association with 20th century claims about German *kultur*), but in late tsarist documents it carries a largely positive meaning.

that could not feed itself. Elites thus associated the failings (from the state’s perspective) of peasant and Cossack agriculture with ecological degradation. Similarly, they connected land- and forest-use to peasants’ supposed moral deficiencies and to their tendency to hire Chinese and Korean tenant farmers, thereby contributing to East Asian immigration.

Such reactions draw our attention to the role of nature in the civilizing mission of Russia’s imperial elite.\(^5\) In Primor’e, administrators and other observers evinced what Jeffrey Wilson has described as a “green” civilizing mission, the idea that wise environmental management is a hallmark of civilization, and that an imperial power has the right and responsibility to impose “civilized” nature-use on those perpetrating degradation. Wilson shows that such beliefs underpinned German efforts to wrest control of forests in East Prussia from Poles in the late nineteenth century.\(^6\) Grove, Guha, Pouchepadass and others have found a similar sort of eco-paternalism in British India.\(^7\) The “green” civilizing mission in Primor’e echoed these cases, both in the case of East Asians and with regard to Slavic settlers. In this way, the discourse surrounding environmental both reflected and reinforced ethnic and social hierarchies.

A term that appears throughout discussions of environmental questions is *khishchnicheskii*, translated here as “predatory” (the literal meaning) or “rapacious.” The

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\(^5\) A mission that is similar to what Ryan Jones has found in his study of the Far East in the mid-eighteenth century. The main difference here lies in the fact that in Jones’s case, decline of fur-bearing sea mammals influenced the emergence of ecological awareness among naturalists working in the North Pacific, and led them to be critical of the empire as a whole. In contrast, in Primor’e few naturalists saw the empire as a cause of ecological degradation, and instead generally looked to the state for nature protection. See Jones, *Empire of Extinction*.


word had flexible meanings depending on the context, but the effect in all cases was to delegitimize certain forms of nature-use. The different uses of the term, moreover, reflect how ideas of ethnic and social difference shaped the language of nature-protection. In the case of East Asians, “predatory” usually denoted the exploitation of natural resources—and indigenous peoples—in a way that was immoral, wasteful, violent, and/or cruel. In some cases, it simply stood in as a stronger synonym for “illegal,” as in the case of poaching or illegal fishing. In the case of Slavic migrants (both Cossacks and peasants), “predatory” usually meant the irrational, short-sighted, and/or wasteful use of resources (such as timber), but could also stand in for “primitive.” Low-intensity agricultural practices were almost invariably described as “predatory,” either because they contributed to deforestation or because commentators believed they were primitive. If “predatory” had an antonym, it was “rational,” a similarly flexible concept, and one that became the polestar for environmental policy in Primor’e during the twentieth century.

I. East Asians

One of the most striking elements of discussions of environmental questions in late-imperial Primor’e was their strong nationalist bent. From a relatively early stage, there was an outcry among tsarist officials and other Russian elites against the damage wrought by East Asian peoples, mainly Chinese hunter-gatherers, on Primor’e’s plant and animal life. Russian observers almost invariably described their exploitation of nature as predatory and/or barbaric, and often regarded East Asians’ nature-use as a part of broader threats to imperial authority. The nationally charged rhetoric surrounding nature-use
was closely connected to broader fears regarding East Asian migration and, I argue, contributed a great deal to the idea that a “yellow peril” threatened the Russian Far East.

By emphasizing the nationalist dimensions of such eco-criticism, I do not wish to suggest that the observations cited here were groundless. Chinese sources suggest similar processes were at work in the forests of neighboring Manchuria, and the accounts of foreign observers do not conflict with Russian ones on this point. Some Russian observers, like Vladimir Arsen’ev (who was as well-informed on ecological questions as anyone in turn of the century Primor’e, or at least anyone who wrote about their experiences), were ecumenical in their criticism of the province’s various peoples. Rather, I seek to show that one of the major responses among tsarist elites in late-imperial Primor’e was to view it through the lens of empire-building and Russia’s civilizing mission in Asia. The rampant destruction of nature that elites witnessed offended their sensibilities and contributed to the impression that East Asians (primarily the Chinese) were a barbaric, destructive force. This, in turn, gave greater urgency to questions of nature-use and nature protection, and contributed to restrictions on East Asian migration.

*Barbarism and predation*

To many observers in late tsarist Primor’e, environmental change signaled the rapaciousness, perniciousness, and cruelty of the Chinese and Japanese (and to a lesser extent Koreans). Such accounts implied that the empire had a moral duty to intervene in Primor’e to prevent the destruction of the natural world. Already in the 1860s, visitors to the Far East described changes in the nonhuman environment as evidence of East Asian

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greed and rapaciousness. Charges of exploitation by Chinese migrants were among the earliest justifications for Russian intervention in the territory. Russian officials claimed that the Chinese were deforesting the Ussuri taiga, over-hunting valuable game, and plundering fish stocks without regard for future populations. Imperial boosters like Nikolai Przheval’skii made similar criticisms. Przheval’skii complained that Primor’e’s “beautiful oak forests [were being] methodically destroyed” as the Chinese cleared one stand after the next to create favorable conditions for growing mushrooms. “It is sad,” he wrote “to see whole slopes laid bare and covered with the remains of felled, rotting oak trees.” Another traveler, Nikolai Aliab’ev, described Chinese logging as a form of “barbarous destruction,” one of several ways in which the Chinese threatened the new Russian territory.

By the 1880s, the “predatory” Chinese had become a common trope in writing on Primor’e. Such was the view of Vsevelod Krestovskii, for instance, who travelled around the Far East in 1881-82 in his capacity as secretary to the commander of the Siberian flotilla and official correspondent for the newspaper Morskoi Sbornik (Naval Digest). Krestovskii believed the Chinese were over-exploiting Primor’e’s resources in both land and sea. He described Chinese hunting of deer and other animals a form of “barbaric destruction” that had to be stopped. Similarly, in 1883, Konstantin Skal’kovskii, a mining engineer who penned a report on Far Eastern trade for the Ministry of Finance, criticized the Chinese for illegally exporting timber from the territory and leaving signs of “profligate [bezraschetlivogo], foolish, and terrible destruction” behind. The

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10 Przheval’skii, Puteshestvie v Ussuriiskom krae, 1867-1869 g., 85–86.
11 Aliab’ev, Dalekaia Rossia: Ussuriiskii krai, 49.
12 RGA VMF, F. 410, op. 2, d. 4046, ll. 241-242ob.
“destruction of forests,” he wrote, “occurs throughout the territory [and is] not only merciless, but the most disgraceful that can be imagined.” Skal’kovskii found the trade in deer antlers especially pernicious, since it was carried out in the spring and resulted in the killing of pregnant does. 13 A. Ia. Maksimov, another former naval officer, claimed that the Chinese “shamelessly” exploited the region’s animal wealth. In “places which were not long ago rich with diverse beasts,” Maksimov wrote, “one or another species has begun to disappear.”14 Similarly, a publication of the Moscow Agricultural Society, which likely drew on previous accounts of the Far East, complained of the “terrible, fearful harm” that Chinese trapping posed for the new territory.15 The publicist Dmitrii Shreider, in his widely published work on the Far East, complained of Chinese, Koreans “vagrants” in the taiga who set off forest fires in the interior. “The elusive manz [Chinese]” Shreider wrote, had a “reckless relationship” with the forest and its riches, causing frequent and terrible fires for small personal gain. Shreider singled out pit traps in particular as a “predatory method” that was impoverishing the territory.16 In such accounts, commentators portrayed Chinese use of Primor’e’s flora and fauna as immoral, cruel, and barbaric.

Arsen’ev made similar observations during his tour of southern Primor’e in 1906-1907 and later incorporated them into his published writing. Arsen’ev was more tolerant of non-Russians than most of his contemporaries,17 but he too levelled stern criticism against Chinese and Korean hunters for their apparent greed and lack of humane feeling.

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13 Skal’kovskii, Russkaia torgovlia v Tikhom okeane, 41–44.
14 Maksimov, Na dalekom vostoke, 122.
15 Imperatorskoe moskovskoe obschestvo sel’skago khoziaistva. Komitet gramotnosti, Amur i Ussuriiskii krai, 110.
16 Shreider, Nash Dal’nii Vostok, (Tri goda v Ussuriiskom krae), 334. On zaseka traps, see Chapter 2.
17 Arsen’ev also sought to draw attention to China’s long historical presence in the region. See Stephan, The Russian Far East: A History, Ch. 2.
In one of his first encounters with a Chinese fanz during his 1906 expedition, Arsen’ev found a group of hunters harvesting a variety of deer organs (antlers, tendons, and tails), which they were able to sell for roughly 1.5 rubles per animal. After seeing vast stores of dry animal parts in the fanz, Arsen’ev remarked in his diary that the Chinese were perpetrating terrible “vandalism” through the conduct of their trade. Moreover, they then sent the product of their “predatory hunt” back to China, along with money earned in Russia. “In this way,” Arsen’ev wrote, “the territory is doubly impoverished.”18 In his famous work, Dersu Uzala, a memoir based (somewhat loosely) on his expedition, Arsen’ev described over-hunting by non-Russians in similar terms. Having watched Koreans harvest deer from a pit-trap, keeping only the males and throwing does aside for the birds, Arsen’ev concluded that in the face of such “robbery and exploitation, this land, so rich in plant and animal life, will be turned into a desert.” 19

When discussions turned to fisheries in the late-1880s and 1890s, commentators argued that East Asians were driving north, stripping Primor’e’s waters of their natural bounty. Krestovskii, for instance, warned that Chinese over-exploitation of marine life was a step toward the “peaceful conquest” (mirnoe zavoevanie) of Primor’e. He argued that migrants from China and Korea were removing more of Primor’e’s seaweed each year than the algae’s annual growth such that it had fallen into decline. “It is said,” he wrote, “that in former years the Korean coast was, no less than ours, rich in seaweed, but now there is none at all: all was destroyed as a result of the incorrectly conducted industry, which therefore was forced to turn further north, to our shores.” Krestovskii

spoke of a double loss—both of natural riches and of Russian silver, which Chinese
migrants took with them. On the Ussuri, A. Sil’nitskii wrote that Korean fishermen,
with their “predatory” methods—specifically, closing off too much of the Ussuri River
with their nets—had damaged fish stocks. Not only had the quantity of fish noticeably
decreased, Sil’nitskii reported, but the Koreans wastefully (in his view) caught more than
they could use, dumping unwanted, rotting fish into the river. Shreider claimed that in
1894, the Japanese had extracted some 60,000 rubles worth of fish from Russian shores,
while the Chinese had taken 126,000 rubles worth of seaweed. No traveler in Ussuri
krai, he wrote, would get used to “the picture of reckless embezzlement [raskhishchenie]
of those gifts which nature has so generously provided….it would be better to change the
word ‘exploitation’ [eksploatatsiia] (of natural wealth) for the term ‘extermination’
[istreblenie].” Similarly, Ferdinand Ossendowski, a Polish explorer and engineer who
lived in Primor’e in the early 1900s, observed that Japanese fishermen had completely
denuded a bay on Primor’e’s south coast. “I saw no traces of life,” he wrote, “no
seaweed, no fish, no sea anemones or medusas or even shells. It was truly a waste,
abandoned by live beings as though it were a plague-stricken country.”

By the turn of the century, officials concerned with resettlement took a similar
perspective, highlighting the threat posed by East Asians to Primor’e’s aquatic resources.
For instance, echoing the idea that East Asians were stripping the seas like locusts,
resettlement officer A. A. Rittikh reported to the Committee for the Siberian Railway in
1899 that “whole flotillas of foreign [inozemnykh] fishermen” had plundered the once

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21 Sil’nitskii, Kulturnoe vlianie ussuriiskoi zheleznoi dorogi na iuzhno-ussuriiskii krai, 70.
22 Shreider, Nash Dal'nii Vostok. (Tri goda v Ussuriiskom krae), 256.
23 Ossendowski, Man and Mystery in Asia, 107.
rich seas of coastal Primor’e. “[The sea] is now exhausted,” he wrote, “and the hunt has moved north.” Rittikh asserted that salmon fisheries were hardest hit; whereas previously Peter the Great Bay had once teemed with fish, foreigners had exhausted it almost entirely.24

As Rittikh’s comments suggest, fisheries were an area of particular concern. One official in the Ministry of State Domains was distressed that “foreign fishermen often use[d] approaches and methods that deprived the industry from local fishermen,” threatening to ruin the Russian fishing economy “in its infancy.”25 Similarly, Governor-General Pavel Unterberger argued that the extraction of salmon from Russian waters by the Japanese had “taken on such scale and character that it must inspire apprehension for the future.” He spoke of the “predatory nature” of Japanese fishing, by which in this case denoted wastefulness. He pointed to the fact that Japanese fishermen caught more than they could process and left much of the catch to spoil. Like Krestovskii, Unterberger cited the example of Peter the Great Gulf, where during the previous 20-30 years “abundant reserves of keta [chum salmon] were exterminated almost completely…We see the same thing,” he wrote “on the coasts of Japan and Korea.” Unterberger also cited the Chinese practice of gathering sea cucumbers using diving bells, which he also deemed predatory—here denoting excessive and unsustainable—as “in this way even the small [sea cucumbers] are caught, without having reached full size.”26 Unterberger’s concern for sea cucumbers may seem trivial, but it is also indicative of the ways in which

24 Rittikh, Pereselencheskoe i krest’ianskoe delo v lužno-Ussuriiskom krae.
25 RGIA F. 391, op. 3, d. 626, 1-ob; Office of the Primur Governor Generalship, O rybnom promysle v Primorskoj oblasti i na ostrove Sakhaline (Khabarovsky: Tipografia Kantseliarii Primurskago General-Gubernatora, 1903), 4.
26 P.F. Unterberger, Piamurskii krai, 1906-1910 g.g., Zapiski imperatorskago russkago geograficheskago obshchestva po otdeleniiu statistiki 13 (St. Petersburg: Tipografia V.O. Kirshbauma, 1912), 143–50.
exploitation of natural resources lay at the center of competing claims to both land and sea.  

**Nature and Sovereignty**

Compounding the fear of the “yellow peril” was the fact that many Chinese fishermen, hunters, and gatherers, drawn to Primor’e by its natural resources, lived beyond the reach of the state. To officials in particular, the exploitation of Primor’e by East Asians illustrated the weakness of Russian state power in Primor’e and offended nationalist sensibilities. Some observers connected hunting, gathering, and fishing to the threat of a Chinese or Japanese attack, or a kind of creeping colonization. Aliab’ev, for instance, warned that Chinese trappers and traders “lord over [lands] within our borders with complete impunity” [*polnoiu beznakazannost’iu*], seizing forest products and living in self-governing communities. To state councilor Filipp Feigin, Chinese power in Primor’e’s hinterland was a source of shame and outrage. After visiting the Far East in 1881, he complained of the “mass of Chinese” and other foreigners exploiting the riches of Primorskaia oblast’, including its gold, furs, and timber. Nowhere in Russia, Feigin wrote, was the Russian settler so oppressed, and nowhere had he felt such “deep humiliation” in the face of foreign dominance.

Despite the rapid influx of settlers after 1900, observers’ impressions of the Chinese presence remained similar. Prince Georgii L’vov, after touring the Far East in

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29 Filipp Feigin, *Dokładnaia zapiska o merakh k uvelicheniiu russkago naseleniia v Primorskoi Oblasti…* (St. Petersburg: Tipografiia V. Reinberg, 1884), 1.
1908 wrote to Prime Minister Peter Stolypin to inform him that “the territory [was]
“being settled by Russians, but [it was] being colonized by Chinese.”\textsuperscript{30} Forty years after
Aliab’ev published his work on the region, Arsen’ev reached an almost identical conclusion. In Primor’e’s interior, he wrote, Chinese hunters ruled “with complete
sovereignty [\textit{tsariat pol’novlast’iu}]; the Chinese were masters of the land, and Russians
were rulers “in name only.”\textsuperscript{31}

A related concern was financial. Timber, seaweed, fish, and other products were
valuable, and if exported illegally would not yield any revenue in the form of taxes or
duties. For instance, after studying Primor’e’s woodlands in the 1880s the forester
Petrovich pointed out that the Chinese hunted illegally in the region with little fear of
prosecution. According to Petrovich, they then sent their gains to China without paying
duty, which represented a direct loss to the state.\textsuperscript{32} Similarly, one infantry commander
wrote his superiors to ask whether he should charge “unfriendly nationalities” duty for
carting off timber, and under what circumstances he could (or should) intervene to stop illegal logging.\textsuperscript{33}

The prominence of East Asians in fishing and hunting industries also drew
concern because a byproduct of these activities was a deep knowledge of Primor’e’s
geography, which had strategic implications. In the nineteenth century, officials were
concerned mainly with Chinese sojourning in Russian territory, while in the twentieth the
emphasis shifted to the Japanese fishing along the coast. To Fedor Busse, writing in

\textsuperscript{30} Quoted in Sorokina, \textit{Khoziaistvennaia deiatel’nost’ kitaiskich poddannykh...}, 5.
\textsuperscript{31} V.K. Arsen’ev, \textit{Kratkii voenno-geograficheskii i voenno-statisticheskii ocherk Ussuriiskogo kraia 1901-
1911 gg.}, (Khabarovsk, 1912), 175; V.K. Arsen’ev, \textit{Kitaitsy v Ussuriiskom Krae} (Moscow: Kraft, 2004),
355.
\textsuperscript{32} Anuchin, \textit{Mery, prinimaemye k uporadiocheniiu ustroistva lesov Priamurskogo kraia}, 5: Lesa
Priamurskogo kraia:28.
\textsuperscript{33} RGIA DV, f. 1, op. 4, d. 973, ll. 12-14. In fact, the officer asked if he should order his troops to open fire
on illegal loggers.
1896, the prominent Chinese presence in Primor’e’s fishing and coastal shipping industries meant they were the “masters of a Russian sea,” whose presence threatened the “prestige of the Russian government among the non-Russian [inorodcheskogo] population.” It would be even more dangerous in wartime, Busse argued, since experience in the cargo trade offered the Chinese many good pilots and scouts, while their junks gave them the means to land troops on the shore. Moreover, they exhibited the “well known malevolence of the yellow race toward Europeans” and a “proclivity for treachery.”

Similarly, in correspondence with Busse, Alexander Krivoshein, at the time head of the Land Section of the Ministry of Internal Affairs (MVD), saw great danger in the presence of so many non-Russians along Primor’e’s coast. He wrote that the “preponderance of representatives of the yellow race along the coast of the Sea of Japan,” and their dominance of fishing and cargo trades could prove troublesome in times of complications. Arsen’yev was also wary of the Chinese presence. During his 1906-7 expedition, he wrote in his journal that most of the Chinese living in the taiga of the Sikhote-Alin were extremely hostile, “ardent supporters” and potential spies of the Japanese. The assumption that Chinese, as well as Koreans (who had ample reason to side against the Japanese in an armed struggle), would join Japan if hostilities were renewed is perhaps indicative of the growing importance of race in decisions surrounding Primor’e’s Korean diaspora, as Ia. A. Babrenko has argued.

34 RGIA F. 391, op. 1, d. 1152, ll. 186-188.
35 RGIA F. 1273, op. 1, d. 294, 18-19ob.
36 Arsen’yev, Kitaitsy v Ussuriiskom krae, 355.
Elites regarded Primor’e’s “children of nature”—its indigenous peoples—in much the same way they understood nature itself: as objects of exploitation in need of protection. Representations of indigenous peoples, like those of “nature,” reflect the fact that contemporaries considered these peoples passive objects of competition between the Russian Empire and the Chinese. Examining discussions of the Nanai, Orochi, Udeghe, Ul’chi, and Nivkhi also shows that Russians’ “green” civilizing mission was consistent with the paternalism that had marked interactions between the imperial state and Russia’s “small peoples” since the eighteenth century. As Yuri Slezkine and Bruce Grant have shown, attitudes toward indigenous peoples vacillated between disdain for their supposed backwardness and celebration of their innocence and virtue. Such a dynamic that is also evident in discussions of protecting Primor’e’s indigenous peoples from commercial exploitation at the hands of the Chinese.  

As with the nonhuman environment, the authors cited above viewed indigenous communities as objects of “predatory” Chinese exploitation. The earliest Russian accounts of Primor’e almost universally take this view. Maak, during his voyage along the Ussuri, believed the natives looked upon Russians as liberators from Chinese/Manchu rule oppression. (Not surprisingly, the Manchu claimed the opposite.) Przheval’skii found many Nanai indebted to Chinese traders, who bought sable skins for a pittance in

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exchange for credit. Aliab’ev wrote that the Nanai were in “the gravest dependence on Chinese exploiters [ekspluatatorov]” who squeezed all they could from the desperate natives in return for goods. Notably, both he and Przheval’skii were aware that the Chinese were often middlemen working for Russian fur merchants based in Khabarovsk, who themselves made a handsome profit on furs, but their emphasis lay on non-Russian misdeeds. Nadarov believed that the Udege were virtual “slaves of the Chinese,” while the Nanai lived in less onerous but still difficult conditions. He argued that there were two kinds of people in the Ussuri region: “the exploiters and the exploited.”

The idea that the Chinese mercilessly exploited innocent indigenous peoples was remarkably consistent. To Krestovskii, over-hunting and exploitation of the Nanai and Udege went hand in hand because Chinese sable merchants kept the Nanai in “bondage” through crippling debt. Thirty years later, the Committee on Settlement of the Far East reiterated the idea that indigenous subjects (poddannye-inorodtsev) lived in a state of “virtual slavery” to the Chinese. One committee member even suggested using usury laws to evict the Chinese from the territory. Writing around the same time, Arsen’ev observed that powerful Chinese merchants ruled over indigenous peoples, killing and torturing them to ensure obedience and delivery of furs. “These predators,” he noted in his diary, “have completely enslaved the Orochi and Goldy [Nanai], and treat them terribly.” He remarked that the Orochi in particular were “veritable children”—modest, quiet, and so submissive (smiren) that they seldom if ever took revenge upon the

41 Przheval’skii, Puteshestvie v Ussuriiskom krae, 1867-1869 g., 47-48, 94–96.
42 Aliab’ev, Dalekai Rossia: Ussuriiskii krai, 65; Przheval’skii, Puteshestvie v Ussuriiskom krae, 1867-1869 g., 94.
44 RGA VMF, F. 410, op. 2, d. 4046, ll. 241-242ob.
45 RGIA F. 391, op. 4, d. 513, ll. 33ob, 42ob.
Arsen’ev did distinguish between the hung-huzi (“red-beards”), groups of Chinese bandits who roamed through Primor’e and Manchuria, hunter-gatherers, and sedentary Chinese farmers. But in general, he wrote, the Chinese were “by nature a cruel people,” always looking to bring “suffering to some living creature,” including humans. Some officials also made a direct connection between the abuse of fisheries by foreigners and threats to indigenous peoples, many of whom depended on fish runs for subsistence. In 1882, an envoy to the lower Amur found that overfishing by the Japanese had pushed local Nivkhi to a state of near-starvation, and successfully petitioned for relief on their behalf. In this case, the state undertook protection of nature and indigenous peoples who were allegedly being exploited by foreigners. In 1908, the regional division of the Department of Agriculture and Land Management (GUZZ) continued the refrain that Japanese fishing practices had a “predatory, unlawful character,” as they were operating illegally within river mouths, preventing fish from ascending to their spawning grounds upstream. The result, according to GUZZ, was not only a reduction in the amount of available fish, but also the threat of depriving “our inorodtsy, living upstream, of their food reserves.” GUZZ compared Japanese actions around Primor’e to those of American whalers and cod fishermen in the far north, whose approach to natural resources and native populations showed “a predatory character [khishchnichestva] and

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48 RGIA DV F. 1, op. 4, d. 651, ll. 9-10, 18.
49 According to the Russo-Japanese fishing convention of 1907, the Japanese were permitted to fish in Russian territorial waters, but not in inland waterways. See Chapter 5.
which [was] aimed at the destruction of natural resources and the exploitation [...] of the locals.  

As with the question of nature protection, defending indigenous peoples also had a strategic dimension. In this view, abuse of both nature and “natives” invited Russian intervention, and protecting them could strengthen the imperial project. Thus, Nadarov believed that with Russian settlement and missionary activity, the Udeghe would settle, become aware of their rights as imperial subjects, and thereby enable the “Russification [obruseniui] of the territory” securing its connection to Russia (ukrepleniiu ego za Rossiei). Kurtukov recommended educating the Nivkhi in order to enlist these skilled fishermen in the struggle with the Japanese. Similarly, Arsen’ev saw in Chinese exploitation an opportunity to win indigenous allies. He believed that granting greater rights and property to inorodtsy could attract them to the Russian side, and that they would gladly become forest guards or even Cossacks, since they competed with the Chinese for furs. The “eviction of [the Chinese],” he wrote, “would be met with sympathy” from native populations.

In some respects, as Eva Maria-Stolberg has observed, the indigenous peoples of the Amur and Ussuri regions were caught between the “hammer of Russian civilization
and the anvil of the invading East Asian culture.” However, at least in elite circles, indigenous peoples were objects of genuine concern, in part because they seemed to be potential allies in future conflicts with the Chinese and Japanese. The “native question,” like nature itself, represented an arena in which foreigners contested Russian power. Protecting indigenous peoples dovetailed with the exertion of Russian sovereignty, just as nature protection did in certain contexts. In the case of Primor’e’s nonhuman environment, however, protection was not the only means to do so; as we will see, exploitation by Russian subjects could serve the same end.

II. Peasants and Cossacks

The “green” civilizing mission was also evident in responses to environmental changes by peasant settlers from European Russia and Cossacks, particularly with regard to their role in deforestation. As with discussions of East Asians, imperial elites believed deforestation by peasants and Cossacks was a symptom of their “barbaric” or “predatory” character, and a hindrance to colonization. First, elites invoked these terms to describe what they viewed as the wasteful, irrational, or short-sighted use of resources. To some, it seemed that by creating resource shortages, peasants and Cossacks made their own lives more difficult. Second, observers regarded poor resource use as evidence of peasants’ and Cossacks’ failings as colonists and civilizers. Many associated deforestation with the problems of “predatory” or “primitive” agricultural practices, with peasants’ supposed moral deficiencies, and (in a somewhat roundabout way) with East Asian migration. In this view, environmental problems were also imperial problems.

The fact that critiques of Russian and Ukrainian peasant settlers centered on forests is probably not a coincidence. As several scholars have shown, the state of Russia’s forests was a cause for great concern in the late imperial period, and the “forest question” was closely linked to broader anxieties about the state of the empire’s future. Late-tsarist writers and visual artists depicted the destruction of forests in European Russia as an indication of moral decline; liberal theorists and jurists invoked deforestation as an argument for redefining forests as a kind public property; and naturalists, like the soil scientist Vasilii Dokuchaev, had begun to blame deforestation for environmental degradation of the steppe. The reaction against deforestation in Primor’e was thus part of a broader, evolving set of concerns regarding the care of forests as a “public good.” 55 Similarly, officials and intellectuals alike demonstrated a strong preference—often grounded in aesthetic tastes—for orderly, “rational” agriculture, and against what they believed to be chaotic peasant land use, especially in the post-1905 era. 56 In Primor’e, the experience of deforestation elsewhere in Russia certainly influenced how officials viewed the phenomenon, though their reactions also reflected concerns specific to the region. The cultural significance of forests in late tsarist Russia combined with the discourse surrounding peasant agriculture and anxieties related to East


Asian migration led elites to conflate deforestation with broader questions of rural reform.

Settlers and wastefulness

By the 1880s, as peasant populations in Primor’e boomed, observers began to criticize settlers from European Russia for their use of Primor’e’s forests. In doing so, they emphasized the idea that deforestation was a product of wastefulness and short-sightedness on the part of peasants and Cossacks. One state forester, for instance, who worked in the territory in the 1870s and 1880s, observed that “wasteful [bezraschetlivaia] logging” had led to an acute lack of timber around Vladivostok. Maksimov noted in his work that settlers had denuded the hills around the city. The first arrivals from Russia and Ukraine, he wrote, had “cut down forest impulsively, without calculation, without judgment and cut down such that presently they lack wood. It’s a sad, typical result of the predatory relations of people to the bounty of nature.” Another forester, who toured the South-Ussuri region in 1886, warned of wood shortages around Russian and Korean villages, as well as Cossack stanitsas, which he ascribed to settlers’ “barbaric” relationship with the forest. In some places, he wrote, even firewood was in short supply as a result of “forest fires, predatory logging, and increasing population.” The publicist Dmitrii Shreider lamented that settlers destroyed forests without thinking, evidence, in his view, of a “barbarian attitude” and a “predatory approach[es]” to nature. A “feeling of respect for the forest is completely unknown among the local population,” he wrote,

57 Anuchin, Mery, prinimaemye k uporiadocheniiu ustroistva lesov Priamurskogo kraia, 5: Lesa Priamurskogo kraia:28.
58 Maksimov, Na dalekom vostoke, 97.
59 Man’ko, Lesnoe delo na rossiiskom Dal’nom Vostoke, 37–46.
because they lived among abundance—for the time being—and so did not become accustomed to valuing forests, considering them a “gift from God” to do with as they pleased.⁶⁰ These commentators focused their criticisms on the fact that settlers removed too many trees, in some cases causing wood scarcity as a result.

Such concern stemmed in part from the experience of deforestation in European Russia and Siberia. Foresters had levelled the same criticism against peasants in Central Russia. Mikhail Orlov, for instance, one of the founding figures of Russian forestry, wrote that in Russia there were “two opposing attitudes to the forest: on the one hand there is indubitable love for it, but on the other, the most predatory destruction,” resulting from the belief that forests were inexhaustible.⁶¹ Writing in the early 1890s, Shreider warned that Primor’e was on its way to becoming like the neighboring Transbaikali province, where millions of acres had been “wastefully lost” in the 1880s.⁶² Similarly, Governor-General Nikolai Gondatti described the preservation of forests on peasant allotments as a “question of extreme importance,” because without some form of protection the territory might become as treeless as Tobol’sk or Tomsk guberniias (provinces), with deleterious consequences for settlers themselves, who depended on forests for fuel, fodder, and construction material. Gondatti had previously served as the governor of both Tomsk and Tobol’sk guberniias, and it seems he did not want Primorskaia oblast’ to repeat the mistakes of the western Siberian provinces.⁶³

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⁶⁰ Shreider, Nash Dal’nii Vostok. (Tri goda v Ussuriiskom kraye), 332–33.
⁶¹ Quoted in Brain, Song of the Forest: Russian Forestry and Stalinist Environmentalism, 1905-1953, 17–18. Logging more trees than a forest could regrow certainly went against the grain of the German forestry tradition, which was highly influential among foresters throughout Europe, including in Russia. See especially Ibid., 12–27.
While most discussions about settlers centered on the taiga, one also finds the rhetoric of wastefulness and predation in the discourse concerning fish and animals. The agronomist Nikolai Kriukov, for instance, criticized settlers on the Amur and Ussuri for killing too many fish—more than they actually used—by using a “barbaric” sort of net known as a *samolov* (“auto-catcher”). Pointing to the experience of the Volga and of Lake Baikal, Kriukov argued that “predatory methods of fishing can quickly destroy natural riches… one cannot leave fisheries, the people’s wealth, to the lawlessness of that same people [*na proizvol etogo samogo naroda*].” Instead, it was necessary, he argued, to “care for the people’s descendants,” lest they be left with only the memory of abundance.64 Similarly, V. F. Romanov, a member of the Amur Expedition—a group of scholars who conducted a major study of the peoples, flora, fauna, and resources of the Far East between 1909 and 1910—wrote that Russian settlers and indigenous peoples of the Amur had undertaken “foolish” (*nerazumnoe*) destruction of animals by lighting fires in the taiga and overhunting, leading to shortages. It would be one thing, he wrote “if our simple *narod* and indigenous peoples [*inorodtsy*] were developed enough that they could understand the harm they caused,” but they had not reached such a realization on their own, and “no one has adopted a policy aimed at encouraging [the development of] such an understanding.” In this context, he argued, it was necessary for the state to establish reserves “protected from hunting” in order to conserve forests and animals.65

64 The *samolov* Kriukov describes seems to have been a kind of long-line—i.e. a floating fishing line with many hooks spaced at regular intervals, in this case used primarily for catching sturgeon. He claimed the hooks caught only a fraction of those killed or wounded by the hooks. N.A. Kriukov, *Nekotorye dannye o polozhenii rybolovstva v Priamurskom krae*, vol. 1, Zapiski Priamurskogo otdela IRGO 1 (St. Petersburg: Tip. Imperatorskoi akademii nauk, 1894), ii, 46-47.

Forests and civilization

While excessive logging, overhunting, and overfishing seemed to present practical impediments to colonization, deforestation in particular drew elites’ attention also because it was intertwined with a broader dissatisfaction with peasant settlers and their methods of farming. Observers believed deforestation was in large part a result of these peasants’ agricultural practices, specifically the use of long-fallow and swidden agriculture, which peasants had employed for centuries and which remained common across Siberia. They regarded both techniques as evidence of Russian and Ukrainian settlers’ “barbaric” or “predatory” character, building on stereotypes of peasants as drunken and lazy.

Had settlers from European Russia replaced forests with neat, thriving farms, the “forest question” in Primor’e might have evolved very differently, but as it was contemporaries made direct links between deforestation and peasant “backwardness.” A member of the Amur Expedition, for instance, cited the “extensive character” of agriculture around Nikolaevsk as one cause of the region’s slow growth and as an example of settlers’ “predatory relationship with the bounty of nature.” Similarly, Unterberger observed that peasants managed their lands in a “predatory fashion,”

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“completely stripping from it their lot.” If settlers actually cultivated all of their land, he wrote, it would not have been a problem, but instead they simply farmed one plot for a while then moved on to virgin taiga to start the process anew.\textsuperscript{69} Ia. Eggenberg, an agronomist employed by the governor-general’s office, wrote that settlers destroyed their forest allotments “in the most merciless [bezposhchadnym] way,” selling off their forests to timber-merchants, often for alcohol. Eggenberg argued for land reforms that would dissuade settlers from doing so, in which case “there would not be such complete destruction of the forest, and indeed drunkenness would decrease.”\textsuperscript{70} Like Unterberger, Eggenberg believed deforestation and anemic agricultural growth both reflected peasants’ immorality and backwardness.

The most vociferous critique of peasant land-use came from N.V. Sliunin, an envoy from the Ministry of Finance to the Far East, who also drew a close connection between extensive agriculture, deforestation, and backwardness. Russian and Ukrainian peasants, he wrote, were unproductive because of their “extensive predation,” that is, their tendency to farm a single plot until it was exhausted, then log new forest plots and start again. “Having in a predatory manner destroyed the forests near their allotments,” Sliunin wrote, settlers “soon move on to a new place, loudly complaining of the unsuitability of the soil for farming,” even as Koreans living alongside them supplied all of Khabarovsk with dairy products and vegetables. The soil was fertile, Sliunin wrote, but settlers abandoned their fields because of their “old, barbaric, patriarchal method of working the soil.” He did not describe what, exactly, this method was, except to say that it did not involve the use of fertilizer or regular fallowing to restore fertility. In any case,

\textsuperscript{69} Unterberger, \textit{Priamurskii krai, 1906-1910 g.g.}, 125.
\textsuperscript{70} Eggenberg, \textit{Sel’skoe khoziaistvo v Primorskoi oblasti}, 7–8.
the result, in his view, was that settlers from European Russia were not a “healthy and hard-working element, but simply predator-exploiters of the land and forest plots allotted to them.”

Discussions of deforestation also highlight the gap between officials’ expectations of what Russian and European settlers should have been doing and how they actually lived. As discussed in Chapter 1, one of the reasons officials were so keen to colonize Primor’e was to provide a supply base for the empire’s eastern territories, particularly for the army and navy. The region’s need to import food was thus a cause for concern. Low-intensity long-fallow and swidden agriculture, as we have seen, were reasonable responses to the opportunities and constraints of the new territory, but they did not create a “breadbasket” for Russian military forces or for export, and as a result attracted criticism. In describing deforestation and over-hunting near Shkolovo, for instance, Shreider criticized peasants on the Ussuri for their “pursuit of easy living”—especially hunting and selling furs and antlers to the Chinese—which he believed “weaken[ed] the energy of the local peasants and distract[ed] their minds from agriculture.” Hunting and logging, he argued, undermined the development of agriculture even as they diminished timber and game supplies. Sliunin similarly complained that peasants’ use of shifting, long-fallow agriculture, besides causing deforestation, had failed to create an “economic base for the territory” and had “no surplus for selling grain to the quartermaster.”

To be sure, not all observers were so quick to judge peasant land-use practices and their effect on Primor’e’s forests. Rittikh, though often critical of peasant settlers, observed that long-fallow agriculture could be very productive and did necessarily

71 RGIA F. 391, op. 3, d. 262, ll. 47-50.
72 Ibid. l. 52.
73 Shreider, Nash Dal’nii Vostok. (Tri goda v Ussuriiskom krae), 314.
exhaust the soil. In some cases, he wrote, peasants could farm the same plots continuously for 15 to 20 years without interruption. Similarly, at a 1912 conference on agriculture, a resident of Spasskoe in the Iman district, K. I. Kurochkin, defended peasants’ right to cut timber around their settlements. He pointed out that poor settlers from elsewhere in the empire, dropped into the middle of the taiga by the Resettlement Administration, had been forced to cut or sell off their woodlands to feed themselves during their first years in the territory. Kurochkin also argued that peasants needed to clear forests to create plow-land; it was simply unreasonable to expect settlement to occur without some losses to the forest. Such accounts are exceptional, however; in the main, officials seem to have believed that deforestation was indicative of settlers’ irrational nature and irresponsible use of natural resources. Given the constraints and opportunities afforded by Primor’e’s environment and economy, however, it seems that Rittikh and Kurochkin were closer to the mark: it was officials who had unreasonable expectations about how settlers should cultivate the land and use its resources.

Peasant land-use, along with the associated deforestation, was a concern also because officials believed it created a vacuum that was being filled by East Asian laborers. While Russian and Ukrainian agriculturalists did not work their lands intensively, Chinese and Korean settlers and seasonal migrants certainly did. The productivity of Chinese and Korean settlements was an economic boon for the territory, but it also reflected poorly upon peasant settlers and inspired apprehension among tsarist officials. Thus, Rittikh advised that Korean settlements should be kept from lands

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74 RGIA F. 1273, op. 1, d. 409 12, l. 25ob.
suitable for Russians. Otherwise, he warned, “this eastern race, with its humble persistence, will occupy more than a few places appropriate for Russians, and our territory, which has all the necessary conditions to make it, in the main, Russian, will become half-Korean.” Sliunin believed Russian and Ukrainian settlers on the Ussuri had destroyed the forests on their allotments then rented their lands to Chinese and Koreans rather than farm them themselves. He also claimed that others, having exhausted their fields, cast off their lands to Chinese and Koreans. Peasant settlers, he wrote, were simply “predator-exploiters of the land and forests.” Their failings, in his view, made it difficult to establish a firm economic base for Primor’e, and created opportunities for “yellow labor.” Sliunin wrote that renting out land to East Asians, instead of producing prosperity, led to “indifference, debauchery, and overwhelming apathy toward any improvement in their economic position.” Strangely, he even opposed the use of agricultural machines, which in his view brought laziness and no cultural progress.

Similarly, in 1910, the Committee on Settlement of the Far East, chaired by Unterberger, blamed peasants for undertaking “predatory destruction…of a large area of forest without clear economic benefit, often [to finance] drinking.” The Committee observed that because of adverse environmental conditions, peasant settlers used a low percentage of their land but deforested large areas, militating against the development of intensive agriculture. With little income from farming, peasants turned to selling woodlands or renting out plots to Koreans and Chinese. Like Sliunin, the Committee believed land rentals were an aberration that subverted the idea of the colonist as

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76 RGIA F. 1273, op. 1, d. 409, ll. 24ob.
77 RGIA F. 391, op. 3, d. 1152, ll. 25-29, 31.
78 RGIA F. 391, op. 4, d. 513, l. 79
Renting land was “abnormal,” the Committee’s report observed, “attracting [peasants] away from farming and habituating them to an idle and carefree life, [one that] does not accord with the tasks of colonization.” In this way, the Committee members drew a connection between three interconnected threats to successful colonization: peasant lassitude, ecological degradation, and “yellow labor.”

Curiously, as Sorokina points out, Arsen’ev also objected to land rentals because they seemed to subvert cultural hierarchies. It was one thing, he wrote, if Russian landlords were like English gentlemen hiring tenant farmers, but Chinese renters were often “more cultured and educated” than their employers, who instead acted only as parasitic landlords. Here Arsen’ev seems to have had more sympathy for the renters (and even more, apparently, for English gentlemen), but he also cast doubt on the civilizing qualities of peasant settlers.

A separate but related concern was the opium trade. Here too, officials drew connections between ecological problems (deforestation and soil exhaustion), moral ills, and the East Asian presence in Primor’e. As discussed in Chapter 2, one of the ways that Chinese tenants paid rent to their settler or Cossack landlords was through the cultivation and sale of opium. The Qing government began to suppress the cultivation of opium in China, beginning in 1901, but domestic demand remained strong. Russian officials had

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79 Ibid. ll. 40-41, 43.
80 Sorokina, Khoziaistvennaia deiatel’nost’ kitaiskich poddannykh..., 60.
81 After 1860, opium existed in a legal gray area in China characterized by “sporadic punishment of opium offenders in the midst of legalized foreign opium imports and accelerating domestic production” (Jonathan Spence, “Opium Smoking in China,” in Conflict and Control in Late Imperial China, ed. Frederic E. Wakeman and Carolyn Grant (Berkeley and Los Angeles: University of California Press, 1975), 160. Suppression of domestic production, beginning in 1901, met resistance from those (including officials who profited from the trade). Nevertheless, the government was able to gradually restrict opium production by the time of the Republican Revolution in 1911, which likely contributed to the increased incidence of opium-growing in Russian territory. See Jonathan D. Spence, The Search for Modern China (New York: Norton, 1990), 244–45; Spence, “Opium Smoking in China”; United Nations Office on Drugs and Crime,
several reasons to prosecute this practice, including the association between opium cultivation and criminal groups like the hung-huzy, but among them were ecological concerns. Opium was usually cultivated on newly-logged plots in remote areas, and given that the trade contributed to deforestation in neighboring Manchuria, it seems likely that this was the case in Primor’e as well. According to the surveyor Varpakhovskii, who served as a land manager of the Ol’ga district along Primor’e’s eastern coast, land rentals had contributed directly to forest clearance in his region, particularly because Chinese tenants grew opium on their fields. Varpakhovskii also contended that the Chinese practice of double-cropping on rented lands, alternating opium and grain, had depleting the soil. The process was exacerbated by the fact that starozhily in long-settled areas, such as the Khanka plain, tended to give Chinese and Koreans lands that had already been farmed for many years. He warned that if the practice was allowed to continue, “the soil in the territory in the near future will be quickly exhausted,” and more grain would have to be imported from Manchuria. Sliunin made similar observations about soils being exhausted by East Asian farmers tilling Russian and Ukrainian settlers’ cast-off lands, as did the agronomist Kriukov (both related the phenomenon to land-extensive zalezh practices). In this way, deforestation became part of a wider discourse surrounding migration, rural reform, and the success of Russian colonization, adding urgency to forestry regulations and nature protection more broadly.

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*RGIA F. 391, op. 3, d. 1152, l. 26ob; Sorokina, *Khoziaistvennaia deiatel’nosti kitaiskikh poddannykh,* 60.*
Conclusion

In late-imperial Primor’e, there were some—like Arsen’ev—who believed the nonhuman environment had innate value and advocated nature protection for its own sake. The aesthetic appeal of the Far Eastern wilds was not, however, the main reason why ecological change received so much attention among officials (high and low), scholars, journalists, and others. Rather, their concern is indicative of the fact that “nature” in Primor’e lay at the center of social, political, and ethno-national tensions. Although they sought to make Primor’e cultivated and productive—which would entail some changes in the natural world—elites considered many of the environmental changes taking place in Primor’e obstacles to Russian settlement and symbolic of the failures of colonization. The dominant response was a kind of “green” civilizing mission, a strain of conservationism that complemented their vision of making Primor’e “Russian,” and which involved correcting the behavior of Russians and non-Russians alike.

The changes wrought by East Asians dominated discussions of ecological change, particularly before 1900. As I have argued here, environmental questions were a key part of the discourse surrounding the “yellow peril” in Primor’e. Many among the imperial elite viewed nonhuman nature as a site of competition, and believed changes in the territory’s flora and fauna were indicative of the wider threat posed by Chinese, Japanese, or (more rarely) Korean encroachment. Some viewed the prominent role of East Asians—and the Chinese in particular—in fishing and hunting as a theft of Russian wealth. The fact that non-Slavic peoples could hunt, fish, log, and pan for gold with relative impunity signified an affront to Russian authority and illustrated the state’s
weakness beyond Primor’e’s major towns. In addition, some feared that East Asians’ involvement in hunting, fishing, and other industries also gave them geographical knowledge that they could employ against Russian forces in time of war. Finally, many viewed East Asians’ consumption and destruction of resources—and exploitation of indigenous peoples—as evidence of cruelty and barbarism.

By the 1880s and especially after 1900, as Primor’e’s population increased, officials dealing with resettlement questions worried that settlers—primarily the Russian and Ukrainian peasants who inhabited the countryside—were removing too much forest and killing too many animals, undermining their future livelihoods and contributing to increasingly destructive floods in the process. Here, too, many elites associated wise nature-use with civilization, seeing both low productivity and environmental destruction as products of “predatory,” “backward,” or “barbaric” land use. Observers generally did not question the need to make Primor’e cultivated and productive; on the contrary, they viewed wanton deforestation as a hindrance to the territory’s settlement and development. References to European Russia and Siberia suggest that officials drew on the experience of deforestation in those regions in forming this viewpoint. In addition, this discourse reflects the aesthetic preferences of the Far Eastern elite, who wanted to see “rational” (i.e. intensive and stationary) farming instead of swidden agriculture and mixed village economies. Their particular interpretation of the causes of environmental degradation, in turn, sheds light on why their successors believed intensive, modern agriculture could reconcile the need for further settlement with Primor’e’s environmental constraints.
As we will see in Chapters 4, these cultural and intellectual responses gave rise to the peculiar combination of policies and initiatives undertaken by the state and by voluntary societies during the late-imperial period. Viewing environmental questions through the lens of colonization and empire-building meant that administrators regarded some forms of nature protection—such as the creation of hunting restrictions and reserves—and certain kinds of exploitation by Russian subjects as complementary.
Chapter 4: Rationalizing Space: Forests, farming, and water control

From the perspective of Primor’e’s environment, the early twentieth was an era of great contrasts. This period witnessed rapid colonization, which entailed the expansion of agriculture, the development of extractive industries, and consequently greater pressure on Primor’e’s forests, fisheries, and other resources. Among the most marked physical changes was the introduction of irrigated rice agriculture, which transformed parts of the Khanka plain and the Sungacha River valley. On the other hand, local conservation efforts, including forestry regulations and nature reserves, enjoyed greater support among state officials and the Far East’s budding civil society. In the Soviet era, the contrasts were even greater, with industrialization and collectivization occurring alongside the establishment of more stringent conservation efforts and the creation of several large nature reserves, the zapovedniki, which ultimately provided effective protection to deer, tigers, sable, and other species. Begun in the 1920s and 1930s, such conservation measures proved one of the signal successes of Soviet ecology in the post-WWII era.¹

The following chapters attempt to explain these divergent tendencies by situating them in the history of human-nature relations in Primor’e, and within a broader regional context. As we have seen in the previous chapter, Russian elites were sensitive to changes in Primor’e’s taiga and aquatic environments from an early stage, and many—from naturalists to governors-general—were very concerned with what they saw. Their apprehension, I have argued, stemmed in large part from the fact that ecological changes seemed to undermine the material basis of colonization, served as evidence of the “yellow peril,” and signified the failures of Russian peasants in bringing civilization to the Far East. There was genuine concern for nature itself, but for the most part Russians viewed environmental change through the lens of empire-building.

Imperial concerns also shaped the responses that arose to environmental change. Both tsarist and Soviet elites were concerned with deforestation, erosion, flooding, and other ecological changes associated with settlement, but they were also intent on putting greater and greater numbers of people in the territory and turning its resources to productive use. Because administrators associated environmental degradation with broader challenges to Russian colonization—with the messy ecological and economic relationships described in Chapter 2—they generally believed that what was good for colonization was also good for nature (and vice versa). To reconcile imperial needs with environmental conditions and limits, they sought “rational” use of resources. Moreover, “rational” approaches to nature were not just a matter of discourse; tsarist and especially Soviet authorities attempted to implement them, with some success, in the first half of the twentieth century.
“Rational” use was an amorphous and flexible concept, a counterpart to the equally vague term “predation.” Generally, rational use denoted exploitation that was planned, scientifically-informed, and that which conserved resources for future use. In this view, making Primor’e secure, productive, civilized, and Russian complemented, rather than conflicted with, some measure of environmental protection. It was a basically conservationist approach not unlike that espoused by Progressive conservationists in the United States at the same time, and also had much in common with the view that technology could improve both nature and human society.

In the Soviet Union, the concept of “rational development” proved remarkably persistent; it was the basis for a major 1972 law on environmental management, and is included in Land Code of the present-day Russian federation.

In arguing that imperial concerns shaped the rise of conservation in Primor’e, I do not mean to minimize the sincerity of Primor’e’s conservationists, or conflate them with openly racist figures who were also concerned with conservation, like Governor-General Pavel Unterberger. Rather, I seek to understand why certain approaches to nature-use rose to the fore in the late-imperial period and how they developed during the Soviet era. As many scholars have noted, there was a great deal of continuity between tsarist and Soviet administrations with respect to both resettlement and nature-protection. Such continuities can be attributed in part to the Bolsheviks’ embrace of technocratic elements.

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of the late-tsarist state and the achievements of prerevolutionary scientists, in part to significant continuity in personnel.\textsuperscript{4}

In Primor’e’s experience, another reason for the continuity in nature-use policy—in particular, an emphasis on rational use—was the combination of basic strategic insecurity and an acknowledgment of ecological limits. Tsarist and Soviet officials were keenly aware that colonization would have an effect on the environment, but the perceived need to colonize Primor’e and develop its resource was their paramount concern. To achieve both goals—development and conservation—officials and other educated observers advocated what they believed to be “rational” methods of settlement and exploitation.

**Soviet-era colonization**

When Soviet authorities took control of Primor’e in 1922, they were just as intent on colonization as their predecessors, and for many of the same reasons. Scholars have generally subsumed Soviet-era colonization into the population movements related to industrialization and collectivization in the 1930s, but colonization began in the mid-1920s and was comprised of a distinct set of policies and migrations that had a great deal in common with tsarist-era resettlement programs.\textsuperscript{5} Soviet officials were similarly—and understandably—concerned with the region’s strategic vulnerability and viewed

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\item Holquist, “In Accord with State Interests and the People’s Wishes.” With regard to forestry in particular, see Brain, *Song of the Forest: Russian Forestry and Stalinist Environmentalism, 1905-1953*; Bonhomme, *Forests, Peasants, and Revolutionaries Forest Conservation in Soviet Russia, 1917-1925*.
\item Among the few works that do so are N. A. Bilim, “Pereselenie rybakov na sovetskii Dal’nii Vostok (1928-1941 gg.),” in *Iz istorii bor’by za sovetskuiu vlast’ i sotsialisticheskoe stroitel’stvo na Dal’nom Vostoke*, ed. E. M. Shchagin (Khabarovsk: Khabarovsk State Pedagogical Institute, 1965), 76–88; ibid.; Tkacheva, “Migratsionnye protsessy na Dal’nom Vostoke SSSR v 20-30 gg. XX v.”; Vashchuk et al., *Etnomigratsionnye protsessy v Primor’e v XX veke*, 59–71; Siegelbaum and Moch, *Broad Is My Native Land: Regimes and Repertoires of Migration in Russia’s Twentieth Century*, 32–59.
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colonization as a means to secure a distant periphery. During the Civil War, Far Eastern Cossacks and members of assorted White movements resisted Bolshevik rule. Several foreign powers had intervened in the Far East during the Civil War, with Japan fielding more than 60,000 soldiers in the region, the United States roughly 12,000. Lenin was concerned with Japanese encroachment, and for this reason supported the creation of the short-lived Far Eastern Republic, which nominally ruled the Far East between 1920 and 1922. Even after Soviet power came to stay in the Far East in 1922, Moscow’s authority was light on the ground—the first telephone connection between Moscow and the Far East was completed only in 1938—and consequently the region enjoyed wide autonomy throughout the 1920s. Moreover, the Far East continued to be highly dependent upon the countries of the Asia-Pacific region for everything from machinery to grain, and even imported prepared timber despite its immense forest reserves. Consequently, colonization—overseen by a resurrected Resettlement Administration—continued throughout the 1920s and 1930s.⁷

For all its anti-imperial rhetoric, the Soviet Union proved a much more effective colonizer of Primor’e than the Russian Empire had been. The total population of Primor’e grew by nearly 50 percent between 1926 and 1939, from 570,000 to over 900,000, and this while nearly 200,000 Chinese and Koreans were deported to Central Asia toward the end of this period. More than in previous eras, Russians comprised the bulk of the migratory wave—more than 400,000 made the journey east during the late 1920s and early 1930s—and many settled in urban areas. By 1939, they comprised three-
quarters of the total population, numbering 670,000, while the number of Ukrainians fell to 170,000, or about 20 percent of the population. In demographic terms, Primor’e had an ethnic Russian majority by the end of the 1930s.  

Soviet leaders also continued many of the approaches to resource-use that prevailed at the end of the tsarist era. Like their predecessors, they associated environmental degradation with “predation” (particularly by foreigners); favored intensive agriculture and sought to end peasants’ extensive farming practices; supported the development of industrial forestry; created nature reserves to maintain supplies of valuable animal products; and looked to the natural sciences to harmonize the exploitation of nature with ecological limits. The greatest difference between the tsarist and Soviet periods with respect to nature-protection and natural resources management was that, by the 1920s and especially in the 1930s, the Soviet state was able to put resources and force behind initiatives that had begun during the tsarist era, including the development of industrial forestry, the creation of a large fishing fleet (which initially included private fishing firms), land reclamation, and intensive, irrigated agriculture.

**Forests, water management, and Korean deportations**

This chapter focuses on the evolution of land-management in Primor’e as it concerned forests, agriculture, and hydrology. Control over land and water was central to official colonization goals and was also at the heart of ethnic conflicts in the territory. Throughout tsarist and Soviet eras, agricultural settlement, forestry, and water control were closely linked. Believing deforestation was the result of East Asian predation and

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8 These figures denote the population of Vladivostok okrug (until 1931), Primorskaia oblast’ (until 1938), and Primorskii krai (after 1938). Vashchuk et al., *Etnomigratsionnye protsessi v Primor’e v XX veke*, 71.
peasants’ irrational use of land, tsarist officials promulgated laws aimed at limiting peasants’ and East Asians’ use (and abuse) of Primor’e’s forests. When the laws failed to produce rational use of timber resources, administrators turned to driving Chinese and Korean hunter-foragers from the taiga by force. The desire to control peasants’ use of forest land may also have contributed to a reduction of land allotments in 1900, and certainly informed calls to further reduce allotments after that point. At the same time, administrators encouraged the development of industrial, export-oriented timbering, which they believed would be more profitable and would make more rational use of forest reserves, an initiative that continued in the Soviet era. Finally, to protect settlers from flooding, which settlement had likely aggravated, and open new lands to settlement, GUZZ and the Resettlement Administration attempted to dam waterways and drain marshes.

Soviet authorities were just as interested as their tsarist counterparts in rapidly settling Primor’e and developing its various industries. Cognizant of the problems posed by extensive peasant agriculture—namely deforestation, worsened flooding, and low productivity per unit of land—Soviet officials sought to institute more intensive forms of agriculture that would support large populations without the associated environmental effects. They were partly successful in this regard, primarily because Korean refugees had begun to cultivate irrigated crops, including rice and soybeans, in southern Primor’e during the Civil War. However, believing the Koreans’ methods to be primitive and “predatory”—causing flooding and water-logging of soils—Soviet agronomists, hydrological engineers, and others sought to replace Korean farms with modern, “European” forms. While couched in the language of reason, Soviet-era debates reflected
the long-standing view that East Asians were predatory and ecologically destructive, and the assumption that “rational” nature-use was based on European science and the use of machine power.

Ultimately, Soviet authorities did indeed replace Korean rice farmers. Nearly all of Primor’e’s Koreans were deported in 1937-38, and as an indirect consequence of the deportations, settlers (primarily Russians) took over Koreans’ farms, cultivating irritated rice and other crops and employing irrigation works constructed and managed by state engineers. The deportation of Koreans was in large part a result of a turn against diaspora nationalities across the USSR in the late 1930s. In this respect, the experience of Primor’e’s Koreans (and Chinese) was not unusual, though theirs was the first mass deportation. What I highlight here, however, are the local and environmental dimensions of this phenomenon, specifically that the displacement of Korean rice-farmers was consistent with a long-standing pattern of invoking environmental protection to support Russian colonization.

For late-tsarist and Soviet leaders, colonization and development of Primor’e’s countryside demanded bringing “rational,” scientific methods to farming and logging and to the waters that connected fields to forests. In this way, “industrialized nature,” as it developed in the Soviet era, derived from an attempt to meet the perceived need to colonize the territory while accounting for its unique ecological conditions, not from a

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desire to conquer Primor’e’s environment, as some scholars have suggested with regard to the Soviet Union as a whole.¹⁰

I. Forests and forestry

Although tsarist officials were intent on settling Primor’e with Russian subjects, they were also, as we have seen, acutely aware of the fact that settlement and commercial exploitation could lead to deforestation, erosion, and other undesirable ecological changes. Their interpretation of these changes—that they were primarily a result of “predatory” destruction by East Asians, peasants, and Cossacks, as well as “primitive” land-use practices—led them to promulgate forestry legislation aimed at making productive use of the region’s taiga while controlling the use of forests by peasants, Cossacks, and East Asian migrants.

The first forestry laws appeared in Primor’e (and the Far East more generally) very soon after Russian annexation and were initially similar to regulations elsewhere in the empire, which focused on the protection of timber for ship-building. By the 1870s, however, forestry regulations in the Far East had become more comprehensive than those in European Russia.¹¹ Although knowledge of deforestation in European Russia and

¹⁰ Scholars have pointed out that Marxism advanced the idea that nature could (and should) be subordinated to labor, and that domination of nature was one outcome of advanced industrial life under socialism, often citing a speech from the 1926 Soviet Writers’ Union Congress as evidence (“Let the fragile green breast of Siberia be dressed in the cement armor of cities… Let the taiga be burned, let the steppes be trampled….”.) See, for instance J. R. McNeill, Something New Under the Sun: An Environmental History of the Twentieth-Century World (New York: Norton, 2000), 332; Vaillant, The Tiger: A True Story of Vengeance and Survival, 100–101.

¹¹ The first general forestry legislation in European Russia was the Forest Protection Law of 1888, which regulated forest-removal from privately-held lands in European Russia. Brain, Song of the Forest: Russian Forestry and Stalinist Environmentalism, 1905-1953, 18. On the debates surrounding state protection of forests, including on privately-held lands, see Pravilova, A Public Empire: Property and the Quest for the Common Good in Imperial Russia, 2014, 47–54, 60–79.
Siberia no doubt influenced concerns regarding the Far East, Primor’ë and the Amur Valley were nevertheless at the forefront of forest conservation in the Russian Empire.

The first timber conservation measures in Primor’ë encouraged commercial exploitation while protecting valuable ship-building timbers. In 1859, Governor-General Korsakov sent the forester A. S. Budishchev to survey the forests in Primor’ë and the Priamur. Having travelled through the new territories, Budishchev advised that forests needed “protection and the introduction […] of better logging practices [bolee pravil’noi vyrubki].” Given that very few Russian subjects were living in the Amur region or Primor’ë at the time of Budishchev’s journey, it is difficult to know what practices he meant to improve, but among his proposed measures were the creation of reserves for timber that could be used for ship-building, a standard practice throughout the empire.  

Budishchev’s recommendations likely informed the first regulations governing forest use, promulgated in 1863 by the Siberian Committee. These fairly permissive rules permitted both Russian and foreign subjects (exiles excepted) to log almost anywhere in the region, and to sell timber internally and for export. Oddly, the Committee decided that exports would only be permitted through Imperial (now Soviet) Harbor, a remote bay in the Tatar Strait (see figures 2, 20). In subsequent years, a handful of timber merchants (lesopromyshlenniki), including several Western Europeans, did establish timbering operations in Primor’ë, though generally on a small scale and for internal consumption only.  

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12 Khisamutdinov, Terra inkognita, ili, Khronika russkikh puteshestvii po Primor’iu i Dal’nemu Vostoku, 104.
The 1863 regulations also created a framework for selective forest protection. The Committee members placed forestry questions under the jurisdiction of governors-general and their subordinates, and empowered local military governors to appoint forest overseers (lesnoi nauziriteli), foresters (lesnichie) and forest guards (lesnaia strazha). Foresters and guards were to ensure that logging occurred only in designated areas, specifically those that were not prone to fires (the Committee did not elaborate on how such areas were to be defined), suggesting that forest fires were already a concern.

Guards’ responsibilities also included collecting duty on ship-building and construction-quality timber exported legally Imperial Harbor, and for unlawful logging.\textsuperscript{15} In addition, Kazakevich, at the time military governor of Primor’e, created a tariff schedule based on tree size, appointed Primor’e’s first forest overseer, A. G. Petrovich, and assigned 127 low-ranking sailors from the Pacific flotilla to guard duty, perhaps because he lacked other qualified personnel.\textsuperscript{16}

The 1863 rules privileged naval requirements in particular. The emphasis on ship-building was consistent with imperial forestry regulations dating back to the reign of Peter the Great, and perhaps also reflected the region’s maritime orientation.\textsuperscript{17} Logging trees appropriate for masts and spars required special permission and the Committee also established a reserve for such materials near Imperial Harbor that was off-limits to all logging. It also seems likely that senior Far Eastern administrators, many of whom were naval officers, were particularly concerned with ship-building. Indeed, one of the reasons for moving the Siberian flotilla from Nikolaevsk, on the Amur, to Vladivostok in 1871 was the plentiful supply of timber for construction.\textsuperscript{18}

Within 15 years, however, concerns emerged about protecting forests in general, rather than just those that were of particular value for ship-building, because of the broad ecological impacts of deforestation. Beginning in the late 1870s, administrators geared forestry laws toward controlling the use of forests by peasant settlers and East Asian hunter-foragers. While serving as the military governor of the Amur oblast’, I. G.

\textsuperscript{15} RGIA DV F. 702, op. 2, d. 16, II. 1-4.
\textsuperscript{16} Man’ko, Lesnoe delo na rossiiskom Dal’nom Vostoke, 85–6, 93; Anuchin, Mery, prinimaemye k uporiadocheniiu ustroistva lesov Priamurskago kraia, 5: Lesa Priamurskago kraia:1–7.
\textsuperscript{18} RGA VMF F. 410, op. 2, d. 4179, 4ob-5; RGA VMF F. 410 op. 2, d. 4183, 174ob-175.
Baranov observed that logging in state forests by peasants, Cossacks, and Chinese, was creating “irreversible” harm. In a striking passage regarding the effects of anthropogenic deforestation, Baranov wrote that illegal logging contributed to the “worsening of the climate, the strengthening of floods, [and] the disappearance of fur-bearing animals, the country’s natural [source of] wealth,” not to mention forest fires. In 1878, a special commission tasked with investigating forest resources warned that unconstrained exploitation of forests in Primorskaia oblast’ could “lead to a scarcity of these forests to the detriment of the interests of the future population.”

In response to such concerns, officials attempted to conserve forests through new legislation, focusing first on the trapping and gathering methods employed by Chinese hunter-gatherers. In 1877, G. F. Erdman, military governor of Primor’e (1875-1880), promulgated a set of forestry regulations for the Murav’ev-Amurskii peninsula (on which Vladivostok is located) in an attempt to enforce greater oversight over logging and the use of fire in the taiga. These rules stipulated that logging required permission from forest overseers, set out a season for logging timber used for construction (i.e. not firewood), and established charges for particular sizes and types of trees. Those using the forest were to prevent fires (by not processing wood on-site and or making charcoal around deadfall, for instance), and the rules forbade the burning of fields near forests. These regulations seem to have applied initially only in the Murav’ev-Amurskii peninsula, and were only later extended to other parts of the oblast’.

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19 Anuchin, Mery, prinimaemye k uporiadocheniui ustroistva lesov Priamurskogo kraia, 5: Lesa Priamurskago kraia:82–84; Man’ko, Lesnoe delo na rossiiskom Dal’nom Vostoke, 88.
22 Whether the 1877 regulations applied to only the Murav’ev-Amurskii peninsula or all of the South-Ussuri district (okrug) is unclear, but these practices were illegal throughout the region in later incarnations of forestry regulations. See Man’ko, Lesnoe delo na rossiiskom Dal’nom Vostoke, 62.
also set a precedent for specifically targeting forest use by Chinese and Koreans. The
1877 regulations also imposed a ban on the Chinese practice of clearing oak forests in
order to harvest mushrooms from the decaying logs, which was, according to the authors,
“conducted exclusively by manzy.” Also outlawed was the construction the pit traps
favored by Chinese and Korean trappers.23

With the mass influx of Russian and Ukrainian peasant settlers after 1881, forest
conservation laws became more frequent, detailed, and broader in scope. The 1880-1900
period coincides with the second, seaborne wave of migrants from European Russia and
Ukraine, as well as a rising Chinese migrant populations (see Chapter 1). Officials
continued to promulgate laws aimed at protecting ship-building timber and limiting the
deforestation caused by Chinese hunter-gatherers, but also increasingly sought to exert
greater control over settlers’ domestic economies. These laws appeared as concern over
deforestation in European Russia was growing, but before the issuance of the “Statue on
the Safeguarding of Forests” in 1888.24

When Baranov became military governor of Primor’e in 1881, he enacted a set of
regulations throughout the South-Ussuri district (okrug) that emphasized fire prevention,
protection of ship-building timbers, and controls on mushroom-harvesting and trapping.25
In the same year, Rear-Admiral Fel’dgauzen, military governor of Vladivostok, adopted
much more extensive measures to protect forests in his jurisdiction. Legislation
promulgated during his tenure outlawed logging of any kind in state forests around

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23 Anuchin, Mery, prinimaemye k uporiadocheniuii ustroistva lesov Priamurskogo kraia, 5: Lesa Priamurskago kraia:56.; Skal’kovskii, Russkaia torgovlia v Tikhom okeane, 46; Man’ko, Lesnoe delo na rossiiskom Dal’nom Vostoke, 81–82.
Vladivostok and set aside other protected (zapovednye) groves elsewhere on the Murav’ev-Amurskii peninsula. Fel’dgauzen also restricted the cutting of firewood and making charcoal and tar, and even required a license for gathering deadfall or grazing cattle in state forests. Vladivostok residents were permitted to cut timber on their own lands, but only for personal use (i.e. not for sale). Fel’dgauzen singled out several species—cedar, pine, fir, oak, larch, maple, and walnut—for special protection. As before, the oak-mushroom trade was “unconditionally forbidden,” as was the construction of game fences for hunting. Such measures, Fel’dgauzen hoped, would help give put forestry in the region on rational footing [na rational’nykh nachalakh].

Despite these efforts, when D. G. Anuchin took office as Governor-General of Eastern Siberia in 1883, he found the forests under his jurisdictions in “complete disorder.” In a letter to the Minister of State Domains, he requested financial assistance to “put a stop to the predatory destruction of forests by the Chinese population” in the Amur and Primorskaia oblasts. This “foreign [chuzhdoe nam] population,” he wrote, “along with our peasants, and also timber merchants [lesopromyshlenniki], mercilessly destroyed forests. As a result of uncontrolled activity, the areas around Blagoveshchensk and Vladivostok are fully deforested, [as well as] around other population centers.” Highlighting the connection between resource-use and imperial concerns, the governor-general cited deforestation as well as the “tensing of relations” resulting from the Ili Crisis of 1881 as reasons for “tak[ing] measures toward the Chinese population living in

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26 RGIA DV, F. 702, op. .2, d. 16, ll. 39-40; Shreider, Nash Dal’nii Vostok. (Tri goda v Ussuriiskom krae), 330.
our domains.” He empowered foresters to assess fines and evict violators from the taiga in both Amur and Primorskaia oblasts’.27

After the establishment of the Priamur Governor-Generalship, in 1884, Governor-General Korf’s office demarcated forest management units (lesnichestva) (initially five, eventually thirteen), in which foresters were to enforce existing regulations. Korf also established a specific season (March 15 to May 1) when fields could be legally burned, provided measures were taken to prevent the flames from spreading to the forest. Rural communities were required to extinguish forest fires, when possible, within 15 km of their settlements.28 Subsequent forestry regulations, promulgated in 1891 and 1898, further restricted the use of fire on peasant allotments, and sought to involve village leadership in controlling fires and wanton logging. These rules permitted the use of fire to clear fallow fields, but only with the permission a village elders and the local forester.29

**Enforcement**

Although documentation of enforcement is scarce, it is clear that the intricate forestry regulations discussed above contrasted sharply with the tsarist state’s limited ability to enforce them, particularly in the nineteenth century. Forestry enforcement efforts directed against Chinese were sometimes rolled into punitive (and occasionally violent) missions aimed at limiting their activities in Russian territory, and were

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27 RGIA DV, F. 702, op. 2, d. 16, ll. 128.
28 RGIA DV F. 1, op. 5, d. 502, ll. 1-5
indicative of state weakness—i.e. its inability to enforce migration and nature-protection laws by more peaceful means.\(^\text{30}\)

One of the primary difficulties involved in enforcing forestry conservation was a shortage of personnel. Thus, Baranov, lacking the funds for more forest guards, asked the Amur Cossacks to assist in the prevention of fires and illegal logging, adding to their already onerous duties (which included road-building and border patrols, as well as maintaining their own farms).\(^\text{31}\) Similarly, in 1883 one local official in Primorskaia oblast’ telegraphed Governor-General Anuchin claiming that he did not have enough guards to stop local Chinese from setting fires and undertaking illegal logging, mushroom harvesting, and “animal pit-trapping” [iamnyi zvernyi promysel]. Anuchin, despite his rhetoric, allocated only 1,200 rubles (about $600) annually to forest oversight, which hardly seems sufficient to staff such a large area with foresters.\(^\text{32}\) According to Shreider, until 1886 there were only 14 foresters and rangers working in the whole of the Ussuri and South-Ussuri districts. Their numbers increased after this point, but their task remained very difficult. Forest fires remained a major problem in Primor’e, in part because peasants continued to burn their fields in the spring. As a result, by the 1890s “forest-destruction not only did not stop, but forests [were] disappearing even faster than


\(^{32}\) I have not been able to locate foresters’ salaries, but considering that the Resettlement Administration allocated settlers between 150 and 1,000 rubles per household to relocate to the Far East, this sum does not seem like it would support many foresters. RGIA DV, F. 702, op. 2, d. 16, ll. 128.
earlier.” Even on the relatively populous Murav’ev-Amurskii peninsula, where Primor’e’s administrative center (Vladivostok), was located, foresters were unable to halt the mushroom-gathering in the 1890s. According to the recollections of foresters, their ability to control logging and stop wildfires improved after 1900, particularly near Vladivostok, but was still very limited.

One obstacle facing foresters may have been simply communicating the complex regulations and guidelines to Cossack and settler communities. Arsen’ev found that peasants were not at all concerned with the harm caused by forest fires. “Such thoughts had never entered their heads,” he wrote, and it was clear that “nobody talked to them on this issue.” Moreover, the enforcement of forest laws was not simply a top-down phenomenon. Beginning in 1900, peasant communities (obshchestva) elected local forest wardens (ob”ezdchiki) and fire elders (pozharnye starosty). Wardens and elders, in turn, were supposed to cooperate with state-appointed lesnichii and guards to stop illegal logging and fires. Evidence of such cooperation is unfortunately sparse, but in at least a few cases it did occur. In 1900, for instance, the local warden and the lesnichii of the Chernigov lesnichestvo brought charges against one peasant, Fedor Bozhko, for letting his field-fire spread into the taiga, where it destroyed 200 desiatinas of state forest. Bozhko blamed his young son for the blaze, but was nevertheless ordered to pay a fine (5 rubles) or face brief imprisonment. In another case, a group of peasants filed a petition

34 Man’ko, Lesnoe delo na rossiiskom Dal’nom Vostoke, 79.
35 Ibid., 83–84.
37 RGIA DV F. 1, op. 4, d. 169, ll. 1-10b.
38 RGIA DV F. 94, op. 1, d. 97, ll. 1-8.
with their local forester for the permission to log in the vicinity of their village, suggesting at least an awareness that logging was subject to regulation.  

Attempts to enforce forestry and hunting regulations was a source of tension between the tsarist state and East Asians (and in one case the Qing government), particularly because Russian authorities invoked nature-protection as a reason for taking punitive measures against Chinese hunter-gatherers. When Qing officials (unsuccessfully) objected to changes in the passport regime for migrant Chinese workers, the Russian ambassador in Beijing replied that the treaty did not apply to the thousands of seasonal trappers and ginseng-hunters roaming through the taiga. In 1895, police removed Chinese from the Suchan (Partizanskaia) Valley, and in 1899 conducted a similar operation along the Suchan and in the vicinity of Ol’ga Bay. In 1900, the governor-general’s office ordered Chinese residents of the Ol’ga region to leave in order to make way for Russian settlers. Chinese leaders petitioned local authorities, arguing that many of them had been in the region for forty years, which entitled them to permanent residence. Perhaps because of their protest, they were not forced to move immediately. In 1907-1908, however, military detachments swept through the taiga, evicting “hunters and vagrant elements” who had “illegally [samovol’no] occupied Russian land.” Not surprisingly, as Arsen’ev noted in his diary, the Chinese resented Russian rule in part because tsarist authorities “prosecute[d] them for plundering the taiga, for illegal logging of the forest,” indicating that this was indeed a point of

39 RGIA DV F. 1, op. 4, d. 1975, ll. 4, 11
40 Sorokina, Khoziaistvennaia deiatel’nost’ kitaiskikh poddannykh..., 199–201.
41 Vashchuk et al., Etnomigratsionnye protsessi v Primor’e v XX veke, 39.
42 RGIA DV F. 1, op. 4, d. 1910, ll. 1-10, 59-60, 102-103, 159ob.
conflict. Finally, in 1914, Governor-General Nikolai Gondatti requested funding to form armed detachments to evict an estimated 40,000 Chinese and Korean ranging through the taiga and to confiscate the pelts, ginseng, and antlers they had illegally acquired, much as Anuchin had in 1883. Gondatti cited a report from one GUZZ official that explicitly cited forest fires and over-hunting as grounds for the “eviction [of the Chinese] from the taiga.”

**Forests and land-use**

In addition to targeting East Asians using state forests, forest legislation also addressed the use of woodlands on peasant and Cossacks territories with a view to encouraging what tsarist officials believed was better land husbandry. A set of temporary rules for forestry on settler allotments in the Priamur, promulgated in March 1900 by Priamur Governor-General Grodekov, illustrated rising concerns with wastage and inefficiency on peasant lands. Here we see the practical result of the view, detailed in Chapter 3, that deforestation on peasant land was as result of laziness and short-sightedness. These regulations stipulated that forest plots on peasant lands were to be divided into two sections, one allocated for agriculture, one for a timber reserve (*lesnaja dacha*). Peasants were permitted to acquire new agricultural land only when previously-cleared land was in use (as arable, pasture, or hayfield). To curtail the practice of selling off woodlands for short-term gain, all commercial timbering on peasant lands required permission of the village council (*skhod*). In addition, settlers were only allowed to sell timber they had acquired by clearing land for farming. A later elaboration on these rules

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44 GARF, F. 387, op. 19, d. 67789, ll. 1-3ob, 19
explained this provision with reference to settlers’ habit of acquiring land for the sake of selling off its timber, rather than clearing it for agriculture. “Such a predatory method,” the author explained, “in many cases also impinges on the interests of future settlers.”

Forest-use may also have contributed to the decision to reduce settlers’ allotments. In January 1901, the Governor-General Grodekov issued a new law that limited peasant allotments in the Priamur to 15 desiatinas per person, rather than 100 for each household, as had been the case since 1861. Scholars have generally assumed that the authorities decided to reduce allotments at this point because they lacked land for new settlers in Primorskaia and Amurskaia oblasts. The evidence is somewhat indirect, but I would suggest that another motivation for doing so was the belief that large landholdings encouraged inefficient, extensive agricultural methods, as well as the associated deforestation. It was under Grodekov that the Resettlement Administration began restricting settlers’ ability to sell off woodlots from their allotments so they did not clear more land than they could farm. Even after Grodekov reduced allotments, imperial officials continued to call for further reductions. Thus, Sliunin criticized peasants and Cossacks for cultivating a tiny portion of what he sardonically called their “lordly estates [pomest’ia].” To meet the region’s agrarian, political, and strategic needs, he argued all lands (including Cossacks’) should be divided evenly and rented out to create large farms (bol’shikh fermerskich khoziaistv).

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45 RGIA DV F. 1, op. 4, d. 169, ll. 1-2ob. Interestingly, in 1908 the Governor-General also directed foresters to ban logging within one kilometer of Nivkh villages. According to a circular from the UGI, the Governor-General believed permitting logging would threaten the Nivkhis’ property and would lead to moral corruption. RGIA DV, F. 1, op. 94, d. 17, l. 4.
47 RGIA F. 391, op. 3, d. 262, ll. 31, 46-ob, 52.
Both N. V. Sliunin and Senator Ivanitskii, state envoys from St. Petersburg, recommended that in light of peasants’ inefficiency the state should decrease peasants’ allotments further in favor of agriculture that was conducted on “larger and more modern farms.” The Resettlement Administration objected to further reductions, but not to the idea that large allotments were an inefficient use of land. Indeed, applying the same logic, the Resettlement Administration transferred 37 million acres of land from the Amur and Ussuri Cossacks to their colonization fund, arguing that Cossacks were not using the allotment intensively, and that many more peasant settlers could be installed in the area. While a shortage of agricultural land for new settlers was a motivation for reducing allotments in 1901, concerns about inefficient land use were also an important consideration.

The forestry laws promulgated in 1900 remained, with some modifications in 1914, through to the revolutions of 1917. Neither laws nor evicting Chinese hunters and foragers solved the problems of illegal logging or forest fires, which remained an important source of debate throughout the 1910s. Tracing the evolution of forestry legislation in Primor’e (and the Priamur generally) shows that Far Eastern officials were concerned from the outset with conserving forest resources. Initially, forestry laws focused on conserving valuable ship-building timbers, but in light of widening deforestation, their emphasis shifted to controlling East Asian hunter-foragers and, subsequently, to mandating more economical land-use on peasant allotments. At the

48 RGIA F. 391, op. 3, d. 1178, l. 32.
50 See especially Kurochkin, “Po povodu khishchnicheskogo istrebleniia lesov v krest’ianskikh nadelakh,” 1913; Eggenberg, Sel’skoe khoziaistvo v Primorskoi oblasti; Gribedov, “V chem budushchnost’ Ussuriiskago kraia?”; A.A Men’shchikov, Materialy po obsledovaniiu krest’ianskikh khoziaistv v Primorskoi oblasti, 1911.
same time—i.e. in the early 1900s—administrators and others advocated *more* logging by industrial means. They did not want to abandon logging altogether, but rather to put it on more rational footing.

**Industrial Forestry**

Another solution to the problem of forest- and land-use in Primor’e was to encourage commercial, export-oriented logging. Using commercial logging as a tool of forest conservation seems counterintuitive, but because officials associated the status quo with barbarism, wastefulness, and illegibility of forest resources, they looked to industrial forestry as a source of order and reason. In this way, treating forests as a marketable commodity, rather than a commons, struck most observers as more amenable to rational use.

The first forestry regulations, besides protecting the navy’s timber reserves, sought to encourage commercial timbering, as administrators viewed this as a means to make profitable but “rational” use of forest resources. Following the forestry regulations of 1863, some merchants attempted to export timber through Imperial Harbor, but they faced competition from North American exports, difficulty in transporting lumber to export sites, and uncertain demand in China. As a result, the industry was slow to develop.\(^{51}\) The second initiative came in the 1870s, when the military governor of Primor’e, Furugel’m, decided to eliminate export duties on timber extracted from privately-held lands in an effort to encourage private land ownership and export-oriented timbering. Remarkably, Furugel’m also believed this would somehow “decrease forest

fires, annually laying waste to an immense area,” perhaps because he thought allocating land to private land-holders might give them a stake in preventing fires. Unfortunately, because there was so little oversight, such a subtle policy invited abuse. Loggers purchased private plots but covertly cut timber on state lands then exported them without paying duty, claiming they had come from their own holdings. As a result, Furugel’m soon abandoned the strategy and forests were allocated instead to peasant communities for internal use only. 52 Nevertheless, the episode reflected Furugel’m’s belief that an influx of private capital would be better for both economic development and forest conservation.

Such a view was not exceptional. By the turn of the century, many observers had begun to juxtapose the forms of forest use that prevailed in peasant and Cossack settlements with “correct” (pravil’noe) forestry. Given the state of forestry in European Russia at the time, it seems likely they were referring to methods originating in Germany, which emphasized mathematical modeling and maximum sustained yield. 53 Konstantin Skal’kovskii, for instance, who published a study of Far Eastern trade, criticized deforestation by Chinese and Russian peasants, but advocated the development of “proper exploitation” and the export of timber. 54 Another official, writing in the late 1890s, argued that while a significant portion of Primorskaia oblast’s forests were “ruined by forest fires,” but industrial development and private capital could bring about more economical use. 55 Similarly, A. N. Mitinskii, a member of the Amur Expedition,

52 Skal’kovskii, Russkaia torgovlia v Tikhom okeane, 49–50.
53 Brain, Song of the Forest: Russian Forestry and Stalinist Environmentalism, 1905-1953, 16–27.
54 Skal’kovskii, Russkaia torgovlia v Tikhom okeane, 44–45.
55 Berezhnikov, Obozrenie fabrichno-zavodskoi promyshlennosti Primorskoi oblasti v 1896 godu (doklad Priamurskomu General-Gubernatoru chinovnika osobykh poruchenii, inzhener-tekhnologa M. Berezhnikova), 8.
argued that that “Forest-destruction [lesoistreblenie],” was a result of fires, rot, and poor forest management. The typical settler, he wrote was “an enemy of the forest,” and profitable use of forests would come “only with the introduction of correct forestry, which is impossible without…a large influx of capital.” He advocated granting long-term concessions (at the time most were for only four years), in order to encourage long-term investment of capital.\textsuperscript{56} Sliunin also wanted to see “correct and profitable exploitation of nature riches,” criticizing the fact that Vladivostok itself imported wood from America, Manchuria, and Japan, despite the abundance of timber within Russian territory.\textsuperscript{57}

Most pointedly, A. S. Shlikevich, who was the head of the Resettlement Administration in 1906, argued that a greater investment of capital was necessary both for settlement and, ultimately, for the long-term viability of Primor’e resource industries. The natural conditions of the territory, Shlikevich wrote, were such that the “successful struggle with nature and victory over her” was possible only for those “armed with knowledge and capital.” The peasant population of the Far East, according to Shlikevich, had neither, and more extensive settlement would not yield good results. Instead, he contended, it was necessary to attract a combination of foreign capital and Russian labor. To the objection that an influx of capital-intensive industries might lead to the destruction of resources, he wrote:

\begin{quote}
In no case can we ignore the consideration that allowing wide access to capital creates predatory exploitation. The phase of predatory exploitation is, to a degree of course, unavoidable in a new territory…and without a doubt it is better to come to terms with the
\end{quote}

\textsuperscript{56} A. N. Mitinskii, \textit{Materialy o polozhenii i nuzhdakh torgovli i promyshlennosti na Dal’ nem Vosoke}, Trudy komandirovannoi po Vysochaishemu povleniui Amurskoj Ekspeditsii 8 (St. Petersburg: Tip. V.F. Kirshbauma, 1911), 113–16.
\textsuperscript{57} RGIA F. 391, op. 1, d. 1152, II. 39, 74ob.
loss of a known percentage of natural capital because of predation than to lose that
capital, along with territory that contains it.58

This passage is striking in its recognition that settlement and exploitation would destroy
some of Primor’e’s “natural capital,” and for the zero-sum terms in which Shlikevich cast
the regional contest over resources. He was speaking broadly about fish, minerals, and
timber, but his report is indicative of the widely-held belief that capital-intensive
development was ultimately better for both the Empire and conservation of resources in
Primor’e.

One consequence of this view was the development of commercial timbering in
the territory, which became much more common under Priamur Governors-General
Unterberger and Gondatti. Both were staunch critics of resource depletion, particularly
with regard to forests and fisheries. However, neither seemed to think that supporting
commercial timber operations was at odds with conservation.59 On the contrary,
Unterberger argued that industrial forestry and timber exports would bring about
“rational exploitation” of Far Eastern forests, which would otherwise be just “dead
capital.”60 As governor-general, Unterberger made good on this idea, granting timber
concessions to both foreign and Russian subjects. Yuri Brynner, A.S. Skidel’skii, and
several others received concessions (granted as four-year leases) in various parts of
Primorskaia oblast’ between 1904 and 1911 permitting them to harvest 1.5 million trees.
(Skidel’skii already had large timber concessions in Manchuria.) 61

58 RGIA F. 391, op. 1, d. 1152, ll. 82ob-83.
59 Their lack of concern for private timbering is strange considering exerting public control over private
forests was a focus of forest protection in the late tsarist era. Ekaterina Pravilova, A Public Empire:
Property and the Quest for the Common Good in Imperial Russia (Princeton and Oxford: Princeton
University Press, 2014), 60–79.
60 Unterberger, Priamurskii krai, 1906-1910 g.g., 126.
61 Without doubt, the most infamous forestry concession from this era was one granted to Brynner along the
Yalu River. Brynner sold the concession to Bezobrazov, providing the pretext for the Japanese attack on

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The first major forest concession to a foreign firm in Primor’e came 1907, when Unterberger granted the Australian/British company Sley, Moore & Co. rights to 400,000 trees in the Ol’ga district and around Imperial Harbor for export. To encourage logging in remote areas, a new tariff schedule, issued in 1912, reduced export duties on timber taken from districts that were not easily accessible to river valleys or near the Ussuri Railroad. Timber exports through Vladivostok rose rapidly after 1905, reaching a high of 2.8 million cubic feet in 1918. Most went to Japan, although smaller quantities were exported to China, Great Britain, and Australia. While the scale of industrial timbering in the Far East was still modest (only one percent of total Russian wood exports in 1913), there was a clear trend toward state support for fostering a capital-intensive forest industry.

Similarly, Far Eastern officials began to support the development of timber processing industries, including sawmills, in order to make more efficient use of forest resources. G.V. Glinka, the head of the South-Ussuri Resettlement Office, together with the Director of the Forest Department, G.V. Piotukh-Kublitskii, resolved that construction of state sawmills and timber exports was the key to “rational exploitation of the region’s natural riches.” Houses made of sawed boards, they argued, would make more efficient use of timber peasants’ traditional log homes. Sawmills could unite “the forces of labor and capital” in order to give the territory a more cultivated appearance

Port Arthur in 1904. The Bezobrazov concession was not simply about forestry, but it nonetheless is indicative of the strategic importance attached to forests and other resources in the Far East.


RGIA DV F. 94, op. 1, d. 27, ll. 72-74, 125-ob.


Man’ko, Lesnoe delo na rossiiskom Dal’nem Vostoke, 93.
(kul’turnyi vid), and to enliven the “silent taiga” for Russia’s brave colonizers. The parties present agreed that state sawmills should be built on the Iman and Khor Rivers and near Ol’ga Bay. This initiative was inspired by a report from Vasilii Roberg, a GUZZ envoy who travelled through the United States and Canada in 1911 to survey colonization efforts in the western states and provinces. Roberg stressed the importance of sawmills in home construction in both countries, pointing out that Russian settlers in the Far East often lacked construction materials when they first arrived. At the same time, GUZZ officials sought to maintain state oversight over forest exploitation, particularly in light of the “merciless destruction of forests” by small-holders and concessioners in California and British Columbia. 66 Here one sees GUZZ’s anti-commercial tendencies, but also a characteristic desire to balance the needs of colonization with the conservation of resources.

By World War I, Primor’e’s officials increasingly looked to capital-intensive, export-oriented timbering, combined with state oversight, as the best means to ensuring what they believed to be rational use of forest resources. Not coincidentally, such policies coincided with a rapid increase in export-oriented logging of state forests in European Russia, which generated enormous revenues for the treasury in the years before the war. 67 Brian Bonhomme has argued that Russian foresters were suspicious of private land ownership of forests in the late-nineteenth century because of landowners’ tendency to sell off or log their forests for short-term gain. For this reason, he contends, many favored nationalization of forests. 68 While we see a similar dirigiste tendency among

66 RGIA F. 391, op. 4, d. 1296, ll. 72-3, 81-2, 90.
observers in Primor’e: high officials were much more concerned with peasants selling off their forests, not with private logging firms. The idea that forests were a commodity—something to be quantified, managed, and sold—was in this case a force for both exploitation and conservation.

**Forest management in Soviet Primor’e**

After the Civil War, Soviet authorities continued the pre-war emphasis on industrial forestry as a means to both greater production and more efficient forest-management, while striving to stop illegal logging and forest fires. In 1923, the Far Eastern Revolutionary Committee, Dal’revkom, organized a forestry department, known as Dal’les, to oversee logging operations in the Far East. However, as before the Revolution, foreign investment played an important role in the timber industry. Lacking the resources to develop new timbering sites or infrastructure under the auspices of Dal’les, Dal’revkom granted concessions to foreign timber firms, mainly from Japan.69 Timber exports expanded rapidly, from 5 million cubic feet in 1921 to 16 million cubic feet two years later, with Japanese firms accounting for about 80 percent of timber exports (mainly of aspen and pine).70

In the post-war years, forestry officials remained concerned with local ecological conditions, including timber shortages. In 1920, a representative of the Far Eastern Provisional Government wrote that in some villages of the Shkotovo region, northeast of

Vladivostok, there were “shortages of land and, increasingly, forest.” An economic survey of the Khanka region found that forests in the Khanka basin had been to a great extent “ruined by logging and fires.” To combat illegal logging and forest fires, Dal’revkom formed a State Forest Section (GLO) in 1923. The GLO banned timber sales by private parties, permitting exploitation only by Dal’les and one other state firm, measure the organization seems to have enforced relatively often. In 1924, the GLO had 21 surveyors, 21 foresters (lesnichie) (as opposed to 15 before 1917), 37 assistant foresters, and 250 patrol personnel (ob’ezdchiki), who together surveyed hundreds of thousands of acres of forest. They enrolled local populations and military units to fight forest fires and prosecuted 242 people for illegal logging in 1923-24 alone. This represented a substantial leap in the enforcement of forestry regulations, when compared to the prerevolutionary era.

Foresters also looked favorably upon rational forms of forest exploitation—namely planning, mechanization, and exports—in order to meet economic goals while considering environmental constraints. In 1922, for instance, Far Eastern foresters criticized republic-level forestry laws as being inappropriate to the Far East’s rugged terrain and diverse soils and vegetation, warning, for instance, that logging should be not be conducted in areas with steep slopes, presumably because of the threat of erosion. However, their goal remained the “extraction of the highest continuous income from the forests, by means of inexhaustible use (neiztoshchitel’nosti pol’zovaniia) and possible

71 GARF F. 3751, op. 1, d. 2, l. 80ob.
72 GAPK F. 1125, op. 3, d. 2, l. 465.
73 GAPK F. 1506, op. 1, d. 22, l. 50-64ob.
74 In particular, the Basic Law on Forests (1918), which applied to forests throughout the Russian Soviet Federative Socialist Republic (RSFSR). On the 1918 law, see Bonhomme, Forests, Peasants, and Revolutionaries Forest Conservation in Soviet Russia, 1917-1925, 107–70.
full and multifaceted fulfillment of all demands in the forest from the side of the foreign and internal markets” as well as the “improvement of the make-up and growth of the forest.” Similarly, in 1923, one forester advocated the expansion of timber exports to Japan, but warned that given the rapid reduction in pine (kedr) trees—how much remained he did not know—Primor’e might reach the point at which easily accessible timber “will be gone (examples already exist).” He argued that it was necessary to encourage timber exports while creating an overall plan for the industry and imposing limits on logging. The People’s Commissar for Peasant-Worker Inspections (NKRKI) observed in 1928 that timber had become scarce along Primor’e’s railroads and riverbanks. As a solution, he proposed expanding production into unused areas and the construction of timber and pulp-and-paper factories, with a view to exporting finished timber and cellulose products to Japanese and Chinese markets. One consequence of this approach was that Dal’les turned to extracting timber from relatively remote areas, such as the basins of the Sitsy, Belembe, and Kolumbe Rivers, as well as the upper Iman, operations that continued until 1939.

Another component of rational forest production was hydrological management. While pushing for the exploitation of timber in more remote, mountainous areas, the NKRKI Commissar advocated surveying Primor’e’s river systems, dredging of waterways (to facilitate timber rafting), and marsh drainage. The commissariats of communications and agriculture stated in 1923 that recent development had “greatly

75 Upravlenie Zemledeliia i Gosudarstvennykh Imushchestv Primorskoi, Sakhalinskoi i Kamchatskoi Oblastei, Instruktziia dlia ustroistva gornykh lesov Primorskoi oblasti (Vladivostok: Tipografiia Voennoi Akademii, 1922), 3, 9, 41.
77 F. A-358, op. 2, d. 437, l. 15.
78 GARF A406, op. 25, d. 315, ll. 2-5.
exhausted forest [massifs] near to rivers and railroads,” and thus the goal of forest policy should be to move the industry to more remote, less exploited places. Doing so would entail significant changes in Primor’e’s river courses, including the straightening of rivers and clearing of debris, drainage of marshland near agricultural zones, and the use of hydroelectric energy. According to one hydrological engineer, by 1924 the forest reserves of Primorskaia guberniia had been depleted along the coasts and in river valleys as a result of “exploitation during successive years, especially in recent times.” Timber remained along the upper reaches of Primor’e’s mountain rivers, but their steep, shallow channels precluded timber rafting downstream.79  In April of 1924, Dal’les decreed its intention to move logging operations to the upper reaches of Primor’e’s rivers, and to straighten and dredge some of the in the process.80

Soviet officials were clearly aware of the problem of Primor’e’s finite timber supply, particularly in settled or easily accessible areas. Their response was to prosecute illegal logging, but also to “rationalize” timber production by expanding its range, by increasing mechanization, and by altering waterways in order to better access timber in remote areas. For Soviet officials in the region, like for their tsarist predecessors, production and conservation went hand-in-hand.

II. Land, water, and irrigation

The transition to industrial forestry occurred alongside efforts on the part of tsarist and Soviet states to manage Primor’e’s hydrological regime in a way that would improve

79 GARF F. 1506, op. 1, d. 13, ll. 3-5.
80 GAPK F. 1506, op. 1, d. 5, ll. 15-ob.
conditions for settlers. Eventually, doing so dovetailed with the emergence—at first, independently of state initiatives—of intensive, irrigated agriculture, which physically remade parts of central Primor’e (mainly near Lake Khanka and its outlet, the Sungacha River). While these two phenomena were in some ways quite separate, both can be understood as part of a wider process of rural reform that emphasized a shift away from the mixed-use spaces characteristic of extensive peasant agriculture, and toward intensive forestry, on the one hand, and intensive agriculture on the other, a separation of functions that elites regarded as better for both Russian/Soviet colonization and for the environment.

Hydrological management

Even as tsarist authorities actively encouraged the migration of thousands of newcomers from European Russia to Primor’e, they also sought to mitigate or circumvent the environmental impacts of settlement. Among those impacts was erosion and worsened flooding: although floods were a problem for settlers from European Russia from the outset, many observers believed that deforestation had aggravated the situation. In this context, the tsarist state attempted to encourage peasants to make less extensive use of their lands, as discussed above, and also sought to prevent flooding and improve conditions for settlement through hydrological engineering.

Besides the problem of wood shortages, a key reason why deforestation drew so much attention was that it seemed to aggravate flooding. As discussed in Chapter 2, floods threatened settlers’ livelihoods more than any other single factor, washing away crops, fertile alluvial soil, livestock, roads, buildings, and occasionally people. As
discussed above, the engineer A. V. L’vov had emphasized the effect of anthropogenic deforestation on erosion and flooding in the Khanka basin as early as 1896. As thousands of peasant settlers arrived in Primor’e after 1905 from European Russia, officials became increasingly concerned that settlers were inadvertently exacerbating flash floods through over-cutting and poor land use. Surveyors working on the Khor River in 1907, for instance, warned that mountain slopes should not be given to peasants, since “as is well known from the example of European Russia,” forest plots in peasant hands were “quickly destroyed by them and soon become unsuitable wastes,” cut through with gullies and ravines. Such statements reflect a low estimation of peasant land management, and suggest that some officials in the Far East were aware of deforestation and erosion in the forest and steppe zones of European Russia.

Similarly, Alexei Tatishchev, a senior official in the Resettlement Administration’s Vladivostok office, having witnessed the damage wrought by floods in the recently-settled Iman and Vaku valleys in 1912, wrote that with so many settlers cutting the forest, “the flow of water after the downpours that are common at the end of July and the beginning of August occurred at a more rapid tempo than before.” Arsen’ev’s remarks on the subject, published around the same time, suggest that the effect of deforestation on flooding was common knowledge. “Who does not know what a close dependence exists between the forests and the rivers?!” he wrote, arguing that that over-cutting had led to dry stream beds, boggy soils, and flooding.
A sustained effort to control flooding and to drain marshlands began in 1909, when members of the Amur Expedition formed Amur and Primor’e Hydrological Parties (AGP and PGP, respectively) to address water-management issues, which the Expedition saw as among the chief impediments to colonization.\textsuperscript{85} According to one member of the Amur Expedition, in 1909, 32 percent of migrants who abandoned the Far East cited rain, floods, and difficulty working the soil as their main reasons for leaving.\textsuperscript{86} The AGP and PGP operated under GUZZ and in close coordination with the Resettlement Administration. A Moscow-trained hydrological engineer, Alexander Proskurin, headed the PGP, which also retained a permanent staff of six hydrologists, along with several agronomists and technicians.

The PGP and Resettlement Administration officials believed further colonization required hydrological management. Proskurin wrote that the eastern shore of Lake Khanka was promising for colonization, but areas of “intensive water-logging [zabolachivaemosti],” which had grown since 1906, impeded settlement.\textsuperscript{87} Similarly, one PGP member, Tkachenko, stressed that “flood-prone lands cannot serve as a strong basis for colonization.”\textsuperscript{88} In response to requests to focus the PGP’s work on already settled Cossack lands, the hydrological engineer L. B. Charnetskii emphasized that the organization’s focus on more remote areas was essential because of their “strategic importance,” in this case referring to the Bira River basin. In support of this view, a representative of the Resettlement Administration, Klepinin, underlined the “necessity of

\textsuperscript{85} A series of scientific expeditions intended to study the resources and conditions for settlement along the Amur Railroad.
\textsuperscript{86} RGIA F. 391, op. 3, d. 270, ll. 40ob-41ob.
\textsuperscript{87} RGIA F. 391, op. 5 d. 574, ll. 3ob-5.
\textsuperscript{88} RGIA DV F. 702, op. 5, d. 332, ll. 250-251.
the settlement of the region along the Amur railroad” and that without drainage work, many areas within the “colonization fund” were impossible to settle.  

From 1912 to 1916, PGP staff studied Primor’e’s rivers, drained marshland, and built anti-flood works, such as dikes and dams. The PGP focused its efforts on areas that were especially marshy, such as the Khanka plain, or flood-prone, such as the valleys of the Iman, Vaku, and Khor Rivers, which flow into the Ussuri along its middle and lower courses. From the PGP’s perspective, these rivers were particularly important, since they were among of the few parts of Primor’e that were both lightly populated and amenable to settlement. Settlers had begun to arrive in these remote areas relatively late, mostly arriving after 1900, as rural areas in southern Primor’e were more heavily populated.

The PGP leadership and resettlement officials also sought to protect forests in key watersheds in order to prevent flooding. The head of resettlement affairs, Klepinin, advocated forest conservation on the upper Iman, Khor, and other rivers in order to preserve these “natural river regulators” from destruction, and Governor-General Gondatti supported this measure. In October 1914, A Ia. Bulgakov, then the head of the PGP, informed the Ussuri Cossack ataman to preserve forest lands near the headwaters of the Iman and Khor Rivers, which lay within Cossack territory. Notably, Bulgakov did not know how much timber was being harvested from these lands, or by whom, and he requested this information from the ataman. There is no record of a response from the ataman’s staff, perhaps because the host had been mobilized for war.

In attempting to impose some order on the landscape, the PGP was fairly responsive to settlers themselves, who were eager for assistance with water management.

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89 RGIA DV F. 130, op. 1, d. 1, ll. 71-75.
90 GAPK F. 130, op.’ 1, d. 1, l. 65-67, 108ob.
In 1913, for instance, the village of Vvedenskoe requested that the PGP drain a marsh and construct a dike along the Vaku River to prevent flooding.\textsuperscript{91} Similarly, the Ussuri Cossack ataman petitioned in 1914 for road construction and drainage work in the Don Cossack district on the middle Ussuri. He wrote that Cossacks were “diligently trying to expand and improve their fields,” but were stymied by “the hydro-technical condition of their land.” In response, in 1914 the PGP planned to address these and other requests through the construction of wells, reservoirs, dikes, and drainage ditches.\textsuperscript{92} Given that the PGP had only come into being in 1910, the number of requests from local actors suggests they were receptive to their efforts. More broadly, it reminds us that although Cossacks and peasant settlers may have deviated from the goals of administrators, they often cooperated with—and depended on—state officials.\textsuperscript{93}

\textit{Hydrological management and Soviet colonization}

Having inherited the same basic geographic, ecological, and geopolitical conditions in the Far East, Soviet leaders found hydrological management and intensive agriculture similarly appealing. If anything, they more intent on rapidly populating the Far East and developing its resources than the tsarist regime had been, particularly because of a renewed influx of East Asian (mainly Korean) migrants. Migration from China and Korea fell briefly before World War I,\textsuperscript{94} but then rose as labor became scarce. With the end of the civil war and foreign intervention, many Koreans travelled to and remained in Soviet territory. In Primorskaia oblast’, the Korean population increased

\textsuperscript{91} RGIA DV F. 702, op. 5, d. 332, l. 253.
\textsuperscript{92} RGIA DV F. 702, op. 5, d. 332, l. 329-360, 435.
\textsuperscript{93} Siegelbaum and Moch, \textit{Broad Is My Native Land: Regimes and Repertoires of Migration in Russia’s Twentieth Century}, 6–8.
\textsuperscript{94} As a result of anti-Asian immigration policies - see Chapter 1.
from roughly 47,000 in 1910 to over between 120,000 and 145,000 by 1926, constituting 25 percent of the total population (of 570,000). The Commissariat of Foreign Affairs (Narkomindel) announced in January 1926 that it considered the “spontaneous settlement of the Far East by Chinese and Koreans” as a “serious danger”—presumably to the region’s security—and argued that it was therefore necessary to work out a plan for “colonization [kolonizatsii] from the central provinces” in order to counterbalance East Asian migration.95

In light of concerns about security and migration, further colonization by Soviet citizens and agricultural self-sufficiency were among the primary goals of Soviet policy in Primor’e. The legal basis for Soviet resettlement initiatives originated in a 1925 resolution of the Central Executive Committee and the Council of People’s Commissars (the Sovnarkom), which proposed the transfer of 30,000 citizens to the Far East, along with many more to Siberia and the lower Volga.96 As during the tsarist period, settlement came with various incentives, including discounted rail passage, exemption from taxes and animal requisitioning, and start-up loans. An All-Union Resettlement Administration (VPU), operating under the Commissariat of Agriculture (Narkomzem), allocated settlement plots on a per-person (rather than per-household) basis. The first resettlement plan was highly optimistic: VPU officials sought to implant nearly 42,000 migrants during the 1925-26 season, while providing them with seed grain, tools, and baths, hospitals, and hot meals on route. Only about 13,000 actually made the journey, and over a thousand returned home before the next season. The number of settlers (who were

96 The resolution did not specify where settlers would come from.
overwhelmingly Russian) increased during the following two years, though so did the rates of returnees.\footnote{N. A. Bilim, “Pereselenie krest’ian na sovetskii Dal’nii Vostok (1925-1941 gg.),” in \textit{Iz istorii Dal’nego Vostoka}, ed. V. E. Voishins, V. M. Peskov, and P. Kh. Chausov (Khabarovsk: Khabarovsk State Pedagogical Institute, 1976), 189–91; Conolly, \textit{Soviet Trade from the Pacific to the Levant, with an Economic Study of the Soviet Far Eastern Region}, 19.}

Because of the need to settle large numbers of settlers on a relatively small amount land, Soviet leaders in Moscow and in Primor’e supported the continuation of hydrological work in order to protect existing settlements and open new lands to cultivation. Seeing the continued need for flood protection and land reclamation, officials in Dal’revkom authorized the continuation and expansion of pre-war hydrological work, retaining several of the PGP’s staff. What had been the GUZZ branch for Primorskaia \textit{oblast’} became the Agricultural Administration for Primorskaia \textit{guberniia} (PGZU), and the PGP became the Division of Land Reclamation (OZM).

Charnetskii, who had formerly worked as a hydrological engineer for the PGP, headed the OZM as of 1923, and Bulgakov remained on its staff.\footnote{GAPK F. 1506, op. 1, d. 40, 1; GAPK F. 1506, op. 1, d. 5, ll. 15-17.}

While there was much continuity between pre- and post-war hydrological management, in one important respect the use of land and water in Primor’e underwent a major change during the Civil War. In 1918, a Korean migrant began growing rice imported from southern Korea on rented land in the Sungacha River valley, and the practice quickly spread in the surrounding region.\footnote{Now known as the Partizanskaia River.} Chinese farmers had cultivated small quantities rice in Primor’e before 1860, but the practice seems to have disappeared soon after the Russian arrival.\footnote{GAPK F. 1166, op. 1, d. 115, l. 1-2.} The particular strain of rice the Korean migrant brought to Primor’e in 1918 had apparently originated in Hokkaido, so it was better suited to...
Primor’e’s cool temperatures and short growing season than other variants. Rice-planting was initially circumscribed to a small area along the Sungacha River, but grew rapidly over the following years. Abundant harvests in 1918, 1919, and 1920, in the words of one observer, “indisputably established that the cultivation of rice accords completely with local conditions.” By 1922, there were an estimated 54,000 acres devoted to rice in the province, cultivated almost exclusively by Koreans on lands rented from Russians.

Rice agriculture may have been especially appealing to Soviet leaders in light of the belief that further colonization might lead to more deforestation, which could in turn contribute to flooding. In the 1920s, Primor’e’s scientific community was unanimous in its belief that human action was partly to blame for worsening floods, which had been particularly destructive in 1914-1915. The head of the Vladivostok Meteorological Station, S. Griboedov, observed in a 1916 article that settlement, by deforesting Primor’e, had not made the region drier, but may have aggravated the problem of flash flooding. Although Griboedov had many critics, none disputed him on this point. Similarly, Griboedov’s successor at the Vladivostok Meteorological Station observed that colonists had “completely deforested” the Khanka plain and parts of the Ussuri valley, leading to erosion and exacerbating summer floods. A. Polovinkin, a geography professor at Far Eastern University, argued that human activity had not made the region drier, but rather...
the destruction of forests had instead contributed to the problem of flooding. At a 1928 conference on the problem of flooding, one engineer argued that settlement and the destruction of forests through “logging, fires, [and] artificial clogging of rivers” had made floods more frequent and intense.

Thus, although rice agriculture appeared in the Far East independently of Soviet (or any) authority, Soviet officials seized upon rice cultivation because it offered a way to facilitate colonization. In 1923, Dal’revkom created a state company known as Dal’ris (Far Eastern Rice) to oversee rice-growing and processing. In addition, OZM officials, in consultation with the People’s Commissariat for Agriculture (Narkomzem), drafted its first plans for a network of damming and drainage works in Primor’e in 1923. State plans for reforming Primor’e’s agricultural sector emphasized the need to abandon extensive agricultural practices and deforestation. Dal’ris viewed planned, irrigated agriculture as a solution to the “predatory use of arable land”—that is, long-fallow farming—which, in Dal’ris’s view, exhausted the soil. Similarly, the Sovnarkom, in making a case for irrigated agriculture in Primor’e, emphasized the need settle new colonists without causing excessive forest destruction. Indeed, the Sovnarkom’s colonization plan, drafted in 1928, described the necessity of settling a million (!) newcomers, many of them in the Khanka plain, where they would undertake intensive farming of rice, beans, wheat, and other crops. Of these migrants, 780,000 were

107 GAPK F. 1506, op. 1, d. 5.
108 GARF F. A310, op. 16, d. 337, ll. 11-17.
109 GARF F. A406, op. 1, d. 814a, ll. 37.
supposed to be installed by 1932.\textsuperscript{110} Settlers were to increase the area of sown land in Dal’krai from 989,000 ha to 2,740,000 ha and use more profitable crops, such as rice, beans, and wheat. Forestry, mining, and fishing were also to increase their output, and both state ownership and foreign concessions were to increase at the expense of private firms. This would, according to state planners in Moscow, enable the krai to become economically independent.\textsuperscript{111}

\textit{Rice and race}

However, while irrigation and water-tolerant crops seemed more efficient to Dal’ris, the OZM, and the Sovnarkom, Soviet officials viewed the existing irrigation networks (operated by Koreans) as “primitive” and ecologically harmful, and sought to replace them with a planned, coordinated system. In this regard, their reactions were similar to those regarding irrigation systems in Soviet Central Asia, where officials made spurious connections between local water-management practices and disease.\textsuperscript{112} In Primor’e, it was environmental concerns, not health, that formed the basis of official criticism.

Questions surrounding land- and water allocation soured what was otherwise a fairly positive relationship between the Soviet government and Primor’e’s Korean community (Civil War-era mass migration notwithstanding). There had been many Bolshevik supporters among Korean communities in Primor’e and Manchuria during the

\textsuperscript{110} GARF F. A406, op.1, d.814а, l. 37; GARF F. 262, op. 1, d. 293, ll. 23, 34; F. P5446, op. 10a d. 322, ll. 2-4; Conolly, \textit{Soviet Trade from the Pacific to the Levant, with an Economic Study of the Soviet Far Eastern Region}, 13.

\textsuperscript{111} GARF F. 262, op. 1, d. 293, ll. 23, 34.

\textsuperscript{112} Maya Peterson, “‘Native’ Rice, American Cotton, and the Struggle for Water in Central Asia Under Russian Rule, 1890s-1920s” (Eurasian Environments Conference: Nature and Ecology in Eurasian History, Columbus, Ohio, 2011).
Civil War, and the Soviet government in turn supported the protection of Korean as well as Chinese national rights in the 1920s, including native-language education and preferential recruitment into government (a process known as korenizatsiia, or nativization).\textsuperscript{113} However, the large size of Primor’ë’s Korean population, as well as their prominence in the rural economy, attenuated such “affirmative action” policies. The peculiarities of land tenure in the Far East, together with lingering racism and security concerns, soon complicated the official tolerance that followed the Civil War. Nearly 70 percent of Primor’ë’s Koreans were tenant farmers, renting land from Russian and European settlers in return for grain or cash payment; only a small minority (about 2,800 households) had their own plots. In theory, Soviet policy favored the creation of an autonomous Korean district and reallocation of land rights, but Russian settlers resisted attempts to redistribute land and openly advocated resettlement of the Korean population.\textsuperscript{114}

The introduction of rice farming, and irrigation systems that accompanied it, aggravated these tensions. Koreans’ rice farming practices almost immediately produced disputes over land- and water-use. In order to flood rice fields at the necessary times, Koreans built small dams, partitions, and ditches using fascines, rocks, timber, and earth, and other materials. Occasionally, these various structured leaked or collapsed and water spilled into adjacent fields used for dry-land crops. In addition, there were complaints the canals and ditches dug for rice irrigation impeded the migration of fish (presumably

\textsuperscript{113} Among the more optimistic elements of korenizatsiia was the attempt to create Latinized alphabets for both groups, conceived the belief that Soviet Chinese and Koreans, armed with modern literacy, would become a “vanguard” and example to their compatriots in neighboring states. Terry Martin, The Affirmative Action Empire: Nations and Nationalism in the Soviet Union, 1923-1939 (Ithaca: Cornell University Press, 2001), 4–9, 44, 199-200.

\textsuperscript{114} Ibid., 317; Toropov, “Koreiskaia emigratsiia na Dal’nem Vostoke Rossii, vtoraiia polovina XIX v. - 1937 g.,” 124–26.
salmon) attempting to swim upstream during their spawning runs. According to a commission established in May 1921 to study the issue, rice-growing had as a result produced arguments and “open conflict” between Korean rice-farmers and their neighbors (Russians and other Koreans). The five-member commission was headed by engineer Charnetskii, who was particularly critical of Koreans’ ad-hoc irrigation networks. He warned that a lack of any oversight over water-use had already generated “a whole range of disputes and conflicts between neighboring renters and even on a single rented plot between different artels [work collectives].”

When he came to head the OZM under the new regime, Charnetskii continued to warn that Koreans were employing dangerously improvised irrigation systems, and maintained that planning and engineering were essential to effective water- and land-use. While acknowledging that rice fields were highly productive, Charnetskii contended that Koreans’ canals and dams were “primitive” because their dams and ditches occasionally collapsed, leaked, were vulnerable to flooding, and often did not maintain the necessary quantity of water. Such constructions, he argued, threatened to aggravate flooding and posed a significant hazard to rural populations. In a 1923 report, he claimed that when Korean irrigation works “would precipitate a catastrophe” in times of heavy rain, and in the meantime damaged fisheries. He argued instead for replacing Koreans’ irrigation works with state-supported irrigation systems based on experimental fields, electric pumping stations, and hydrologic observations. Similarly, a regional economic council, convened in 1923 to discuss agrarian reform, argued that the “improper methods

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116 Ibid., 234.
118 Ibid., 9–11.; GAPK F. 1506, op. 1 d. 1, 93; GARF F. A310, op. 16, d. 337.
of irrigation” found on Korean fields would neither help rice production nor guarantee security from flooding. In response to such concerns, Dal’revkom created a commission to inspect rice growing and the associated irrigation works.

Officials in Moscow tended to agree that Korean farming practices should be replaced with more technically advanced methods, invoking environmental and racial arguments in the process. The Sovnarkom’s 1928 plan for the Far East claimed Korean rice farming was “regulated by nothing and no one” and was “leading to waterlogging of the soil,” the flooding of Russian peasants’ fields, and “sharp conflicts between the Russian peasantry and the Korean rice-farmers.” The Sovnarkom advocated “more modern technical approaches, as occurred in Italy and America, where a rice farmer works without soaking his feet in a swamp.” (The latter comment may have been more than technophilia. According to an article on rice-farming that appeared in 1921, Russian settlers and Cossacks in Primor’e were reluctant to take up the crop themselves because they believed that “to work in water higher than one’s knee is bad for one's health.”)

Similarly, in 1928, a Korean artel’ (work cooperative) petitioned the Central Executive Committee in Moscow directly for the right to manage its own waterworks, but officials in Moscow refused, citing the concern that “primitive irrigation works” and “predatory use of rice fields and water resources” would ultimately lead to “total anarchy in land usage and water usage.”

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119 GAPK F. 1506, op. 1, d. 28, l. 1-ob.
120 Charnetskii, “Mestnoe risoseianie,” 11.
121 Ibid., ll. 39-40.
123 Kan Sekher, representing the artel’, wrote that as Koreans, they were “a defenseless people in the Far East” seeking only a “warm, peaceful corner here in the Siberian krai.” The revolution offered them a chance to gain Soviet citizenship and a land allotment, but according to Sekher, prejudice still remained. GARF, F. A310, op. 16, d. .337, 6, 13.
In addition, by late 1920s Soviet officials increasingly viewed Koreans with suspicion, primarily due to mounting tensions with Imperial Japan, which had occupied Korea and 1910 and controlled southern Manchuria.\textsuperscript{124} In this context, replacing Koreans’ rice-farming operations with more technically advanced farms, staffed by Russians, was especially appealing. The Sovnarkom speculated that rice agriculture, though economically promising, might make the Far East more inviting to the Japanese, observing that the crop had been introduced around the time of the Japanese intervention. Delegates raised the possibility that rice-farming was a Japanese scheme to provision its army in the event of invasion. With thousands of Koreans growing rice, the Sovnarkom argued, Japan killed two birds with one stone: “on the one hand, it frees Korean territory...for settlement by Japanese, who are not acclimatized to Primor’e, and on the other hand it creates a food base for its occupying army.” Thus, it was necessary to create “conditions under which rice-farming can be undertaken by Russian settler[s].”\textsuperscript{125} Similarly, Dal’ris called specifically for interesting “the Russian population in the development of rice and [soy]beans, since at present these crops are remain purely Korean.”\textsuperscript{126}

Thus, while Soviet officials in Moscow and the Far East believed irrigated rice agriculture in Primor’e promised to solve the region’s grain shortages by taking advantage of the region’s humid climate, they sought to replace Koreans with Russians, and to replace “primitive” Korean methods with “more modern technical approaches.”

\textsuperscript{125} GARF A406, op. 1, d. 814a, ll. 34-39.
\textsuperscript{126} GARF F. 1235, op. 122, d. 77, 11ob, 17
Collectivization and deportation

By the end of the 1930s, the rice farms that Koreans had worked a decade earlier were indeed staffed by ethnic Russian settlers, and some of their irrigation works were replaced with systems created by the OZM and by individual state farms (sovkhозы). The rapid transformation of Primor’e’s human and natural landscapes was the product of a complex series of events, not a concrete plan, but the result was largely congruent with what the OZM, Dal’ris, and other state organs had envisioned for the territory’s rural economy.

Colonization in the early 1930s was accompanied by collectivization, which was just as chaotic and violent in Primor’e as elsewhere in the USSR. In the Far East, divisions in the countryside tended to reflect the legacies of colonization and tsarist-era nationality policies: early settlers from European Russia (the starozhily) and Ussuri Cossacks tended to be wealthiest, while more recent arrivals, together with Chinese and Korean laborers, were poorest. Starozhily, Cossacks, and Old Believers bore the brunt of de-kulakization among Russians, though because hiring laborers—a very widespread practice in the Far East—was enough to qualify one as a kulak, less prosperous peasants suffered dispossession and deportation as well.

Koreans (including long-time settlers) had by far the least amount of land in the Far East, though 44,000 Korean families received land allotments in 1928. Because it presented the opportunity to gain access to land and acquire Soviet citizenship, Koreans

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were more favorable to collectivization than many others. However, arrests and grain requisitions fell particularly hard on Koreans and, to a lesser extent, Chinese, both many of whom fled across the border in large numbers. In some areas, as much as 60 percent of the Korean population fled or was removed. Twelve armed revolts involving an estimated 1,300 people—both Russians and non-Russians—flared up in February 1930, and were suppressed only with the deployment of army units.

One by-product of collectivization was to accelerate the transfer of irrigated lands from Koreans (or their erstwhile landlords) to the state. With flight from and disturbances in the countryside, grain output dropped precipitously throughout the Far East, necessitating food imports from neighboring states, including Japan. To overcome the grain deficit, Far Eastern administrators undertook two major initiatives in the countryside. The first was to take over irrigation works in the Khanka plain and along the Sungacha River and to replace existing ditches and other structures with those planned by OZM engineers. Beginning in 1930, Dal’ris formed a sovkhoz on the Sungacha River, on lands occupied primarily by Koreans, for mechanized rice farming, planting 9,846 ha of wet rice and 1,930 ha of dry rice in that year. Soy production began in 1934 in the Khanka basin, albeit on a very small scale. After a drop during collectivization, rice and soybean output from around the Khanka plain rose through the

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130 GAPK F. 1125, op. 3, d. 2, ll. 32, 471.
132 GAPK F. 853, op. 2, d. 20, ll. 166b, 30.
133 GAPK F. 1125, op. 3, d. 2, l. 475.
mid-1930s, and raw materials were processed at a plant near Nikol’sk-Ussuriisk.\textsuperscript{134}
Korean farmers still formed the bulk of the labor force, raising these and other crops with the help of improvised irrigation works. At the same time, engineers constructed a network of pumps, ditches, and canals to replace previously-existing works, which Dal’ris regarded the Koreans’ systems as “very primitive,” without providing further explanation. By 1935, the beginnings of a new irrigation system spread along the south shore of Lake Khanka and the upper Sungacha River. (See figure 21 for a map of the one rice-growing sovkhoz).\textsuperscript{135}

\begin{center}
\textbf{Figure 21: Map of the Santakhez Rice Sovkhoz, Lake Khanka (1935)\textsuperscript{136}}
\end{center}

\begin{flushright}
\textsuperscript{134} GARF F. F. 5446, op. 15, d. 1488, ll. 1-5.
\textsuperscript{135} GAPK F. 1125, op. 3, d. 2, l. 42; GAPK F. 853, op. 2, d. 61, l. 1.
\textsuperscript{136} GAPK, F. 853, op. 2, d. 49, l. 6.
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The second initiative was the formation of military-agricultural settlements comprised of active or demobilized Red Army soldiers. In March 1932, the Central Committee of the Communist Party approved a recommendation from Vasilii Bliukher, commander of the Far Eastern Red Army (OKDVA), for the creation of a Special Kolkhoz Corps (OKK). Like latter-day Cossacks, the OKK was intended to “strengthen security, open virgin lands, supply the population of the DV and the army with provisions, and significantly decrease the import of grain and meat.” Its members created military-agricultural settlements in the form of enormous sovkhozy, on which they cleared land and drained some 4,400 acres in Primor’e and the Amur valley.\footnote{Z. Sh. Ianguzov, Osobaia Krasnoznamennaia Dal’nevostochnaia Armiia na strazhe mira i bezopastnosti SSSR (1929-1938 g.g.) (Khabarovsk: Khabarovsky knizhnoe izdatel’stvo, 1970), 91, 111; Lykova and Proskurina, Derevnia rossiiskogo Dal’nego Vostoka v 20-30-e gody XX veka, 88–89.}

Korean farmers still formed the bulk of the labor force in the rice industry (and much of southern Primor’e’s rural population) until their deportation in 1937-38. The reasons behind the deportations were complex, but most centrally were connected to security concerns (and the paranoia that accompanied them) regarding diaspora nationalities. Similar deportations took place across the Soviet Union, from Ukraine to the Caucasus, during the late 1930s and 1940s.\footnote{See especially Robert Conquest, The Nation Killers: The Soviet Deportation of Nationalities. (London: Macmillan, 1970); Norman M. Naimark, Stalin’s Genocides (Princeton, N.J.: Princeton University Press, 2010); Terry Martin, The Affirmative Action Empire: Nations and Nationalism in the Soviet Union, 1923-1939 (Ithaca: Cornell University Press, 2001), 308–343.}

While the deportation of Koreans and Chinese was part of this wider phenomenon, there were local peculiarities that made it distinct. First, unlike in other borderlands, plans to remove Koreans and Chinese from border areas had existed since 1926, but efforts to do so were sporadic and limited to a few hundred families. The ease
with which Koreans (among others) were able to move back and forth across the border—particularly in the context of collectivization—troubled Soviet authorities concerned with smuggling and Japanese espionage. Japanese propaganda, by calling for unity of Asians under the aegis of Japan, exacerbated such concerns. In 1930 and 1931, security forces removed a handful of Koreans from border areas as part of “dekulakization,” intending to replace them with Russian colonists. Although their plan called for the removal of 10,000 people, for unknown reasons only a few hundred families were removed.\(^{139}\) After a six-year interlude, the NKVD prepared for a new bout of relocations, sending special units to the Far East in April 1927. The Japanese invasion of northeastern China in July 1937 provided a pretext for removing all Koreans and Chinese. The NKVD argued that since deporting some Koreans would turn the rest against the state, all had to be taken from the region. The result was the removal of nearly all of the Koreans in the Far East, along with many Chinese residents. Alongside the human toll of the relocation, much of the rice crop in 1937-38 was lost, as there was no one around to harvest it.\(^ {140}\)

In the place of deported Koreans, new rice sovkhozy were formed in the Khanka lowlands. In 1938, one sovkhoz was formed around the village of Morozovka, which already had a combination of improvised and engineered irrigation systems in place for would-be settlers, along with 24 “Korean homesteads (not destroyed).” Similarly, Dal’ris oversaw the creation of another sovkhoz on irrigated lands near the village of Voroshilov.

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whose previous residents had been deported. Another was to be formed on the Lefu
River, which flows into southern Lake Khanka, where the houses, barns, and other
outbuildings of departed Koreans were available for incoming settlers.\footnote{F. 853, op. 2, d. 61, ll. 1-9, 22-25.}

There is little to suggest that the irrigation systems created by Soviet engineers led
to more efficient or productive farming, or for that matter that they alleviated the problem
of flooding. Indeed, the production of rice and soybeans, previously cultivated primarily
by Koreans using “primitive” irrigation systems, fell by 40 to 50 percent during
collectivization, and at the end of the 1930s were but a fraction of what they had been a
decade earlier.\footnote{Lykova, and Proskurina. \textit{Derevnia rossiiskogo Dal’nego Vostoka v 20 - 30-e gody XX veka}, 130.} As one scholar has observed, the deportation of Koreans ushered in “a
sustained agricultural crisis, which only resolved in the course of several decades.”

Nevertheless, by the end of the 1930s, rice cultivation, which had for nearly twenty years
been the preserve of Koreans farmers, became a state industry staffed primarily by
Russian settlers. In this way, the modernization of Primor’e’s countryside entailed
replacing supposedly “primitive” and labor-intensive irrigation practices with “modern”
one, which in practice also meant replacing the rice-growers themselves.

\textbf{Conclusion}

It might seem strange to discuss the deportations of 1937-38 alongside forestry
regulations and soybean yields. However, as I have argued here, land- and water-use in
Primor’e were always closely intertwined with the broader goals colonization—peopling,
developing, and civilizing the territory—and with ethno-national tensions. Tsarist and
Soviet administrators were well aware of the relationship between settlement and

}\footnote{F. 853, op. 2, d. 61, ll. 1-9, 22-25.}
\footnote{Lykova, and Proskurina. \textit{Derevnia rossiiskogo Dal’nego Vostoka v 20 - 30-e gody XX veka}, 130.
deforestation, but wanted to continue to populate Primor’e with Russians and increase its productive potential. During both eras, doing so meant encouraging more intensive forms of agriculture, commercial forestry, and forest conservation while managing the territory’s waters to avoid flood damage and drain marshland. In both cases, administrators associated rational nature-use with planning and modern, scientific methods, and believed that primitive or “predatory” methods were responsible for both economic failures and ecological degradation.

In the Soviet period, irrigated agriculture—a technique imported by Koreans—offered a way to have intensive agriculture without further deforestation, and to make use of Primor’e’s abundant surface water. It complemented established thinking about forest conservation and the goals of colonization. However, by the late 1920s, Soviet authorities viewed the masses of Korean and Chinese farmers cultivating Primor’e’s lands as a strategic liability. Many also believed that Korean methods of cultivation were increasing the threat of flooding and water-logging. Replacing Koreans with Russian colonists became a security matter inflated by the paranoia and increasingly racialized nationality policies of the 1930s. Replacing Korean rice farms with sovkhozy managed by engineers, new settlers, and the OKK, however, reflected ideas about proper or “rational” nature use that linked East Asians with predation and backwardness.

In general, the management of land, water, and populations in Primor’e suggests a desire (among tsarist and Soviet elites) to impose a clearer separation between peoples, on the one hand, and between nature and culture, on the other. Thus, officials sought to encourage a shift away from economically mixed spaces, wherein field and forest intermingled (though swidden and long-fallow agriculture), and marshes encroached on
arable and pasture, toward having some lands earmarked for industrial logging and others for intensive farming. Similarly, by the end of the tsarist era we see less tolerance for ethnically mixed spaces, and consequently harsher measures against East Asian populations within Russian borders. The de-mixing of populations in 1937-38 represents the most extreme example of this modernizing project. In this sense, Primor’e’s experience was consistent with the drive of modernizing states to make spaces and populations that are legible, orderly, productive, and modern.\textsuperscript{143}

\textsuperscript{143} Scott, \textit{Seeing like a State}. 
Chapter 5: Fishing and Costal Settlement

In the nineteenth century, Primor’e’s coastal waters and rivers were rich in fish, seaweed, sea cucumbers, crabs, and other organisms. These resources attracted thousands of fishermen from the surrounding region, principally from China, Korea, and (later) Japan, who sold their catch primarily in their home countries. Russian administrators and other contemporary observers were concerned with what they perceived to be a decline in certain populations of aquatic organisms, particularly salmon, sturgeon, and seaweed. Not without reason, they believed that East Asians were the cause of diminishing fish populations and other ecological changes. After the Russo-Japanese War, when Japanese fishermen were legally permitted in Russian waters, concern with over-fishing by foreigners became an even more urgent concern.

Examining the late imperial and early Soviet periods as a whole, we see three main responses to diminishing fish stocks and to the presence posed by Chinese and Japanese fishing and gathering in Primor’e’s coastal waters. First, tsarist and then Soviet administrators directed Russian and European colonists to the coast, attempting to attract experienced fishermen in particular. Resettlement officials saw this as a means to expand the exploitation of marine resources by Russian subjects in order to wrest control of fisheries and other coastal industries from foreigners. Second, administrators under both regimes encouraged what they believed to be more efficient, rational forms of
exploitation of marine and riparian organisms: commercial-oriented fishing that was technologically advanced, capital-intensive, and scientifically informed. The Soviet regime was particularly determined to do so, and was more concerned with creating a state-run fisheries sector, although the Soviets accepted the presence of private fishing firms through to the late-1920s. Third, tsarist and then Soviet authorities supported conservation of fish stocks (primarily sturgeon and salmon, the main commercial species in Primor’e and on the lower Amur) by regulating fishing implements, practices, rationing out fishing plots, and supporting ichthyological research.

In this way, both tsarist and Soviet authorities came to view conservation as a key element of “rational” exploitation. Such a view, I argue, stemmed from the belief, shared by both tsarist and Soviet officials and scientists in the Far East, that scientific reason could reconcile state priorities (securing the seas adjacent to Primor’e and supporting the local economy) with ecological limits. Indeed, many believed that these goals were complementary, since the alternative was over-fishing by foreigners who lay beyond (Russian/Soviet) state control. Conservation was a priority, but primarily because it promised sustained yield, and in this sense was consistent with the goal of rational exploitation.

The history of fishing and gathering in Primor’e’s waters is not solely a Russian story. Besides East Asian populations, the indigenous Nivkhi people of the coast (and Sakhalin) were deeply involved in these industries. This chapter, however, focuses primarily on how Russian/Soviet policies reshaped fishing and gathering in the late nineteenth and early twentieth centuries. Because coastal waters were so important to ensuring Primor’e’s security, prosperity, and Russianness, human uses of Primor’e’s
aquatic species—who was fishing, where, and how—were very closely connected to the goals of colonization. Moreover, by the late 1930s, the Soviet fishing fleet, whose development had deep roots in the tsarist past, had become the primary anthropogenic force affecting the territory’s marine life, having displaced the Japanese from coastal waters and absorbed private fishing operations.

The development of fishing and fish conservation in Primor’e speaks to a number of broader historiographical questions. First, examining Primor’e’s history from the perspective of fisheries complicates the idea that Russia was an imperial power in Far Eastern waters. Like a developing country subject to economic imperialism, Russian administrators struggled to defend Primor’e’s natural resources from foreign fishermen armed with larger and more technically advanced ships and greater military power. Russian and European settlers sold their raw catch to Japanese ships and canneries, which were then resold in Japan or elsewhere in the Asia-Pacific region. In this way, they occupied a semi-peripheral—and economically disadvantageous—position in an important part of the Pacific economy. In many cases, Russian resource nationalism looks less like imperialism and more like anti-imperialism.

Second, the story of directed seaside colonization shows that conceptions of nationality and ethnicity were closely bound up with environmental use, especially in the tsarist era. The Resettlement Administration, in particular, sought to place settlers in ecological niches to which they were already accustomed, a phenomenon noted by several scholars studying other parts of the empire.1 In Primor’e, resettlement officials sought out those they thought to be natural fishermen, such as Finns and Balts, who

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1 As in Sherry, “Imperial Alchemy Resettlement, Ethnicity, and Governance in the Russian Caucasus, 1828-1865.”
would be most effective as maritime colonists. There is no indication that tsarist or Soviet officials believed ethnic character was fixed, although some saw a stark divide between Asians and Europeans. Rather, they saw a close connection between environmental use and ethnic or national character.

Finally, the history of Primor’e’s fisheries questions the primacy of ideology in Soviet approaches to environmental management. Early works dealing with Soviet environmental history stressed the Marxist-Leninist belief that environmental degradation was a product of the chaotic, predatory nature of capitalist production, suggesting that this helps explain Soviet complacency toward ecological destruction. However, as I argue here, the belief that science, planning, and technology could harmonize human needs with natural limits predated the Soviet period. Moreover, in Primor’e’s case, such a view made a great deal of sense in the face of technologically advanced, well-funded competitors (i.e. the Japanese). It also held rhetorical appeal, since in the realm of fisheries Russian/Soviet authorities could not claim to be more productive than their neighbors, but they did claim to be better stewards of the seas.

I. Fishing, resettlement, and fisheries management during the tsarist period

*Settling the Seashore, 1862-1900*

Given Primor’e’s position on the Sea of Japan and its many waterways, it is no surprise that fish, seaweed, and other organisms played a key role in the economic life of the region. Before the Russian arrival and throughout the late tsarist period, East Asians and indigenous peoples were widely engaged in the exploitation of a variety of aquatic

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2 See especially DeBardeleben, *The Environment and Marxism-Leninism the Soviet and East German Experience.*
life, both for subsistence and for sale. In contrast, during the nineteenth century, Russian and Ukrainian settlers, as well as Cossacks, mostly stayed in Primor’e’s rivers and lakes. They were much less prominent in fishing along the coast or in the trade in seaweed and sea cucumbers.

Because the loss of valuable aquatic organisms and East Asian migrations were major concerns for Primor’e’s administrators, one consequence of East Asian dominance of fishing and maritime trades was a curious dimension of Russian (and later Soviet) resettlement policy: a very deliberate effort to direct Russian subjects of various ethnicities to Primor’e’s coast and to encourage them to take up maritime trades, particularly fishing and coastal cargo haulage. Seaside colonization never represented a large share of the total number of Russian migrants to Primor’e, but it is a good illustration of how natural resources, and more specifically competition over natural resources, shaped Russian colonization in the territory. Indeed, it is an extreme example of a “use it or lose it” mentality among the officials in the Resettlement Administration, the Ministry of State Domains/Agriculture (in its various incarnations), and Primor’e’s government chancelleries. Even more than with settlement of Primor’e’s as a whole, settlement of the coast was a very deliberate process. At great effort and expense, officials directed migrants from Astrakhan, Finland, the Baltic region, and other areas to the territory’s shores in order to take advantage of aquatic resources and to ensure “Russian” control of the coast.

Maritime colonization was a priority for officials in Primor’e from an early stage. In 1862, Military Governor Kazakevich advocated for the “rapid formation of maritime settlement” through directed migration from central Russia. Kazakevich suggested
offering coastal lands to retired, low-ranking servicemen in the Baltic fleet, with the treasury supplying transportation and loans. He reiterated the point in 1866, claiming that Russian migrants were “unable to make use of their favorable position and derive[d] almost no benefit from the riches that with which nature has endowed the local rivers and seacoast,” while the Chinese monopolized these resources. 3 Similarly, Governor-General Korsakov believed that Chinese “migrants and proletarians” had been flooding into Primor’e in search of gold, fish, and fertile soils, taking “all their gains and acquisitions” back to China. 4 He argued that Primor’e needed more soldiers and settlers to defend against the Chinese threat and to keep these resources in Russian hands. 5

In the late 1860s, Kazakevich attracted a small group of Astrakhan fishermen to Nikolaevsk, believing that these fishermen could transfer their skills to catching sturgeon on the lower Amur. When this effort fizzled out (for lack of markets, primarily), Kazakevich’s successor, I.V. Furugel’m, also sought out settlers accustomed to marine environments. He attracted Finns, including the sea captain Fridol’f Gek, to Primor’e. The Finns’ attempts to break into the coastal cargo trade were unsuccessful, but they stayed in the territory, forming settlements on the Ussuri Gulf near Vladivostok, and Gek went on to command the first coastal patrol ship in the Sea of Japan, the Storozh (Guard). 6

Beginning in the 1890s, resettlement officials undertook more concerted efforts to move fishermen to the coast. In 1891, at the request of Governor-General Korf, the

3 RGA VMF F. 909, op. 1, d. 44, ll. 16-17, 42ob-43ob.
4 Korsakov did not elaborate on his curious use of the term “proletarian.”
5 RGA VMF, F. 410, op. 2 d. 4178, ll. 9ob, 11ob-12.
South-Ussuri branch of the Resettlement Administration initiated a program designed to bring capable seafarers from European Russia. The chief of the Resettlement Administration at the time, Fedor Busse, was aware that Russians had little presence on Primor’e’s shores and remained a minority in maritime trades. As a result, he argued that the Resettlement Administration should focus its efforts on settling pomory (seafarers) on the South Ussuri coast in order to displace the Chinese. (The Resettlement Administration’s documents use the term pomory to refer to all seafaring peoples of European Russia, not just those from the White Sea region.)

To this end, beginning in April 1890, the Resettlement Administration began to entice fishermen-settlers to the Far East with loans of up to 850 rubles per family, along with free logging rights in coastal forests and other benefits. The Administration’s first attempt to move fishermen to the east was something of a farce. Busse found a willing partner in the governor of Astrakhan province, who arranged for the transportation of pomory families to Vladivostok in 1891. His office provided these first families with an additional 3,000 rubles worth of fishing equipment, some of which was damaged on the voyage from Odessa. Upon the migrants’ arrival, Busse and his assistant, Prince L.A. Kropotkin, discovered that the newcomers had neither interest nor ability in fishing. They had, Busse discovered, simply been poor peasants from the black earth region near Astrakhan who had worked briefly as unskilled workers in fishing artels. Their inexperience showed in the autumn, when the so-called pomory “could not even feed themselves, never mind [store] reserves of chum salmon [keta] for sale.”

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7 RGIA F. 391, op. 1, d. 1152, 186-188.
8 RGIA F. 1273, op. 2, d. 294, 18ob.
9 F. 1, op. 1, d. 32, 54-64. Aleksandrovskaia suggests that the governor of Astrakhan was well aware that he was not sending actual fishermen and just wanted to rid himself of some poor workers, but I was unable
Nevertheless, the Resettlement Administration continued to offer incentives to those willing to settle along Primor’e’s coastline and take up fishing. In 1896, Busse and Alexander Krivoshein, at the time head of the Land Section of the Ministry of Internal Affairs (MVD), renewed efforts to displace East Asians from maritime trades. After the debacle of 1891, Busse suggested instead importing settlers from the Baltic, who were “excellent sailors” and who could potentially “secure for Russia the adjacent sea, which the yellow race now dominates.” This idea soon gained the support of Krivoshein. Like Busse, Krivoshein saw great danger in the “preponderance of representatives of the yellow race along the coast of the sea of Japan,” and their dominance of fishing and cargo trades, which he believed could prove troublesome in times of complications. To correct the imbalance, Busse was permitted to seek settlers from the Baltic region. Besides their seafaring skills, Krivoshein wrote, Balts were skilled fishermen, accustomed to a harsh climate, persistent and relatively cultured. Unlike the Astrakhan pomory, they were “trustworthy in a moral sense,” capable of successfully fulfilling the task set before them. In addition, as noted in Chapter 1, Krivoshein believed that in the context of the Far East Balts would simply merge with the Russian population, linguistic differences notwithstanding.

Consequently, in 1899, the Resettlement Administration began offering residents of Estland, Livland, and Courland up to 1,000 rubles toward settlement along the Sea of Japan, far more than the 135 rubles available to agricultural migrants. To ensure the fishermen-settlers did not go the way of the Astrakhan pomory and turn to farming, they

10 GAPK F. 1, op. 1, d. 32, l. 94.
11 RGIA F. 1273, op. 1, d. 294, ll. 18-19ob.
were granted a maximum of 15 *desiatinas* per family, which was deemed insufficient for an independent farming household. As with the 1901 reduction in allotments granted to peasant settlers, administrators here tried to use land allocations to influence economic behavior. Fishermen-settlers also enjoyed a 10-year exemption from duties and granted free use of state forests during that time period. Significantly, these provisions did not extend to those employing foreign workers, a measure almost certainly designed to exclude the Chinese and Japanese from expanding their presence in maritime industries.

This second initiative brought more success than the first. Within the year, 75 Baltic fishermen arrived to settle on the coast, and their numbers swelled during the following years.\(^12\)

The number of Russian subjects on Primor’e’s coasts grew, but control of fisheries proved more elusive. In 1899, the Resettlement Administration officer Rittikh wrote that as a result of the administration’s efforts, “the displacement of the foreign element from the strategically important Sea of Japan coast,” would soon be achieved. Transferring maritime industries into Russian hands would take longer, however, since few Russian subjects fished. According to Rittikh, when asked why they had not taken to fishing, settlers responded that they had enough land to keep them busy; were not used to open-sea fishing; or that there were not many fish in the sea anyway.\(^13\) Apparently this was also true of Balts. Anatolii Lekk-Rebedev has pointed out that the Estonian and Latvians who settled in the Far East were in fact not “natural sailors.” Agriculture, not fishing, was their main occupation, in part because their landlords had exclusive rights to coastal waters, requiring others to pay for usage. It was land hunger and state benefits,

\(^{12}\) Ibid., ll. 20-24.

\(^{13}\) RGIA F. 1273, op. 1, d. 409, ll. 12-13.
not the prospect of rich fisheries that drew Baltic peoples to the Far East. In Primor’e, some of these communities took to fishing and cargo transportation, but not enough to completely displace the Chinese or Japanese from Russian waters.¹⁴

**Conservation efforts, 1880-1907**

Even while they encouraged maritime settlement and the development of a Russian fishing fleet, Primor’e’s administrators took steps to monitor and limit fisheries and the seaweed and sea cucumber trades. As in other areas, tsarist resource policy took on a dualistic and somewhat nationalistic character: encouraging the exploitation of marine resources by Russian subjects while seeking to conserve fish stocks and limit (or at least profit from) East Asians’ use of those same resources.

The earliest fishing regulations in Primor’e could be considered “conservation” measures only in a very narrow sense. Fisheries legislation was primarily concerned with generating revenue for the state and providing minor incentives for Russians to take up maritime trades. These established a system of fishing plots and imposed duties on fish, sea cucumbers, and, after 1885, seaweed. Among their many other duties, foresters were responsible for monitoring the conduct of fishermen engaged in these industries, allocating fishing passes, and collecting export duties. The 1885 regulations provided minor advantages to Russian fishermen: no duties were imposed on fish transported to internal markets, and Russian fishermen using Russian-built ships enjoyed discounted export rates.¹⁵ Russians paid slightly lower duties (5 percent) than foreigners (7 percent) on exported fish, sea cucumbers, and seaweed. Nevertheless, in the 1880s and 1890s

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non-Russians still dominated these industries. In 1893, for instance, foresters in the Suchan (Partizanskaia) region issued 70 passes to Chinese, five to Japanese, four to Koreans, two to Manchurians, and none to Russians.16

The income derived from these trades was substantial, and helps explain why the rhetoric surrounding East Asian “predation” in Russian waters in the 1880s did not translate into tighter restrictions. Between 1889 and 1892, for instance, foresters collected 85,422 rubles in duties on seaweed, over 90 percent of it from foreigners. Between 1890 and 1896, duties from seaweed amounted to over 150,000 rubles.17 Duties collected on fish (3,210 rubles) and sea cucumbers (4,621) over the same time period were less but still significant.18 In 1892, the Vladivostok forester recommended limiting the use of diving bells in the gathering of sea cucumbers, lest this apparently highly efficient method lead to the “exhaustion of sea cucumbers.” In light of the income derived from export duties and from selling fishing plots, however, the military governor permitted the devices.19

A more significant concern was salmon, which provided a major source of nourishment for settlers of all sorts, as well as indigenous peoples. Salmon conservation emerged gradually and partly in response to East Asians fishing in Russian waters. In September 1881, the head of the Vladivostok city administration wrote to the military governor of the oblast, Major General I.G. Baranov, complaining that Japanese merchants were monopolizing salmon fishing in the nearby Mongugae River. He also charged that peasants, who had the right to fish in the river, took as much salmon as they

16 RGIA DV F. 94, op. 2, d. 25, l. 17ob.
18 RGIA DV F. 1, op. 4, d. 946, ll. 2-5.
19 RGIA DV F. 94, op. 2, d. 25, ll. 1-17; RGIA DV F. 94, op. 2, d. 26, l. 1, 57-58ob.
could and then sold their catch to the Japanese. As a result, he claimed, Vladivostok-
based fishermen were unable to operate in the river, threatening winter provisioning in
the city. The matter was finally resolved the following summer when the military
governor ordered the arrest of the offending peasants.  
Similarly, in 1892, one Russian
official on the Tiumen’ River complained that Koreans were blocking off the entire
watercourse with nets. He advocated keeping at least 150 feet of the river open to allow
free passage of fish, a measure that would become a part of all subsequent fishing
regulations.  
Similarly, other officials criticized the gill nets employed by the Japanese
and Nivkhi, which they believed were too effective at catching spawning salmon.

Administrators crafted subsequent regulations to better protect migratory fish
from both foreign and Russian fishermen. In 1892, the governor-general promulgated a
new set of temporary laws that allowed Russians and non-Russians access to fisheries,
seaweed, and sea cucumbers, but banned ban fishing in rivers and their outlets with nets
or weirs that impeded the “free movement of fish” upriver. In addition, fishing along
Primor’e’s southwest shore, from the Korean border to the Ussuri Gulf (just east of
Vladivostok) required special permission from the military governor and fishermen had
to provide local officials with information about their craft and intentions, a measure that
may have reflected security concerns. Subsequent revisions to these regulations in 1897
and 1903 allowed the use of Japanese and Nivkhi gillnets, but limited their size so that

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20 RGIA DV F. 1, op. 4, d. 651, 1-4, 12.
21 RGIA DV F. 1, op. 4, d. 975, ll. 1-4.
22 Office of the Priamur Governor Generalship, O rybnom promysle v Primorskoj oblasti i na ostrove
Sakhaline, 8–9.
23 RGIA DV, F. 702, op. 2, d. 95, ll. 8-10.
24 These were comprised of nets strung between posts driven into the river bottom (or attached to floats) in
such a way that they would drive spawning fish toward a single pocket. They were, according to one
scholar, cheaper and more effective than other sorts of gillnets, and thus highly sought after. A. A. Maiss,
“Istoriia razvitiia stavnogo nevodnogo lova na Dal’nom Vostoke,” Istoriko-kraevedcheskii sbornik,
the deepest third of a given channel would allow fish to pass through, and mandated a minimum distance of one to two kilometers between them. Among peasants and indigenous peoples, the use of Japanese-style gill nets was banned completely. In addition, in 1903 the Priamur Governor-General’s office outlawed salmon fishing at points where tributaries of the Amur flowed into the river, and established a fishing season for sturgeon that extended to the Amur, the Ussuri, and Lake Khanka. Lake Kizi, near the lower Amur, was declared a protected zone (zapovednik) for spawning sturgeon, and the catching of undersize sturgeon was banned year-round in light of the threat of “rapid destruction of sturgeon-type fishes.”

Such legislation, together with the outrage surrounding Japanese fishing in Far Eastern water described in Chapter 3, suggests a growing concern for the conservation of fish, seaweed, and other aquatic organisms. As with forestry, however, oversight was difficult. In the 1890s there was only one patrol vessel, the Storozh, available to enforce fisheries rules along the coast. In 1899, a newly-created Priamur division of the Ministry of State Domains and Agriculture (MGIZ) began to oversee fisheries in the region, but it too suffered from a shortage of patrol boats and had difficulty keeping foreign fishermen out of restricted waters (specifically from rivers as well as some coastal bays and inlets). Moreover, as a result of the strategic significance of fisheries, conservation was

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26 Office of the Priamur Governor Generalship, O rybnom promysle v Primorskoi oblasti i na ostrove Sakhaline, 20–22.

27 Mandrik, Istoriiya rybnoi promyshlennosti rossiiskogo Dal’nego Vostoka (50-e gody XVII v. - 20-e gody XX v.), 41.
consistently secondary to officials’ main goal of replacing East Asian fishermen with a fishing industry owned and staffed by Russian subjects.

**Toward Industrial Fishing, 1907-1917**

Both control over fisheries and settlement of the coast became more urgent after the Russo-Japanese War. Part of the Treaty of Portsmouth that ended the war was a fishing convention (signed in 1907) that granted Japanese fishermen the right to operate in Russian territorial waters with the exception of inland waterways, river mouths, and certain inlets. Japanese fishermen had been active in the waters around Sakhalin (Karafuto) since the late nineteenth century. By the early 1900s, in the face of soaring demand in Japan for marine products, competition for fisheries in home waters, many moved their operations to greener pastures in the “northern seas.”

28 Under the rules of the 1907 convention, fishermen (or fishing companies) bought the rights to fishing parcels (as well as crabbing grounds) at annual auctions held in Vladivostok on equal terms with Russian subjects. Consequently, in the years after 1907 the Resettlement Administration redoubled its efforts to populate Primor’e’s shores and to encourage the development of a technologically-advanced fishing fleet. At the same time, concerns about declining fish stocks mounted, and administrators, together with the Far East’s nascent scientific community, took tentative steps toward conserving existing resources.

The development of capital-intensive fisheries in the Far East emerged from continuing efforts to populate coastal areas. After his visit to the Far East in 1906, N.V. Sliunin reiterated the need for fishermen-settlers, advising that the Resettlement

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Administration not give willing parties good agricultural land. In this way, he argued, they would be forced to take up fishing. This suggestion was consistent with Sliunin’s belief, described in the previous chapter, that changing land allotments could alter settlers’ behavior. What was needed were “real fishermen,” Sliunin wrote, and a program that would “by confidential means offer wide assistance to Russian rybopromyshlenniki [fishermen/owners of fishing firms].” He recommended extending further financial aid to fishermen-settlers, believing that it would be repaid many times over through the development of marine fisheries.\(^29\) Similarly, in May 1907, the head of resettlement affairs in Primorskaia oblast’ circulated a confidential proposal containing rules for coastal settlement, which aimed at installing Russian settlers on the coast with a minimal land allotment (15 desiatinas), but also reserving especially productive areas of the shoreline and along coastal rivers for the state, which could then undertake the “development of capitalist production.” In this way, there could be a substantial Russian population to provide labor for industrial fishing operations.\(^30\)

Such comments are indicative of a shift from simply peopling the coast to encouraging the development of an industrial fishing fleet that would operate on the basis of a scientific understanding of the available resources—that is, on data about the size of fish populations and their spawning cycles. At a commission on resettlement matters in 1907, resettlement officials recognized the necessity of colonizing the coast with a denser “Russian” population, Balts foremost among them. Some, however, doubted that small-scale fishermen could effectively compete with the Japanese. The fisheries overseer for the lower Amur, for instance, claimed that smallholders had impeded the formation of

\(^{29}\) RGIA F. 391, op. 3, d. 262, l. 54ob. Emphasis in the original.

\(^{30}\) RGIA F. 391, op.3, d.1167, l. 2.
large firms in his jurisdiction. He also emphasized that any settlement plan had to provide regulation and enforcement of salmon fishing in light of observations regarding their spawning habits to avoid overfishing in coastal rivers. Ultimately, there were too many questions to finalize an overall plan for coastal settlement, and the commission left the matter unresolved.31

Meanwhile the Resettlement Administration continued to solicit fishermen-settlers from European Russia and the Baltic provinces. In 1908, G.V. Glinka, head of the south-Ussuri resettlement office, invited people familiar with fishing and “maritime trades” from Estland, Novgorod, Kurland, and other provinces to settle the eastern borderlands, particularly around Peter the Great Bay.32 Glinka also contacted Cossack atamans, inviting those on the Don and in the Urals to move to Primor’e at state expense. He suggested that they could establish a “special marine Cossack host for the protection of Russian waters” and to prevent their “seizure [zakhvat] by foreigners.”33 Scouts arrived in Khabarovsk by train in May of that year and, according to Resettlement Office officials, were enthusiastic about relocating to a region richer in fish, citing declining yields in their own waters, but soon problems appeared. A pair of scouts joined a village, then proceeded to illegally block off an entire channel with nets (until the local forester arrived to stop them). Other would-be settlers expressed concern regarding a lack of local markets for the fish and the difficult conditions of settlement. Don Cossacks requested the fishing rights in state plots at Cape Vasse on the lower Amur, but as the Priamur Ministry of State Domains valued this area as a valuable plot that it could rent

31 Ibid., 31-5.
33 RGIA F. 391, op.3, d.1129, ll. 7-10.
out (either to Japanese or Russian fishermen), the Resettlement Office rejected the request outright. 34

While the Resettlement Administration continued to attract fishermen in the years after the Russo-Japanese War, some officials began to advocate instead for the creation of a capital-intensive fishing industry, rather than just attracting individual households to the coast. The officer overseeing the Cossack scouts’ visit, for instance, believed that parceling out valuable plots for small-scale operations might destroy what little Russian “capitalist” fishing operations existed, and thereby would deliver the industry “fully into the hands of the Japanese.” 35

Similarly, A. S. Shlikevich, head of the Resettlement Administration, recommended in a report to the governor-general that “the artificial effort to attract fishermen to the territory has, for the time being, no soil under it.” Russian fishermen, he wrote, were unable to lead the life of “a Giliak [Nivkhi] or a Tungus [Evenk],” living solely off the fruits of nature. They needed opportunities to sell their fish, which in turn required better communication routes, larger local markets, and equipment, from salt to icebreakers. In light of the immense difficulties involved, Shlikevich questioned the wisdom of expending state funds on relocating peasants. In order to ensure that only Russians used the “natural riches of a Russian territory” he recommended more cooperation with capitalist promyshlenniki, who would undertake the challenges of building a fishing industry in the Far East if it was in their financial interest. The state could offer incentives and invest in infrastructure, like large refrigerated steamships, with

34 Ibid., ll. 124-125ob, 168.
35 Ibid., ll. 175-175ob
the goal of export of fish to European markets. This would, in turn, give a strong stimulus to the development of industry “and its liberation from Japanese influence.”

In almost identical terms, V. Romanov, a member of the Amur Expedition, concluded that the success of the fishing industry on the lower Amur demanded that the state subsidize refrigerated steamships, assist settlers with shipbuilding, strengthen enforcement organs, support individual initiative, order the quartermaster to buy up salmon for the military, and ensure an adequate supply of Russian workers to nascent industries. Freeing the fishing industry from a Japanese monopoly, in his view, demanded such urgent measures. He warned that Russia’s “recent political enemies”—the Japanese—had taken a lively interest in the Far East and its “aquatic riches.” The government’s main goal, he argued, was to protect (sokhranit’) the krai, “economically and politically, for the Empire.”

Although resettlement of peasant-fishermen continued, by 1910, more voices were calling for a capital-intensive industry staffed by a Russian labor force, while continuing to take measures to preserve fish populations. At a 1910 meeting of the All-Russian Congress of the Fish Breeders and Fishing Society, delegates cited a lack of state credit as the key hindrance to the development of Far Eastern fisheries. At a commission on resettlement, meeting several times throughout 1909 and 1910, representatives from the Resettlement Office and other divisions within GUZZ observed that 80 percent of fish caught in the lower Amur went to Japan in raw form. The problem, the commission members decided, was that without “large, capitalist

36 Ibid., ll. 171-172ob.
production,” Russian fishermen sold their fish piecemeal to Japanese buyers. Not only
did this take much local industry out of Russian hands, it deprived European Russia and
Far Eastern armed forces of a cheap source of nourishment. Thus they sought further
measures to populate the coastline a “solid, working, primarily agricultural population”
that could serve as a labor pool for larger industries. This, in turn, could combat the
“seizure [zakhvat] of the fishing industry by Japanese buyers.”

At the same time, the commission also favored an approach that would ensure that
fishermen would not exhaust fish stocks. Governor-General Unterberger stressed the
necessity of settling the mouth of the Amur only with “Russian people experienced in
fishing,” so that “capitalist enterprises will have the necessary quantity of fishermen from
the local, and not from the alien [prishlago], population.” But he also advocated limits on
the new industries that would “guarantee the conservation of fish resources,” and to
forbid it in places where it might harmfully affect the migration of fish into the Amur.
Beyond such general pronouncements, there is little indication that the commission (or
anyone in the government) had a sense of how many fish there were, and what would
constitute a sustainable catch. Accordingly, the commission resolved that the Priamur
branch of the Ministry of State Domains (MGI) should hire ichthyologists to investigate
the state of the coastal fisheries so that development could occur within reasonable limits.
Against the threat of fisheries exhaustion, officials made a general pronouncement about
the need for state regulation, fish farming and, in areas “especially important for the
protection of fish,” a full ban on fishing.

39 RGIA F. 391, op. 4, d. 513, ll. 39, 42ob.
40 RGIA F. 391, op. 4, d. 513, ll. 45-45ob.
41 Ibid., ll. 77-78ob.
Similarly, Romanov, reporting to the Amur Expedition, also warned against the possibility of fisheries exhaustion, citing a decline in the salmon catch in the United States and Japan—another indication that in approaching natural resources management, Russian specialists paid attention to foreign experiences and practices. Romanov also advocated fish-farming as the “most cultured…method to keep these riches [bogatstv] from exhaustion,” and to “restore those [fish] reserves that have already gone into decline,” and even populate rivers that they had not inhabited previously, citing the testimony of an ichthyologist attached to the Expedition, V. K. Soldatov.⁴² According to Soldatov, it was vital that hatcheries be established while there were still wild salmon. If not, the chum salmon would be gone. If that occurred, Soldatov warned, the situation would be dire: “the soil for colonization would disappear, life itself on the lower Amur would be swallowed up, and it would become a desert.”⁴³

A few of these measures came to fruition before 1917. The Russian fishing fleet on the lower Amur and elsewhere in the Far East did grow between 1906 and World War I. The catch of salmon on the Amur peaked at around 100,000 metric tons in 1910 (and about twice that figure for the Russian Far East as a whole, including Kamchatka, where the industry had begun to boom). By 1914, the competition from Russian fishermen was stiff enough to motivate Japanese fishing firms to lobby the Russian government for more favorable terms. Increases in fish production eroded during the war, however. At that time, Russian rybopromyshlenniki faced shortages of fuel and labor severe enough that the Priamur administration also relaxed its long-standing labor laws, allowing more

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⁴² Romanov, Nachdy Nikolaevskago raiona Primorskoi oblasti: Otchet o komandirovke v Nikolaevskii raion chinovnika osobykh poruchenii V klassa pri Pereselencheskom Upravlenii V. F. Romanova, 79.
⁴³ Quoted in Ibid., 83.
foreign workers into the industry. Though the Russian fishing industry was shifting toward a capital-intensive model, the transition had only begun during the tsarist period.

Efforts to protect and replenish fish stocks were also limited, but set important precedents for later years. The first fish hatchery was established in 1907 on a tributary of the Amur through a partnership between Soldatov and a rybopromyshlennik, K. L. Lavrov. By 1909, this fish farm was producing 100,000 chum and pink salmon fry. According to Romanov, other fishermen on the Amur were requesting state assistance to establish hatcheries. Romanov argued that only the state had the resources to establish hatcheries of “the most rational type.” Soldatov, together with ichthyologists I. I. Kuznetsov, M. N. Pavlenko, and A. I. Cherskii, conducted research on Far Eastern fish populations, beginning in 1907, focusing on salmon and herring.

In addition, in 1915, Governor-General Gondatti issued new fishing regulations that were more attentive to conservation than previous laws. Along with provisions about nets and allowing some migratory fish passage upstream, the rules targeted wastage, mandating that fishermen—including peasants and indigenous peoples—were not to catch more fish than they could use, since this amounted to “unproductive destruction.” This included catching fish for caviar and discarding the rest of the animal. In cases of overfishing, guilty parties were to pay a fine equal to ten times the value of the excess

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46 Romanov, Nuzhdy Nikolaevskago raiona Primorskoi oblasti: Otchet o komandirovke v Nikolaevskii raion chinoivnika osobykh poruchenii V klassa pri Pereselencheskom Upravlenii V. F. Romanova, 81.
catch. Gondatti expanded previous regulations governing sturgeon fishing, banning the catch, sale, and purchase of the fish in the Amur basin from spring break-up until mid-July, and added Lake Orel’ to the list of protected zones.48

By the end of the tsarist period, officials and natural scientists looked increasingly to science and industrial fishing to develop Far Eastern fisheries without undermining their potential. There was an awareness among officials and natural scientists that further fishing could cause harm, but also that they lacked knowledge about fish stocks and those exploiting them. Moreover, it was clearly difficult to monitor so many foreign fishermen as well as Russian and European settlers, who fished and then sold their raw output—i.e. fish—piecemeal to the Japanese. Overseeing a handful of large Russian firms would surely have been easier than monitoring thousands of settlers, which in turn would enable planned exploitation. Given the experience of fisheries management in Russian waters during the late-tsarist era, one can understand why tsarist and then Soviet authorities attempted to move toward large-scale production, consolidation, and scientific planning: doing so seemed better for the state, since it allowed Russian fishermen to better compete with the Japanese, and for the fish themselves because in this way administrators, with input from scientists, could moderate the catch and keep it within natural limits. Likewise, it helps us understand the appeal—particularly among conservation-minded scientists—of the Soviet state, which promised greater state intervention into science, natural resources use, and enforcement.

48 GARF F. 3773, op.1, d.1, ll. 5-6.
II. Fishing, resettlement, and fisheries management during the early Soviet period

Soviet fisheries officials—some of whom had served under tsarist and/or White governments—were as eager as their predecessors to direct Russian and European settlers to Primor’e’s coast to take up fishing and displace the Japanese. They were also, however, concerned with exhausting fish reserves. Two square the circle, they adopted two main approaches, both of which built on prerevolutionary policies. One was greater investment in a scientific apparatus that could gather knowledge about marine life, culminating in the establishment of the Pacific Scientific Research Institute for Fisheries and Oceanography (TINRO), and support for a variety of conservation measures (such as temporary fishing bans and the protection of spawning grounds).

Another response was to consolidate fisheries in to large, state-run fishing firms. The view, advanced by Shlikevich and others before World War I, that individual settlers with little capital could not adequately develop Far Eastern fisheries became even more pronounced after the war. In this case, the Bolsheviks’ preference for large-scale industries and state management dovetailed with an already-existing discourse about efficiency and economic expediency. From an early stage, fisheries officials believed that industrial production would make fisheries more competitive vis-à-vis the Japanese, and would also simplify state planning and oversight, which would in turn (in this view) contribute to greater economic growth and to more effective conservation of fish stocks.

Maritime settlement II: 1922-39

During the Civil War, Japanese fishermen expanded their operations in Russian waters into non-convention areas. The various governments that claimed authority in the
Far East protested, but neither Japanese fishermen nor the Japanese Military Governor, who oversaw fisheries on the Amur and Sakhalin between 1920 and 1922, were interested in restricting fishing operations.\textsuperscript{49} Such actions did little to dispel the notion that they were “predatory” exploiters of Russian (or Soviet) natural riches. A publication of the Far Eastern Republic, for instance, published in the United States to attract American investment, accused the Japanese of “loot[ing] the fishing wealth” of the lower Amur “without any control or regulations.”\textsuperscript{50}

Understandably, then, after the Far East was absorbed into the Soviet Union in 1922, Soviet officials were very concerned about Japanese fishing in Soviet waters. During the NEP era, the fisheries sector in Primor’e and throughout the Far East encompassed a mix of foreign and domestic, private and state, collective and individual fishing operations. Soviet authorities recognized that Japanese markets and capital were essential to the rebuilding of Far Eastern fisheries after the Revolution, but were concerned with overexploitation and dependence on their powerful neighbor, particularly since the Russo-Japanese Fishing Convention of 1907 remained in force, with modifications, until the end of WWII.

The Soviet strategy with respect to Far Eastern fisheries was to rely on private and foreign investment until capital-intensive state fishing operations could replace them. In 1923, the Far Eastern Revolutionary Committee, Dal’revkom, created a Far Eastern fisheries agency, Dal’ryba, which later became Dal’rybokhota (The Far Eastern Fishing and Hunting Agency). Dal’ryba’s mandate was to assist Russian fishermen (including

private *rybopromyshlenniki*) and to prevent the expansion of Japanese fishing operations in Soviet waters.\textsuperscript{51}

As during the tsarist period, officials in the Far East during the Soviet era were concerned with the number of foreign fishermen in the region, and attempted to fill the fishing “niche” with Soviet citizens experienced in seafaring. Dal’ryba considered Far Eastern fisheries’ dependence on foreign labor “a threat to the long-term growth and development of our industry,” estimating that in 1923, the Japanese still comprised two-thirds of the labor force.\textsuperscript{52} Consequently, beginning in 1925, Dal’ryba instituted restrictions on the use of foreign labor, particularly in Peter the Great Bay and the Amur estuary; no foreign workers were allowed in the former, up to ten percent of employees in the latter. The number of foreigners working in Soviet state fisheries fell to 20 percent by 1926 and 15 percent by 1928.\textsuperscript{53}

Directing migrants to the coast was one means by which Dal’ryba and resettlement officials sought to increase Russians’ share of the fisheries workforce. In keeping with the pre-revolutionary trend away from individual fishing toward industrial exploitation, Soviet officials focused on attracting capable fisheries workers, rather than those who would fish individually. Administrators attempted to settle fisherfolk from around Astrakhan and the lower Volga along Primor’e’s coastline in order to provide a steady, non-seasonal supply of labor for the developing fishing fleet. A new resettlement administration, Dal’pereuprav (Far Eastern Resettlement Administration), which operated under the direction of the Sovnarkom, together with Dal’ryba, oversaw this new bout of

\textsuperscript{52} GAPK F. 633, op. 7, d. 326, l. 4.
\textsuperscript{53} GAPK F. 633, op. 7, d. 21, 4-6ob; GAPK F. 633, op. 7, d. 43, ll. 25-29.
migration, which brought roughly 1,500 fishermen eastward between 1928 and 1930, and an unknown number—perhaps as many as 10,000—during the following decade.\footnote{Oddly, neither Bilim’s study nor Dal’ryba documents provide exact figures for 1930s, documenting only overall growth of kolkhoz and state fisheries in the 1930, which derived from diverse population sources, including collectivization, reorganization of fisheries, and migration. Bilim, “Pereselenie rybakov na sovetskii Dal’nii Vostok (1928-1941 gg.),” 81–3, 87.; GAPK F. 633, op. 7, d. 54, ll. 4-29.}

Bilim has argued that labor shortages induced state fisheries conglomerates, such as Dal’gosrybtrest’ (Far Eastern State Fishing Trust) to press the Commissariat of Labor (NKТ) for directed migration of fishermen, culminating in August 1928 legislation that outlined conditions for migration of specialized workers.\footnote{Ibid., 80–81.} However, archival sources suggest that the initiative did not originate from within the bureaucracy, but rather from a local merchant, A. M. Lubkov. Lubkov first raised the issue in 1927, and in February of 1928, he presented resettlement officers with a plan to relocate a 100-person fishing artel’ from the Astrakhan area to Primor’e’s east coast. he also claimed that 1,000 fishermen were available to migrate from the Volga. His involvement with maritime colonization in the 1920s is indicative of the cooperation, born of necessity, between state organs and private merchants in the Far East during the NEP era.\footnote{GAPK F. 633, op. 7, d. 54, ll. 1-4ob.}

Officials initially shelved Lubkov’s suggestion, but in April of 1928, Narkomzem suddenly informed Dal’ryba and Dal’pereuprav that over a thousand families of fishermen from Astrakhan were to be resettled in the Far East during the summer, and that 600 were already on route. The two agencies scrambled to find resettlement and fishing plots for the new arrivals. Given the short notice and difficult conditions on Primor’e’s northeast coast, 1,100 migrants could not be settled until the following season. Also, in a case of déjà-vu, Dal’pereuprav found that the new arrivals were “not sea
fishermen, but river [fishermen]” and, moreover, “a significant part of them were simply
dock workers,” unfamiliar with ocean conditions and unwilling to use the Korean-style
fishing boats common in Primor’e.  

Another wave of maritime settlement followed in 1931, and similar efforts were
made to populate the Kamchatka coast around the same time. In that year, whole
kolchozy of fishermen and fishnet-makers, numbering roughly 800 households, relocated
from the Volga-Caspian and Azov-Black Sea regions to Plastun and Dzhigit Bays and
Soviet (formerly Imperial) Harbor on Primor’e’s northeastern coast.  

In this way, Soviet
officials, like their predecessors, attempted to fill a socio-ecological “niche” with
fishermen from central Russia.

Science, conservation, and anti-poaching patrols

Such resettlement efforts occurred alongside, and in dialogue with, state efforts
aimed at conserving fish stocks. As noted above, fish populations had been the source of
some concern since the 1890s. One species that had become scarcer in the early
twentieth century was the Amur sturgeon. Here the data are unfortunately incomplete,
but the general picture is one of decline. According to the Priamur MGI, in 1891, a total
of 73,415 sturgeon were caught on the Amur and Ussuri rivers. By 1909, the catch had
fallen to 17,626, then levelled off before dropping to 9,012 in 1914. In light of declining
yields and fish size, Dal’revkom imposed a seven-year ban sturgeon fishing on the Amur

57 Ibid., ll. 4-7, 11-29ob, 51-ob. “Korean-style” fishing boats, also known as kungases (sing.: kungas), are
narrow, undecked vessels that are still commonly used for coastal fishing in the Russian Far East. Why
these fishermen-settlers disliked them is unclear. Kungases may have been narrower and less flat-bottomed
than the river boats to which settlers from Astrakhan were accustomed.
58 Conolly, Soviet Trade from the Pacific to the Levant, with an Economic Study of the Soviet Far Eastern
Region, 9; Vashchuk et al., Etnomigratsionnye protsessi v Primor’e v XX veke, 70.
in 1923. Nevertheless, a Dal’ryba’s fisheries inspector wrote in 1927 that the sturgeon of the Amur basin had nearly become “a thing of the past.” Indeed, sturgeon remain very rare in the Amur basin to this day.\footnote{P. Rusanov, “K zapreshcheniiu lova osetra i kalugi v basseine reki Amura,” \textit{Ekonomicheskaia Zhizn’ DV}, no. 9 (1927): 76–79.}

Salmon were more significant source of concern, as this was the main commercial species in Primor’e (and, indeed, in the whole of the Russian Far East). On the Amur, the center of Primor’e’s fisheries, the salmon catch dropped rapidly after 1910. In the 1920s, the catch vacillated between about 10,000 and 40,000 metric tons per year, down from a high of over 90,000 in 1910.\footnote{Augerot, “An Environmental History of the Salmon Management Philosophies of the North Pacific,” 61.} In 1923, Dal’ryba officials expressed concern regarding the “the exhaustion of natural [salmon] reserves,” which threatened the Amur fisheries in particular.\footnote{GAPK F. 633, op. 4, d. 64, ll. 4-6.} According to one Narkomzem official, M. A. Kozakov, the population of Amur chum salmon during the summer of 1925 “ha[d] been almost entirely destroyed, reserves of pink salmon have been completely ruined, and the catch of autumn keta shows signs of rapid decline.”\footnote{Chum salmon had two runs on the Amur, in the early summer and in the autumn.} The situation was serious enough that officials affiliated with economic planning in the Far East (Dal’gosplan) recommended a complete halt on autumn chum salmon fishing on the Amur by private firms, and to allow others to fish only during odd years. Fisheries officials advocated firm-farming, smaller catch norms, protection of spawning grounds, better processing methods and fish study stations, greater distance between fishing plots, and even a complete ban on river fishing (with an accompanying shift to the open sea).\footnote{Zasel’skii, \textit{Razvitie morskikh biologicheskikh issledovanii na Dal’nom Vostoke v 1923-1941 gg.}, 35–36.
Another response to the decline in the salmon and sturgeon catch was to gather more information about fish stocks, since there were little existing data. Beginning in 1922, ichthyologists, members of the Society for the Study of the Amur Territory (OIAK) and officials affiliated with the Far Eastern Fisheries Scientific Bureau (Dal’nauchoybbiuro) sought the creation of an ichthyological station in southern Primor’e. In the words of one advocate, establishing such an institution would reveal “the most rational means of exploitation of this or that fish without the loss of its natural abundance.”\textsuperscript{64} In 1925, the Bureau established a Pacific Scientific-Industrial Station (TNPS, later renamed TINRO). Operating under director A. Derzhavin, TNPS representatives warned that output from Far Eastern salmon fisheries could only be sustained through exploitation of new regions because in many places stocks were exhausted, and argued that salmon populations had to be restored, partly through shifting the focus of fisheries to other species. The TNPS also recommended protection of forests around spawning grounds, regulation of logging along salmon rivers, and artificial fish-raising.\textsuperscript{65}

Soviet officials took up some recommendations from scientists, but not those that appeared to conflict with short-term economic growth. At a conference in 1926, Narkomzem’s Fishing Division and Dal’ryba supported the protection of spawning grounds, temporary fishing bans, the establishment of more precise catch norms, and a shift away from river fishing. They argued that further development of the industry could only come with the expansion of capital investments in state fishing companies and cooperatives, alongside the extension of credit to private operators, which would help

\textsuperscript{64} Ibid., 42–43. Zasel’skii points out that there had been discussions about the creation of such an institute as early as the 1880s.

\textsuperscript{65} GAPK, F. 633, op. 7, d. 43, ll. 9-10.
wean the latter off their dependence on Japanese capital. Notably, these officials also advocated barring future colonists from spawning grounds. The krai-level Soviet supported most of the conservation measures, adding that forests around spawning areas be protected (zapovednye) zones, guarded from logging and fire. However, the Soviet also rejected any restrictions on river fisheries, because the region did not yet have a large enough sea-going fishing fleet to replace the river-based fishing industry.66

The Executive Committee for Dal’krai, Dal’kraiispolkom, incorporated some of these ideas into the regulations issued the following year. Intended for the Amur and Ussuri watersheds, these rules mandated controls on certain types of nets, empowered Dal’ryba to set catch norms and institute bans on any fishing plots, and barred peasants from fishing in known spawning areas. Indigenous peoples (who were conspicuously absent from almost all of these discussions) were permitted in these areas if they did not otherwise have access to fishing grounds near their village.67 Dal’kraiispolkom also outlawed trade in undersized sturgeon. The question of fixed “Japanese” nets was a matter of some debate; many believed such nets were wasteful because they inhibited salmon migration, while others argued that they were an efficient tool, and that “predation” was a matter of the user, not the type of net. When the question of standing gill nets and purse seines in the waters around Kamchatka emerged in 1929, however, TNPS officials permitted them because settlers from Astrakhan were familiar with such methods, and thus they would not need to depend on Japanese labor and equipment.68

To restore salmon stocks, ichthyologists continued to experiment with fish hatcheries into the 1920s, an effort that Dal’ryba supported enthusiastically. Some of

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66 GAPK F. 633, op. 7, d. 25, ll. 1-11, 87-89.
67 GAPK F. 633, op. 4 d. 2, ll. 87-89.
68 GAPK F. 633, op. 7, d. 62, ll. 1-2.
those who had worked on fish hatcheries before the Civil War had died or gone into exile, but Soldatov and I. I. Kuznetsov continued their experiments on tributaries of the Amur and Ussuri, as well as on Kamchatka. By hatching roe and cultivating fry on protected lake and river beds, Kuznetsov and his colleagues were able to achieve high survival rates. Despite early successes, experiments with fish hatcheries were never able to make up for increased pressure on salmon populations in the Amur basin. Although the salmon catch in the Amur rose through the mid-20s, and has never again reached the levels attained during the first two decades of the twentieth century.

In addition, Soviet authorities sought to interdict those Japanese fishermen caught outside Convention waters. While doing so was part of broader fish conservation efforts, it also represented an assertion of Soviet sovereignty against a foreign power. Soviet authorities were generally better equipped than the tsarist-era MGI to enforce fishing laws, but doing so remained a challenge and invited abuses. Between 1925 and 1928, fishing inspectors routinely complained of Japanese poachers roving Soviet waters engaged in “predation of our natural riches” and found that what few patrol vessels they had at their disposal were often too slow to capture illegal fishermen. One Dal’ryba inspector, N. V. Russkii, described how he approached poachers in his schooner, only to have them flee at the last minute, taunting him.

Interdiction of poachers occasionally turned violent, underscoring the blurring of lines between anti-poaching efforts and the continuing political and military rivalry between Japan and the Soviet Union. In one instance, a Dal’ryba patrol attempted to stop

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71 GAPK F. 633, op. 7, d. 53, l. 3ob.
72 GAPK F. 633, op. 7, d. 16, l. 1ob.
a crabber, operating, in his view, in non-convention waters, only to be halted by the appearance of a Japanese torpedo boat. This, in turn, prompted the inspector who had been on the patrol to call for faster boats armed with machine guns. The head of Dal’ryba, in his correspondence with Narkomzem, argued that illegal Japanese fishing threatened “a complete lack of control and exhaustion of [fish and crab] reserves in our waters.”

In 1930, a patrol boat near Kamchatka fired on a Japanese vessel, killing one man, and inspectors killed three during an encounter near Ol’ga Bay in 1933 (in the latter case, the Soviet government agreed to pay compensation). While Japanese captains often claimed they were forced to shore by inclement weather, Soviet authorities regarded this as an excuse for poaching.

Rational Development, or a Race to the Bottom?

While Dal’ryba, TINRO, and other institutions adopted policies aimed at fish (mainly salmon) conservation, fisheries officials and fishermen were also involved in the expansion of the Soviet fishing fleet in the Far East in the 1920s and 1930s. The creation of a large, industrial fishing fleet was part of the broader process of Soviet industrialization, but it also appealed to fisheries personnel in the Far East because it seemed more amenable to planning, and therefore less likely to diminish fish populations.

A 1923 article by V. O. Kolobov, one of Dal’ryba’s senior fisheries specialists (and one who had previously served under Kolchak), offers some insight into Soviet officials’ preference for large-scale fishing operations based on scientific knowledge, and

73 GAPK F. 633, op. 7, d. 29, 1-1ob, 19ob, 56.
illustrates the belief that environmental degradation was partly a product of “backwardness.” Kolobov argued that Russian/Soviet fisheries were not making rational use of the available resources because fishermen were over-exploiting salmon “in the most merciless way” while leaving other species untouched. He noted that the yield of salmon on the lower Amur had fallen from nearly 14 million fish in 1909 to 725,000 in 1919, while very few fishermen caught other types of fish (such as cod and herring). He argued that Far Eastern fisheries in general suffered from a “provincialism and amateurishness,” that was “specifically Asian.” He singled out Kamchatka natives in particular for their supposedly primitive and wasteful use of resources, but also critiqued Russian fishermen on Peter the Great Bay for their “amateurishness.”

By diversifying fisheries, he argued, and through the use of better science and technology—including facilities for canning, salting, rendering fish products, scientific studies of fish stocks, and a telegraph network that would help coordinate fishermen—the Soviet fishing industry could “shed its centuries-old clothes of amateurishness [kustarnichestva] and yellow provincialism and enter the wide road of global, concentrated production.” All of these measures, he emphasized, would “depend on ability and knowledge.” In this way, Far Eastern fisheries could produce more while avoiding a collapse in salmon stocks.

Similarly, in a 1923 report, the head of Dal’ryba, F. I. Adrianov, criticized what he considered the short-sighted, small-scale settlement initiatives on the lower Amur of the 1910s on similar grounds. Adrianov, however, recast the “big is beautiful” argument in ideological terms, contending that parceling out fisheries to the local population, rather

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75 Kolobov believed that the Kamchadals’ dependence on salmon for feeding their sled dogs was particularly wasteful and inefficient.
than concentrating them in state hands, was an “SR-like decision” that threatened to undermine the fishing industry and return it to a “primitive condition.” As a result of the intensive and “clearly predatory fishing by the local population,” he wrote, salmon stocks were in decline. Degradation of spawning areas and wasteful practices, particularly among peasants and natives on the middle and upper Amur had contributed to a “catastrophic” reduction in salmon stocks by 1913. Although it was difficult to articulate what, precisely, the Soviet alternative would look like, Adrianov and Kolobov evidently believed that it would increase productivity while preserving fish stocks. As another Dal’ryba official put it in 1923, declining fish stocks were a concern, but “with the correct economic approach,” fish output would be “colossal.”

One consequence of officials’ preference for large, state-industries was that fisheries they were reluctant to parcel out fishing plots to individuals, believing that doing so was might undermine state oversight. In response to concerns about overfishing, for instance, Dal’ryba proposed to consolidate fishing plots, since larger operations would “be easier to establish and simpler to control.” Similarly, among the reasons Dal’moreprodukt initially rejected Lubkov’s 1928 resettlement proposal was the concern that “spontaneous” fishing by settlers would not be scientific, and that more knowledge

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77 SRs, the Socialist Revolutionary Party, were one of the largest socialist parties in prerevolutionary Russia and an opponent of the Bolsheviks after the October Revolution and during the subsequent Civil War. Among the SRs’ main political positions was their advocacy of distributing land to those who worked it, i.e. the peasantry. Although the Bolsheviks adopted this measure in 1917 (recognizing a fait accompli, the peasants’ seizure of land), many regarded peasants as lacking in revolutionary consciousness, believed they retained a “petty bourgeois” mentality, and viewed parceling out land on the basis of individual households as a temporary expedient that was ultimately not compatible with socialism. Here, Adrianov applies a similar idea to fisheries, arguing that smallholding led to primitive production and exploitation (of labor).

78 GAPK F. 633, op. 7, d. 13, ll. 1-4, 7.
79 GAPK F. 633, op. 4, d. 64, ll. 4-6.
of fish stocks and the waters adjacent to Primor’e was necessary before Dal’ryba supported resettlement.\textsuperscript{81}

Instead, Dal’ryba/Dal’rybokhota sought to gradually incorporate existing fishing operations into the state sector, but initially needed to collaborate with private \textit{rybopromyshlenniki}. Dal’ryba confiscated the assets of émigrés, but left other enterprises in owners’ hands. Far Eastern merchants who had remained in Primor’e or returned following the Civil War, such as Arthur Denbigh, K. P. Lavrov, M. M. Liuri, A. I. Rubenstein, and others, were able to develop their fishing operations through the mid-1920s.\textsuperscript{82} In keeping with Dal’rybokhota’s emphasis on scale and diversification, the agency and its successors slowly built up the state fishery sector and encouraged fishermen to catch fish besides salmon, beginning with a modest herring operation in Peter the Great bay. Dal’rybokhota also oversaw the formation of work collectives (artels) and, conjunction with local merchants, joint-stock companies, with the state serving as the majority stockholder. The first, Dal’moreprodukt (Far Eastern Seafood), was formed in 1923 from a state firm and that of M. M. Liuri, who ran the largest private fishing operation in the Far East.\textsuperscript{83} According to N. A. Bilim, output from Far Eastern fisheries from these various operations more than tripled between 1923 and 1928.\textsuperscript{84}

\begin{thebibliography}{1}
\bibitem{81} GAPK F. 633, op. 7, d. 54, ll. 5-6. Among the Bolsheviks, “spontaneity” was a negative characteristic of those who had not achieved revolutionary consciousness.
\bibitem{84} Bilim, “Pereselenie rybakov na sovetskii Dal’nii Vostok (1928-1941 gg.),” 76.
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After a few years, however, Dal’rybokhota liquidated the mixed joint-stock companies and folded them into the growing state sector.\textsuperscript{85}

Second, Soviet authorities sought to replace Japan’s fishing fleet with a Soviet version. In the early 1920s, Japanese ships and workers continued to dominate Russian waters. As of 1923, the Japanese were again permitted to purchase fishing rights at auctions in Vladivostok, as per the convention of 1907. Although they were not permitted in non-convention waters (i.e. inland waterways and certain bays and inlets) after the Soviets consolidated power, Japanese fishing craft still dominated where the conventional legally permitted them to fish, and foreign labor remained essential for some Soviet operations. The size of the Soviet fisheries workforce as a whole (i.e. marine fisheries and on the lower Amur) grew during this period, reaching 23,310 in 1928, but so did the quantity of Japanese workers. With little experience with deep-sea fishing, Russian fishermen were particularly reliant on Japanese expertise to operate beyond coastal waters.\textsuperscript{86}

As the Japanese share of Soviet fisheries declined, Soviet authorities attempted to undermine Japanese fishermen’s ability to rent to fishing plots. According to the convention, Japanese fishing rights were to be renewed in 1919, but in the context of revolutionary upheaval negotiations did not take place and the Japanese simply fished in Russian/Soviet waters. A temporary agreement in 1924 restored the status quo antebellum. In 1923, Japanese firms purchased 219 fishing \textit{uchastki}, worth over 1 billion

gold rubles, versus the Soviets’ 74. In order to reduce the Japanese share, Soviet officials altered the terms by which Japanese fishermen could purchase *uchastki* by manipulating the yen-ruble exchange rate at the Vladivostok auctions of fishing plots. Negotiators reached a new agreement only in 1932, when the Soviets allocated the Japanese a fixed proportion of the available fishing plots.

The Japanese continued to be a major presence in Soviet waters, particularly in the Sea of Okhotsk and near Kamchatka, through the 1930s, but around Primor’e Soviet fishermen slowly gained the upper hand. Wertheim noted that throughout the early 1930s, the Soviets had worked gradually but consistently to squeeze Japanese fishing boats from their waters once they could make up the loss of capital by other means. Thus, in 1932, Soviet fisheries officials chartered 100,000 tons of Japanese fishing vessels to work in Soviet waters, but the following year they took less than one third of this amount, and by 1934 supplanted Japanese boats entirely with vessels purchase abroad, mainly from Norway. State fisheries were organized into nine fishing “trusts” operating primarily along Primor’e’s northern shores and the Amur estuary.

The steady growth of state fishery trusts, collectivization, and capital investment during the first and second Five Year Plans enabled rapid growth in Soviet fishing tonnage and output. By 1937, of 578 fishing plots (*uchastki*) in the Sea of Japan, the Japanese rented only 14; state fishery trusts accounted for 123, and fishing *kolkhozy* took the largest share, 289. Japanese vessels were excluded completely from the lower Amur, the Khabarovsk area, and northern Sakhalin. While private interests rented 133 fishing plots in 1929, their share fell to only 16 by 1932 and continued to decline thereafter.

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87 Mandrik, “Rybnaia promyshlennost’ Primor’ia v period novoi ekonomicheskoi politiki.”
89 Ibid., 194–95.
should not overstate the growth of the Far Eastern fishing fleet, since documentary sources and the main scholarly works on the Stalin era are likely sanguine about the achievements of the 1930s. Still, Soviet authorities clearly invested heavily in creating a large, capital-intensive fishing fleet, and the Soviet fleet grew substantially during the years of the first Five Year Plans.\textsuperscript{90}

In the short-term, Soviet efforts bore fruit: whereas in 1913 the Far East had produced only 9.7 percent of the country’s fish products, by 1931 this share had risen to nearly thirty percent, surpassed only by the Caspian Sea fisheries. By the mid-1930s, fish accounted for 54 percent of food production of Far East.\textsuperscript{91} Output from both Soviet and Japanese fisheries in Pacific waters increased. According to official figures, the total catch for Primorskaia o\textit{blast’} increased from 95,140 to 129,260 metric tons between 1929 and 1931, with salmon making up the majority of fish caught. The Sea of Japan region alone produced 184,490 metric tons of fish (of all types) by 1937 after a brief lull in 1933-4.\textsuperscript{92}

During the First Five Year Plan, production quotas increased from 20,613 tons in 1929\textsuperscript{93}—slightly more than the total catch in 1928—to 26,213 tons in 1932. The actual catch fell below plan targets initially, but exceeded the 1932 benchmark by more than 50 percent. Targets and output increased throughout the 1930s, reaching 36,266 tons in


\textsuperscript{92} GAPK F. 853, op. 5, d. 95, l. 8. Primorskaia oblastnaia planovaia komissia, \textit{Primorskaia o\textit{blast’} v tsifrakh} (Vladivostok: Dal’giz, 1933), 40–47. The latter work is a curious use of the term Primorskaia o\textit{blast’} given that the region had been renamed Primorskaia guberniia by this point.

\textsuperscript{93} Weights here are from Zasel’skii, which are given in tsentners in the original. Presumably, Zasel’skii’s figures are metric tsentners, i.e. 100 kilograms.
However, by mid-30s, there were unmistakable signs of decline. The catch of herring in Peter the Great Bay, fell rapidly after 1926 from a high of 20,000 tons to barely 180 tons ten years later, and output from northern Primor’e also collapsed. Humpback and chum salmon also went into decline after 1926 on the Amur.

In the face of declining yields, Soviet fishermen shifted their focus away from Primor’e and the Amur, to more promising areas or new species of fish. After 1926, Kamchatka became the center of the Far Eastern salmon fisheries. Its stocks declined somewhat by the late 1930s as well, but generally fared better. Besides moving further afield, Soviet fishermen also met plan quotas by turning to previously little-exploited species, such as cod and flounder. In response to falling output, in 1935 the government issued a new fishing policy, but in the face of demands for increasing output never stipulated precise norms. During World War II, in the context of widespread food shortages, Soviet authorities removed all restrictions on fishing and stopped monitoring fishing by individuals living in the Amur basin.

On both sides of the Sea of Japan, conservation became one of many variables in a wider imperial competition. The Soviet effort to nationalize fisheries while conserving available stocks elicited an equal and opposite reaction in Japanese fisheries. To put themselves in a better bargaining position, the Japanese government placed their northern fishing fleet under state control in order to quell internal dissention and present a united front to their northern neighbors. In the face of Soviet pressure and declining yields around Sakhalin and the Amur, Japanese fishing firms moved toward pelagic fishing

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94 Zasel’skii, Razvitie morskih biologicheskikh issledovanii na Dal’nom Vostoke v 1923-1941 gg., 143.
95 F. 633, op. 5, d. 75, ll. 12-20.
97 Ibid.
beyond Soviet coastal waters, using giant “mother ships” that carried smaller vessels. Deep-sea fishing in northern waters produced increasing yields through 1934, but in light of signs that stocks were becoming rapidly depleted (the average size of salmon caught, for instance, was the smallest ever recorded in 1934), the Japanese Ministry of Agriculture and Forestry mandated a 30 percent reduction in the catch and forced a reduction in the number of vessels deployed. According to Wertheim, the cuts would have been deeper had northern districts not already been suffering from depression.98

In the pre-war era, Soviet conservation efforts, though well-informed, could not match the increasing pressure on fish populations. Although Soviet scientists were aware of the dangers posed by overfishing and advised Dal’revkom and other government organs about concrete steps to conserve salmon and other populations, conservation was always subordinate to plan targets. The presence of a foreign fishing fleet in Soviet waters added urgency to resettlement efforts and investment in the Soviet fishing industry. During World War II, American forces destroyed much of the Japanese fishing fleet, but the natural limits of fish populations in Far Eastern waters would remain an intractable concern for Soviet ichthyologists in the post-war era.

**Conclusion**

When thinking about the major changes that occurred in human relationships with Primor’e’s aquatic environments during the late imperial and early Soviet eras, one is struck by the coexistence of divergent tendencies. On the one hand, we see efforts on the part of state officials to protect fisheries from foreigners and, on the other, active promotion of fishing by Russian and European settlers and/or commercial fishing firms.

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In both cases, the competition posed by foreign (mainly Chinese and Japanese) fishermen was a key consideration, alternately motivating protection and expanded use. The way that this tension between protection and exploitation developed in the Far East also suggests that Soviet leaders (and the prerevolutionary technical intelligentsia) viewed industrial exploitation of natural resources, ostensibly informed by science, through the lens of local challenges and historical experience—not an ideologically-grounded antagonism toward nature.

During the tsarist era, Primor’e’s administrators, primarily in the Resettlement Administration, invested a great deal of energy and money in populating Primor’e’s coastline with (they hoped) experienced fishermen in an attempt to stimulate the development of a fishing industry. When directed resettlement of Russian subjects failed to effect a major change in the fishing industry, administrators turned to investing in capital-intensive, industrial fisheries, which they believed would be better able to compete with the Japanese and would be more amenable to state oversight. Before World War I, this shift had only begun to take effect, but Soviet fisheries policy in the Far East followed the same approach.

In the 1920s through 1940s, regional competition with the Japanese, together with the outlandish targets of the Stalin-era Five Year Plans, had a direct impact on aquatic life in Primor’e’s rivers and coastal waters. Soviet authorities continued efforts to direct experienced fishermen to Primor’e’s shores, limit Japanese access, and invest in the creation of a fishing fleet and processing facilities. Although state officials and fisheries scientists were aware that certain fish populations, particularly salmon, had declined since the 1910s, they were determined to increase output and to displace the Japanese
from Soviet waters. So even as they supported many fish-conservation measures, Soviet officials also sought to build up a large, sea-going fishing fleet, much as their tsarist predecessors had. Part of the reason that this seemed possible was that fisheries officials viewed over-fishing as a problem of methods, a product of misguided and/or primitive practices, which also accounted for economic weakness. However, conservation was always secondary to the more pressing goals of increasing output, and industrialization of the fishing industry was much better suited to the latter aim. Consequently, by World War II, fish stocks around Primor’e and in the lower Amur were at their lowest levels ever, and Far Eastern fishermen shifted their attention to other areas.

As in the realm of land- and forest-management, tsarist and Soviet administrators and scientists pursued statist conservationism aimed at sustained output and national self-assertion, seeking a combination of “rational” exploitation and protection. Fisheries officials were concerned that fisheries might be exhausted, and so advocated the collection of data on fish stocks (and employed ichthyologists and other specialists to do so), the creation of fish farms, and shifting practices so that production would increase without undermining fish populations. At the same time, during the last years of the tsarist regime and in the early Soviet era, many advocated capitalization and consolidation, which contemporaries believed would make the Far Eastern fishing fleet both more competitive and more amenable to planning.

In this sense, Soviet leaders’ technophilic and technocratic tendencies were rooted in the experience of previous decades, and emerged in part as a solution to ecological problems, not in defiance of them. Their faith in (European) science and technology to reconcile human needs with natural limits may have been naïve, but it was
not a product of promethean antagonism toward nature, nor was it specific to Soviet socialism.\textsuperscript{99} Because of previous experiences in the Far East, and because many believed environmental degradation was a product of primitive or short-sighted exploitation, tsarist and Soviet authorities believed that bringing science to bear on aquatic ecosystems would enable the growth of fisheries production as well as the conservation of fish stocks. They shared this belief with their counterparts in the United States and Canada, where fisheries experts put their faith in technological fixes (including hatcheries) that failed to restore salmon populations.\textsuperscript{100} In this regard, fisheries experts’ emphasis on science and state planning dovetailed with Marxist-Leninist ideology, but did follow from it.

Fisheries policy in Primor’e also evolved as a result of a contest over resources along the territory’s lightly-governed shores. As a result of the Fisheries Convention of 1907 and some fishing regulations, Far Eastern waters were not exactly a “commons.” However, even in the 1930s neither Soviet laws nor the convention was the last word in determining access to fish, crab, and other species. Late tsarist and early Soviet approaches to fisheries had a “use it or lose” it quality: if Russian/Soviet fishermen did not exploit the available resources, foreigners would. Although Russia (and subsequently the Soviet Union) can be regarded as an imperial power in the North Pacific, day-to-day
struggles over fishing access have an anti-imperial character to them. Tsarist and Soviet authorities were intent on asserting territorial sovereignty against an empire that was, until the 1930s (and arguably until after World War II), more powerful and economically dominant in the region and enjoyed more sophisticated fishing and fish-processing industries. Moreover, in the pre-revolutionary period and Civil War, Russian fishermen sold much of their catch to the Japanese for industrial processing, being at a comparative disadvantage in terms of capital investment.

Ultimately, the Soviets’ efforts to assert control over Far Eastern fisheries were largely successful—partly because US forces destroyed much of the Japanese fishing fleet during World War II—but in the process the quest to utilize marine resources to the fullest acquired its own momentum. What had begun, at least in part, as an effort to conserve Primor’e’s fisheries, became a set of policies that furnished the means to industrial exploitation, with major consequences for Primor’e’s waters and other parts of the Pacific.

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102 Ryan Jones has noticed a similar dynamic in post-war Soviet whaling, whereby whaling fleets sought to maximize their catch long after doing so had become largely unprofitable. Jones, “Running into Whales”; Jones, Empire of Extinction.
Chapter 6:  
Saving Tiger Country:  
Deer, Tigers, and Conservation in Primor’e

Nature protection in Primor’e today is inseparable from the fate of the Amur (or Siberian) tiger, whose survival in Soviet/Russian territory is rightly regarded as one of the signal achievements of Soviet conservation in general and of the zapovednik system in particular.¹ Soviet biologists and zapovednik staff, beginning in the 1940s, helped restore the animal’s numbers after decades of hunting and habitat loss. The Amur tiger was nearly extirpated from China during the twentieth century, and as a result, nearly all of its existing population lives today in Primorskii and Khabarovskii krais. This success, combined with a decline in tiger populations in Primor’e during the early 1990s, underscores the value of Soviet-era conservation for this animal in particular.²

Yet in studying the history of conservation in Primor’e, one is struck by the fact that tigers were simply not part of the discussion surrounding nature protection until the 1930s. Indeed, throughout the late-tsarist era and into the early Soviet period, state regulations specifically encouraged the hunting of tigers, along with other predators (such as wolves, bears, and even birds of prey) widely considered to be pests. Only in 1939 did

¹ Josephson et al., An Environmental History of Russia, 110–11.
tigers (along with the even rarer Amur leopard) fall under state protection. The animal’s role in nature protection in the Far East, and its status as an iconic symbol of the Far Eastern taiga, are relatively recent developments.

Instead, nature-protection in Primor’e was initially oriented toward very different goals: protection of the spotted (sika) deer, Manchurian elk/red deer, goral, and to a lesser extent the Ussuri sable, a light-colored variant of *Martes zibellina*—certainly not tigers. Spotted deer, in particular, are at the center of this story. They played a role in Primor’e analogous to that of the Barguzin sable, whose conservation was one of the main goals of Russia’s first *zapovednik* on the shores of Lake Baikal. The great value of spotted deer antlers in China, combined with dwindling populations, motivated early conservation efforts and the creation of private game reserves.

This chapter examines the long history of animal protection in the province and how conservationism transformed from a set of narrow, anthropocentric initiatives focused on protecting commercially profitable animals to a program of state conservation that encompassed the conservation of predators and enormous tracts of territory, and one that could be effectively enforced. Beginning in the 1880s, Russian officials, naturalists, and other elites noticed with dismay that several populations of land mammals were in decline. As discussed in Chapter 3, many connected such changes to broader threats to Russian prestige, border security, and sovereignty, and viewed the destruction of Primor’e’s fauna as a sign of barbarism. I argue that, as a result of this view, early conservationists responded to increasing scarcity in much the same way that they responded to over-fishing and deforestation: by seeking to halt or restrict hunting by supposedly exploitative or “predatory” peoples—primarily Chinese hunters and some
settlers—while introducing rational measures to ensure a continued supply of the most valuable animals.

In the late-nineteenth century, concern for certain mammalian species, particularly spotted deer, precipitated the emergence of state hunting regulations as well as hunting societies that advocated for conservation. Together, state and public actors sought to conserve wildlife by restricting the hunting practices employed by East Asian hunters; delineating hunting reserves designed to exclude those deemed predatory or uncivilized; and by creating spotted deer farms, where land owners and some peasants kept semi-wild deer in order to harvest their antlers. After 1922, the Soviet government supported similar policies, including the creation of much larger nature reserves (the zapovedniki)—which local scientists argued was an essential means of ensuring a steady supply of deer and sable—as well as the expansion of deer farms. In sum, animal conservation in Primor’e, with its emphasis on protecting commercial species from over-hunting and encouraging rational exploitation, was consistent with other areas of environmental management in the territory.

However, the history of wildlife protection in Primor’e is also distinct from forests and fisheries in a number of ways. First, the protection of land mammals was much more of a “ground-up”—though not exactly populist—phenomenon than forestry or fisheries protection, involving state actors, non-state elites, and in a few cases even peasant settlers. The most important group in this regard was the Vladivostok Society for Amateur Hunters (VOLO). VOLO was an elite organization whose members focused their efforts on protecting deer, elk, and goral, mainly so they could hunt them for sport whenever they liked. Although anthropocentric—and often Russo-centric—in its goals,
VOLO nevertheless played a key role in the development of nature protection in Primor’e. They also served as important locus for Far Eastern civil society, providing a forum through which members could advocate for nature protection. Through their activities, we can see the close relationship between non-state elites in the Far East and government officials, as well as the gulf that separated urban, educated society from peasant settlers and East Asian hunters.

Second, while wildlife protection emerged from narrow, conservationist beginnings, beginning in the 1910s and continuing into the 1930s it also created a space in which scientists could undertake broader nature protection efforts aimed at protecting large swathes of Primor’e’s interior and a wide range of animals, including those with little commercial value. After 1917, scientists and government officials continued to emphasize rational production and sustained yield of furs and antlers, as with regard to fish and timber. However, having created the infrastructure and institutions necessary to protect valuable deer, elk, and sable (as well as the forests they inhabited), scientists soon broadened their approach to encompass flora and fauna that did not have immediate economic value, including tigers.

Scholarship on Russian nature protection has focused primarily on the zapovedniki and the Russian/Soviet scientific community, but Primor’e reminds us that sportsmen were also essential to early conservationism, just as they were in the United States and in British colonies. As in British and American contexts, conservationism in Primor’e was often exclusionary, privileging the needs of a few nature enthusiasts over local peoples and ethnic minorities.\(^3\) Non-state actors’ advocacy for nature protection

\(^3\) VOLO was particularly similar to the Boone and Crockett Club, whose founding members looked upon poor whites, blacks, Italian immigrants, and others as unsporting, those who William Temple Hornaday
also underlines the appeal of the Soviet governance in Primor’e insofar as the Bolshevik government claimed to operate on the basis of scientific governance, and did indeed support the creation of a vibrant (though not independent) scientific community. Weiner and others have argued that, for this reason, in the 1920s many environmental scientists supported the Soviet regime. I would add that sportmen and other local conservationists also sought a strong, scientifically-informed state, in this case to help solve Primor’e’s environmental problems, as they had during the last years of tsarist rule.4

Finally, while Soviet-era wildlife protection in Primor’e evinced much continuity with pre-revolutionary initiatives there were important moments of disjuncture during the revolutionary and Soviet periods. These inflection points differed somewhat from those that were most relevant to fisheries-, land-, and forest-management, and were principally connected to changes in state capacity and in the geopolitical situation in the Far East. First, the chaos of the Civil War was particularly damaging to mammal species, as it removed state-imposed limitations on hunting in Primor’e and destroyed most of the private nature reserves established before the war. Second, the creation of zapovedniki and stricter hunting regulations (as they concerned tigers, for instance) in the 1930s and 1940s created an institutional framework for more robust and wide-ranging forms of animal conservation than those that had come previously. Finally, World War II and

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Cold War tensions led to greatly increased security and a stronger military presence along Primor’e’s borders, limiting cross-border trade and access to Chinese markets and making poaching (including by residents of Primor’e) more difficult. As Edmund Russell has pointed out, state strength can have a direct effect on animal populations, even on their genetic makeup, over a relatively short span. Likewise, greater state capacity in the Soviet Union provided very different conditions for animals than those that prevailed in neighboring China, which was plagued by domestic turmoil, war, and foreign occupation until 1949. Thus while wildlife conservation in Primor’e emerged from a long-standing search for “rational” or “civilized” use of animal resources, the changing political and geopolitical context created the conditions in which some of the territory’s most successful nature protection efforts could thrive.

I. Protecting mammalian species in the late-tsarist period

*Deer, hunting, and civil society*

As early as the 1880s, Primor’e’s administrators had taken tentative steps to limit hunting in the territory’s forests in response to concerns regarding a decline in animal species and over-hunting by East Asians. In 1886, Baron A. N. Korf, the first governor-general of the Priamur, wrote to the military governor of Primor’e, I. G. Baranov, requesting that he institute some basic hunting rules. At the time, there were no restrictions on hunting in the Priamur but, as noted in Chapter 4, Baranov was already concerned with forest destruction and the potential loss of fur-bearing animals that could

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result. Korf cited a die-off of goral (a result of overhunting and a harsh winter) as one motivation for doing so. In particular, he sought the creation of hunting seasons for deer, elk, sable, and a handful of other valuable animals. He also advocated the destruction of the fences (zaseka) and pit-traps favored by East Asian hunters, which observers found especially pernicious. Such measures did not become law, but in 1877 Military Governor Erdman outlawed both sorts of traps on the Murav’ev-Amurskii peninsula. In 1886, the Priamur Governor General issued a decree that established a hunting season for sable, and in 1899 promulgated rules regarding the hunting of sable and deer that reiterated bans on the use of fence- and pit-traps set out in forestry regulations.\(^7\)

On the whole, however, state hunting laws and other forms of wildlife protection were limited and hesitant in the nineteenth century. It was not the state, but rather voluntary organizations comprised of military officers, scholars, and merchants who initiated Primor’e’s first conservation efforts. In 1887, a small group of sportsmen acquired hunting rights on Askol’d and Rikord islands, in Peter the Great Bay near Vladivostok (see figure 16). They, together with other hunters, founded the Vladivostok Society of Amateur Hunters (VOLO) the following year, which initially included 25 permanent and eight seasonal members. Hunters in Nikol’sk-Ussuriisk (present-day Ussuriisk) created a similar organization, the South Ussuri Society for Proper Amateur Hunting (IuUOLPO) in 1899.

The cornerstone of VOLO’s conservation efforts was its system of game reserves (zakazniki). In addition to holdings on Askol’d and Rikord islands, the society gained access to Putianin and Rimskii-Korsakov islands and part of Russkii Island, which was

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\(^6\) Gaponov, *Istoriia taezhnogo prirodopol’zovaniia Iuzhno-Ussuriiskogo regiona*, 152.
\(^7\) RVIA DV F. 1, op.5, d. 502, l. 4; RVIA F. 702, op. 2, d. 299, ll. 3-4.
substantially larger than the others and home to a large military base. In 1895, VOLO also secured a lease for land on Lake Khanka between the Mo and Lefu Rivers. Besides deer and elk, members hunted pheasant, grouse, and waterfowl. On their island reserves, VOLO members also sought to protect and cultivate herds of spotted deer and goral, whose numbers had dwindled on the mainland.

As such exclusionary reserves suggest VOLO and IuUOLPO were primarily elite organizations. VOLO brought together some of southern Primor’e’s most prominent scholars and public officials, including Vladimir Arsen’ev, who joined the organization as a young officer in 1901 and eventually served as its director. Russian and Vladivostok-based foreign merchants, such as the Finnish whaling magnate Otto Lindgol’m, were also well represented. VOLO also had strong ties to the state. The Society received formal recognition—and a sizeable donation—from Governor-General Korf himself. The Grand Duke Alexander Mikhailovich, grandson of Nicholas I, was VOLO’s official patron and sponsor, and both Unterberger and a senior naval commander were made honorable members in 1890.

In keeping with their elite orientation, VOLO members contrasted their own “proper” (pravil’nye) hunting methods to the supposedly profligate and wasteful methods of peasant settlers, Cossacks, and the Chinese. The society’s founders wrote that spotted deer and mountain goats, killed in massive numbers by foreign hunters and local peasants, had fled into remote areas where they were inaccessible to the “cultured”

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8 RGIA DV F. 1, op. 4, d. 1889, ll. 1, 13.
9 In contrast, Primor’e’s Forest Society was a more democratic organization, but it was also much shorter-lived, existing only between 1916 and 1922. Iu. I. Man’ko, “Istoryia lesnykh obschestv na rossiiskom Dal’nom Vostoke,” Vestnik Da’nevostochnogo otdeleniia RAN, no. 3 (2008): 127–28.
part of the population. VOLO’s reports complained of “year-round, merciless destruction” of wildlife in the Society’s Lake Khanka reserve, primarily by Ussuri Cossacks (whose territory included part of the Lake Khanka shoreline). “One can imagine how many wounded birds are lost,” one member wrote, as Cossacks “smashed up birds,” destroyed nests and eggs, and generally conducted their hunt in a “completely predatory way.” The author believed it was the group’s “moral duty to appeal to Russian society, to stop poaching and exploitative (razboinicheskom) relations with nature.”

VOLO members proposed legal protection for birds and mammals (especially during breeding and nesting seasons), education of the population regarding proper hunting practices, and the creation of reserves where they could undertake the cultivation of Primor’e’s animals. In VOLO’s depiction of its activities, it played a paternalistic, civilizing role in relation to less educated inhabitants of Primor’e.

Ironically, to buy or rent land and pay guards, VOLO relied on the income derived from the sale of spotted deer antlers, goral horns, and pelts. At their height, VOLO’s island reserves boasted several hundred goral and deer. The spring antlers (panty) of deer and elk antlers were greatly valued in China for their medicinal value. A single pair of antlers could be worth hundreds of rubles (see Chapter 2). By 1898, there were 1,300 deer on Askol’d Island alone, along with dozens of goral. In that year, VOLO garnered 4,635 rubles—over 85 percent of its budget—from the sale of panty, goat horns, and skins. Maintaining large herds of these animals was a challenge. Disease and

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11 Obshchestvo liubitelei okhoty, Ochety sostoiashchago pod pokrovitel’stvom ego imperatorskago vysochestva velikago kniazia Aleksandra Mikhailovicha Obshchestva liubitelei okhoty, 1888-1896 g.g., 51–52.
12 RGIA DV F. 702, op. 2, d. 299, II. 53, 89-90.
13 Obshchestvo liubitelei okhoty, Ochety sostoiashchago pod pokrovitel’stvom ego imperatorskago vysochestva velikago kniazia Aleksandra Mikhailovicha Obshchestva liubitelei okhoty, 1888-1896 g.g., 9.
inclement weather could kill dozens or even hundreds of animals in a short time span. Losses were especially bad in years of heavy snowfall, when deer and goral had difficulty grazing. Nevertheless, through the 1890s VOLO was able to subsidize its reserves and other activities by culling its island herds and selling their horns and antlers.

As was so often the case with regard to conservation efforts, enforcement was difficult. VOLO employed up to twelve guards and posted a set of hunting rules in Russian, Chinese, and English. Guards levied fines from poachers (which went into the club’s coffers), and were supposed to keep Chinese and Koreans who were not also Russian subjects out entirely. Nevertheless, poaching was common, even on island reserves, and guards faced occasional violence from poachers. Most dramatically, in the spring of 1889 two guards on Askol’d Island were killed, probably by poachers. In the Lake Khanka reserve, locals continued to cut forests, and guards themselves even took to killing animals for their own consumption. According to VOLO’s report for 1905, during the Russo-Japanese War poaching by soldiers based on Russkii Island was a constant problem. In addition, peasants travelled to Askol’d and other islands with firearms, claiming they needed the weapons to be able to protect themselves, but then proceeded to hunt deer. “The island presents a sad picture,” the author wrote, “here there are headless carcasses, since the heads with their antlers the poachers take with them, and a strong, putrid smell fills the air.” As a result of poaching, VOLO’s herds were much reduced by the war’s end.

14 Heavy snowfall resulted in die-offs of spotted deer throughout the 20th century. See Bromlei and Kucherenko, Kopystye iuga Dal’nego Vostoka SSSR, 135.
15 Interestingly, VOLO guards also enforced state laws, fining fishermen who they caught gathering seaweed without the permission of the local forester. RGIA DV F. 702, op. 2, d. 299, l. 91.
Conservation through exploitation?

VOLO’s reserves constitute a narrow form of wildlife protection, one aimed at conserving game animals for the leisure activities of a select few. Indeed, given that VOLO members and peasants sought to protect deer and other animals just to hunt them, to call their efforts “conservation” is debatable. They were concerned almost exclusively with a handful of ungulates, game birds, and the forests that created habitats for these animals, not with the preservation of untrammeled nature, with its thickets and predators. Tigers were by no means among the species VOLO (or the state) sought to protect. On the contrary, voluntary hunting societies (along with state officials and practically anyone else writing on the subject) regarded tigers and other predators as dangerous pests, and these animals were afforded no protection under state hunting laws until the 1930s.\(^{16}\) In this regard, Primor’e’s gentlemen hunters contrasted with those of British India and Africa, for whom hunting big cats was a favorite pastime.\(^{17}\) Tiger- and leopard-hunting did occur in Primor’e, but it rare and not particularly important for conservation in the imperial era.

However, it is important to acknowledge that some VOLO members thought of nature protection in fairly broad terms, sought to prevent the disappearance of deer, elk, and goral in general (not just on their reserves), and wanted to promote limits on hunting in order to ensure the continued survival of a variety of wildlife. In this way, what had begun as exclusionary game reserves also created space for more holistic visions of

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\(^{16}\) As noted above, VOLO warned its members against hunting tigers. RGIA DV F. 702, op. 2, d. 299, l. 104.


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nature protection. For instance, in VOLO’s lengthy report for 1904, possibly written by Vladimir Arsen’ev,\(^{18}\) one member lamented:

> In the nineteenth century man has destroyed 16 species of various animals. Unmistakably we can say, that in the twentieth century the following will be destroyed: whale, elephant, lion, ostrich, and here in the Far East: tiger, snow leopard, moose, elk, spotted deer, goral, sable, beaver, sea otter, pheasant, hazel-hen, grouse, bustard, wood grouse and others. In Japan almost all beasts and birds have been destroyed, in France for about 25 years they have hunted only for larks and rabbits. And, indeed, our region, with its rich fauna, awaits the same fate! Indeed here as well, with guns in arms, we will have to be satisfied with only sparrows!

This pessimistic statement spoke of humanity’s relationship to nature in general, though providing opportunities for future hunters was its concern. This report concluded with a plea for a comprehensive hunting law that would encompass all of Siberia and the Far East, along with support for the Far Eastern hunting societies.\(^{19}\) In this sense, VOLO’s project was conservationist, in that it was oriented toward long-term human ends. But we should not draw too sharp a distinction between utilitarian conservationism and the preservation of nature for its own sake. VOLO also emphasized educating the public by distributing pamphlets on “proper” hunting methods as part of their “moral duty.”\(^{20}\) Such voluntary organizations were not monoliths. VOLO’s leadership—presumably those who penned its reports—may have held views very different from members who made their living in whaling (such as Lindgol’m) or fishing, for instance, and may have supported the creation of hunting reserves for completely different reasons.

The gray area between conservation and commercial exploitation is most evident in Primor’e’s deer nurseries (pitomniki), commercial operations that nonetheless proved

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\(^{18}\) The report survey of major animal species in Primor’e, which included an assessment of the size of their populations, is very similar to that included in Arsen’ev’s Geographical Notes (1911). However, there is no author indicated on the report.

\(^{19}\) Obshchestvo liubitelei okhoty, Otchety sostoiashchago pod pokrovitel’stvom ego imperatorskago vysochestva velikago kniazia Aleksandra Mikhailovicha Obshchestva liubitelei okhoty, 1888-1896 g.g., 114.

\(^{20}\) RGIA DV F. 702, op. 2, d. 299, l. 90.
important for the survival of wild deer populations. Nurseries consisted of captive herds of deer that were fed, fenced in, and protected from predators so that their antlers could be harvested on a regular basis. Even more than VOLO’s reserves, deer nurseries were meant to be profitable, with deer treated as a kind of semi-wild livestock. Russian and European settlers may have learned how to keep spotted deer and harvest their antlers from the Chinese, who had raised deer in this way previously.\(^{21}\) In Primor’e, the practice may have begun among Russians as early as 1867. The Khudiakov family had begun keeping deer in the Suifun (Razdol’naia) valley by 1877.\(^{22}\) Michael Iankovskii, himself a VOLO member, established a deer farm after a herd wandered onto the Sidemi peninsula during the winter of 1888. Iankovskii and his sons penned in the deer and proceeded to harvest antlers from the animals. The Iankovskiis had 700 head of deer by 1908 and 1,500 by 1912. Several other land-holders also kept and raised deer, beginning around the turn of the century, with perhaps 6,000 total on some sort of farm or preserve.\(^{23}\)

In times of turmoil, nurseries became havens for the increasingly rare spotted deer. During the Russo-Japanese War, all of the deer on Rikord and Rimskii-Korsakov Islands died or were killed, leaving only the herd on Askol’d Island. Consequently, VOLO began transporting some of its deer to private reserves, including to lands held by the Shevelev, Konrad, and Menard families, where the animals were better protected (in part because these families systematically eliminated tigers and other predators from their

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\(^{21}\) Aramilev, “Sika Deer in Russia,” 479. The keeping of spotted deer is somewhat like the semi-domestication of reindeer, though the latter took place over much longer period.

\(^{22}\) Abramov and Kuchurenko, 156. According to Nikolai Baikov, elk-raising first appeared in the Transbaikal in 1843, where Akim Andreevich Neskromnii began catching elk in deadfalls, removing their antlers, and releasing them. By the 1880s, some 300 households harvested the antlers of 800 captive elk in the Transbaikal. Similar practices were also common in the Altai. See Baikov, 11-12.

\(^{23}\) Baikov, Iziubr i iziubrevodstvo, 12; Aramilev, “Sika Deer in Russia,” 479–80.
lands). Most importantly, these small populations of farm-dwelling deer were eventually vital to replenishing spotted deer populations in the wild during the 1920s and again in the 1940s.

Although VOLO’s records depict Cossacks and peasants as lawless poachers, there is scattered evidence that peasant settlers themselves also protected spotted deer. Writing in exile in the 1920s, Nikolai Baikov, a specialist on Manchurian wildlife, remarked that peasants in several parts of Primor’e protected deer in order to harvest their antlers, much as VOLO did. Arsen’ev, in the diary of his 1906 expedition, wrote that residents of the villages of Permskoe (near Ol’ga Bay on Primor’e’s southeast coast) and Fudin decided as a community to limit their take of deer and elk, to enforce a hunting season, to fine poachers, and to avoid using cruel or predatory (i.e. wasteful) methods, a state of affairs Arsen’ev called a “proper hunting economy.” Arsen’ev believed this arrangement was reflected in the peasants’ morals (or vice versa): “They live comfortably, they have no debts, and they are completely satisfied with their situation and thank God.” Later, Arsen’ev noted that local authorities had refused to recognize this grassroots reserve because it was on state land. Interestingly, considering he was a VOLO member, Arsen’ev contrasted peasants’ efforts with the “egotistical” conservation schemes of Primor’e’s hunting societies. He argued that the state should support such grassroots initiatives for “the conservation of beasts in general and deer in particular from

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24 Aramilev, “Sika Deer in Russia,” 479. According to VOLO, soldiers from a garrison on Russkii Island hunted animals illegally. In one case, sailors on board a submarine even opened fire on deer they sighted onshore. RGIA DV F. 1, op. 5, d. 502, ll. 43–43ob
25 Baikov, Iziubr i iziubrevodstvo, 11–12; Bromlei and Kucherenko, Kopytnye iuga Dal’nego Vostoka SSSR, 156; Aramilev, “Sika Deer in Russia,” 479; RGIA DV F. 702, op. 2, d. 299, l. 111.
26 Baikov, Iziubr i iziubrevodstvo, 11.
massacre.” In addition, in 1915 Governor-General Gondatti approved the request of a family of Old Believers from Ternei (situated near the present-day Sikhote-Alin Zapovednik), to create an elk nursery. In contrast, Gondatti did not give approve VOLO’s request for funding to improve their island reserves.29

Farm-raised deer further blur the line between domestication and conservation. Owners, whether wealthy VOLO members or local peasants, created the farms to produce antlers and enrich themselves. Yet the farms nevertheless were closely connected to the creation of game reserves, and played an important role in the re-population of wild deer populations in the twentieth century.

II. From game reserves to environmental protection

Primor’e’s first zapovednik

By World War I, the various currents of conservation—game reserves and deer farms, and the (admittedly few) hunting laws that existed—began to come together in response to over-hunting. One product of conservation efforts during the last years of the tsarist regime was the creation of Primor’e’s first zapovednik, Kedrovaia pad’ (Cedar/Pine Valley), in 1916. Kedrovaia pad’ was a “ground-up” initiative that garnered the support of Primor’e’s voluntary societies as well as the state. Though primarily intended to protect game, it presaged a shift toward nature protection that was less narrowly focused on game species than VOLO’s reserves had been.

28 Arsen’ev, “Polevye dnevnikii ekspeitsii V.K. Arsen’eva 1906 goda (prodolzhenie),” 47.
29 RGIA DV F. 702, op. 5, d. 422, ll. 1-3.
30 The literal translation of the Russian word kedr is “cedar,” but it usually refers to pine trees rather than true cedars. In this case, the main tree of concern was the Korean pine (Pinus koraiensis).
Besides VOLO’s game reserves, the immediate predecessor of Primor’e’s zapovedniki was a local initiative to protect flora and fauna in southwestern Primor’e. In 1908, in response to problems with illegal logging, fires, and over-hunting, local foresters in the Slavianskoe lesnichestvo, situated on the west side of the Amur Gulf near the Sidemi Peninsula, banned hunting and logging in the Kedrovaia River valley, apparently on their own initiative. The Kedrovaia valley contained some of the last stands of Korean pine in southern Primor’e and some of the last wild spotted deer. As noted above, Korean pine is a key component of the forest ecology of southern Primor’e; a variety of fauna, both large and small, feed on Korean pine nuts, and they in turn are prey for tigers and other large predators. The foresters hoped that by protecting the local forest, they could provide a sanctuary for increasingly rare species, particularly spotted deer.

At the same time, many others in Primor’e recognized the need to take active steps to protect the territory’s flora and fauna. Fur traders, concerned with a marked decline in the number of sable in Primor’e and the Amur Valley, petitioned the government to enforce a temporary ban on the trade in order to allow populations to recover. In response to such concerns, in 1910, Priamur Governor-General Nikolai Gondatti enacted a two-year suspension of sable trading in his province. In addition, the following year Gondatti’s office issued a set of hunting regulations that banned the

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33 GAPK, F. 1351, op. 1, d. 1, l. 20b.
killing of does and fawns (of spotted deer, elk, musk deer, and moose), and restricted the
hunting season for males of these species. As in previous iterations, such restrictions did
not apply to predators. The rules specifically permitted year-round hunting of tigers,
leopards, lynx, wolves, bears, and birds of prey by any means except poison.  

However, because hunting regulations were very difficult to enforce, officials
began to look to bounded reserves as a solution to declining game populations. In 1911,
Romanov, the head of the Amur Expedition, called for the creation of reserves that would
be off-limits to hunting, citing a decline in fur-bearing animals around Nikolaevsk.
Similarly, some officials in GUZZ also thought that reserves were the only viable way to
protect Far Eastern wildlife. In 1914, as discussed in Chapter 3, Gondatti wrote to
Alexander Krivoshein requesting funding for punitive measures against Chinese and
Korean poachers, he was rebuffed, but GUZZ suggested forming zapovedniki instead.
Since there was no way to police the entire territory, GUZZ officials argued, it would be
best to at least conserve some forests and animals in bounded areas that could feasibly be
protected. The creation of reserves also received wide support at a conference of
naturalists in 1916. One delegate, N. Voskresenskii, argued that many species were
under threat from Russian and non-Russian populations. Following well-worn
explanations for ecological degradation, Voskresenskii blamed forest fires, “barbaric”
trapping methods (such as poison and pit-traps), and the wastage of game for the sake of
antlers or organs for the decline in deer and other populations. In response, he called for

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34 One could hunt with poison if given permission to do so by the local peasant superintendent
(krest’ianskii nachal’nik, the equivalent of a land captain in European Russia).
35 Romanov. Nachdy Nikolaevskago raiona Primorskoi oblasti: Ochet o komandirovke v Nikolaevskii
raion chinovnika osobykh poruchenii V klassa pri Pereselencheskom Upravlenii V. F. Romanova, 161.
36 GARF F. 387, op. 19, d. 67789, ll. 19, 29.
the creation of nature reserves (*zakazniki*), along with stricter hunting regulations, as well as state support for the creation of private animal nurseries.\(^{37}\)

Thus, by the war years, officials and naturalists in Primor’e were increasingly amenable to the creation of state nature reserves. In this regard, they were engaged in broader developments in the field of conservation ecology taking place across the empire.\(^{38}\) In 1916, the same year that the Barguzin *zapovednik* was established on Lake Baikal, the informal reserve established by foresters in the Kedrovaia valley became Primor’e’s first *zapovednik*. Local foresters gained the support of the Society for the Study of the Amur Territory (OIAK), the new Forestry Society of the Priamur, established in 1916, as well as Governor-General Gondatti.\(^{39}\) Official recognition did not change the day-to-day operation of the reserve appreciably. Local foresters continued to enforce prohibitions on hunting and logging, as they had before and as they continued to do until after the Revolution. But *Kedrovaia pad’* would form the core of a more ambitious program of nature-protection after 1922.\(^{40}\)

### Conservation in the early Soviet period

Between 1922 and 1935, Soviet leaders supported the creation of several new *zapovedniki*, along with deer farms and hunting regulations aimed at the conservation of many species, including some predators. Initially, Soviet conservationists, like their predecessors, looked to nature reserves as a way to ensure future production of sable furs

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\(^{37}\) GAPK F. 1351, op. 1, d. 1, ll. 1-4.


and deer/elk antlers. Given the value of these commodities, administrators of Primor’e—which was part of the Primorskaia guberniia until 1926, and subsequently Dal’krai—gave their approval and support.\footnote{On administrative divisions in the Far East between 1922 and 1936, see the Introduction, p. 37.}

The Civil War and foreign intervention brought lawlessness and partisan warfare to much of Primor’e. In such circumstances, game populations suffered. Residents of Primor’e and seasonal hunters from China and Korea flouted restrictions in order to gain access to food, furs, and antlers. Spotted deer almost disappeared entirely in the wild, and captive or semi-captive populations declined as well. VOLO’s island reserves were decimated, while an estimated 90 deer remained in Kedrovaia pad’, along with several hundred on farms scattered along the southern coast.\footnote{Aramilev, “Sika Deer in Russia,” 479, 483; Organ Primorskogo gubernskogo ekonomicheskogo soveshchaniia, Sovetskoe Primor’e, 131.} Populations of elk, goral, tigers, and other animals were less well studied, but they likely became rarer as well.\footnote{Gaponov, Istoriiia taezhnogo prirodopol’zovaniia Iuzhno-Ussuriiskogo regiona, 169.} Among the few bright spots were private deer-farms, where once again several hundred spotted deer managed to survive the war.\footnote{Baikov, Iziubr i iziubrevodstvo, 11–12; Bromlei and Kucherenko, Kopytnye iuga Dal’nego Vostoka SSSR, 156; Aramilev, “Sika Deer in Russia,” 479.; RGIA DV F. 702, op. 2, d. 299, l. 111.}

Understandably, some of those who lived through the Civil War in the Far East remembered it as a period of chaos, destruction, and foreign exploitation. Staff members of the Sikhote-Alin Zapovednik, including renowned zoologist G. F. Bromlei, later wrote that the intervention coincided with the destruction of thousands of hectares of the best forests in Primor’e, as well as the “mass disappearance of sable” and a significant reduction in in the populations of spotted deer, goral, and tigers. Such “plunder,” according to Bromlei, stopped only with the departure of the Japanese and the arrival of
the Red Army. As with regard to fisheries, the experience of foreign exploitation during the Civil War was a touchstone for conservation efforts in the early Soviet period.

Curiously, the language of “predation”—at least with regard to land mammals—became much rarer in the 1920s and 1930s. If mentioned at all, observers invoked it with reference to the pre-revolutionary period, the Civil War, or foreign capitalists. The forester A. A. Tsymek, for instance, wrote in 1936 that the region’s natural riches had previously lured Russian and foreign capital, causing “enormous losses” in animal life, such that many of the most valuable animals, including sable and spotted deer, had been nearly exterminated. Only a combination of regulation, reserves, and breeding programs (for spotted deer in particular) under the Soviets had stemmed the tide. Similarly, a later work attributed the disappearance of local flora and to “predatory capitalist exploitation,” and argued it had fallen to Soviet scientists to restore these populations.

In the wake of the Civil War, scientists and foresters again looked to the creation of nature reserves, mainly to protect forests and ungulates, especially spotted deer. In 1925, a group of academics, including zoologist A. K. Mol’trekht, one of the founding members of Primor’e’s Forest Society, recommended expansion of the existing Kedrovaia pad’ reserve to include the Sidemi and Mongugae Rivers. They also called for the creation of nurseries for spotted deer and foxes, along with an apiary. The People’s Commissariat of Agriculture (Narkomzem) was particularly supportive of the creation (or expansion) of a reserve for spotted deer. The following year, the Far Eastern

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Economic Council (Dal’ekoso) approved the expansion of *Kedrovaia pad’*, increasing the total size of the reserve to 9,500 ha (23,475 acres). The zapovednik’s purpose was to provide a laboratory for the study of plants and animals, and to protect deer, along with the forest that nourished them, from logging, fires, and other hazards.48

As with the creation of *Kedrovaia pad’*, there was considerable ground-up support for the introduction of zapovedniki elsewhere in Primor’e. In 1925, a forestry official reported that the local population around the Suchan and Sudzukhe Rivers, in the vicinity of Ol’ga Bay, had requested a zapovednik in the area. In the same year, the zoologist Mol’trekha led an expedition to the region, finding rare herds of deer, elk, and wild goat along the Sudzukhe. Warning that without immediate protection these populations too would be decimated, Mol’trekht recommended the creation of a zakaznik49 that ultimately formed the core of the Sudzukhinskii (now Lazovskii) zapovednik, situated on Primor’e’s rugged southeastern coast and the eastern slopes of the Sikhote-Alin.50

Soon after the expedition, officials in Primor’e and Moscow agreed to protect the areas that Mol’trekht had scouted in order to ensure protection (and production) of sable and deer. Officials from Dal’kraiispolkom, the Far Eastern Forest Institute, together with local scientists Iu. A. Salmin and hunting expert (okhotoved) K. G. Abramov, studied the region during the early 1930s. In 1933, representatives from the Committee on Zapovedniki and the state fur company Soiuzpushnina, along with Salmin and zoologist P.A. Monteifel’ of the Moscow zoo, recommended the organization of a sable reserve on

50 GAPK F. 1506, op. 1, d. 36, ll. 1-1ob.

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the eastern slopes of the Sikhote-Alin range. In late 1934, the Executive Committee ordered the Committee on Zapovedniki to form a reserve in the Sikhote-Alin, and the Far Eastern authorities finalized its borders in June 1935. The Sikhote-Alin zapovednik encompassed 1 million ha. (2,471,053 acres) upon its formation in 1935, including 150,000 ha. (370,658 acres) allocated to the Sudzhukhinskii (later Lazovskii) reserve, which became a separate zapovednik in 1940. Along with lands near Ternei, the Sikhote-Alin zapovednik included Petrov Island in the Ol’ga region in order to protect deer, goral, and rare vegetation. Initially, parts of the zapovednik were earmarked for limited economic use (such as the gathering of useful plants and hay-growing), but these too was declared off-limits in 1944.51

Abramov, a Bolshevik since 1905, is indicative of the ways in which anthropocentric conservationism contributed to a broader program of nature protection. Abramov had been enamored with nature from an early age and longed to travel to the wilds of Siberia and the Far East, particularly after reading Maksimov’s *V Ussuriiskom taige (In the Ussuri Taiga)*. He finally got his chance in 1924 when he travelled to Vladivostok as part of a commission tasked with introducing the metric system. An avid hunter, Abramov was captivated by the taiga, but found that it had been largely exhausted, particularly—in his view—by foreign intervention during the Civil War.52

In 1929, after surveying spotted deer populations in southeast Primor’e, Abramov presented a plan to the Vladivostok okrug Party Executive Committee for the creation of a reserve to replenish the numbers of this valuable species. He argued that existing deer-

51 GARF F. A-358, o., 2, d. 437, ll. 19-23.
raising operations, conducted on a small scale, were insufficient to preserve the species as a whole. Abramov wrote that deer-farming was concentrated in the hands of predatory starozhily and kulaks, leading to “merciless destruction.” Instead, he proposed a combination of strict reserve territories and collectivized deer-farming. Coming on the eve of collectivization, Abramov’s suggestion to combine a chaotic array of separate farms into one large plan may have been appealing, but it met opposition from many quarters. According to his wife, Abramov was threatened by local hunters, who allegedly killed supporters of the initiative. Fisheries managers on the south-east coast also resisted, since they relied on wild game to feed their workers. And finally, officials demanded quick returns on their investment. A Dal’kraiispolkom representative allegedly warned Abramov that if his reserve did not produce sable, “we’ll have your head!” Fortunately for Abramov, the zapovedniki were economically productive. In its inaugural year, for instance, the Sudzukhinskii zapovednik harvested and sold the pelts of squirrel, weasel, sable, lynx, musk deer, and several others species worth over 30,000 rubles.

Another way in which exploitation and conservation were closely linked was the repopulation of wild deer herds with farm-raised animals. The new zapovedniki did not harvest antlers; they left this to state-run deer farms, but justified the protection of wild populations on the grounds of the need for a large, diverse breeding pool. Ultimately, however, the reverse was true: it was the semi-domesticated populations that replenished and rejuvenated wild populations. There were only a handful deer remained in the wild after the Civil War, after which biologists and zapovednik staff managed to bolster their

53 Ibid., 25–38.
54 GAPK F. 1351, op. 1, d. 5, ll. 1-2.
numbers with deer from private farms. During World War II, wild deer were once again almost exterminated, including from Lazovskii and Sikhote-Alinskii zapovedniki, and were again replenished with semi-domesticated deer, allowing their populations to recover by the 1980s.\textsuperscript{56} In addition, hundreds of spotted deer were acclimatized to other parts of the Soviet Union, beginning in 1933. Eventually there were 60,000 descendants of acclimatized deer in the Soviet Union, most in 11 state farms (sovkhzozy) in the Far East, but there were also more than 20,000 on farms outside of the country. The remnants of VOLO’s herds, and those of private deer-farmers, lived on in the wild in Primor’e and beyond.\textsuperscript{57}

\textit{Saving tiger country: Toward a more comprehensive model of nature protection}

If the protection and cultivation of deer highlights the gray area between conservation and exploitation, the protection of tigers stands as a distinctly preservationist initiative, one not oriented toward immediate human ends. Influenced by the concept of zapovednost’ (inviolation), adopted elsewhere in the Soviet Union, and by an increasing awareness of the fragility of Primor’e’s animal populations, Soviet scientists in the territory took a broader view of nature protection that eventually encompassed a broad range of species and habitats. In this way, Soviet-era nature-protection in Primor’e diverged significantly from its roots in the elite hunting traditions of the pre-revolutionary periods, and from the anthropocentrism of the 1920s. In this

\textsuperscript{56} Ibid., 483.
sense, it complicates the idea that the 1920s were the halcyon days of Soviet ecology, while the Stalin era saw the enforcement of narrowly utilitarian goals in the discipline. In the case of tigers, at least, the opposite was the case.  

After the establishment of the first Far Eastern *zapovedniki*, Soviet scientists began to openly discuss the protection of non-commercial species, most notably tigers and leopards. As noted above, settlers and officials alike widely regarded these animals (along with bears, wolves, and other predators) as pests. Predators, including tigers and leopards remained exempt from hunting restrictions, according to a 1922 decree of the Sovnarkom. Through the 1930s, Primor’ë’s *zapovedniki* remained focused on producing furs and antlers, while they actively hunted predators, such as wolves, lynx, and bears, which they considered a threat to more commercially valuable species.

However, attitudes toward tigers and leopards began to change during the 1930s, and by the end of the decade local scientists and *zapovednik* staff sought to extend state protections to them as well. Advocating for the protection of such predators, which preyed on valuable deer and elk, may have been politically unwise during the Stalin years, when the *zapovedniki* were supposed to yield immediate economic benefits. In 1930s (and again in the 1950s), opponents of predator control and acclimatization elsewhere in the Union faced denunciation from rivals. Some staff members at the Askania-Nova *zapovednik* in Ukraine, for instance, were purged in 1932-33, ostensibly for their opposition to acclimatization. Yet given that tiger conservation in Primor’ë

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began during the late Stalin years, such political calculus does not seem to have been the main issue.

Instead, a dearth of reliable information was likely the primary obstacle to protecting tigers, leopards, and other non-commercial species. Until this point, there was simply no data on Primor’e’s big cats. Once it became evident that Amur tigers were almost extinct, scientists were not reticent about advocating tiger protection. According to the staff of the Sikhote-Alinskii zapovednik, it was only after a survey of wildlife in the Sikhote-Alin mountains in 1934 that biologists noticed some species were almost gone entirely, including sable and tigers (they found evidence of only three tigers). The authors of a subsequent report wrote that populations of “elk, sable, and especially moose, tiger, and raccoon dog” in the forests of the Sikhote-Alin had “catastrophically fallen by 1934,” and needed to be placed under protection (rezhima zapovednosti). Consequently, it was only after its establishment that the goals of the Sikhote-Alin zapovednik included the protection of tigers, which then joined spotted deer, sable, and others as species of concern.

A broader effort to protect tigers and other wildlife throughout Primor’e (i.e. not just in the zapovedniki) followed on the work of zoologist Lev Kaplanov, whose *Tiger, Deer, Elk, and Moose* proved a watershed book for Far Eastern ecology. Kaplanov had spent years researching tiger populations in Primor’e, beginning around 1938 in the Sikhote-Alin zapovednik, then continuing in the Sudzukhinskii zapovednik while serving as its director. Kaplanov was killed in the zapovednik in 1943, ostensibly by poachers. However, his work was published posthumously (in 1948), and informed the

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62 GARF F. A-358, op. 2, d. 437, ll. 16-17.
63 GARF F. A-358, op. 2, d. 23, l. 31.
conservation efforts of the post-war era. Kaplanov had estimated that there were 30 to 40 individual tigers in all of the Russian Far East, with the highest concentrations on the upper Iman (Bol’shaia Ussurka) River, then within the Sikhote-Alin zapovednik. He wrote that tigers were “on the edge of total extinction,” primarily as a result of hunting and the capture of tiger cubs for zoos and circuses. He saw an immense loss for science in the disappearance of this species, and recommended a complete ban on tiger hunting throughout the Far East, as well as the capture of tiger cubs. The work of Kaplanov, Yuri Salmin, and other researchers likely informed a change in Far Eastern hunting regulations. Hunting rules promulgated in 1939 permitted the killing of predators, including bears, wolves, and birds of prey year-round, but for the first time exempted Primor’e’s two largest cats.

After World War II, the leadership of the Far Eastern zapovedniki—particularly Bromlei and Abramov—took up Kaplanov’s initiative and pressed for restrictions on the hunting of tigers and leopards (along with deer, elk, and other species that already enjoyed state protection). Tiger hunting was specifically banned in 1947, as was the capture of cubs in 1956. Tiger populations in the Sikhote-Alin zapovednik bottomed out in the late 1950s, then began to recover. Reliable data on tiger populations in the zapovednik are available only from 1966 on. Kaplanov had estimated that there were 10 to 12 tigers in the Sikhote-Alin zapovednik in 1948, and perhaps twice this number in the rest of Primor’e. By the 1980s, there were over 30 tigers in the zapovednik alone (which had been substantially reduced in size), and more in the Lazovskii zapovednik and

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64. Shitilmark argues that soldiers stationed in the zapovednik shot Kaplanov and their commanding officer covered up the murder. See Shitilmark, 95-6, 281.
66. GARF F. A-358, op. 2, d. 34, l. 17; GAPK F. 1351, op. 1, d. 2, l. 1, 16ob.
elsewhere.\textsuperscript{67} In this way, conservation efforts within the \emph{zapovedniki} and beyond moved from a focus on deer and sable to a broader initiative aimed at protecting rare animals, whether commercially valuable or not.

\textit{Borders, armies, and state capacity}

While such measures were certainly important to the recovery of many of Primor’e’s large mammal populations, there were other challenges to conservation prior to World War II. Specifically, poaching remained common, despite greater state enforcement capacity, particularly along the Chinese border and around Old Believer settlements. In addition, security forces themselves apparently contributed to the anthropogenic pressure on wildlife. With the build-up of the Special Far Eastern Army (OKDVA) in the late-1930s, there was an increased demand for food (particularly meat) in Primor’e. As noted in Chapter 2, livestock was constantly in short supply in the province and collectivization greatly exacerbated the situation.\textsuperscript{68} The army employed hunting brigades to provide meat for soldiers. In fact, one theory regarding Kaplanov’s death is that soldiers stationed in the Sudzukhinskii \emph{zapovednik} were shooting so many animals that the \emph{zapovednik} director intervened and was murdered as a result. In addition, the OKDVA requisitioned livestock to feed its soldiers, leading locals to turn increasingly to the taiga and its large mammals (especially deer and elk) to meet their nutritional needs. Since predators, including tigers, competed with humans for deer, elk,


boar, and other animals, the increased incidence of hunting may have depressed their populations as well.\textsuperscript{69}

In contrast, during the post-war era, populations of ungulates, tigers, and sable rebounded, particularly after 1960. Two key changes were tighter border controls and greater state capacity. In their study of Amur tiger populations, Miquelle and Smirnov point out that tiger populations in the Sikhote-Alinskii \textit{zapovednik} continued to decline even after bans on hunting and cub-capture (in 1947 and 1956, resp.), probably because roads became more common in the reserve, giving poachers easier access. But beginning in 1965, tiger populations recovered rapidly, thanks to more regular patrols of the \textit{zapovednik}, anti-poaching efforts, fewer economic incentives (because there was so little access to international markets), and strict state controls on firearms.\textsuperscript{70}

Since much of the demand for antlers, furs, and other products had come from China and other international markets, a sharp reduction in cross-border trade (as a result of the Sino-Soviet split) and strong military presence along the border meant both means and motivation for poaching in Soviet territory were much reduced. During the interwar period, military expansion had added pressure on wild game populations, but since Primor’ë’s food was more stable after the war (partly in thanks to the success of rice-growing in the Khanka plain) and local industries were expanding, the post-war military build-up did not have the same effect on wildlife. To be sure, the effect was not uniform; the construction of border fences along the Sino-Soviet border in 1979 contributed to the fragmentation of Amur tiger populations, blocking the migration routes of both tigers and

\textsuperscript{69} Aramilev, “Sika Deer in Russia,” 483; Gaponov, \textit{Istoriia taeznogo prirodopol’zovaniia luzhno-Ussuriiskogo regiona}, 180–81.

their prey and isolating the tigers in Chinese territory in a very small gene pool. But on the whole, the effect of reduced trade and tighter border patrols seems to have been positive both for tigers and for other species, such as deer, that had become scarce during the mid-twentieth century.

Conclusion

The protection of land mammals in Primor’e underwent significant changes over a relatively short span of time. In the late-tsarist period, wildlife conservation evinced many similarities with the management of fisheries and forests. Early efforts focused on protecting animals from hunting on the part of peasant settlers, Cossacks, and especially East Asians, whom Primor’e’s elites regarded as destructive and uncultured, while providing the conditions for “proper” hunting and rational exploitation of animal life. Early conservation also focused on a narrow range of commercially valuable species, like spotted deer, elk, goral, and sable. Far from being on object of concern, tigers and leopards were lumped in with wolves and other “pests,” and exempted from hunting laws. In the absence of effective state regulation of hunting, Primor’e’s hunting societies—primarily VOLO—created bounded reserves intended to protect deer, birds, and other wildlife that members sought to hunt themselves. In this way, the role that Russian (and European) hunters played in the development of nature protection in

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72 Aramilev, “Sika Deer in Russia,” 483; Gaponov, *Istoriia taezhnogo prirodopol’zovaniia Iuzhno-Ussuriiskogo regiona*, 180–87. As noted in Chapter 2, tiger population correlate most closely with the number of deer and/or elk, and the predators are a keystone species in Primor’e, i.e. a good indicator of ecological health more generally. Dale G. Miquelle et al., “Hierarchical Spatial Analysis of Amur Tiger Relationships to Habitat and Prey,” in *Riding the Tiger: Tiger Conservation in Human-Dominated Landscapes* (Cambridge: Cambridge University Press, 1999), 71–99.
Primor’e was at least as important as that played by ecologists and other natural scientists.

After the Civil War, Soviet conservation policy in Primor’e largely continued the trends begun in the 1910s, namely the creation of game reserves, the promulgation of hunting regulations, and support for deer-farming operations. To be sure, there was discontinuity in rhetoric. Aside from Abramov’s references to “predatory” starozhily and retrospective accounts of the prerevolutionary era, Soviet scientists did not discuss the need to protect animals from “predatory” peasants or East Asians. However, in the 1920s, Soviet authorities—and scientists—also emphasized the conservation of deer and sable, and like VOLO members argued for protection of these species on primarily utilitarian, economic grounds. Scientists may have supported the protection of commercial species in order to sell conservation initiatives that had broader goals in what Weiner calls “protective coloration”—how ecologists justified their activities in the language of socialist construction. On the other hand, given the history of conservation in Primor’e and the dearth of information on other species in the 1920s, there is no reason to assume that their arguments regarding the economic utility of conservation were an attempt to dupe Soviet authorities into nature-protection. Moreover, Soviet-era conservation was also, in its own way, exclusionary, insofar as it removed vast tracts of territory from use by local peoples (peasants, indigenous peoples, or East Asian hunters) and sold the valuable furs and antlers garnered from the new reserves abroad. Kedrovaia pad’ was not so different from VOLO’s deer reserves, and from their inception the Sikhote-Alin and Sudzukhinskii zapovedniki were deeply concerned continuing the fur

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trade. Acclimatization was also a major concern, particularly as it concerned exporting spotted deer to farms elsewhere in the union.

If there was turning point in terms of nature protection in Primor’e, it came during the Stalin era. *Pace* Weiner, the utilitarian conservationism of the 1920s gave way to a broader system of nature protection in the 1930s and beyond. During the 1930s, Dal’krai administrators approved a vast expansion in the territory included in Primor’e’s *zapovedniks*, and Soviet scientists and *zapovednik* staff (who were often one and the same) were able to better study wildlife populations in remote areas of the territory. Better information, together with the infrastructure provided by the *zapovedniks*, led a few to advocate for nature protection in a broader sense. In this way, the conservation of deer, elk, and sable, though initially very anthropocentric and narrow in its goals, helped provide the conditions necessary for more comprehensive (and effective) nature-protection efforts in the post-World War II era.

In the early twentieth century, porous borders and lax enforcement in Primor’e’s interior hobbled many conservation efforts, and in times of crisis (such as the Russo-Japanese and Civil wars) they fell apart almost entirely. After World War II, however, and particularly after the Sino-Soviet split, tighter border controls, controls on firearms, and anti-poaching patrols all worked to the benefit of Primor’e’s large mammals. The rapid return of poaching in the 1990s, following the Soviet collapse, underlined the need for strong state oversight to protect Primor’e’s wildlife.

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It is commonly observed that environmental history is inherently transnational, since climate, flora, and fauna don’t abide by political borders. However, Primor’e’s environmental history makes clear that borders are important for the nonhuman environment, and to the history of conservation. First, anxiety surrounding Primor’e’s porous borders and the East Asian hunter-gatherers who migrated across them shaped the discourse surrounding conservation in its early days. Later, a closed border policed by a strong (Soviet) state lead to very different fates for species on either side. In the twentieth century, this was true for both deer and tigers, which were almost entirely eliminated in China while they recovered dramatically in the Soviet Union.75

Conclusion

In considering the environmental changes that occurred in Primor’e between 1860 and 1940 as a whole, three broad tendencies stand out. First, under the influence of settlers, regional trade connections, and industrial exploitation, the region experienced deforestation, and a reduction in a number of animal species, as well as erosion and more destructive flooding along some of its waterways. Second, almost immediately after Russia's acquisition of the territory, a variety of actors began advocating for nature protection, a call that the tsarist and Soviet states generally embraced. In the twentieth century, Primor’e experienced serious ecological problems, but major elements of its nonhuman environment—particularly forests and large mammals—enjoyed an unprecedented degree of protection and something of a renaissance by the middle of the twentieth century. Third, the discourse and policies concerning nature-use and protection were intertwined with ethnic and social tensions, which themselves were closely connected to the international situation in the Far East.

As I have argued here, these phenomena were closely related. The political, strategic, and symbolic value that Russian and Soviet elites attached to physical space and natural resources motivated Russian and Soviet colonization of Primor’e as well as efforts to develop resource industries. Colonization and resource development, in turn, had major implications for the region’s environment. At the same time, the political
valence of nature and nature-use also ensured that the pursuit of rational exploitation and conservation became a state priority. Conservation appealed to elites as a way to replace the messy economic, demographic, and ecological realities of settlement with something more orderly, scientific, productive, and Russian.

Indeed, Primor’e’s environmental history during the period under study is closely connected to broader processes of making nature, space, and peoples more legible, categorized, and defined—in short, of becoming modern. In less than a century, Primor’e went from being an amorphous part of a pre-modern empire, a borderland kept sparsely populated, to a territorially-defined, rapidly developing settler society, and finally to a province governed by a modernizing, nationalizing, rationalizing state. In the process, it experienced a telescoping of environmental changes characteristic of pre-modern colonial empires (deforestation by peasant farmers, claiming nature by use) and modern ones (industrial resource-extraction, claiming nature by invoking conservation).

Yet neither colonization nor modernity meant a process of unequivocal environmental decline. In comparison with Chinese Manchuria (or, for that matter, most of Asia), Primor’e’s twentieth century was a time of partial environmental recovery, offering a corrective to the idea that Soviet modernity fostered a regime of “ecocide.” My goal here has been not so much to offer a verdict on Soviet (or Russian) environmental policy, but rather to investigate why certain types of nature use prevailed at certain times, and why they changed when. And as I have argued here, both colonization and conservation appealed to tsarist and Soviet elites because they advanced the cause of empire- and state-building in Primor’e, either in direct material ways (cultivating the land, ousting East Asians) or ideological ones (advancing civilization and
socialism). While some of this appeal was specific to the situation in the Far East, it is indicative of the importance of international competition in driving modernization—with its attendant environmental effects—in Russia more generally.

From borderland to Russian province

In 1860, as a result of its distance from population centers and Qing migration restrictions, Primor’e’s was a space apart, a kind of artificial buffer, and its separateness made for a very particular set of relationships between humans and the environment. It lay beyond the “willow palisade,” cordoned off (along with the rest of Manchuria) from central China. In part, this was so that the Qing court could have privileged access to its furs, fish, seaweed, deer, and ginseng, which were exploited by indigenous peoples and a handful of Chinese hunters. On the other hand, while indigenous peoples used the environment in a number of ways, they did not clear large tracts of land for agriculture in the nineteenth century. Nor were there many Chinese around to do so. Whereas the spread of peasant agriculture was a major engine of deforestation in central China, Settlement restrictions kept it far from Primor’e. As a territorial buffer, a cultural touchstone for the frontier-oriented Manchu, and a place of escape, Primor’e was useful to the Qing because of its relative “emptiness.”

In contrast, tsarist officials did not want a borderland or buffer; they sought to make Primor’e “Russian” and to ensure that it had defined, defensible borders. In this sense, Primor’e experienced the transition to territorialization of borders that accompanied modern state-building. Acquiring Primor’e involved cataloging and

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1 On the relationship between state-building and the creation of discrete borders, see for instance, James R Akerman, “Cartography and the emergence of territorial states in western Europe,” Proceedings of the
mapping the territory’s land, flora, and fauna and settling Cossacks and peasants in border zones—even before Russia gained formal control of it. Indeed, defining borders and space was a critical concern for Far Eastern officials throughout the nineteenth century. During the tsarist period, a variety of state and professional organizations, including the RGO, the members of the Amur Expedition, and the Resettlement Administration sought to study and define the region to better suit the needs of colonization in a process similar to that which had accompanied settlement of the steppe. The porousness of the Russo-Chinese border and difficulty policing the coast were constant sources of irritation for state officials, but with the growth of state power in the early 1900s and particularly after 1930, the region acquired fixed borders “on the ground” in a way it had never had previously.

Most centrally—and in contrast to the Qing—Far Eastern administrators directed settlers to Primor’e in order to help make it “Russian,” to define it from neighboring Manchuria and Korea. Unlike the Qing, they wanted to populate Primor’e as quickly as possible. To be sure, tsarist-era colonization was never a narrowly ethno-national project. As in other imperial borderlands, tsarist officials were practical and pragmatic in their approach to national questions. They supported the settlement of non-Russians, particularly those who seemed especially valuable from an economic standpoint and politically trustworthy, including Koreans and some Chinese. Whether by necessity or by choice, migration policy retained a great deal of flexibility, at least until the 1920s.

That said, there were limits to this tolerance. Even in the 1860s, when migration policy was at its most flexible, senior officials argued that Chinese and Koreans “could be useful” even if they were potentially treacherous and not desirable in the long term. By the early 1900s, elites in general were suspicious of Chinese migrants and became more wary of Koreans. If the tsarist era was marked by xenophobic rhetoric and little action, in the Soviet period the opposite was the case. Explicit racism was rare, but on the other hand the Soviets deported nearly all of Primor’e’s Koreans and Chinese, producing a radically changed demographic landscape, one that was almost exclusively Russian and Ukrainian. Moreover, the discourse surrounding allegedly “predatory” water-use by Koreans and fishing by Japanese is indicative of how science and conservation were embedded in—indeed, in some ways defined by—conceptions of ethnic, racial, or social difference. While the deportations of 1937-38 were more extreme than anything undertaken in Primor’e in the prerevolutionary era, and should be understood as part of a broader turn against diaspora nationalities during the mid-Stalin era across the Soviet Union, they were consistent with tsarist-era concerns about migration and with long-standing connections between ethnicity, environment, and security.²

Russian and Soviet colonization also involved attempts to make other definitions and divisions, including those between civilization and barbarism, wildness and cultivation, even land and water. In the early days of settlement, some wanted to make Primor’e more cultivated and less of a damp, densely-forested, primeval wilderness. When it became clear that deforestation had deleterious effects (worsened flash flooding,

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e.g.) and that the territory was not getting any drier, tsarist officials overseeing settlement sought to separate land from water through drainage and flood prevention. Soviet agronomists and engineers later stove to bring land and water back together in the form of irrigated agriculture, but in a way that involved some sort of coordinated system, electric pumps, and other (unspecified) agricultural technologies—not the supposedly “backward” practices of Korean rice-farmers.\(^3\) In the tsarist period, state reformers also sought to make a firmer distinction between field and forest by circumscribing peasant use of the forest while advocating for intensive farming and industrial timbering. Similarly, hunting laws distinguished between desirable and undesirable fauna, allowing the hunting of predators at all times by any means (laws that persisted into the 1930s). Finally, throughout the period under study, observers embraced a dichotomy that separated rational and predatory uses of land and resources, one that more often than not coincided with ethnic and social divisions. Making Primor’e modern was about drawing and enforcing borders on a map, but also making artificial divisions in “nature” itself and between populations.

**Imperial competition and colonization**

What motivated tsarist officials to make Primor’e “Russian”? In comparison with the experience of other empires, colonization of Primor’e was a deliberate attempt to claim space and resources. It was a manifestation of what David Wolff, in his study of

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\(^3\) As Maya Peterson has shown, tsarist and Soviet engineers adopted similar attitudes toward Central Asians and their irrigation practices. Maya Karin Peterson, “Technologies of Rule: Empire, Water, and the Modernization of Central Asia, 1867-1941” (PhD dissertation, Harvard University, 2011).
neighboring Manchuria, has called “competitive colonialism,” and one that precipitated an equal but opposite reaction from the Qing, since Russian encroachment convinced them that they, too, had to people space to keep it and so opened the northern borderlands to settlement. Especially in its early stages, Russian colonization was largely state-directed rather than popular. Though Primor’e was one of Russia’s last territorial acquisitions and one of the most distant from European Russia, it was among the first of the empire’s Asian territories to which tsarist authorities actively directed Russian and European settlers. Resettlement programs involved significant investment of personnel and resources (in the form of land grants, loans, subsidies, emergency relief, and tax and military service exemptions). Moreover, raisons d’état—security foremost among them—informed settlement policy in Primor’e throughout the nineteenth and twentieth centuries, with major inflections in migration occurring alongside or in the wake of renewed foreign policy crises and concerns. There was population pressure at home and there were potential riches in the east, but unlike along many settlement frontiers, here the flag did not follow trade, nor was the state forced to rescue hapless settlers who had stirred up trouble with the locals.5

Just as officials and other elites viewed the occupation of space through the lens of imperial competition, so too did they approach the use of land and natural resources as objects or sites of contestation. This was particularly apparent with respect to coastal seas, where the Resettlement Administration sought to displace East Asians, partly to

curtail their ecological impact, by creating a “Russian” and subsequently Soviet fishing industry. The broader project of agricultural settlement evinced similar motives. In the first decades of settlement, tsarist officials saw the occupation and cultivation of land as a way of staking a claim, as did peasant settlers who claimed land by plowing it. The Sovnarkom’s suspicion that Korean rice cultivation might serve the interests of Japanese invaders is an extreme version of the view that control over and utilization of the land had direct relationship to sovereignty, security, and political authority. Ultimately, Primor’e became national in the sense that natural resources (as well as nature protection) were “nationalized,” i.e. brought under state control or oversight, by the 1940s, for the benefit of the Soviet Union.

That geopolitical concerns could serve as a motivation for colonization is not an especially novel idea, but it is important in the Russian context because of the way that external challenges have historically influenced internal reform—including changes in environmental use. Geopolitical and/or military considerations have long been an important factor in Russian resource use, from the massive lines of earthen embankments, forests, and flooded fields that defended the southern edge of Muscovy to the exploitation of strategically vital resources in the context of the Cold War, which justified massive development schemes in Siberia and the Far East in particular.

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powers may also be relevant in the case of other “reforming traditions”—and their ecological consequences—in a variety of modernizing polities (the Meiji Japan, the Ottoman Empire, e.g.). Moreover, this study shows that in the case of Primor’e, interstate competition could militate in the other direction, that is, for nature-protection, not just for increased exploitation.

**Settlers and nature**

While much of the discussion here has focused on officials and other elites, this is not to deny the agency of settlers themselves, or to downplay their role in Primor’e’s environmental history. Settlers from elsewhere in the Russian Empire, Europe, China, and Korea, together with seasonal migrants, brought agriculture, new land-uses, and environmental change to Primor’e. Russian subjects, for the most part, migrated to Primor’e voluntarily in search of a better life, often in the face of want or a lack of opportunities in their home provinces. They took advantage of state incentives, but once in Primor’e lived largely beyond state oversight. The situation with Korean settlers was similar. In the mid-nineteenth century, they came to Primor’e in search of opportunity and took advantage of modest land grants from the state. Although tsarist officials

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wanted them to settle away from Korea and Manchuria, they tended to cluster in border regions, even when land-tenure became more constrained. Chinese faced greater restrictions from the outset, but a weak state gave them wide latitude to settle, hunt, fish, and trap in Primor’e’s more remote areas into the twentieth century.

Thus, while the state’s intentions were decisive in initiating colonization and determining its broad contours, other factors and actors were at work in actually changing the face of Primor’e’s environment. When it came to how Primor’e’s various residents actually used the flora and fauna—where, how, and what they hunted, fished, and farmed—the state had relatively little say, at least during the first stages of settlement. Until the 1890s, settlers largely decided where they would settle (even if it meant displacing non-Russians in the process). Until the 1930s they determined how they would use these various lands, though state organs attempted to exert some control over peasant land-use—as well as over East Asian hunting and gathering—as evidence of ecological degradation mounted and the region remained dependent on outside sources of supply. Throughout the late imperial era and into the Soviet period, they employed agricultural methods (including swidden and long-fallow farming) that state officials believed were backward. They also adopted mixed economies based on farming, hunting, and fishing, and also garnered income by selling off woodlands to timber merchants and renting lands to Chinese and Koreans. While experts and officials tended to criticize such practices, they were in many ways rational responses to the opportunities and limitations that settlers faced. The damp, monsoon climate, with its fogs, pests, and flooding, complicated the introduction of Russian-style agriculture and stock breeding. Investing energy in raising crop yields made little sense given the abundance of land,
making shifting cultivation more attractive. Because Russian subjects enjoyed privileged access to land, and because East Asians’ wages were comparatively low, renting out agricultural land to Chinese and Korean farmers was in the interests of both parties.

The combined effect of agricultural settlement and commercial exploitation of forest and sea products had noticeable effects on the environment by the 1880s. Agriculturalists of all nationalities contributed to deforestation by land clearance and as a result of their liberal use of fire. Hunting and fishing, both for subsistence and markets, affected valuable animal species like deer, sable, salmon, and seaweed, as well as “pests” like tigers. Some of the ecological changes after 1860—particularly those related to land clearance—followed directly from settlement. Others, such as illegal hunting, foraging, and fishing on the part of East Asians, occurred independently of the colonial project and in conflict with it. To be sure, the two were not absolutely separate. Russians earned extra income by selling pelts and antlers to Chinese intermediaries (as well as raw salmon to the Japanese), and in this sense trading connections with Chinese markets facilitated settlement. Chinese and Koreans may have had, as contemporaries believed, a greater role in the exploitation certain animal and plant populations—deer, ginseng, and seaweed, for instance—than Russian or European settlers. However, given the highly fluid character of Primor’e’s economy, it is clear that deforestation, over-hunting, and over-fishing was an ecumenical and multinational enterprise.

Conservation and managed colonization

The ways in which Primor’e’s officials, naturalists, gentlemen hunters, and other elites interpreted and understood the environmental changes they witnessed shaped their
responses to these changes. In particular, they believed conservation was an essential part of colonization, one that would facilitate Russia's sovereign control over space and resources. Almost immediately after Russia acquired Primor’e, a wide range of observers expressed anxiety over what they believed to be ecological degradation. This sentiment was strikingly widespread by the turn of the century and also fairly consistent. In this view, rather than “making Russia,” colonists were combining with the East Asian settlers and seasonal migrants to turn Primor’e into a “desert,” as Arsen’ev put it. Yet despite the influx of thousands of settlers and the rapid spread of agriculture (generally at the expense of the taiga), Primor’e, on the eve of the First World War, remained strategically vulnerable. It was dependent on imported provisions and had a large East Asian population, which officials increasingly saw as a threat. From the state’s perspective, the territory faced simultaneously the problem of under-development and over-utilization: in this view, Russians settlers failed to utilize the territory’s natural bounty while Chinese and Koreans readily did so. Throughout the imperial period, they tended to blame both ecological degradation and the failures of colonization on the same causes—the backwardness of peasant settlers and the rapaciousness of East Asians. Accordingly, they viewed the “rational” use of resources as a means to both more effective settlement and better husbanding of natural wealth.

Consequently, tsarist administrators and voluntary hunting societies pursued policies aimed at curtailing backward or pernicious land- and resource- use, and, particularly after 1900, encouraged exploitation by modern and technologically-advanced means. In the forests, the state—from the late 1870s on—attempted to control peasant and East Asian forest use, largely by punitive means, in order to stem deforestation and
wildfires. Slightly later, officials also supported commercial logging, which they viewed as a more rational use of forest resources than peasants’ clearing, burning, and selling off their forests allotments willy-nilly. Similarly, in the 1880s, voluntary hunting societies sought to protect certain animal species from the supposedly irrational and wasteful settlers and Chinese, mainly so that they could hunt them themselves regularly and in perpetuity. The “rational” production of deer antlers on farms reflected the same sorts of motives (and it was indeed more “rational,” given that one did not need to kill the animal to harvest its antlers). On the seas, tsarist officials viewed East Asians’ use of seaweed and fish as a direct challenge to Russian sovereignty and as a threat to Primor’e’s material wealth. Their response was to simultaneously encourage the settlement of experienced fishermen from Russia and the Baltic provinces in order to oust foreigners from coastal seas and to institute some conservation measures to protect sturgeon and salmon runs. At the same time, governors-general and the Resettlement Administration supported policies aimed at creating a more modern, technologically advanced Russian fishing fleet, one better able to both compete with the Japanese and exploit offshore riches in a rational way.

Did these responses matter? After all, in Primor’e the tsarist state was weak and the Soviet state was not much stronger, at least in the early going; much of the territory was “illegible” well into the twentieth century; and those whose voices are rarest in the sources (settlers, indigenous peoples) were also those who actually engaged with the natural world on a daily basis. In Russia and the Soviet Union, we are warned, plans and dreams seldom went beyond the desks on which they were drafted. Seasonal migrants from China and Korea moved back and forth throughout the late-tsarist era, and
thousands came to stay permanently, despite increasingly restrictive migration regimes. On the coast, Japanese fishermen worked freely (and mostly legally, according to the terms of the 1907 Fisheries Convention) in Russian/Soviet territorial waters. The trade in sea and forest products that prompted outrage among Russian elites continued throughout most the tsarist period and during the Civil War. Although there was talk of conservation, the state’s limited reach attenuated nature protection. Primor’e’s hunting societies enjoyed some early successes, but they too had difficulty enforcing the bounds of their reserves.

Nevertheless, many paper realities came to fruition, at least in the long run. In the late tsarist period, administrators began to advocate state-directed, industrial exploitation of natural resources and by the 1930s it had become the norm. Conservationists had long called for closer control on the trade in forest products among Primor’e, Manchuria, and Korea, and a much stronger security presence along the border did help limit poaching and illicit cross-border trade. Officials and other observers wanted peasants to switch from extensive to intensive farming, and with the introduction and spread of irrigated agriculture helped facilitate the latter. Primor’e’s game reserves and calls for better wildlife protection contributed to the formation of state nature preserves during the 1920s and 1930s. Moreover, some conservation schemes were quite effective at conserving flora and fauna. Land mammals in particular enjoyed an unprecedented revival after World War II, and wide swathes of forest were protected along with them in the zapovedniki. To a degree, the state was able to exert greater control over nature-use by the eve of World War I. Foresters, for instance, were better able to police their districts, though this remained limited.
In light of such successes, were Primor’e’s flora and fauna better off under a strong state, firm(er) border, and an illiberal economy? Had Primor’e remained Chinese, it is possible that it would have gone the way of the rest of Manchuria, largely denuded of forests and with much less wildlife than it currently has. The opening of Primor’e since 1991, and the rampant poaching and illegal logging that followed in the 1990s, has underscored the benefits that isolation bestowed on certain elements of the region’s environment, particularly its forests and tigers.¹⁰

On the other hand, Russian and Soviet colonization and modernization directed much more of Primor’e’s environment to human ends that had been the case before 1860. In addition, while a detailed picture of environmental conditions in the Far East during the second half the twentieth century would require further research, it is clear that “rational” development under Soviet auspices cut both ways. Forests outside zapovedniki were subject to increased logging during the Soviet period, especially after World War II. Exploitation of fisheries did not restore sturgeon to the Amur or Ussuri, and salmon in Primor’e’s waters went into decline following a brief postwar uptick. Moreover, the development of heavy industry and resource extraction after World War II, which can be

seen as consistent with pre-war ideas of rational development through science and modern technology, generated pollutants that were only a minor concern in the pre-war era, when certain industries (mining, ship-building) were in their early stages. The Amur was particularly hard hit, as were areas around mines, thermal generating stations, pulp-and-paper mills, and other facilities.

The duality characteristic of the Soviet era—protection on the one hand, exploitation and pollution on the other—had deep roots in the tsarist past. In the conditions of the Far East, it held particular appeal for those who believed that with the help of science, reason, and the state, colonization could complement conservation, and Primor’e could be made “Russian” (or Soviet) without overstepping natural bounds. Although such an approach was in some ways distinct—the zapovedniki, for instance, were a uniquely Soviet institution—those who planned and undertook conservation policy in Primor’e shared practices, attitudes, and an intellectual heritage with their counterparts in Germany, the United States, India, and elsewhere in the world. Indeed, how to harmonize human needs with natural limits remains an existential question in our own times, though we employ the term “sustainable” (rather than “rational”) development. Primor’e’s experience reminds us of the ways in which political, social, and cultural factors exert a powerful influence on our understandings of nature, development, and the appropriate relationship between the two.
Bibliography

Archival sources

State Archive of Primorskii Krai (GAPK), Vladivostok
- Fond 1: Head of Resettlement Affairs for the Primorskii Region (1906-1920)
- Fond 633: Primorsko Basin Administration for the Protection and Reproduction of Fish Reserves and the Regulation of Fishing (Primorrybvod) (1923-present)
- Fond 853: Far Eastern Rice Trust (1932-1934)
- Fond 1125: Planning Commission of the Executive Committee of the Ussuri Provincial Soviet of Workers’ Deputies
- Fond 1166: Workers’ and Peasants’ Inspectorate for the Vladivostok District
- Fond 1351: Records of the Sudzukhinskii State Zapovednik (Lazovskii region)
- Fond 1506: Primorskoe Provincial Land Administration

State Archive of the Russian Federation (GARF), Moscow
- Fond 102: Department of Police (of the Ministry of Internal Affairs) (1880-1917)
- Fond R-176: Council of Ministers of the Russian (White) Government (Omsk and Irkutsk, 1918-1920)
- Fond A-262: State Planning Commission (Gosplan) for the RSFSR (1925-1990)
- Fond A-310: Ministry of Agriculture for the RSFSR (1917-1963)
- Fond A-358: Main Administration of Hunting and Zapovedniki (Glavokhota) for the RSFSR and its successors (1933-1990)
- Fond A-374: Central Statistical Administration for the RSFSR (TsSU RSFSR) (1927-1991)
- Fond A-406: Peasants’ and Workers’ Inspectorate for the RSFSR (1920-1934)
- Fond A-482: Council of Ministers of the RSFSR
- Fond R-3722: Russo-Japanese Conciliation Commission (1920-1921)
- Fond R-3751: Provisional Government of the Far East, Primorskaia Zemtsvo Government (1920)
- Fond R-3773: Provisional Council for Fishing, Maritime, and Hunting Affairs in the Far East (1920)
- Fond R-5446: Council of Ministers of the USSR

Russian State Naval Archive (RGA VMF), St. Petersburg
- Fond 410: Chancellery of the Ministry of the Navy (1836-1918)
- Fond 417: Main Naval Staff (1884-1918)
- Fond 909: Administration of Pacific Ports (1856-1887)
Russian State Historical Archive (RGIA), St. Petersburg
- Fond 350: Plans and Designs for Equipping Railroads
- Fond 391: Resettlement Administration (1867-1918)
- Fond 1273: Committee for the Siberian Railroad (1892-1906)

Russian State Historical Archive of the Far East (RGIA DV), Vladivostok
- Fond 1: Primorskaia Provincial Administration (1818-1917)
- Fond 5: Primorskaia Provincial Statistical Commission (1887-1917)
- Fond 94: Primorskaia Provincial Forest Inspector (1888-1920)
- Fond 130: Primorskaia Hydrotechnical Party (1912-20)
- Fond 183: Fishing Inspector for the Vladivostok Economic Region (1909-1921)
- Fond 702: Chancellery of the Priamur Governor General (1861-1920)

Russian State Military-Historical Archive (RGVIA), Moscow
- Fond 99: Individual fond of Governor-General Pavel Unterberger
- Fond 5294: The Ussuri Cossack Host (1879-1918)

Contemporary Periodicals

Bulletin de la Société de la Géographie
Dalekaia okraina
Ekonomicheskaia zhizn’ DV
Morskoi sbornik
Primorskii Khoziain
The New Monthly Magazine
Sovetskoe Prim’e
Zapiski Obshchestva izucheniiia Amurskogo kraia
Zapiski Priamurskago otdela Imperatorskago russkago geograficheskago obshchestva
Zemskaia zhizn’ Primor’ia
Zhurnal Ministerstva vnutrennykh del

Published materials


———. *Kratkii voенно-географическii i военно-статистическii ocherk Ussuriiskogo kraia 1901-1911 gg.* Khabarovsk, 1912.


———. *Voенно-географическii i военно-статистическii ocherk ussuriiskogo kraia, 1901-1911 g.g.* Khabarovsk: Tipografiaiia shtaba priamurskago voennago okruga, 1911.


Baikov, N.A. Iziubr i iziubrevodstvo. Kharbin: Obshchestvo izucheniiia man’chzhurskogo kraia, 1925.


———. “Mestnoe risoseianie.” Russkoe Primor’e, no. 1 (July 1, 1922): 7–11.


Feigin, Filipp. Dokladnaiia zapiska o merakh k uvelicheniiu russkago naseleniia v Primorskoj Oblasti i razvitiu v nei rynka dlia sbyta proizvedennoi russkoi promyshlennosti v Kitai, Iaponiiu i Koreiu. St. Petersburg: Tipografiia V. Reinberg, 1884.


Maak, Richard K. *Puteshestvie na Amur, sovershennoe po raspriazheniiu Sibirskogo otdela Russkogo geograficheskogo obshchestva v 1855 godu*. St. Petersburg, 1855.

———. *Puteshestvie po doline reki Ussuri*. St. Petersburg, 1861.


Men’shchikov, A.A. Materialy po obsledovaniu krest’ianskikh khoziaistv v Primorskoi oblasti, 1911.


Men’shchikov, A., and Pereselencheskoe Upravleni. Obshchie vyvody obsledovaniia starozhilov stodesiatinnikov Primorskoi oblasti (materialy po obsledovaniu


Obshchestvo liubitelei okhoty. *Otechy sostoiashchago pod pokrovitel’ tvom ego imperatorskogo vysochestva velikago kniazia Aleksandra Mikhailovicha Obshchestva liubitelei okhoty, 1888-1896 g.g. Vla’divostok: Tip. gazety Dal’nii Vostok, 1897.*


Peterson, Maya. “‘Native’ Rice, American Cotton, and the Struggle for Water in Central Asia Under Russian Rule, 1890s-1920s.” Columbus, Ohio, 2011.


Rittikh, A.A. *Pereselencheskoe i krest’ianskoe delo v Iuzhno-Ussuriiskom krae*. St. Petersburg, 1898.


Romaniello, Matthew P. *The Elusive Empire Kazan and the Creation of Russia, 1552-1671*. Madison, Wis.: University of Wisconsin Press, 2012.


Rusanov, P. “K zapreshcheniuiu lova osetra i kalugi v basseine reki Amura.” Ekonomicheskaia Zhizn’ DV, no. 9 (1927): 76–79.


Sergeev, O. I. “Organizatsiia kazach’eego pereseleniia s Dona na Dal’n’yi Vostok v kontse XIX-nachale XX v.” In Dal’nii Vostok Rossii: problemy sotsial’nogo-politicheskogo


Teichmann, Christian. “Changing Tides on the Oxus The Lower Amu Daria, 1920s to 1940s.” Columbus, Ohio, 2011.


Tselishchev, M.I. *Ekonomicheskie ocherki Dal’nego Vostoka.* Vladivostok: Knizhnoe Delo, 1925.


