

TRAINING FOR EMPIRE AND MODERNITY: JAPAN'S DEVELOPMENT
OF HOKKAIDO FROM THE 1870s-90s

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ABSTRACT

Most history texts place the beginning of Japan's colonial empire in 1895, with the acquisition of Formosa (now Taiwan) and Korea in 1910. The first Japanese experience with administering and developing a land not traditionally their own, nor inhabited by ethnically Yamato Japanese, however, might be found in the relatively inhospitable northern island of Hokkaido during the first half of the Meiji era (1868-1912). Hokkaido can be viewed as a colonization laboratory, where the blueprints of the later Japanese Empire were initially developed. It was not solely by native Japanese knowledge that the exploration, research, development, and the creation of infrastructure in Hokkaido were undertaken, but by well-paid foreign advisors. These Westerners (including many Americans) surveyed and categorized the resources of Hokkaido, while testing which crops, animals, structures, and methods might help the economy of Hokkaido develop into a modern one. Particularly with the establishment of an institution such as Sapporo Agricultural College, the foreign advisors trained a new generation of Japanese capable of doing just the same. Hokkaido's development and the treatment and acculturation of the colonized peoples of Hokkaido, the native Ainu, would prove an invaluable guide and underlying influence to the colonization of areas like Formosa, Sakhalin, and Korea. Additionally, while Hokkaido was initially not so easily tamed and some initial development efforts stalled out, both the successful work and the failures accomplished during the period of the 1870s to 1890s effectively laid the groundwork for permanent Japanese settlement on the island. The early development of Hokkaido was

therefore an important piece to Japan's modernization and had far-reaching consequences for both Japanese imperialism and the Hokkaido of today.

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A NOTE TO THE READER

All quotations have been kept in their original forms. Spelling errors in the original source documents have been denoted by the use of “[sic]” where appropriate. Spellings in the British-English style (such as “colour”) have been left unformatted.

The island of Hokkaido will be referred to as “Ezo” prior to 1869 and “Hokkaido” thereafter. Original sources use a variety of terms for the Ainu (Aino, Ainos, Ainu) and frequently refer to the island of Hokkaido by its former designation of Ezo, even after 1869, and by various spellings (Yezo, Yesso, Yeso—“ye” is an archaic spelling and is pronounced “e” in modern Japanese).

Hokkaido (sometimes written Hokkaidō) has been written without any accent mark, as has been the case in recent scholarship. Japanese terms have been used sparingly, though are italicized and defined when present in the text, unless they are organization names (such as the “Kaitakushi”) or words common in English (“samurai”). Less common Japanese words or lesser-known place names have been appropriately formatted with accent marks.

The southern islands traditionally inhabited by the Japanese (Honshu, Kyushu, and Shikoku) are here referred to as the “mainland” of Japan, in comparison to the northern island of Hokkaido.

INTRODUCTION

Few aspects of Japanese history are as intriguing to historians as Japan's dramatic 1868-1942 modernization. During this period, the Japanese created a modern state that stood equal to the powers of the West, industrialized its economy, and built one of the world's largest empires. After its doors were forced open by the United States in 1853, Japan saw the end of the Tokugawa House's rule (1600-1868), concluding the age of the samurai. What replaced Tokugawa power was a new government with the young Meiji Emperor at its head. Operating with the ambitious goal of first overthrowing the unequal treaties placed upon Japan by the imperial West, and then equaling Western economic, military, technological, and industrial power, Japan eventually succeeded in playing the West's own game. By the end of the Meiji era (1868-1912), Japan had earned the respect of the West through its growing modern economy and defeat of Russia in the 1904-05 Russo-Japanese war, the first non-Western country to win a war against a Western power in the industrial age. In the Taisho era (1912-26), Japan managed to stand as one of the five great powers at the 1919 Paris Peace Conference talks, where the fate of the post-World War One world was to be decided. Finally, the Showa era (1926-89) saw Japan achieve the height of its power in 1942 and hold a vast empire that included much of Southeast and East Asia, before falling in the Second World War to the Allied Powers, led by the United States. After the war and with some U.S. influence, it remade itself as an economic world power. None of this, however, occurred in a vacuum.

The role of the northernmost island of the Japanese archipelago, called Ezo before the Meiji era and Hokkaido after it, in this modernizing process has largely been ignored. The main islands of Japan, especially the largest, Honshu, were the political and economic centers of Japan where decisions were made. Japan's capital and largest cities saw obvious tremendous changes as the nation opened to the West and industrialized, and have therefore attracted the a large majority of scholarly attention. Hokkaido, on the other hand, has rarely been seen as anything other than a semi-frontier land that was only slowly developed with significant foreign input and contributed very little to Japan overall. When this frontier was thrown open in the Meiji era, the Japanese also did not suddenly move to Hokkaido in mass, as was the case of the American West, and the population instead stayed concentrated within Japan's three main islands. Ignoring the role of Hokkaido, scholars have largely traced the hard date of the beginning of Japanese colonialism only to 1895, with Japan's incorporation of Formosa into its empire. Several of these positions require reinterpreting.

The few existing English-language works relating to Hokkaido are divided into several categories: those focusing on the native inhabitants of Hokkaido, the Ainu—their culture, and their eventual absorption into the Meiji state; books examining the role of Ezo/Hokkaido in Russo-Japanese relations; and, texts describing Hokkaido's development, especially as it relates to the role of American advisors. Besides the contribution of numerous anthropologists in recreating what Ainu culture may have looked like, the two figures who have contributed most heavily to examinations of the acculturation of the Ainu are Brett Walker and David Howell. Walker's *The Conquest of Ainu Lands* examines environmental aspects of the changing Ainu relationship with the

environment and their shifting patterns of subsistence in the Tokugawa era. Howell has several chapters of his *Geographies of Identity in Nineteenth-Century Japan* devoted to the intellectual transition of Ezo/Hokkaido and the Ainu from an outer land and a barbarian people to an inner land and a native people stripped of their identity. The works of Alexander Lensen (1971) and John Harrison (1953) are helpful, if dated, works that describe Russo-Japanese relations. Lensen's text is more solidly a diplomatic history from the eighteenth to nineteenth centuries, where Japanese and Russian encounters in Hokkaido figure prominently. The focus of Harrison, on the other hand, is on the initial Meiji development of Hokkaido, with the goal of keeping it out of Russian hands. The final set of works examines the influence and roles of the Americans who were hired to assist with the development of Hokkaido under the Kaitakushi (the "colonial office," in operation from 1871-82), mostly during the 1870s. Published by the Hokkaido government, *Foreign Pioneers* provides brief profiles of a wide range of foreign employees, while Fujita Fumiko's *American Pioneers and the Japanese Frontier* deals with the roles and impressions of a select number of prominent Americans. A few other works written by Japanese authors on Hokkaido's development also exist, though none have been published within the last 50 years, nor with any great depth. Ann Irish's 2009 book, *Hokkaido: A History of Ethnic Transition and Development on Japan's Northern Island*, attempts to put many of the above elements together, though her focus is primarily in political history and limited to the island itself.

A number of topics therefore open themselves for additional examination. The existing works on Hokkaido's development era from the 1870s-1890s deal primarily with official policy, and fail to get down to the important details of what was planned, actually

attempted, and ultimately a success or failure. Taking a resource-based environmental and economic focus reveals a number of important aspects of development and sheds light on how these translated into official structures in Hokkaido and beyond. While many works on the Meiji era deal with the influence of foreigners upon Japan and the impact of modernization, few show this uneven trial-and-error process in action. Other works favor foreign influences over Japanese accomplishments. Finally, scholars have underestimated the role of Hokkaido in the colonization that came after 1895. Hokkaido is merely mentioned in passing in prominent works on the subject. For instance, Hokkaido is not referenced at all within W.G. Beasley's *Japanese Imperialism 1894-1945*. In a collection of essays entitled *The Japanese Colonial Empire, 1895-1954*, editor Mark Peattie only acknowledges the importance of Hokkaido to Japanese colonialism in a partial paragraph, stating that "the Japanese effort in the development, exploration, and colonization of Hokkaido, 1873-1883...provided practical experience in the creation of a settlement colony."¹ He doesn't, however, carry his analysis any farther than that or make any subsequent mentions of the island.

Instead, the development of Hokkaido must be seen as a microcosm of larger issues faced by a modernizing Japan. The early stages of Meiji involvement in Hokkaido reveal how much the Japanese had to learn to catch up with the West, how the Meiji state educated those who would drive Japan forward, and, during the age of colonialism, how far the Japanese had come compared to the rest of Asia. Hokkaido's development characterized the challenges Japan generally faced in learning from the West, in needing to develop its own economy and infrastructure, and in managing its own people, as well

¹ Mark R. Peattie, "Japanese Attitudes Toward Colonialism," in *The Japanese Colonial Empire, 1895-1954*, ed. Ramon H. Myers and Mark R. Peattie (Princeton, N.J.: Princeton University Press, 1984), 80-81.

as those not ethnically Japanese. The trial-and-error process of Japanese modernization is particularly evident in Hokkaido, though it has been less explored by scholars than events on the mainland. The early attempts at the development of Hokkaido and the management of the Ainu are revealing of the social and political structures that would later carry through in Japanese colonialism. Some of the same agrarian techniques or crops introduced by American advisors were later applied to the creation or development of colonial agriculture, infrastructure, and economies. Cultural biases evident in the Japanese management of Hokkaido's native Ainu also played out in some similar ways within Japanese colonies. Analysis of Hokkaido therefore provides a fresh perspective as to how certain aspects of Japanese colonialization occurred as they did. The initial development during the 1870s-1890s also had a number of long-term consequences for the island itself, which have been largely unexplored by scholars. These include the overall growth of the island's population and cities, crops introduced in the Meiji era that still flourish today, and the significant fact that the Japanese absorbed Hokkaido into Japan proper and ultimately retained it after World War Two, despite the loss of the rest of its empire. In short, an analysis of Hokkaido's development from the 1870s-1890s in the context of both modernization and imperialism has been mostly lacking from the current historiography of Japan. A new look at Hokkaido's long-term relevance provides important context to pre-War colonial activities and insights into how the Hokkaido of today achieved its present character.

The story of these events must begin in the Tokugawa era with an examination of early Japanese influences in Ezo and the clashes between Japanese and Russian explorers there, and in the islands to the north. Early Japanese settlements began the acculturation

of the Ainu, as well as some early environmental change. The onset of the Meiji era then threw aside many of the structural and intellectual values of Tokugawa era Japanese in an attempt to catch up with the West and avoid the colonial fate of most of East and Southeast Asia. This was avoided in part by hiring the Westerners themselves, who helped legitimize Japan's claim to Hokkaido and began to plan out how it might be developed. Hokkaido was a potential treasure trove of natural and mineral resources, though figuring out how to begin to extract these items was a major difficulty for the Kaitakushi. The climate of Hokkaido was initially too cold to support rice-based agriculture. With rice being the primary food source for the rest of Japan, the Kaitakushi made a number of strategic plans for attracting immigrants, though it had little success until later years. The problem of food was solved in part by the importation of Western crops and animals by the American advisors and the creation of Sapporo Agricultural College (SAC), which was able to grow, test, and distribute crops to immigrants. The Kaitakushi and other Hokkaido administrations focused on building an infrastructure, from roads to some of the first railways and telegraphs in Japan, while developing schools and social services. Much of this work was supervised by Western advisors, though the Japanese who worked alongside them learned valuable skills from the experience, in addition to the training available at SAC. The Ainu were one of the first non-Japanese people the Meiji state attempted to administer, and its treatment of the island's natives made it clear that Japanese progress was the primary motivating factor in the relationship. Japanese exploitation, with Ainu aid, of many fish and animals caused dramatic downswings in animal populations, making the hunting-oriented Ainu even more reliant on the Japanese state. Finally, Japanese colonialism would officially begin in

1895, while the influence of Hokkaido in colonial development would extend well beyond that date. The result of what was learned in Hokkaido is particularly evident in the administration of Formosa, Sakhalin, and Korea. Japan retained Hokkaido following its defeat in World War Two and the loss of all its colonies, confirming Hokkaido's transition from an outer to an inner land. An examination of postwar Hokkaido reveals that the influence of the Kaitakushi and the American advisors is still evident in Hokkaido's agriculture and economy.

CHAPTER 1 – PRE-MODERN HOKKAIDO AND THE MEIJI OUTLOOK

Japanese contact with Hokkaido (called Ezo until the end of the Tokugawa era) and its inhabitants before the Meiji era is an extensive but important history to recount. In some ways, hundreds of years of Japanese influence over the Ainu constituted a slow economic conquest, which made the Ainu easy to fold into the Japanese empire post-Meiji. Through trade, the Japanese slowly exploited the resources of Ezo and began to change its ecology and Ainu subsistence patterns. This trade garnered the interest of the Russians to the north, who began to seek out trade with the Japanese. Both the Japanese and Russians explored the islands in between Ezo and Russia, the island of Sakhalin and the Kuril Island chain, trading and building outposts in each area. Russian aggression in the north set the Japanese against the Russians up until, and beyond, the end of Japan's Tokugawa era of isolation. This began a political and diplomatic scramble for Sakhalin and the Kurils, forcing the Japanese to move to secure their interests in Ezo. The Meiji Restoration would shift Japan's gaze outward, as a new Japanese government worked to modernize Japan, learn from the West, and avoid the colonial fate of the rest of Asia. Hokkaido would come to play an important role in these efforts.

Background on Japan and Ezo before 1650

Sustained contact with Ezo and its inhabitants is thought to have reached significant levels sometime in the late Kamakura period (1185-1333) and further grew during the Muromachi era (1333-1573). Archaeological evidence suggests contact even before this point, although the Fujiwara clan of northeast Japan only began to trade

heavily with early Ainu peoples and influence their culture by the twelfth century.² While trade with Ezo might not have been essential to the Fujiwara, economically speaking, the Ainu of Ezo might have abandoned some of their early cultivation practices to more heavily hunt and fish, thereby beginning changes in the ecology of Ezo even before the Tokugawa period. The Ainu harvested and traded in salmon, animal pelts, eagle feathers, and kelp. The Japanese established several forts and trading posts in southern Ezo during the Muromachi period. Early contact was generally peaceful, though there was at least one mid-fifteenth century war between the Japanese and the Ainu, in addition to a number of raids in the early sixteenth century, indicating that there was some early Ainu resentment against Japanese intrusion into their homeland.³

Ezo and the Ainu also began to appear in Western writing by the mid-sixteenth century. Perhaps the first description of the Ainu by a Westerner in 1548-49 is by the Italian Jesuit, Nicolo Lancillotto, who described the long beards, large stature, and martial prowess of the Ainu, noting that they fight like “Germans.”⁴ In 1565, Luis Fróis S.J., relaying hearsay, noted of Ezo that it was “a great country of savage men, clothed in beast skins, rough bodies with huge beards, and monstrous moustaches, the which [sic] they hold up with forks as they drink.”⁵ In 1600, another Western priest depicted the Ainu as “a most barbarous kind of people” who “live by hunting and fishing, and neglect

² Mark J. Hudson, "Ainu Ethnogenesis and the Northern Fujiwara," *Arctic Anthropology* 36, no. 1 (1999): 77.

³ Brett L. Walker, "Reappraising the Sakoku Paradigm: The Ezo Trade and the Extension of Tokugawa Political Space Into Hokkaido," *Journal of Asian History* 30, no. 2 (1996): 175-77.

⁴ Donald F. Lach, *Japan in the Eyes of Europe* (Chicago: University of Chicago Press, 1965), 723.

⁵ Michael Cooper, *They Came to Japan: An Anthology of European Reports on Japan, 1543-1640* (London: Thames and Hudson, 1965), 294.

husbandry.”⁶ Finally, Jesuit Jeromino de Angelis suggested that they “know but little about the future life.”⁷ Barbarity and savagery, in addition to physical descriptions of the Ainu’s size and hairiness (in comparison to the Japanese), viscerally set the Ainu apart as an “other,” a primal to be feared in battle, but won over in other ways, including through trade.

Trade with the Ainu of Ezo was not strictly regulated until the time of the second of Japan’s three great unifiers, Toyotomi Hideyoshi (1536-98), and only formally established by Tokugawa Ieyasu, the leading member of the Tokugawa shogunate (1600-1868) who ruled over a unified Japan. In the 1630s, Japan was largely closed off to foreign entry and trade with the implementation of the so-called *sakoku* (closed country) edicts. This isolation was due to a combination of fears of foreign (primarily Western) religions, trade, and military ambitions, in addition to the economic and political advantages this situation conferred on the central Tokugawa *bakufu* (literally, “tent government”), which had the sole official say on all foreign relations.⁸ The only foreigners formally allowed in Japan included Chinese traders at Nagasaki and trade with the Dutch on Nagasaki’s artificial island of Dejima, a walled compound they were not allowed to leave without Japanese permission. The Dutch served as one of Japan’s windows to the world and allowed for the import of Western books studied by *rangaku* (Dutch studies) scholars. For the rest of the Japanese domains (*han*) on the main islands

⁶ Lach, *Japan in the Eyes of Europe*, 725.

⁷ Jeronimo de Angelis S.J., "The Ainu," in *They Came to Japan: An Anthology of European Reports on Japan, 1543-1640* 290.

⁸ See Toby for more information on the role of foreign relations and trade in establishing and maintaining the legitimacy of the Tokugawa *bakufu*. Ronald P. Toby, *State and Diplomacy in Early Modern Japan: Asia in the Development of the Tokugawa Bakufu* (Princeton, New Jersey: Princeton University Press, 1984).

of Honshu, Kyushu, and Shikoku, trade with outsiders was theoretically forbidden. There were, however, three main exceptions to this rule.

The first two were the *han* of Satsuma and Tsushima, which were given special “black seal” directives that granted them special extraterritorial privileges. Satsuma traded indirectly with mainland Ming (1368-1644) and Qing (1644-1912) China after the 1609 invasion of the Ryukyu Islands. Satsuma manipulated a puppet state in Ryukyu into sending official trading and diplomatic missions into China, and reaped the rewards of these ventures, particularly in the form of silk and other goods. Satsuma would later become one of the most powerful *han* that led the way into the Meiji Restoration. Tsushima, on the other hand, was a poor island province that relied on trade with Korea for much of its livelihood. During the Tokugawa period, between 500 to 1,000 Japanese lived in the walled-off Waegwan (an isolated center of foreign trade similar to Dejima) and traded with the Koreans for foodstuffs.⁹

The final exception to the *sakoku* rules, of course, was the trade that proliferated between the Japanese and Ainu in Ezo. Another house that was given special dispensations by the *bakufu* was Matsumae house, which exercised power in southern Ezo and whose rulers served as an intermediary between mainland Japan and the Ainu peoples of Ezo, Sakhalin, and the Kuril Island chain.¹⁰ Given the same “black seal directive” that the heads of the Satsuma and Tsushima domains were granted, Tokugawa Ieyasu presented the head of the Matsumae clan (formerly the Kakizaki, enfeoffed with

⁹ See Robert K. Sakai, "The Satsuma-Ryukyu Trade and the Tokugawa Seclusion Policy," *The Journal of Asian Studies* 32, no. 3 (May 1964) and James Bryant Lewis, *Frontier Contact Between Choson Korea and Tokugawa Japan* (London: Routledge-Curzon, 2003) for additional information on trade through Ryukyu and the Waegwan in Korea.

¹⁰ “Mainland” is here referring to the islands of Honshu, Kyushu, and Shikoku.

their trading rights by Toyotomi Hideyoshi) with a decree that stated: “It shall be unlawful for people from outside provinces to enter or exit Matsumae to trade with the Ainu without the consent of Matsumae Shima-no-kami.”¹¹ The Matsumae oriented themselves as keepers of the northern frontier land and their legitimacy was predicated on their role as the Japanese liaison between the mainland and the Ainu. Unlike the *han* of Satsuma and Tsushima, Matsumae was largely left to its own devices, perhaps due to the fact that it wasn’t China, Korea, or the West that Matsumae officials were dealing with. These were all military, economic, and diplomatic threats, as opposed to the various non-centralized Ainu tribes. Only when there were major Ainu uprisings, threats from the West, or strong evidence of illicit trade, did the Tokugawa *bakufu* interfere in the affairs of the Matsumae in Ezo.

The Slow Conquest of the Ainu: Trade, Mining, and Environmental Change

Throughout the course of the Tokugawa period, the Ainu of Ezo and the other northern islands slowly lost a largely bloodless battle against the Japanese. Owing to Japanese trade with the Ainu, the latter’s relationship with the land changed, as Ainu subsistence patterns shifted to meet the trade demands of the Matsumae, in addition to ceremonial exchanges. Brett Walker, in *The Conquest of Ainu Lands*, argues that “two centuries of trade with Matsumae domain...had unraveled the social fabric of Ainu communities and undermined their ability, not to mention their basic will, to resist Japanese claims to what was once their homeland.”¹² The Tokugawa period saw an

¹¹ Brett L. Walker, *The Conquest of Ainu Lands: Ecology and Culture in Japanese Expansion, 1590-1800* (Berkeley: University of California Press, 2001), 37. Additionally, it was unlawful to inflict any harm on the Ainu, who could go where they pleased, while the Japanese could not travel in any of the northern islands without Matsumae permission.

¹² Brett L. Walker, *The Conquest of Ainu*, 233.

increased number of Japanese move or work in southern Ezo, while explorers traded all across the island, and even farther north with Ainu tribes in Sakhalin and the Kuril Island chain. Japanese access to goods such as precious metals (gold) and animal pelts were limited in the mainland, while northern fishing grounds were plentiful. Japanese miners would extract the former, while the Ainu would begin to take animals and fish in excess of their usual practices, for use in trade. These systems would shape Ainu subsistence patterns as well as transform their land.

The Matsumae clan's legitimacy and partial economic livelihood was so intertwined with its Ainu oversight and trade that this led *han* officials to carefully shape their influence over the natives, both economically and socially. They required that the Ainu appear like the barbarians described above, when in the presence of outside observers. David Howell, in his book on the development of a Japanese identity based on the outside "other," notes the example of an Ainu man who normally dressed and groomed himself in a Japanese fashion and lived in a Japanese village, but when it came time to represent his people, "He let his hair and beard grow long so that he might look properly Ainu when he went to pay his respects to the lord of the Matsumae domain."¹³ The Ainu were also often forbidden to speak Japanese in front of outsiders, at risk of being required to pay an indemnity. Mogami Tokunai, a later explorer and geographer of the north, noted in the eighteenth century that "In all matters the policy of not allowing the Ezo [Ainu] to adopt Japanese customs is the law of the Matsumae house."¹⁴ The Ainu

¹³ David L. Howell, *Geographies of Identity in Nineteenth-Century Japan* (Berkeley: University of California Press, 2005), 119.

¹⁴ David L. Howell, "Ainu Ethnicity and the Boundaries of the Early Modern Japanese State." *Past & Present* 142 (Feb. 1994): 85-86.

of Ezo were thereby constructed to appear as a people with whom only the Matsumae (as 'barbarian specialists') could interact.

This Japanese influence also extended to alter the once traditional ways in which the Ainu survived and the manner in which they gathered foodstuffs. Over a course of decades, the Ainu with whom the Japanese most frequently traded began to increasingly rely on Japanese-imported rice for sustenance. The Matsumae strictly forbade their merchants from trading rice seed with the Ainu, for fear that they might become self-sufficient in growing the most important Japanese export and undercut the Matsumae trade income.¹⁵ After appearing to have abandoned most agricultural practices in an earlier age, the Ainu came to rely on hunting and fishing to fulfill the need for clothing, foodstuffs, and other items. As trade volume with the Japanese increased, so too did the Ainu's impact on local fish and game populations, which began to dwindle from their original levels.

Pelts were valued in Japan as raw materials for leather working. Since the Nara period (710-794), Japan had ancient prescriptions against the slaughter of draft animals for their meat or hides in place. This was due in part to the influence of Buddhist prescriptions against hunting and meat-eating. It was also in part because Japan had little in the way of flat grazing ground and animals were better utilized as beasts of burden than food sources.¹⁶ These laws, however, did not keep the Japanese from importing animal hides that the non-Japanese Ainu gathered. The leather workers (considered a

¹⁵ Toshiaki Honda, "A Secret Plan of Government," in *Sources of Japanese Tradition: Volume Two 1600-1868, 2d Ed.*, ed. Theodore de Bary, Carol Gluck and Arthur E. Tiedeman (New York: Columbia University Press, 2006), 503.

¹⁶ William Lyman Brooks, "Outcast Society in Early Modern Japan" (Ph. D. diss., Columbia University, 1976), 12. See Brooks' unpublished dissertation for the most detailed source of information on pre-Meiji era outcastes.

defiling occupation) themselves were formed from the ranks of the *eta* outcastes who were also outside the normal Tokugawa class-status order. Feathers (including eagle feathers) were also valued as luxury items for the wealthy in large cities.

Ezo was also noted for its precious metals, which were valuable in Japanese coinage and select foreign trade. In 1620, Jesuit Diego Carvalho described a process by which Japanese settlers within Matsumae-held territory would speculate and purchase parcels of river land, endeavor to divert the course of entire rivers, and then mined and sifted through “the sand which remained” until they discovered any gold that had settled into the former river bottom.¹⁷ One of the biggest fears of the trade in Nagasaki and Dejima, along with the relative trade autonomy of *han* like Tsushima and Satsuma (trading with Korea and China, respectively), was the outflow of Japan’s limited amount of precious metals, on which the Japanese coinage system was based. This coincides with widespread Japanese fears that Japan was losing excessive volumes of precious metals, on which its own currency system was based. Though perhaps on the alarmist side, a high-level advisor to the shogunate, Arai Hakusei, concludes at the turn of the eighteenth century that “one-fourth of the gold and three-fourths of the silver [in all of Japan] have been lost.”¹⁸ The *bakufu* began debasing coinage throughout the first half of the eighteenth century as a direct result of foreign trade. Instead, Ezo and the northern islands were mined for the same materials about which *bakufu* advisors had such great concerns.

¹⁷ Bl. Diego Carvalho, "Gold Mining in Ezo," in *They Came to Japan: An Anthology of European Reports on Japan, 1543-1640*, 236.

¹⁸ Arai Hakusei, “Musings by a Brushwood Fire,” in *Sources of Japanese Tradition: Volume Two 1600-1868*, 330.

These trade demands drove the Ainu to overuse their natural fish and game resources, while Japanese mining in Ezo also had a negative effect on fish populations. Brett Walker argues that the Ainu began to commoditize their hunting practices, viewing the animals they took as items to be traded (the larger the number caught, the larger the return), not subsistence resources on which their lives depended and were intertwined. The Ainu also began to value Japanese crafts as prestigious status-giving goods garnered through trade or ritual gift-giving, further depopulating animal numbers.¹⁹ Matsumae Norihiro, writing to the *bakufu* as early as 1715, lamented of Ezo that “recently it is not like it was before...In all four directions natural resources have become exceedingly scarce.”²⁰ The mining practices of the Japanese, liberally altering the course of entire rivers, also served to destroy valuable spawning grounds for fish such as herring, throwing their numbers into decline. In some cases, various Ainu tribes began to compete against one another for the dwindling resources, while rebelling against the Japanese twice.²¹

Besides the Satsuma clan’s manipulation of Ryukyu’s inhabitants, the Matsumae experience in Ezo was also one of the first Japanese attempts to construct identities for a colonized or subjugated people. Though later Meiji era prescriptions would demand that the Ainu look more like the Japanese, not less, the creation of identities would prove to be a tool applied to the Japanese imperialism of the twentieth century. So too would the

¹⁹ Howell, *Geographies of Identity*, 119-30, See also Howell for more on these practices.

²⁰ Walker, *The Conquest of Ainu Lands*, 118.

²¹ Walker, *The Conquest of Ainu Lands*, 99-127. See Walker’s chapter on the environment and trade for more.

Japanese regulate the knowledge or education of their foreign subjects and establish separate physical spheres that divided Japanese settlers from colonized peoples.

Ezo and the Russian Threat

Despite the ecological shifts of Ezo and the beginning of the destruction of the Ainu's past way of life, Ezo and its inhabitants were still viewed as an ambiguous borderland, or even an undesirable backwater. This was in part due to the Matsumae's efforts to craft the Ainu "other," and the generally colder climate of Ezo, but also because the *bakufu*'s political interest in the island was initially limited. This would begin to change with the southward exploration of the Russians from the Kamchatka Peninsula, down through the Kuril Islands and Sakhalin, and eventually to Ezo and the main Japanese islands themselves. These probings would eventually be seen as a clear danger to the Japanese, one that would cause officials to begin to rethink their distant relationship with the northern islands, a trend that would continue well into the Meiji era.

Tokugawa Ieyasu, the first shogun of the Tokugawa era, asked the famed William Adams whether Ezo appeared on any Western maps, to which Adams replied, "I told him I never did see it put into anny mappe nor globe."²² Initial Russian interest in Ezo and Japan would only come as a result of the flourishing Matsumae-Ainu trade, which flowed into the northern islands. The exclusive permission given by the *bakufu* for the Matsumae to trade with the Ainu had been liberally interpreted as permission to trade with the Ainu wherever they lived, and hence a justification for trade expansion into the territory that comprises modern-day Sakhalin and the Kuril Islands.

²² Will Adams, "Ieyasu Enquires About the North-West Passage," in *They Came to Japan: An Anthology of European Reports on Japan, 1543-1640*, 123. Adams was an English sailor raised to the rank of a samurai.

Before the seventeenth century, the Russians had heard of a land that possessed great mineral wealth, while in later years traders and sailors in Siberia had come across Japanese goods. These had also been making their way northward, passing through the hands of various Ainu tribes who had traded with Japan in the south. Some of the Russians' meager sources of information on the Japanese came from shipwrecked castaways, the first of which made their way to Russia as early as 1695, after being driven to Siberia following a typhoon. In the 1730s, the Russians would seriously attempt to make contact, setting up Japanese lessons for potential explorers with Japanese castaways, who patriotically praised the wealth of their home country. By 1739, one of the first expeditions to seek out Japan, the Spanberg mission, actually made ground in Awa province in northern Honshu.²³

The Russian interest and later aggression prompted a re-imagination of Japan's relationship with Ezo and the other northern islands. Japanese explorers such as Mogami Tokunai had encountered Russians in the Kuril Islands in 1785, and at that time exchanged friendly greetings with them. Other Japanese were sent to explore the island of Sakhalin, demonstrating a clear Japanese interest in the islands to the north of Ezo, and an awareness that the Russians also were taking their own interest in exploring, trading, and perhaps inhabiting some of the islands between Russia and Japan.²⁴ Some Japanese thinkers advocated against what they saw as a growing Russian threat. Though little known at the time, Honda Toshiaki, a mathematician and scholar who funded some of the

²³ George Alexander Lensen, *The Russian Push Towards Japan: Russo-Japanese Relations, 1697-1875* (New York: Octagon Books, 1971), 27-55.

²⁴ Donald Keene, *The Japanese Discovery of Europe, 1720-1830* (Stanford, CA: Stanford University Press, 1969), 128-38.

travels of Tokunai, called for Japan to begin to abandon its *sakoku* policies and set up its own colonies. He wrote in 1789 that:

At this crucial time when the Ezo islands are being seized by Russia, we are faced with an emergency within an emergency. When, as now, Japan does not have any system for colonizing her island possessions, there is no way of telling whether they will be seized by foreign countries or remain safe... The lack of a colonization system has kept Japanese rule from the island and has meant that the natives are unaware of the goodness of the ruler of Japan.²⁵

Ezo in this case refers to both the island that would become Hokkaido, as well as the islands to the north, though Honda worried that the Japanese hold over even the former was increasingly tenuous, with new competition on the scene. His fears were soon justified.

In 1792, a mission led by Adam Laxman had landed in Ezo and successfully negotiated permission with the Matsumae and the *bakufu* to trade in Nagasaki, where the Dutch and Chinese made port. Not until 1805, however, would a Russian vessel actually make its way to Nagasaki, only for its captain to eventually be turned away after half a year of unsuccessful negotiations, when the Japanese reaffirmed their commitment to *sakoku* policies. The commander, Nicolai Rezanov, frustrated at the Japanese about-face and his failure to open trade, in 1807 ordered several of his subordinates to raid Japanese outposts in the islands north of Ezo in an act of revenge or as a misguided attempt to open Japan by force.²⁶ This action would influence Russo-Japanese relations for a century before the 1904-05 Russo-Japanese War and open up more active competition for the expansionary land that lay between Russia and Japan. The attack served to demonstrate the potentially fragile hold that the Japanese had over Hokkaido and the other northern

²⁵ Honda, "A Secret Plan of Government," in *Sources of Japanese Tradition: Volume Two*, 503.

²⁶ Lensen, *The Russian Push Towards Japan: Russo-Japanese Relations, 1697-1875*, 97-176.

islands. It also awakened some Japanese to the idea they might not only have to fight to remain in control of outlying lands, but that they were also in competition with Western powers for the people who traditionally inhabited such spaces.

From 1799-1821, the *bakufu* would take direct control over Ezo from the Matsumae (due to rumors of illegal Matsumae trade with Russia), something only previously done during the two Ainu rebellions. The first was from 1669-72, against the incursion of Japanese miners into Ainu lands, while the second occurred in 1789.

Worried that the Ainu might turn toward the Russians, a new directive was issued a few years later in 1799, stating:

We intend to promote education in the hope that the Ezo people will gradually be converted to Japanese customs and become so deeply attached to our ways that even if some foreign power seeks to win their favor...they will not waver in their allegiance... The best policy is to continue our efforts to raise their standard of living by means of trade.²⁷

Due to a combination of the 1789 rebellion, Japanese knowledge of Russian-Ainu trade, and controversy surrounding possible Matsumae trade with Russia (whether a justification for *bakufu* takeover or not), there was a clear reorientation of policy regarding the Ainu and Ezo. No longer were the Ainu a barbarian “other,” but a potential ally under benevolent Japanese control; nor was Ezo an inconsequential political backwater, but a buffer zone to protect the main Japanese islands from Russian expansion.

Following the assault of Rezanov’s subordinates in 1807, Japan made a concerted effort to stake out its claims in Ezo and the islands beyond. Explorers such as Mamiya Rinzo went north to the island of Sakhalin in an 1808-09 effort to map the island, perhaps

²⁷ Keene, *The Japanese Discovery of Europe, 1720-1830*, 135.

with an eye for potential future Japanese expansion.²⁸ During and after the *bakufu*'s 1799-1821 takeover of Ezo, additional troops were temporarily stationed around the edges of Ezo, with the intent of defending the land. Samurai captured Russian captain Vasily Golovnin and held him prisoner for two years between 1811-13, before finally releasing him.²⁹ Long-standing policies on the Ainu's appearance and knowledge were sometimes altogether reversed, as many were encouraged to adopt the Japanese language and hairstyles. The Japanese also began to actively care for the health of the Ainu, with some regions after 1829 requiring them to report to medical posts if ill or showing signs of disease. This interest eventually resulted in an 1857 campaign to vaccinate Ainu and Japanese living in Ezo as part of what Brett Walker correctly calls an "assimilationist agenda," one that would continue into the Meiji era.³⁰

Due to the events of 1807, Japanese sources continued to speak of the Russians with a particular suspicion, right up until Japan's *sakoku* policies were forcibly ended in the 1850s. In 1825, an increasing number of foreign vessels, including English ones, appeared off of the Japanese shores. Aizawa Seishisai, a leader of the nationalistic Mito school wrote "The Russians are now hiding in wait for the kill" and were only having the English ships do their scouting for them.³¹ In 1842, when the English put increasing pressure upon the Japanese to open up trade with them, Sakuma Shozan, a samurai expert

²⁸ Brett L. Walker, "Mamiya Rinzo and the Japanese Exploration of Sakhalin Island: Cartography and Empire," *Journal of Historical Geography* 33 (2007): 298-306.

²⁹ Lensen, *The Russian Push Towards Japan: Russo-Japanese Relations, 1697-1875*, 196-246.

³⁰ Brett L. Walker, "The Early Modern Japanese State and Ainu Vaccinations: Redefining the Body Politic 1799-1868," *Past & Present* 163 (May 1999): 121; 129-35. The Ainu were vulnerable to smallpox and other diseases, against which they had few immunities. Similar to the Native Americans of the Americas, years of contact with Japanese and Russian-borne diseases might have weakened Ainu communities and their ability to resist outside influences.

³¹ Aizawa Seishisai, "Shinron (New Theses)," in *The Japanese Discovery of America*, ed. Peter Duus (Boston: Bedford/St. Martin's, 1997), 55.

on Western gunnery wrote, “If now we permit trade with England, the Russians will be angered at this betrayal...If the Russians see that Japan has given in to the English...they will conclude that the national strength of Japan has declined and they will make particularly unreasonable demands.”³² This sentiment is again reflected eleven years later in 1853, when Tokugawa Nariaki pondered that “Should permission be granted to the Americans, on what grounds would it be possible to refuse if Russia and the others [again] request it?”³³ While trade with any additional foreign nations was undesirable during the Tokugawa period, Japanese thinkers seemed particularly keen on avoiding any intercourse with Russia in particular. This no doubt stemmed from fears of a repeat of the 1807 event on a grander scale and general Russian competition in the north.

Even though some political reorientation occurred with regards to the overall Japanese view of Ezo, Sakhalin, or the Kurils, the island was still not necessarily ‘Japanese’ in the international diplomatic sense of the times. Japanese claims to these islands, taken in the context of the nineteenth century drive toward colonization, were still rather tenuous and were not officially recognized by the West. Indeed, from the Japanese perspective, even their three main islands were still under the threat of being colonized. Japan was forced to realign its goals from the traditional Confucian “civilized center, barbarian edge” to claims that were recognized in standard Western diplomatic practice and backed up with enough of an economic might and military threat to seem

³² Sakuma Shozan, "Kaibōsaku (A Plan for Coastal Defense)," in *The Japanese Discovery of America*, 60-61.

³³ Nariaki Tokugawa, "Memorial on the American Demand for a Treaty," in *The Japanese Discovery of America*, 104.

viable.³⁴ Though the Ainu of Ezo themselves had already in a sense been conquered by Japanese intrusion there for centuries, there were still fears that the Ainu might ally themselves with outsiders like the Russians against the Japanese. The Japanese had yet to begin addressing one of the most important parts of the equation, the formal occupation and development of the land itself, a marker of Japanese sovereignty that the West would be more likely to recognize. Efforts toward this end would come in rapid fashion after the end of the Tokugawa era and the establishment of the Meiji state, as Ezo was slowly transformed into an integral part of a modernizing Japan.

Realignment of the Meiji Era

As has been noted, Russia attempted to open Japan for additional foreign trade as early as the eighteenth century. In the first half of the nineteenth century, Britain and the United States also made several unsuccessful attempts to do the same. It was not until 1853 that American Commodore Matthew Perry, through an act of gunboat diplomacy, forced the Japanese to seriously consider opening their ports to Western powers beyond the Dutch. In 1854, Japan signed the Treaty of Kanagawa with Perry, when he returned to Japan with overwhelming force. After the British, the Russians also finally succeeded in signing a treaty with Japan in 1855. This was the beginning of the so-called “unequal treaties” under which Japan was forced to open up a number of ports at which foreign powers might trade and resupply their ships, in addition to the creation of foreign

³⁴ Howell, *Geographies of Identity*, 131-53. Essentially, this was the practice of emanating power, legitimized by culture, outwards to tame or cause the outer ‘barbarians’ to recognize the authority of the more ‘civilized’ center. This was a long-standing Chinese concept. See Howell’s chapter for more.

consulates on Japanese soil.³⁵ The *bakumatsu* period (1853-1867) followed, during which the Tokugawa shogunate quickly saw its 250 year power evaporate due to a lack of national confidence inspired by its inability to refuse foreign powers access to Japan. Taken from Aizawa Seishisai's *Shinron* (New Theses), many factions adopted the slogan, *sonnō jōi*, or “revere the Emperor, expel the barbarians,” citing the *bakufu*'s failure in its traditional ceremonial role to protect the emperor. Although Emperor Kōmei also began to become increasingly involved in politics, it was his son, Mutsuhito, who would become the Meiji emperor and around whom a new government would be oriented following the fall of the Tokugawa house's rule.³⁶

The Meiji emperor and his supporters promulgated the five clause Charter Oath in April of 1868. This pseudo-constitution, which did away with past customs, opened participation in the government and all other careers up to the general populace, and called for knowledge to be sought throughout the world. There was a growing call for “men of ability” to lead, rather than the hereditary-type rule of the Tokugawa era. The emperor became the head of a system designed to support him, run by an oligarchic government made up of cliques from the most powerful former *han*. The oligarchs were from a group of domains that were victorious in the 1868-69 Boshin Civil War, a conflict that stamped out any remaining resistance from the *bakufu*.³⁷ What followed was a period

³⁵ The foreigners required minimal import taxes placed on goods coming into Japan, along with other concessions. These treaties also granted their own citizens extraterritoriality privileges, or required trial by their own laws and courts, not Japanese ones, in the event of crimes, etc. committed while in Japan.

³⁶ Kenneth Henshall, *A History of Japan: From Stone Age to Superpower* (New York: Palgrave MacMillan, 2004), 66-79.

³⁷ These *han* included Satsuma, Choshu, Tosa, and Hizen. Many Meiji oligarchs were “men of ability,” or former low-ranking samurai who, despite their competence, did not hold high-ranking positions in the Tokugawa hierarchy.

of radical reorganization, as Japan's leaders tried to reorient Japan's focus from inward to outward and avoid the fate of Southeast Asia and China. There are currently eleven countries in Southeast Asia—ten out of eleven of them were colonies during the Meiji period, while China was defeated in foreign wars, experienced a horrible civil war, and was partially divided among Western powers.³⁸

The underlying goals of the Meiji officials therefore were to make Japan strong and avoid a colonial fate. Leaders sought to make Japan itself a power in the East, to revise the “unequal treaties,” and to eventually be accepted by the West as an equal. Keeping in line with the 1868 Charter Oath, the Japanese sent emissaries around the world to learn about the organization of foreign governments, militaries, economies, and societies. The most well-known of these was the Iwakura mission of 1871-73. In a letter from the Meiji emperor to U.S. President Grant, it was straightforwardly stated that “It is our purpose to select from the various institutions prevailing among enlightened nations such as are best suited to our present conditions, and adapt them in gradual reforms and improvements of our policy and customs so as to be upon an equality with them.”³⁹ Fukuzawa Yukichi, who was initially a well-known advocate for learning from the ways of the West, stated in 1874 that “Now, suddenly, intercourse with foreign nations becomes a reality, and the business of our nation becomes closely tied with foreign affairs. The trend today is to compare things in our country with those of foreign

³⁸ James L. McClain, *Japan: A Modern History* (New York: W.W. Norton & Company, 2002), 119-82.

³⁹ Emperor Meiji, "Emperor Meiji to President Grant on Iwakura Mission," in *Japan: A Documentary History: The Late Tokugawa Period to the Present*, ed. David J. Lu, vol. II (Armonk, New York: M.E. Sharpe, 2005), 324.

countries before taking any action.”⁴⁰ What was once unquestioned during the Tokugawa era was now reexamined in the context of the West, and what the West would do. The Japanese government invited as many as 2,400 well-paid foreign advisors to help modernize Japan. These Westerners were instrumental in transforming Japan’s economy and military, updating its scientific and technical knowledge, performing geological surveys, and assisting in setting up factories and a modern infrastructure.⁴¹ Unlike China, Japan chose to learn from the West in order to throw off its yoke, no matter how slow or painful the process. Though it would take several decades, Japan eventually grew into an industrializing country, hungry for the land and resources required to do so. The defining slogan of the age became *fukoku kyōhei*, “rich nation, strong army.”

Some concerns, however, would take more than a new era and new outlook to change, as competition and interference from Russia in Japanese affairs was still a concern. In advocating the need for a new universal conscription system that would draw from all ranks of Japanese society, not just former samurai, Vice Minister of Military Affairs Yamagata Aritomo cited the Russians and Hokkaido in 1872, stating that lately “Russia has been acting very arrogantly...it is inevitable that she will move eastward sooner or later by sending troops to Hokkaido.”⁴² A year later, Finance and Home Minister Okubo Toshimichi argued that “In regard to the diplomatic situation, the most important countries for us are Russia and Britain.” He worried that “Russia will interfere

⁴⁰ Yukichi Fukuzawa, "Encouragement of Learning," in *Japan: A Documentary History: The Late Tokugawa Period to the Present*, 347.

⁴¹ H. J. Jones, *Live Machines: Hired Foreigners and Meiji Japan* (Vancouver: University of British Columbia Press, 1980), 145.

⁴² Yamagata Aritomo, "Opinion on Military Affairs and Conscription," in *Japan: A Documentary History: The Late Tokugawa Period to the Present*, 318. The conscription system was eventually implemented, albeit not with much support from the peasants which were the primary targets of conscription, in 1873.

unless we secure our independence” from the “unequal treaties,” or else foreign powers such as Russia (or others) might send troops into Japan under the pretext of maintaining the tenets of the treaties.⁴³

The northern islands were also a subject of the first treaty Japan signed with Russia in 1855. This was when Japan had a poor negotiating position after having just been forced open by the Americans. The Treaty of Shimoda clearly outlined where Japanese and Russian spheres of influence began and ended, despite the fact that claims of first exploration or trade with the Ainu were historically ambiguous. The treaty stated that “The whole island of Etorofu belongs to Japan and the whole island of Uruppu and the other Kuril Islands to the north constitute possessions of Russia. As regards the island Karafuto (Sakhalin), it remains unpartitioned between Russia and Japan, as has been the case up to this time.”⁴⁴ Etorofu (now Iturup) is just to the north of Kunashiri, an island visible off of the northern coast of Hokkaido. Ownership of Sakhalin was a debated topic both before the Russo-Japanese War, and after it, as Japan and Russia played games of international chess with the islands between them in an effort to create buffer zones away from one another’s main areas of control. The beginnings of modernization under consideration in central Japan therefore had to be extended northward, not only to give Japan a chance at extending its borders and playing the empire-building game with the West, but also in solidifying its hold over Hokkaido once and for all.

⁴³ Toshimichi Okubo, "Okubo Toshimichi's Opinion Against Korean Expedition," in *Japan: A Documentary History: The Late Tokugawa Period to the Present*, 325-26.

⁴⁴ "Treaty of Peace and Friendship: The Treaty of Shimoda," in *The Russian Push Towards Japan: Russo-Japanese Relations, 1697-1875*, trans. George Alexander Lensen (New York: Octagon Books, 1971), 475.

Conclusion

Ezo would play an important role in realizing many of the goals of the Meiji era, in addition to warding off the advances of Russia. An 1877 memorial to the emperor had complained that:

For a long time past, Japan has neglected to give proper protection to the northern portion of her dominion. In the time of the *bakufu*, even the children knew that Saghalien [sic] and the Kuriles [sic] belonged to Japan. But the Russians have come down below the fiftieth degree to hunt and have commenced to devour our country.⁴⁵

Given how little most Japanese had known about Hokkaido prior to the Meiji era, it certainly wasn't true that "even children knew" that the northern islands had belonged to Japan. Meiji era thinkers, on the other hand, were certainly willing to envision this as having been the case. Japan had no intention of letting go of its grasp of Ezo, however. In 1869, the island was officially renamed "Hokkaido" and declared open for Japanese settlement.⁴⁶ The Hokkaido Kaitakushi was set up to help interested Japanese immigrate to the new land and provide a temporary form of government there.⁴⁷ This also began a long process that eventually divested many Hokkaido Ainu of their native lands. Heavy funding for development would be pumped through the Kaitakushi until its dissolution in 1882. Sapporo Agricultural College (SAC), later one of the nine imperial colleges of Japan, was also established in 1876 under the presidency of American William S. Clark.

⁴⁵ Kenkichi Kataoka and the Risshisha, "Memorial Advocating the Establishment of a Representative Assembly," in *Japanese Government Documents*, ed. W.W. McLaren (Tokyo: Asiatic Society of Japan, 1914), 477.

⁴⁶ Hokkaido literally means "Northern Sea Road," the name itself being suggestive of further Japanese ambitions to the north.

⁴⁷ Most foreigners of the time translated "Kaitakushi" as "Colonial Office," evident of the thought process of the time, though it's also written in English as "Development Office" in more recent writing.

At the outset, Hokkaido was spoken of as having great potential, especially for a modernizing nation such as Japan. Early surveys made by foreign advisors, including a team led by Horace Capron, former U.S. Commissioner of Agriculture, revealed a large amount of mineral wealth on the island, which also boasted plentiful fishing grounds and timber for the taking. Hokkaido, however, was initially an inhospitable place for rice-based agriculture, which cut down on the number of willing immigrants, causing the Japanese and their American advisors to look for alternative subsistence and cash crops. These developments caused additional changes in the island's ecology, while the Ainu were often casualties of the process. Hokkaido's development would also settle once and for all any lingering issues over Japan's legitimate hold over the island, as it was transformed into an essential piece of an empire in the making. This empire was formed in part with the aid of lessons learned from foreign advisors and through the modernization of Hokkaido and Japan in general.

CHAPTER 2 – HOKKAIDO’S UNTAPPED POTENTIAL AND EARLY CHALLENGES: ECOLOGY, CLIMATE, AND SURVEYS

Immediately following the transition to the Meiji era, Ezo was renamed “Hokkaido” and systematically surveyed with the goal of modern development and to reveal both the island’s potential and the possible challenges that any progress would face. These early stages of development were several-fold. Holding back the encroachment of the Russians was often understood to be a primary motivating goal, and surveying and developing the island provided Japan with a legitimizing claim to it in the eyes of the West. Another factor was economic. Japan was a nation hoping to industrialize, and it needed all the resources it could cobble together to give it a chance to catch up with the West. Hokkaido could, and did, provide a potential diamond in the rough in terms of resources, which if developed and refined could provide Japan with an additional economic boon and greater self-sufficiency. Lacking knowledge in many areas surrounding modern development, the Meiji government had to hire foreign “men of ability,” upon whom it relied to unearth Hokkaido’s potential. Hokkaido also provided potential room for growth for the citizens of an expanding empire.

The largest challenge to the development of Hokkaido, as surveyors and the government soon realized, was not Russia or the West generally, but rather the land itself and the colder climate. A land that was initially without the promise of potential rice cultivation did not provide an attractive immigration destination for many ordinary Japanese, whose agrarian origins and training did not necessarily match the environment

of Hokkaido. Surveyors and early explorers spoke about the potential of Hokkaido's timber, fishing, and other natural industries. Important mineral reserves such as coal were scouted and the advisors offered some suggestions as to what might be viable and how each might be extracted. The Meiji government under the Kaitakushi attempted to search out and set in motion the creation of structures to exploit these resources. The Kaitakushi was successful in some instances, but was an expensive failure in other areas. The population of Hokkaido also grew, though the government still had trouble attracting immigrants from Japan's main islands.

Ezo/Hokkaido before the Kaitakushi

The early interaction between the Ainu and Japanese, as well as the exploration of Ezo by the latter, created the island's embryonic economy. This produced a few small cities in the southern part of the Ezo and a ring of villages and outposts around the rest of the island, which were used for fishing, trade, and defense. In the coastal areas, the Ainu were often organized and employed in local industries, most commonly in fisheries, under the supervision of samurai and Japanese merchants. The Japanese government took direct control of the largest port city, Hakodate, in 1854, as it was to be opened to foreign trade after signing the Convention of Kanagawa with the United States. The *bakufu* extended its control over all of Ezo by 1856, a year after Russia also signed an "unequal treaty" with Japan.⁴⁸ The port was to supply foreign vessels with "wood, water,

⁴⁸ Richard M. Siddle, *Race, Resistance, and the Ainu of Japan* (London: Routledge, 1996), 43-48.

provisions, and coal” and would gradually grow through foreign commerce.⁴⁹ Hakodate also hosted Russian and English consulates.

The island of Ezo/Hokkaido is now listed as having an area of 83,456 km² (32,222 mi²), approximately as large as Ireland or Austria, and represents twenty-two percent of Japan’s overall land area.⁵⁰ The vast majority of this land in 1860, however, was unmanaged, undiscovered, and unsettled by the Japanese. Christopher Hodgson, English ambassador in Hakodate from 1859-60, observed that “All around the coast there are innumerable fishing villages, but in the island I do not believe there is a city, town, or village of importance five miles from the coast.” Instead of the Japanese, the “Bear and deer [were] the land-lords and tenants” of Ezo’s inner lands.⁵¹ Only Matsumae and Hakodate stood as cities of any size, and the Japanese inhabitants of the island totaled less than 50,000 (primarily located in the south) of some 30 million Japanese on all four islands.⁵²

Nonetheless, even in the very early stages of Japan’s opening to the West and beginnings of modernization, the potential of the island was viewed in high regard. Ezo provided the northernmost ports of Japan, and significantly, some were free of ice year-round. One of the factors driving the Russian push southward was the desire to secure such ice-free ports for easy year-round trade, a goal of which the Japanese were well

⁴⁹ United States, *The Treaty of Kanagawa*. 1854, National Archives and Records Administration, (accessed December 10, 2011) <http://www.archives.gov/exhibits/featured_documents/treaty_of_kanagawa/>.

⁵⁰ *Hokkaido: Business Location Guidebook*, Feb. 2009, Hokkaido Prefecture, (accessed September 18, 2011) <<http://www.pref.hokkaido.lg.jp/file.jsp?id=94186>>.

⁵¹ Christopher Pemberton Hodgson and William Jackson Hooker, *A Residence at Nagasaki and Hakodate in 1859-1860: With an Account of Japan Generally* (London: Richard Bentley, 1860), 48; 61

⁵² John A. Harrison, *Japan's Northern Frontier* (Jacksonville, Florida: University of Florida Press, 1953), 60.

aware as they also moved to secure their interests in Ezo and further north. Hodgson commented that ports like Hakodate held such geographical convenience and strategic potential that “Hakodate, in the hands of a European power, might become a Gibraltar or Aden.”⁵³ He also correctly speculated that the “great sources of the wealth of Yezo, or rather what will eventually prove to be so...are the precious metals and the timber.”⁵⁴ Other explorers, such as Samuel Beal specifically noted that Ezo was “rich in minerals” including coal in the southern parts, while “gold is not unfrequently [sic] met with in the mountains.”⁵⁵ In exploring the area around Hakodate, he found the soil to be a “rich black loam,” which would be “exceedingly productive” when cultivated properly.⁵⁶ Early observers also commented on the sea’s bounty. Hodgson, when traveling from Hakodate to a nearby city, a distance of some twenty-two miles, observed large amounts of seaweed, and that along the coastline “every available inch is covered with it.”⁵⁷ Fishing was similarly praised. Most of these products had been exported to the main islands of Japan since early Tokugawa times; however, the extraction possibilities for modern industries was potentially incalculable. The development of these industries would be at the forefront of the new Meiji government’s priorities once the Tokugawa house fell.

Oddly enough, as the object of the beginning of Japan’s empire, Hokkaido was also host to the last vestiges of the Tokugawa regime during the Boshin War (1868-69).

⁵³ Hodgson and Hooker, *A Residence at Nagasaki and Hakodate in 1859-1860*, 307.

⁵⁴ Hodgson and Hooker, *A Residence at Nagasaki and Hakodate in 1859-1860*, 310.

⁵⁵ Samuel Beal, "Remarks on Yezo and the Temples of Hakodadi," in *Transactions of the China Branch of the Royal Asiatic Society* (Hong Kong: Royal Asiatic Society of Great Britain and Ireland. China Branch, 1859), 16.

⁵⁶ Beal, "Remarks on Yezo and the Temples of Hakodadi," 21.

⁵⁷ Hodgson and Hooker, *A Residence at Nagasaki and Hakodate in 1859-1860*, 63.

Following defeats on the main islands, Admiral Enomoto Takeaki escaped to Hakodate in 1869 with 2,000 pro-shogunate men in an attempt to set up a separatist country in Ezo.⁵⁸ These forces were defeated in only a few months by imperial forces in support of the Meiji emperor, led by Kuroda Kiyotaka, a military leader from Satsuma *han*, a domain that led the way into the Meiji era. This, if nothing else, thrust Ezo/Hokkaido back into the consciousness of Japan as a point of strategic interest. Both of these men would go on to prominent careers in the Meiji era and be particularly influential in Hokkaido's development. Enomoto, whose life was spared when his captor Kuroda threatened ritual suicide if Enomoto was not left alive, would become an envoy to Russia and temporarily part of the Kaitakushi before attaining several ministerial posts.⁵⁹ Kuroda, on the other hand, would become head of the Kaitakushi itself, and eventually the second Prime Minister of Japan (1888-89). It was his vision, more than that of any other Meiji official, that would provide a foundation for the development of Hokkaido to come.

The Formation of the Kaitakushi and Employing Foreign Advisors

As Enomoto's forces were under siege, the young Meiji emperor issued an official proclamation announcing his (and the government's) intent to develop the island, while a framework to do so was created shortly thereafter. The emperor declared that "After Hakodate is quieted, We intend to take steps to reclaim and people the island."⁶⁰

In July of 1869, only a month after the fall of the remaining shogunate forces, a new

⁵⁸ W. G. Beasley, *The Meiji Restoration* (Stanford, CA: Stanford University Press, 1972), 298.

⁵⁹ William Wheeler letter to his mother, Oct. 6, 1878, William Wheeler Papers, (RG 2/3 W54). Special Collections and University Archives, University of Massachusetts Amherst.

⁶⁰ Shosuke Sato, "Hokkaido and Its Progress in Fifty Years," in *Fifty Years of New Japan*, ed. Shigenobu Okuma and Marcus B. Huish (London: Smith, Elder, and Co., 1910), 516-17. The capitalized "We" here is the royal "We."

colonial governing body was formed and a new inland capital, what would become the city of Sapporo, was selected. Ezo at this point was officially renamed Hokkaido, though the former name still persisted for a number of years after the change. An initial force of officials was instructed by a head of state to treat the Ainu natives fairly, increase economic activity, and work “harmoniously,” with the underlying “chief motive” again being to do these things in order “to check the expansion of Russian power southward.”⁶¹ Kuroda, one of the few high-ranking officials to actually have spent time on the island, quickly became the obvious choice to become the head of the newly formed Kaitakushi in 1871. The Kaitakushi would administrate over Hokkaido, the southern (Japanese) portion of Sakhalin, and the Kuril Islands closest to Japan, totaling eleven prefectures in all. The office would be the first Meiji governmental entity to oversee territories beyond the scope of Japan’s traditional control, or those that were only ambiguously occupied by the Japanese.

The Kaitakushi was granted a total of 10 million yen over a ten-year period from 1872-82, in addition to its own income, to spend on development. Even with this enormous sum, however, the number of issues to be addressed was dizzying. Immigrants had to be encouraged to settle in Hokkaido, while also maintaining defense over the island. Basic infrastructure including roads and communication systems were largely nonexistent, while the development of specific settlements, including the new capital of Sapporo, had to be attended to. Other than fishing, Hokkaido’s basic industries were also undeveloped, while the land was heavily forested, mountainous, and unexplored. Kuroda was well aware of these challenges, and advocated for the installation of dedicated

⁶¹ Harrison, *Japan's Northern Frontier*, 65.

officials, good treatment of the Ainu, and with regards to the land and economy, “that advisers well versed in the work of reclamation should be employed, and that some experts in mineralogy should be employed to inspect minerals, &c.”⁶²

The government tried initially to solve the problem of immigration and defense by encouraging the immigration of samurai and their families to Hokkaido. There, they were to both populate the land and defend it. In particular, the samurai from the defeated clans who had supported the shogunate in the Boshin War were utilized for this purpose. Shiba Goro, a samurai from the defeated Aizu clan of northern Honshu, wrote that Aizu men were encouraged to settle in Hokkaido, “with the understanding that they would be set free and allowed to have their families in the detention centers...join them.”⁶³ In 1869, the Aizu clan departed to Hokkaido with 200 families, and was organized into *tondenhei*, or military colonies, at strategic points around Hokkaido, along with other samurai from the north. The government, similar to the appointment of Kuroda, seemed to have been making a point of selecting individuals that had some association with Hokkaido, or were from the northern (and therefore colder and less fertile) parts of Japan, to serve various roles in the defense and development of Hokkaido because they would have realistic expectations about Hokkaido’s climate.⁶⁴ In Japan’s later imperial expansion, soldiers, and often their families, were frequently both the first occupiers and long-term residents to foreign territories, particularly that of Formosa.

⁶² Sato, "Hokkaido and Its Progress in Fifty Years," 517-18.

⁶³ Goro Shiba, *Remembering Aizu: The Testament of Shiba Goro*, trans. Teruko Craig, ed. Ishimitsu Mahito (Honolulu: University of Hawaii Press, 1999), 74.

⁶⁴ The Aizu had patrolled and built fortifications in Ezo after the attack of Rezanov’s subordinates. See Shiba, *Remembering Aizu*, 63

Outside of the several thousand samurai families who emigrated from Japan's main islands to Hokkaido, the Kaitakushi also set up incentives for Japanese of other backgrounds to do the same. Samurai could be used for defense, reclamation labor, and often worked in fisheries, though due to the Tokugawa separation of generations of samurai from the land, they often lacked in practical farming experience.⁶⁵ Encouraging farmers, however, also initially proved difficult, as many were hesitant to leave their villages and kinship ties for immigration to a new and unproven land. In 1871, the Kaitakushi attempted to attract immigrants with heavy subsidies, providing families with several years worth of rice, paid passages to Hokkaido, farming equipment and tools, seeds, and a cash bonus for the amount of land cleared.⁶⁶ This program proved to be very expensive to the Kaitakushi, however, and didn't initially bring many immigrants to Hokkaido. The government also later attempted to build ready-to-work farms with cleared land and small buildings for sale. Although as William Wheeler, a later president of Sapporo Agricultural College, noted in 1877, "purchasers however [were] not abundant" for such plots. Most immigrants were ultimately drawn from the "poor classes," which Wheeler stated "are almost ten-tenths of those who come here in a private capacity."⁶⁷ This initial lack of interest in Hokkaido's opportunities, family ties aside, also had much to do with Hokkaido's colder climate.

⁶⁵ See Shiba for an example of the difficulties that samurai families faced in learning a new trade. Shiba, *Remembering Aizu*, 82-99.

⁶⁶ Harrison, *Japan's Northern Frontier*, 73-76.

⁶⁷ Wheeler, letter to his father, Nov. 25, 1877, William Wheeler Papers. See also "Hokkaido and Karafuto: Japan's Internal Frontier," *Population Index* 12, no. 1 (Jan. 1946): 12, which argues that "Hokkaido's migrants were recruited from the backward agrarian regions of Japan and they transferred the fertility patterns of those regions to Hokkaido."

Under contemporary definitions, the Hokkaido of today is listed as being located in a subarctic zone.⁶⁸ Therefore, in addition to all of the other challenges faced in developing Hokkaido, perhaps the biggest was the cold weather. Rice and other crops initially did not meet with much success in Hokkaido, even in the more temperate regions such as Hakodate and Sapporo. In Nemuro, in the eastern part of Hokkaido, ship captain Henry St. John wrote in 1871 that the “cultivation of rice was attempted, but entirely failed.”⁶⁹ The entire Tokugawa economy had been based on rice, while the lives of most peasants, who made up the vast majority of the population, were still centered around rice cultivation. William Wheeler described the “principle crops” of Japan as “rice (first, last, and always).”⁷⁰ Trying to get Japanese peasants to take up a place in Hokkaido, initially utterly lacking in any attraction to agrarian rice-growers, proved difficult to say the least. St. John continued that by his observations, “Notwithstanding the inducements of a house, money, and free living being held out by the Japanese Government, these people cannot be got to migrate so far north, dreading the cold season.”⁷¹ These early agricultural failures were certainly recognized, as was the lack of knowledge and the ability of the government to transform Hokkaido’s infrastructure and industries from almost nonexistence, into modern, efficient ones. For aid, Kuroda and the Kaitakushi, much like the Meiji government in general, turned its attention to hiring foreigners where native

⁶⁸ Hokkaido Bureau of Economy, Trade and Industry, *Visual Introduction of Hokkaido Industry, 2010FY Version*. 2011, METI Hokkaido, (accessed October 14, 2011) <http://www.hkd.meti.go.jp/hokia/visual_hokkaido/2010fy/index.htm>.

⁶⁹ Henry Craven St. John, "Notes on the East, North-East, and West Coasts of Yezo," *Journal of the Royal Geographical Society of London* 42 (1872): 346.

⁷⁰ Wheeler, letter to his father, Nov. 25, 1877, William Wheeler Papers.

⁷¹ St. John, "Notes on the East, North-East, and West Coasts of Yezo," 346.

ability was lacking. In particular, Kuroda looked toward the upstart Americans to assist Japan.

The reasoning for choosing Americans in particular was several fold. America was not yet a colonial power in the sense that other Western nations were, but the Americans had settled a vast continent and had practical, contemporary experience in such matters.⁷² The technical knowledge of American engineers and scientists was rapidly increasing and America possessed advanced agricultural technology. The American government had in place working structures for settling and dividing land, bringing industry to it, and dealing with native peoples who had been dispossessed of their territories, upon which the Kaitakushi could model its own laws and programs. Nor did America have any conflicts, or strong alliances with Russia, which Japan still viewed as its main competitor for northern lands. There were also thriving American cities and territories at latitudes similar to Hokkaido, such as Chicago, New York, and the then-territories of the U.S. Pacific Northwest.

Development, especially under the advice of another Western nation, would provide a sense of legitimacy of Japanese ownership of the land. Sidney Bridgeford, writing in 1873, said of most of Ezo's potential acreage that "At present they are uncultivated and are consequently valueless to mankind. Hundreds of thousands of acres [are] lying idle."⁷³ As environmental historian William Cronon has demonstrated, and Bridgeford reflects, the Western view of the land often requires that it must be subdued

⁷² Hiroko Willcock, "Traditional Learning, Western Thought, and the Sapporo Agricultural College: A Case Study of Acculturation in Early Meiji Japan," *Modern Asian Studies* 34, no. 4 (Oct. 2000): 980-81.

⁷³ Sidney T. Bridgeford, "A Journey in Ezo, During the Months of August, September and October 1873," in *Transactions of the Asiatic Society of Japan, 1872-1873* (Vaduz, Liechtenstein: Kraus Reprint Limited, 1874), 107.

and cultivated, otherwise the owner is somehow not living up to their claim upon the property, and therefore Western outsiders such as the Russians could legitimately lay claim to underutilized areas.⁷⁴ In demonstrating their commitment to developing the land by hiring American advisors, however, the Japanese thereby solidified their claim to Hokkaido in the eyes of the West.

With the permission of the Dajokan and encouraged by the United States minister in Japan, Kuroda negotiated with the American government regarding the appointment of a chief advisor for the Kaitakushi.⁷⁵ Several candidates were offered in negotiations through U.S. Commissioner of Agriculture Horace Capron and President Grant. With the blessing of Grant, the position was ultimately offered to Capron himself in 1871, who accepted the offer with an extravagant \$10,000 salary, and paid travel and living expenses.⁷⁶ Capron was also honored by an audience with the emperor upon his arrival, one of several. Capron would remain in Japan until 1875. He brought with him A.G. Warfield, a civil engineer, and Thomas Antisell, a geologist and mineralogist. The Japanese government also hired Benjamin Lyman, a mining engineer and surveyor, among others. Capron's son later hired rancher Edwin Dun in 1873. In all, the Kaitakushi hired eighty-eight foreign employees, fifty-six of whom were a diverse group of Americans with varying specialties.⁷⁷ For their part, the Americans generally sought

⁷⁴ Which is what justified the taking of Native American lands in what would become the United States, for instance. The natives were not seen as properly utilizing the land upon which they lived. See William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill and Wang, 2003).

⁷⁵ An imperial-appointed assembly roughly analogous to the Department of State.

⁷⁶ Harrison, *Japan's Northern Frontier*, 68-70.

⁷⁷ Jones, *Live Machines*, 145: The remainder were from a smattering of European countries, with 13 being Chinese who primarily worked in the fishing industries of Hokkaido.

employment abroad for the good wages offered by the Japanese government, especially during the beginning years of the Panic of 1873, part of an international economic depression.⁷⁸

Besides the legitimization that hiring American and other foreign advisors offered, there was a pressing need to know exactly what Hokkaido could provide to Japan, especially in terms of mineral wealth, even given perceived Japanese risks in hiring outsiders to do so. Hodgson had commented that “all the Japanese assure you that the north of *Nippon* is one large continuous bed of gold and silver,” though what little exploration or mining that had been conducted during the Tokugawa era did not reveal anything close to the whole extent of Hokkaido’s mineral or natural resources. Nor did these early explorations add to the ability of the Japanese to develop these resources into modern, profitable industries.⁷⁹ As has been demonstrated, the main interest of foreigners, Westerners and Easterners, in Japan during the early Tokugawa period was Japan’s mineral resources, particularly copper and silver. St. John noted, likely due to Japanese fears of the West learning what kind of resources Japan had and exploiting them from the Japanese, that “Up to the present day, all knowledge that the Japanese possesses [sic] regarding the mineral wealth of the country is kept entirely to themselves.”⁸⁰

⁷⁸ Edwin Dun, *Reminiscences of Nearly Half a Century in Japan*. 1919, U.S. Department of Agriculture, National Agricultural Library, (accessed September 1, 2011) <http://naldr.nal.usda.gov/NALWeb/Agricola_Link.asp?Accession=CAT92968307>, 3-4. Dun’s cattle business, for instance, had been almost wiped out between 1871-73. The Panic was usually referred to as the “Long Depression” or “Great Depression” in Europe before 1929.

⁷⁹ Hodgson and Hooker, *A Residence at Nagasaki and Hakodate*, 311. “Nippon” refers to Nippon or Nihon, the Japanese word for their own land.

⁸⁰ Henry Craven St. John, *Notes and Sketches from the Wild Coasts of Nippon* (Edinburgh: David Douglas, 1880), 380-81. See also Hodgson and Hooker, *A Residence at Nagasaki and Hakodate*, 317, for a similar observation.

Hokkaido therefore represented a part of the larger openness of Japan to the West, in that Westerners were not only learning about Japan's strategic resources, but were actually hired to discover them for the Japanese. This was something of a calculated gamble on the part of the Japanese, but Japan could not become a "first class nation" without resources or modern development. The undertaking of the Kaitakushi was a small part of a larger Meiji era attempt to first use Westerners to change Japan's structural and intellectual outlook, then become students of the West so as to increase the overall pool of knowledge in Japan, and train individual Japanese in technical fields. Japan therefore might eventually stand on its own and become, with the West, equal players on the world's stage.

The Bounty of the Land and Foreign Advice

The foreign advisors, organized under Horace Capron, began in 1871 an ambitious set of surveys ranging across the island to discover what lay within the "perfect wilderness of impenetrable forest" that existed in Hokkaido's interior.⁸¹ The foreign advisors and other explorers spoke highly of Hokkaido's natural potential, including its extant fishing and aquatic industries, but also of the potential wealth in lumber and minerals such as coal. These surveys were critical to determining what, exactly, the investment in Hokkaido potentially would yield beyond only "build[ing] up a barrier against Russian encroachment," but also in beginning to transform Hokkaido into an integral part of Japan as a whole.⁸² The surveys also provided a generally realistic

⁸¹ St. John, *Notes and Sketches from the Wild Coasts of Nippon*, 5-6.

⁸² Thomas Wright Blakiston, *Japan in Yezo: A Series of Papers Descriptive of Journeys Undertaken in the Island of Yezo, at Intervals Between 1862 and 1882* (Yokohama: Japan Gazette, 1883), 40.

estimation of how much work there was to be accomplished. Even if some resources did exist, actually developing them and determining along what lines to do so was easier said than done. This sometimes initially proved very costly, while some resources were not as bountiful as originally thought. The Americans and other outsiders were also quick to offer solutions that some Japanese were hesitant to adopt, especially with regard to agriculture. Either way, the experience was a learning one, an education not only about discovering Hokkaido's resources, but also in picking up on Western structures and methods and employing them in part or whole.

Of all natural industries, the one that had been employing Japanese and Ainu for hundreds of years, and by the 1870s still employed the most, was the Japanese fishing industry. Besides those founded for defense, it was fishing that had sprinkled so many small villages around the coastal regions of Hokkaido and at the headwaters of major rivers. Many of Capron's surveyors and other observers pointed out the massive quantities of fish they witnessed during their stay in Hokkaido. The salmon run up the major rivers, such as the Ishikari, for example, brought thousands of seasonal workers into Japan. St. John wrote in the 1870s that the fish were so plentiful during this time, "that their backs are visible, and that the water rises along the banks as the first rush takes place over the bar at high tide."⁸³ John Milne, a geologist hired by the Japanese government who lived there for twenty years, also later reported that he had seen "five killed by a single shot from a rifle," and that when the season occurred, "The shores are strewn with dead and dying fish that have run themselves on shore and failed to get back

⁸³ St. John, *Notes and Sketches from the Wild Coasts of Nipon*, 17.

to their natural element.”⁸⁴ Naturalist Thomas Blakiston who journeyed to Hokkaido during the Capron surveys estimated that the average catch of just the Ishikari River averaged about 1.2 million fish (3,000 tons worth). The fish were dried and salted and exported “to Tokio and the east coast of Japan, as well as to Hakodate for the west coast ports.”⁸⁵ Fishing easily proved to be one of the largest early revenue sources for the Kaitakushi, providing some \$350,000 in 1874 in taxes on caught fish and government lease of fishing grounds, increasing the Kaitakushi’s annual budget by about a quarter, on average. Capron advocated the recent technique of canning fish, rather than drying and salting them, to appeal to a larger market. He also called for the government not to tax the fishermen as heavily, as he feared this stifled growth in the industry. He claimed that “there is no room for a doubt that these fisheries may easily be extended many millions of dollars annually.”⁸⁶

Some fish were also not just useful as consumable foodstuffs, but as a fertilizer. Explorer Arnold Landor later observed of sardines that, when looking out from the coast, “The sea is so dense with them that it changes its colour, and these moving banks of sardines are distinguishable 4 or 5 miles from the coast.”⁸⁷ Sardines were particularly important in Japan during Tokugawa and Meiji times as a ground bio-fertilizer for rice paddies prior to the widespread use of chemical fertilizers. Japan was still a primarily

⁸⁴ John Milne, "Notes on a Journey in North-East Yezo and Across the Island," in *Royal Geographical Society: Supplementary Papers*, vol. 4, Part 4, 1 (London: John Murray, 1893), 501.

⁸⁵ Blakiston, *Japan in Yezo*, 36. See 89 for his estimations on the Ishikari, and 36 for two small rivers, which resulted in some 700 tons.

⁸⁶ *Reports and Official Letters to the Kaitakushi* (Tokei: Kaitakushi, 1875), 560.

⁸⁷ A. H. Savage Landor, "A Journey Round Yezo and up Its Largest Rivers," in *Supplementary Papers of the Royal Geographical Society, 1893* (London: John Murray, 1893), 522.

agrarian society until after the Meiji era. Fertilizer in particular was therefore critical to Japan, especially given its large population, which about doubled during the Meiji era, and limited land area where ground couldn't be allowed to rest fallow. Fish and seaweed in general made up a common foodstuff consumed by Japanese from all levels of society, while the use of fish fertilizer provided an important boost to rice-based agriculture.

Another obvious industry lay in the “impenetrable forest” of the island. A. G. Warfield, acting as Engineer in Chief to the Kaitakushi, wrote of Hokkaido in 1871 that there was an “abundant growth of various kinds of trees, nearly all of which are suitable for building purposes.”⁸⁸ R.G. Watson, a former ambassador in Japan, noted a few years later that Capron estimated that the “average acre of Yezo forest may contain about 42,500 feet of planking,” in an area now made up about a quarter of Japan's land mass. Much wood for construction at that time, however, which otherwise “might be procured in Yezo, is likewise being constantly brought from the United States [and] Hong-kong.”⁸⁹ If Japan developed the logging industry in Hokkaido, that would further compliment the goal of obtaining modern, self-sufficient industries and decrease Japan's reliance upon foreigners and foreign goods—and thereby foreign influences.

These were some of the obvious resources, apparent even to the casual observer. Geologists such as Benjamin Lyman, who made the single largest contribution to Hokkaido in the area, however, were required to determine the state of mineral resources in Hokkaido. Lyman noted that while Hokkaido had been known for mineral wealth, including gold, in earlier ages, most of the well-known mines only actually possessed

⁸⁸ *Reports and Official Letters to the Kaitakushi*, 25.

⁸⁹ R. G. Watson, "Notes of a Journey in the Island of Yezo in 1873, and on Progress of Geography in Japan," *Proceedings of the Royal Geographical Society of London* 18, no. 3 (1873-74): 231.

small lodes, commenting that their “widespread fame in spite of their smallness” demonstrated how thoroughly some parts of “the country [have] been searched.”⁹⁰ In his official reports, he complained that the Japanese officials who were also touring the country and conducting concurrent surveys only visited “mineral places that were known for a long time to the Japanese...and have discovered scarcely a single new place.”⁹¹ Lyman, along with Capron, argued that Hokkaido must be surveyed using modern techniques to determine whether or not particular lodes were actually worth investing in, especially if they were so small that they would quickly peter out, and not ultimately turn a profit. This was a major reason behind the employment of foreign advisors, to help create generally realistic expectations of the costs of modernization overall, and for the development of Hokkaido specifically.

Coal was the mineral resource for which Hokkaido ultimately was to be known, not gold. While Lyman did discover some gold, along with deposits of sulfur, limestone, and iron sand, he concluded at that time that “In respect of economical Geology, coal continues to be almost the only workable mineral yet known in Yesso.”⁹² While other resources were later discovered and successfully exploited, Lyman discovered and surveyed several massive coal deposits in the Ishikari plains near Sapporo, and in Yubetsu and Tokachi, to the south and southeast, respectively. He estimated there to be 65 million tons of more easily exploitable coal, and even additional deposits at lower

⁹⁰ *Reports and Official Letters to the Kaitakushi*, 412.

⁹¹ *Reports and Official Letters to the Kaitakushi*, 421.

⁹² *Reports and Official Letters to the Kaitakushi*, 629.

depths.⁹³ This was an amount that Capron thought “should be able to supply the coal markets of the east if properly developed and worked.”⁹⁴ Coal, of course, was particularly essential to industrialization in its use in powering steam engines that drove rail and water transportation, as well as in making iron. Warfield noted rightly that coal was the “basis of most of the wealth of Great Britain, and...has enabled the United States to take her present stand among the nations of the earth.”⁹⁵ This was then a most fortuitous resource to discover in Hokkaido at the time, and most early investment in mineral extraction was thrown into coal, rather than gold. Lyman was satisfied with his surveys because if existing “schemes for washing gold in Yesso” had been allowed to proceed uninformed, this “would undoubtedly have proved disastrous.”⁹⁶ As expensive as it might have been to employ foreigners, men like Lyman saved the Japanese from much misadventure and helped shift expectations of Hokkaido to ones backed up more by science and less by unproven historic reputation. It was useful for Japanese policy makers to begin basing strategies to exploit resources on science, rather than rumor, tradition, or popular knowledge alone. The path of modernization was not a straight one, but required learning and trial along the way.

The future potential of natural resources aside, the Kaitakushi and the American advisors also faced the challenges of figuring out general plans for the development of Hokkaido’s roads and cities. The selection of the site at Sapporo for the capital of

⁹³ Benjamin Lyman, “A Geological Sketch Map of the Island of Yesso,” May 10, 1876, Benjamin Smith Lyman Papers, (MS 190). Special Collections and University Archives, University W.E.B. Du Bois Library, University of Massachusetts Amherst.

⁹⁴ *Reports and Official Letters to the Kaitakushi*, 259.

⁹⁵ *Reports and Official Letters to the Kaitakushi*, 26.

⁹⁶ *Reports and Official Letters to the Kaitakushi*, 632.

Hokkaido, for instance, was brilliant in the long term but initially troubling and expensive during the Kaitakushi era because of the effort, money, and engineering solutions required to connect the capital to Japan's economy. Sapporo is about twenty miles inland from the Sea of Japan to the north. The city is situated in the western portion of the Ishikari Plain, and was specifically chosen because it was one of the warmest and most fertile lowlands of an otherwise mountainous island. Its distance inland made it potentially more suitable for defense than Hakodate, though the trek there, when transporting foodstuffs or outside construction materials, was initially long and arduous.⁹⁷ Warfield argued that Sapporo could only reach its full potential if connected to nearby ports through "first class roads." He and many of the American advisors were of the opinion that "Roads have at all times been the most influential agencies of settlements and progress, roads are literally the pathways not only of industry, but of social and national intercourse."⁹⁸ While some simple roads did exist, most were neither well-made nor well-repaired, and often initially inhibited basic transportation and the flow of commerce. Bridges across the rivers around Sapporo were also often washed away, prompting Bridgeford to comment that the "Japanese have yet to learn how necessary it is to keep a road in repair."⁹⁹ The American advisors and later members of Sapporo Agricultural College kept the construction of roads high on their list of advice, in addition to the future construction of railroads between key areas. Japanese budgets did not always support the implementation of such recommendations, while road building in Hokkaido's

⁹⁷ Hakodate, along with the town of Matsumae, the old center for the Matsumae clan, was also partially damaged in the Boshin Civil War.

⁹⁸ *Reports and Official Letters to the Kaitakushi*, 30.

⁹⁹ Bridgeford, "A Journey in Ezo, During the Months of August, September and October 1873," 110.

environment was not always successful. In the later imperial realm, however, this advice was taken to heart, and colonies like Formosa and Sakhalin quickly had roads crisscrossing their respective territories.

Roads and cities were only useful, however, if there were citizens to use and populate them. Here the climate was again an issue. Between 1869-75, when Capron departed, the population of Hokkaido did increase overall from 58,476 to 183,630, though this was still a drop in the bucket compared to 30 million Japanese in all.¹⁰⁰ Thomas Antisell, in his observations in a report to Capron, had deemed that Hokkaido's climate should be called sub-arctic. This was a view that didn't support Capron's, who was attempting to make Hokkaido a better sell to the Japanese. The report "was therefore suppressed."¹⁰¹ In comparison to Tokyo, for instance, Sapporo had 148 nights of frost and 35 frosty days, verses only 67 such nights in Japan's capital.¹⁰² It was even colder further to the northeast. A sizable part of Hokkaido's potential population only inhabited the island during the prime fishing seasons, thereafter returning to the mainland and taking their productive capabilities and contributions to the local economy with them. Watson spoke of "many thousands of fishermen, labourers, and others, who come to Yezo from other islands for the summer months" on a temporary basis and "later quit it for their homes on the approach of winter," when there was there was no other work to be had or any agricultural preparation to be undertaken.¹⁰³

¹⁰⁰ Harrison, *Japan's Northern Frontier*, 61.

¹⁰¹ Blakiston, *Japan in Yezo*, 109.

¹⁰² J.J. Rein, *Japan Travels and Researches* (London: Hodder and Stoughton, 1884), 107-08.

¹⁰³ Watson, "Notes of a Journey in the Island of Yezo in 1873, and on Progress of Geography in Japan," 233.

For the Americans, the solution to this problem was simple—shift the reliance away from rice toward crops that would actually grow in the colder climate of Hokkaido. While the government had been encouraging immigration with the availability of incentives listed above, this practice didn't necessarily encourage innovation or self-sustaining practices on the part of immigrants. In an early letter to Kuroda, Capron wrote:

...to insure [sic] a healthy and vigorous development and settlement of the Island of Yesso it is first necessary to change the habits and food of its present and prospective population; that it was folly to attempt a forced settlement depending upon the rice of Nippon as their principal food; that to be successful this Island must be self sustaining and produce its own food.¹⁰⁴

Self-sustaining food that could be grown in Hokkaido at that time was not rice. The American advisors advocated the cultivation of underground tubers (potatoes, daikon) in the northern regions, which remained mostly unaffected by hard freezes, as well as the introduction of vegetable crops such as corn or onions, or fruit trees and wheat in the south. Capron also called for the raising of stock in Hokkaido. Unlike produce, which could spoil, animals could be accumulated and provide growing income. Capron argued that those who farmed had “no market for their surplus productions” because of a lack of population and easy transportation. In addition, there were generous government subsidies, which gave “no incentive to produce anything more than what will simply keep soul and body together.”¹⁰⁵ He also advocated in the very first annual report to the Kaitakushi in 1871 that the government should consider setting up an agricultural college in order to test and develop crops that would thrive in Hokkaido. Furthermore, to ward off the cold, he recommended that the government should create a plan for providing

¹⁰⁴ *Reports and Official Letters to the Kaitakushi*, 83.

¹⁰⁵ *Reports and Official Letters to the Kaitakushi*, 246.

Western-style housing with thicker walls, raised floors, and fireplaces fueled by plentiful Hokkaido wood for settlers in Hokkaido. That way, Japanese “unused to the cold climate of Yesso, should be effectually protected from the rigors of winter.”¹⁰⁶ Many of these suggestions would later be adopted by the Kaitakushi, though met with varying success.

Kuroda also solicited the advice of Capron and his staff not only on industry and infrastructure, but also on government and administrative structures and laws. In the 1871 annual report, for example, upon Kuroda’s request, Capron detailed the American Homestead Act and what incentives were put in place by the American government to open up the West to interested settlers. Two years later, Kuroda inquired as to how territorial governments had collected and allotted tax money to pay for natural disasters, regular repairs, salaries of civil servants, and the care of foundlings.¹⁰⁷ In addition, he was interested in how land was sold by the government and then taxed.¹⁰⁸ In 1875, he also asked Capron to share any knowledge he had about the “British system for the Government of foreign settlers in Australia and India.”¹⁰⁹ Just as the Japanese had traveled the globe for the perspectives of the leading nations during the Iwakura Mission in the early 1870s, and later invested much time and effort into deciding on a favored form of government before promulgating the 1890 constitution, Kuroda and the

¹⁰⁶ *Reports and Official Letters to the Kaitakushi*, 647.

¹⁰⁷ Tokugawa era Japanese had practiced *mabiki*, or “thinning,” as a partial method of population control. Children were left at the edge of villages to expire. This was denounced as one of the ‘evil customs’ of the past, though the practice still continued into the Meiji era.

¹⁰⁸ *Reports and Official Letters to the Kaitakushi*, 46. See 46 for Capron’s interpretation of the Homestead Act. In short, that there were official channels through which to purchase land, that the purchaser must move to the land in a certain amount of time and make the necessary improvements upon it within two years to receive an official land deed. Kuroda’s specific inquiries regarding the use of tax money can be found on 223-25.

¹⁰⁹ *Reports and Official Letters to the Kaitakushi*, 638.

Kaitakushi were sampling which administrative structures had succeeded under which conditions, and might thereby be applied to the governance of Hokkaido.¹¹⁰ This adoption of a smattering of bits and pieces of knowledge was generally characteristic of the first decades of the Meiji era.

Finally, the Americans, as did many other foreign advisors elsewhere in Japan, pushed the advantages of mechanization and other labor-saving devices. Prior to his departure to Japan, Capron had arranged for the purchase of a number of agricultural machines, which rancher Edwin Dun described as including “threshing machines...self binding reapers...mowing machines, gang plows; corn planters and innumerable smaller machines and implements.”¹¹¹ Before moving to Hokkaido to attend stock there, Dun performed demonstrations of several of these machines at a Tokyo test farm before an audience, which included the Meiji emperor and several leading oligarchs. Capron justified his reasoning for importing new technologies in that “The time must soon come when in the progress of trade, commerce, manufactures...a higher civilization will require that in Japan, as in other civilized nations, manual labor shall be supplemented by all known forms of mechanical science and ingenuity.”¹¹² While some of these farm implements were merely impractical novelties at the time, in a few decades Japan was forging ahead on the path to industrialization, creating railroads and telegraphs, erecting

¹¹⁰ Flexibility to change was specifically written into the official Kaitakushi business plan, in that the head (Kuroda) was given the broad powers of “Introducing novel arrangements or deviating from existing rules.” See *Japanese Government Documents*, 71.

¹¹¹ Dun, *Reminiscences of Nearly Half a Century in Japan*, 13. Dun comments, however, that most of these were as useful in Japan as “a fifth wheel would be to a wagon.” See Dun 14.

¹¹² *Reports and Official Letters to the Kaitakushi*, 50.

textile factories, and becoming overall an increasingly mechanized society. These early examples were a start down that road.

Conclusion

With regard to the development of Hokkaido and the Kaitakushi, Capron rightly stated in the first annual report that “the work of this Department should be recognized as having not merely a local but a national significance.”¹¹³ The work being done in Hokkaido during the first half of the 1870s drew up future development plans for Hokkaido, and dealt with a number of issues reflective of the overarching challenges Japan faced. The Japanese sought outside help from abroad in order to vault Japan into the position of becoming a world power. While this process took several decades, it was ultimately successful, and Hokkaido was an important part of this. Moreover, when it came to Japan’s acquisition and later development of its own empire, it could be assured of having faced many of the start-up challenges from planning to develop a region from scratch, as it had learned many useful lessons in the first few years of the Hokkaido development process.

The Capron survey era had legitimized Japan’s claims to Hokkaido and begun the process of its development. In 1875, the same year that Capron departed Japan, the Japanese formally signed a treaty with Russia that dissolved some of the Russian threat to Hokkaido, by ceding its interest in the southern half of Sakhalin in exchange for the Kuril Island chain, which most closely bordered Hokkaido.¹¹⁴ This made the investment of

¹¹³ *Reports and Official Letters to the Kaitakushi*, 49-50.

¹¹⁴ Lensen, *The Russian Push Towards Japan*, 501-04. This was the Treaty of St. Petersburg. See Lensen for a full translation of the treaty. These geopolitical borders still remained a general source of concern for many years, however.

employing foreign advisors all that much more important, as the focus turned from staving off the Russians to eventually making Hokkaido economically viable. While not all advice provided by the Americans was ultimately implemented, or when done so, not with full success or acceptance by the average Hokkaido resident, the influence of the suggestions of Capron's team and other foreign advisors was evident in the course that Hokkaido's development took with regards to what industries and structures were later attempted. The experience gained during this time would be applied to Hokkaido and the imperial realm in years to come.

CHAPTER 3 – INFRASTRUCTURE, ECONOMY, EXPERIMENTATION, AND SAC

While the path of Hokkaido's development had been partially laid out during the era when Horace Capron and his team surveyed island from 1871-75, the work was just beginning. Hokkaido proved to have many resources, though the limited basic infrastructure and economy did not attract immigrants to Hokkaido, let alone to actually extract the island's resources. The years after the departure of Capron moved ahead with various experimentation, some helpful and some not, as the Japanese attempted to implement many of the American suggestions. The Japanese also increasingly sought to train and turn tasks over to their own experts, whose knowledge represented a mix of foreign training and Japanese perspectives. The development of Hokkaido would prove costly to the government, and not always successful.

The new Meiji government encountered serious financial troubles by the mid-1870s due to its attempts to modernize quickly, paying out samurai stipends left over from the Tokugawa era, and suppressing domestic rebellions. This along with a Hokkaido land sales scandal in 1881 embroiled the Kaitakushi in some controversy. The Kaitakushi was dissolved in 1882, and Hokkaido was temporarily broken up into three prefectures, though much development continued along the same initial plans. Mechanization in Hokkaido also didn't catch on as easily as the Americans had hoped, nor were all attempts at producing new crops and raising livestock financially viable.

Nonetheless, the development of Hokkaido still provided many valuable lessons for the Japanese, adding to a growing body of overall knowledge. Capron's suggestion to establish an agricultural college was carried through by Kuroda and in 1875 Sapporo Agricultural College opened. Host to a staff of foreign experts, including former team members under Capron, the college quickly became (and remains today), one of Japan's finest. The college was set up as a model to Hokkaido farmers, as well as a site of experimentation with new crop varieties adapted to suit Hokkaido's climate. It also provided its students with a valuable liberal and hands-on education. Hokkaido's infrastructure did develop strongly in some regions, though with less success in others. The railroads and telegraphs implemented in Hokkaido were some of the first in all of Japan. The number of immigrants dramatically increased and reached about one million by 1900, as the Japanese adopted some Western crops and developed Hokkaido's transportation system, increasing the availability of food and other goods by the turn of the century.¹¹⁵

Sapporo Agricultural College

One of Capron's most significant suggestions to be realized was the creation of an agricultural college. The choice of Sapporo for the college's location was an obvious one, as that was where the majority of Hokkaido's development occurred. The school was founded in 1875 and a year later the Japanese sought a foreigner to take up the position as the new Sapporo Agricultural College's (SAC) first president. At the suggestion of Capron, William S. Clark, then head of Massachusetts Agricultural College, was hired for

¹¹⁵ F.C. Jones, *Hokkaido: Its Present State of Development and Future Prospects* (London: Oxford University Press, 1958), 22.

the position.¹¹⁶ Like Capron, he brought along with him a number of Americans who would make up the core staff for the new college's first years.¹¹⁷ Though originally only thought of as a school for agricultural training, SAC quickly evolved into a venue for both hands-on scientific instruction and education in the humanities.

The school, at Clark's request, also took over a recently-established government farm and began to test new varieties of crops from abroad while attempting to modify them to flourish in Hokkaido's climate. He wrote to Kuroda asking that the farm be placed under the supervision of a foreign agricultural professor, for the "proper training" of SAC students to learn "the correct mode of farm management, with due regard to economy of labor, the production of profitable crops and stock, and the maintenance of fertility in the soil."¹¹⁸ The attachment of the farm to the college therefore allowed both professors and students to engage in hands-on training and experimentation. The former was particularly significant, as the first class of students to enter into the college, with only one exception, was composed of young men from samurai or daimyo families who had little background in practical cultivation.¹¹⁹ The more educated men from samurai families, with the experience of scientific agriculture, could quickly transform their education into management skills, practical results from their own efforts, or train others in turn.

¹¹⁶ MAC is now the University of Massachusetts, Amherst.

¹¹⁷ Clark himself only stayed in Japan for less than a year, though his influence was significant. Many of the staff he brought with him continued to work at SAC for several years after his departure.

¹¹⁸ William Clark letter to Kuroda, Sep. 8, 1876, William S. Clark Papers, (RG 3/1-1867). Special Collections and University Archives, W.E.B. Du Bois Library, University of Massachusetts Amherst.

¹¹⁹ Wheeler, "Japan's Colonial College," *The Cycle*, June 23, 1880, William Wheeler Papers. Wheeler does cite this lone student of a farming background as the second-ranking student in his class, however.

Some of the most significant factors holding back immigration to Hokkaido were the island's growing conditions, as well as the continued application of fertility patterns that outside immigrants had come to expect in the main islands of Japan. Kuroda, on the other hand, was serious in that SAC and the model farms under the college's control would begin to change these patterns, and that this would move Hokkaido closer to the goal of being more self-sufficient where foodstuffs were concerned. In an 1876 letter that Kuroda wrote to Clark he noted that the "government farm was established for the intention of furnishing to the people the examples of agriculture" and agricultural methods from abroad. He feared, however, if the farm remained under control of Japanese overseers that the methods there, and throughout Hokkaido, would only "relapse into the Japanese manner of farming," negating any previous efforts. He sought more permanent changes to Hokkaido's agricultural structure, concluding his letter:

Consequently I transfer this farm to the Sapporo Agriculture College and I desire to establish a still better mode of agriculture and to cancel entirely all the old habits and make new (style system) regulations that shall be everlasting examples and to accomplish my original object.¹²⁰

As emphasized in the Charter Oath, this was yet another realization of the call to do away with customs of the past that were ineffective, as Japan pushed towards a more modern country. For Hokkaido, adopting Western methods and crops were a part of this effort.

Kuroda's intent was also to have many of the students who graduated from SAC eventually become officials in the Kaitakushi and contribute to Hokkaido's overall development. From his point of view, a command of agricultural knowledge was the "principal element for opening up and settling" new land such as that in Hokkaido.¹²¹

¹²⁰ Kuroda letter to Clark, Sep. 12, 1876, William S. Clark Papers.

¹²¹ Kuroda letter to Clark, May 21, 1877, William S. Clark Papers.

William Brooks, the second SAC president, revealed in an 1877 letter to his sister that the SAC students were “obliged to sign an agreement that they will remain in this province in the employ of the government in return for their education for a certain number of years.”¹²² It quickly became the case in Meiji Japan that the graduates from the top universities were quickly snatched up and employed in government service, a practice that may have been first modeled by the student-signed SAC agreements.¹²³

For their part, the first SAC students expressed nationalistic sentiments in that they were doing their part in helping to create a strong Japan. In a petition to the then-president Brooks, twenty SAC students asked Brooks to work them harder with a greater focus on hands-on learning. They stated that they were there to “promote the welfare” of Japan and help “render our country prosperous.” To do this, they had to acquire more knowledge from the foreigners and make the Japanese “agricultural system more elaborate and extensive.”¹²⁴ In a letter to his sister, Brooks quoted some of his correspondences with students, and noted that one especially dedicated pupil wrote that “Though my soul will leave me, I will never return to my native province unless I finish my business or duty.”¹²⁵ Many such students left behind their families not only for the chance to become educated and begin new careers, but also out of a sense of larger duty.

¹²² William Brooks letter to sister, Oct. 28, 1877, William Penn Brooks Papers, (RG 3/1 Brooks). Special Collections and University Archives, W.E.B. Du Bois Library, University of Massachusetts Amherst.

¹²³ This practice continues today, particularly in the case of universities such as Tokyo University and other of Japan’s top universities.

¹²⁴ Petition of 20 students, F. Fukuhara, et al, to Brooks, date unknown, William Penn Brooks Papers.

¹²⁵ William Brooks letter to sister, Oct. 28, 1877, William Penn Brooks Papers. Military drill is also noted amongst the daily schedule of the students.

One of the elements that set SAC apart from the other colleges being founded throughout Japan in the early years of Meiji also had to do with the focus on not just a technical, but also a liberal, education. The curriculum during SAC's first five years included advanced science and technical classes in physics, organic/inorganic chemistry, botany, anatomy and physiology, horticulture, geology, stock management, veterinary science, astronomy, and mechanical engineering. In later years, there was also a strong civil engineering component, helpful to the development of Hokkaido's infrastructure. Science and engineering courses paired along with math, from geometry to drafting and surveying, and subjects useful to administrators, such as bookkeeping. Humanities were also on the schedule, including courses in debate and rhetoric, English literature, and history.¹²⁶

While the college utilized some textbooks, learning in SAC came primarily through lectures, and most importantly, hands-on work in the experimental farm, or in practical-learning field trips around Hokkaido. Wheeler, writing in 1880, noted that the college was set up to produce not only doers, but also thinkers. He referred to textbooks as a "crutch" and preferred oral instruction and interaction between teachers and students, arguing that "no system of instruction is better calculated to arouse the *thinking* faculties" of the students, who were constantly cross-examined by one another and by their professors, in a continuous cycle of criticism and revision.¹²⁷ SAC was one of the first institutions of higher learning in Japan to combine critical analysis, hands-on learning, as

¹²⁶ *First Annual Report of Sapporo Agricultural College*. Tokei: Kaitakushi, 1877. Located in the William S. Clark Papers. See also then-acting SAC president Brooks' hand written schedules for 1880-81 in the William Penn Brooks Papers.

¹²⁷ Wheeler, "Japan's Colonial College," William Wheeler Papers. Wheeler's italics.

well as scientific and liberal educations, turning from older Confucian-based models of education.

A few years later, SAC also established a preparatory school to educate students in English (speaking, reading, and advanced composition), mathematics, advanced Japanese, and some basic history to gain the fundamentals of succeeding in scientific instruction in English. Early SAC students were required to have a working comprehension of English even to be considered for entry into the school. In his 1873 report to Capron, Benjamin Lyman indicated his dissatisfaction with his assistants at the time. He noted that while they were hard workers, his assistants also were “for the most part wholly ignorant at the outset, not only of geology, but of surveying, drawing and almost of common arithmetic.”¹²⁸ Therefore, having a strong background in mathematics was essential for field work in Hokkaido, while English was obviously required to communicate with the mostly English-speaking foreign staff living in Hokkaido.

Besides the overall contribution that SAC graduates would make to the Kaitakushi and Hokkaido, and the thorough curriculum that the foreign professors introduced to their students, the work of the professors in adapting crops to Hokkaido was also of critical importance to the island’s development. Throughout the Tokugawa era, in a sort of Japanese agricultural revolution, farmers across Japan had heavily invested in research and development and experimented in producing larger rice yields. They also created varieties of rice uniquely adapted to local conditions. Cash cropping had spread throughout Japan and diversified Japan’s economy and number of

¹²⁸ *Reports and Official Letters to the Kaitakushi*, 118-19.

foodstuffs.¹²⁹ Much of this knowledge, however, remained highly specialized to particular regions, with yield statistics being either unpublished or intentionally hidden from tax collectors. When Brooks asked the government for statistics on yields and varieties of crops on Japan, the reply came back that “there was none [sic] such statistical tables...published before the [1868] revolution.”¹³⁰ The only national database on agricultural statistics before the Meiji era included events resulting from crop destruction or famines. Books with agricultural advice had been published, though these generally only related to rice-growing practices unsuited to Hokkaido. One of the important methods that the Westerners in Japan would introduce was modern bookkeeping techniques, and the need to keep exhaustive statistics on everything, including crop experiments and varieties, and also to make these available to interested individuals or institutions. SAC expected a similar spirit of inquiry from its students, who were to utilize the scientific method processes of trial and error, and constant documentation of successes and failure. This very closely reflected the larger modernization process itself.

It’s hardly surprising that the Americans attempted to solve the agricultural problem in Hokkaido by importing and experimenting in adapting products from abroad, rather than attempting to produce cold-resistant rice varieties, given their lack of familiarity with wet rice agriculture. Still, the Americans recognized that the Japanese were accomplished agriculturists in their own right. Wheeler, in an 1877 letter, spoke highly of Japanese practices, noting that despite the challenges in Hokkaido, “we should find it more difficult to supply food for a population of 30,000,000 from an area no larger

¹²⁹ See Smith’s seminal *Agrarian Origins* for the development of agriculture during Tokugawa times. Thomas C. Smith, *The Agrarian Origins of Modern Japan* (Stanford, CA: Stanford University Press, 1959).

¹³⁰ (Author unknown) letter to Brooks, 1883, William Penn Brooks Papers.

than Japan... Yet these people have done this for centuries.”¹³¹ The college therefore was an important institution in helping the Japanese to get hands-on knowledge of cultivating the equally unfamiliar Western crops, enabling the students to learn from the Westerners and their ways in only a few years.

Foreign SAC staff frequently requested new seeds with which to experiment in the college farm, requests that seem to have been rarely denied by Kuroda. In one such letter, William Brooks declared that he would do his best “not merely to keep the seed pure and up to the standard of the original, but also to improve upon it and adapt it to the climate.”¹³² While this was not new to the Japanese, crops from the West benefitted from countless generations of human modification and grew in a wider variety of climates. Many such seedlings could be readily imported from companies in America or Europe and be rapidly tested and adapted to Hokkaido’s conditions.

Capron’s team started some 40,000 fruit trees and bushes in Hokkaido, including “apples, pears, apricots, plums, cherries, grapes...currants, gooseberries, &c.” and had grafted together foreign fruits with small native Japanese berry bushes.¹³³ The experimental farm established by Capron in Tokyo, though worthless in adapting foodstuffs for Hokkaido’s climate, was nonetheless the venue through which “over two million of foreign fruit trees and vines were distributed throughout the [main] island of Japan and it is from this source that the foreign fruit we get today comes.”¹³⁴ Though

¹³¹ Wheeler, letter to his father, Nov. 25, 1877, William Wheeler Papers.

¹³² Brooks letter to Hori Motoii, Oct. 22, 1877, William Penn Brooks Papers.

¹³³ *Reports and Official Letters to the Kaitakushi*, 103.

¹³⁴ Dun, *Reminiscences of Nearly Half a Century in Japan*, 13.

indirect, this was a significant overall contribution to Japan's foodstuffs that was a product of Hokkaido's development.

A wide number of vegetables, grains, and grasses were also tested in Hokkaido. Some of the food or forage products introduced by the agricultural college and advisors included the grains buckwheat, (Japanese) millet, oats, barely, and wheat; vegetables in the form of cabbages, onions, legumes, tomatoes, carrots, and some melons, as well as variety of American range grasses. Native daikon and foreign white potatoes also continued to be grown throughout Hokkaido, the latter being especially successful. The SAC professors were careful to make sure the Japanese students got as much hands-on time conducting their own "accurate scientific experiments" under the guidance of the foreign professors.¹³⁵ The SAC staff also experimented with chemical fertilizers on various imported crops, some of the first such trials to be conducted in Japan. When repeated experiments did prove successful, the college began to produce seeds for distribution to farms around Sapporo and the immediate region. It was, after all, on the wider commercial viability of particular crops or varieties, and not merely success in the lab, which would determine whether or not any product was ultimately successful in the long run.

Though Capron had advocated for it, livestock were only introduced to Hokkaido in great numbers after the college was formed, and placed under the care of rancher Edwin Dun. These included horses and oxen as beasts of burden, and cattle, sheep, and swine for beef, mutton, wool, and pork, and lard, respectively. Dun noted that by "careful experiment with over twenty plots of the better kinds of foreign grasses" he discovered

¹³⁵ Brooks letter to Hori Motoii, Oct. 22, 1877, William Penn Brooks Papers.

that many of the range grasses that “flourished in England or America” would also do well in Hokkaido.¹³⁶ Grass and several types of clover for pasturage were essential in supporting the herds of animals that the foreign advisors and SAC professors thought would do well in Hokkaido. Such foliage, along with corn and oats, helped support animals on the new 35,000 acre Niikappu ranch (established in 1875) and other acreages. Horses were initially of particular interest in Japan, as they remained the principle source of long-distance transportation in early Meiji Japan. Niikappu, at its start, contained more than 1,000 native Japanese mares, along with a stock of Japanese and imported American stallions to cross-breed with Japanese horses.¹³⁷ Part of Dun’s efforts was to breed up a stock of hearty horses for use as pack animals in Hokkaido or the main islands, and he selectively bred the strongest animals, showing the Japanese how to do the same.¹³⁸ He additionally oversaw the construction of winter animal housing that could stand up to Hokkaido’s climate and introduced Western methods for breaking and training horses.

Despite the best of intentions, there were, not surprisingly, many failures. Clark, for instance, had argued on several occasions that not only were traditional Japanese style houses “altogether inappropriate” for the cold weather, but that Japanese clothes were also not suitable for the weather.¹³⁹ Instead, he advocated for the use of wool clothing in the colder regions of Hokkaido, along with the introduction of sheep to provide the raw

¹³⁶ Dun, *Reminiscences of Nearly Half a Century in Japan*, 31.

¹³⁷ Dun, *Reminiscences of Nearly Half a Century in Japan*, 35-36.

¹³⁸ Foreign travelers often complained about the poor quality horses on which they travelled, in addition to the harsh methods the Japanese used for breaking them for riding. See, for example, Isabella L. Bird, *Unbeaten Tracks in Japan: An Account of Travels on Horseback in the Interior Including Visits to the Aborigines of Yezo and the Shrines of Niko and Ise* (New York: G. P. Putnam's Sons, 1881), 123-26.

¹³⁹ Clark letter to Kuroda, Sep. 8, 1876, William S. Clark Papers.

materials for spinning. Dun tried just this in Hokkaido, importing a number of sheep, which seemed to adapt easily to Hokkaido's climate. Ultimately, however, the price of wool textiles imported from Western factories was three to four times cheaper, while it "seemed doubtful if the Japanese would ever take kindly to mutton as a food."¹⁴⁰

Economically speaking, livestock in general (with the exception of horses) initially struggled in Hokkaido. While cows, sheep, and goats produced meat, milk, and butter that the Westerners were used to, these animal products initially did little to attract Japanese interest, as the Japanese were not used to eating meat.¹⁴¹ Sugar beets had been on the list of recommendations proposed by Clark and the SAC staff, and the post-Kataikushi government heavily invested in sugar refining factories at Sapporo and Muroran, which cost two million and one million yen respectively.¹⁴² Only one of these factories operated for a few years before shutting down, due to cheaper prices that could be found in East and South Asia, as well as in the Ryukyu Islands, which were officially annexed in 1879.¹⁴³ Many of the advanced machines for cultivating or harvesting that were imported by various advisors also didn't prove to be either cost effective (human labor was cheaper in most cases) or couldn't be used in the more mountainous terrain of Japan.

¹⁴⁰ Dun, *Reminiscences of Nearly Half a Century in Japan*, 31-33.

¹⁴¹ Meat eating would later become popular during the Meiji era, as some Japanese thinkers posited that meat eating was part of the reason why the Westerners had advanced so much more quickly than those of the East.

¹⁴² Muroran is port city to the south of Sapporo.

¹⁴³ Dun, *Reminiscences of Nearly Half a Century in Japan*, 34. The Sapporo factory's machinery was never even installed.

These and other failures revealed the dangers of accepting the advice of foreigners wholesale. Foreign advisors were not always sensitive to cultural differences between themselves and the Japanese, such as differences in meat consumption, or assumed that the Japanese could and would quickly change all of their ways. Despite the admonitions of the Charter Oath, change didn't always come so rapidly or easily for the general populace. The average citizen, of course, made up Japan's internal market, so what initially couldn't be sold domestically, oftentimes struggled or had to be abandoned entirely. Consumption patterns did change, but these changes required new generations less invested in traditional patterns of living, or the growth of Japan's empire into territories and markets with different expectations. These failures were also evident of the struggles of Japan's emerging economy in competing with the established West. It was particularly revealing of the difficulties inherent in investing in profitable factories that wouldn't be out-produced by their counterparts in the West, where factories were run more efficiently and supported by large existing markets.

Not all of what came out of Sapporo Agricultural College ultimately proved useful, and many research and development investments and efforts were neither practical nor profitable. That said, the impact of the college on Hokkaido's development, and even on the main islands, was substantial. Kuroda was confident that "many useful men will in the future come out from that college and assist the work of the Department so as to accomplish our desired object," and this hope proved to be correct.¹⁴⁴ SAC was a training ground for many future Kaitakushi and other government employees, and provided a hands-on learning experience where students could cut their teeth through

¹⁴⁴ Kuroda letter to Clark, May 21, 1877, William S. Clark Papers.

actual fieldwork, while being provided with a liberal education that enhanced their analytical skills. Just as important, many graduates eventually passed their skills on to their own students in turn. Significantly, about 40 percent of the graduates from SAC, between 1880-95, went on to become teachers. Katayama Sen, later founder of the Japanese Communist Party, wrote in 1898 that “Sons of the college are conspicuous figures everywhere throughout the empire.”¹⁴⁵

For the rest of the populace, the experiments at SAC would provide the beginnings of new crops that would supplement the expensive imports from the mainland. In the early 1880s, for example, Thomas Blakiston reported eating strawberries in June, corn in August, fruits later in autumn, and potatoes that were “exceptionally large, quite sound, and of excellent flavour,” in the vicinity of Sapporo.¹⁴⁶ Many of the crops attempted during this period would become both staple foodstuffs and net exports for Hokkaido as a whole (see Chapter Five).

The Development of an Infrastructure

Feeding the populace and training students were not the only tasks faced in the development of Hokkaido. The island could have all the economic potential in the world, but without much of an infrastructure there was no cost-effective way to extract resources, support the needs of a growing population, and move people and ideas about.

Unsurprisingly, most of the money went to developing the largest existing towns and cities, areas near valuable or easily exploitable resources, or low-land areas that had the

¹⁴⁵ Willcock, “Traditional Learning, Western Thought, and the Sapporo Agricultural College,” 991. See Willcock 1016 for information on SAC graduates as teachers.

¹⁴⁶ Blakiston, *Japan in Yezo*, 113.

most agricultural potential. The majority of Hokkaido's development money was expended in the southwest, which fit most of these requirements, and the new capital of Sapporo in particular consumed the lion's share. As Capron's survey team had emphasized, roads were of paramount importance, though creating and maintaining road systems in an area with Hokkaido's land mass and forests was difficult and expensive. Communication lines between Hokkaido's cities and outposts also had to be addressed, in addition to trade with the mainland. Beyond that, there was a growing need for government and social services.

The undeveloped location chosen for Sapporo was a chance to create a new modern city with its own particular layout and design. The early capital proved to be an eclectic blend of Japanese and American techniques. It was laid out "on the plan of an American city, with wide, rectangular streets," and divided by a grid pattern—unique features compared to Japanese cities at the time.¹⁴⁷ The housing varied between a traditional Japanese style, sometimes unfit for the weather, and the more sturdy housing and dormitories built for the foreign advisors, students, and Kaitakushi staff. This experiment in modern city-building had its upsides and downsides. Blakiston, who watched Hokkaido develop over the course of two decades, was particularly critical of Sapporo, stating that it had "all the character of a spoiled child," due to the particularly lavish funding and special attention that went into its development.¹⁴⁸ In his eyes, there

¹⁴⁷ Bird, *Unbeaten Tracks in Japan*, 8.

¹⁴⁸ Blakiston, *Japan in Yezo*, 111.

was “an almost total neglect of other districts,” by comparison, particularly those in the north.¹⁴⁹

Economically, Sapporo quickly became the home to several firsts for Hokkaido. Isabella Bird, an explorer who traversed the southeast portion of Hokkaido, along with large areas of Japan’s other three islands, noted that by 1881 there were “extensive sawmills, a silk factory, a tannery, and a brewery, and large flour mills.”¹⁵⁰ The mills were the suggestions of the foreign advisors, trying to take advantage of the island’s extensive timber and new grain cultivation. Sake (rice wine) was a longtime staple of the main islands, but foreign beer was new to the Japanese. It was the ability of the Japanese to better connect the inland capital to the mainland and the world economy, however, that would determine Sapporo’s ultimate success or failure. Initial efforts were made to develop the new port of Otaru, some 20 miles to the north of Sapporo, though the largest port in Hokkaido still remained Hakodate, even further to the southwest. The early 1870s saw the construction of a road of about 100 miles that joined Hakodate and Sapporo, at the hefty price tag of 1 million yen. In 1874, a telegraph line (one of the first in Japan) had been laid underwater in the Tsuruga Strait between Hakodate and the mainland, hooking Hokkaido directly in with Tokyo. Another line soon connected Hakodate and Sapporo.

Hakodate, as has been mentioned, was initially one of the first ports opened to foreign trade, and had flourished because of supplying and coaling the foreign vessels that made port there. The port city’s measure of development would come with the rapid

¹⁴⁹ Blakiston, *Japan in Yezo*, 35.

¹⁵⁰ Bird, *Unbeaten Tracks in Japan*, 3-4.

creation of its own infrastructure and its significance in domestic trade. By 1881, Bird reported that Hakodate was flourishing with seventeen schools (many teaching foreign languages), a post office, a customs house, and several ship carpenters. Telling of the Western influence, there were a number of Christian churches, as well as shops that stocked a variety of foreign goods, and an effective police force.¹⁵¹ Despite a drop-off in foreign trade in the 1880s, as well as a devastating fire that destroyed some 8,500 homes in 1879, Hakodate was rapidly growing.¹⁵² Foreign exports barely doubled to about £129,000 in value, though domestic exports increased from a paltry £8,000, to over £1,000,000 between 1874 and 1890.¹⁵³

This dramatic increase in the amount traded reflects not only the growth of Hakodate, but also its increasing connection both to the main islands, and to Sapporo and the other developing cities of Hokkaido. Bird noted that “dried fish, seaweed, and skins” procured from all around the island were being “sent direct to China and the main island[s] in native vessels.”¹⁵⁴ Initially, there were only two steam vessels, purchased second-hand by the Kaitakushi from the United States in 1872, that serviced the entire island and ferried supplies and communications between the mainland and Hokkaido.¹⁵⁵ By 1881, there were five steamers running between just Yokohama and Hakodate at ten

¹⁵¹ Bird, *Unbeaten Tracks in Japan*, 7.

¹⁵² Fannie Wheeler (William’s sister) to Mrs. Wheeler, Dec. 10, 1879, William Wheeler Papers.

¹⁵³ Milne, “Notes on a Journey in North-East Yezo and Across the Island,” 504. Imports from the mainland also grew to about £1,000,000 per year.

¹⁵⁴ Bird, *Unbeaten Tracks in Japan*, 6.

¹⁵⁵ The Tokugawa government had put strict tonnage and outfitting laws on all vessels to prevent merchants from being tempted to engage in foreign trade without the *bakufu*’s permission. Japanese shipwrights therefore had to relearn how to construct larger vessels, let alone ones that were powered by the then-cutting edge steam engines. As a result, the Japanese government initially purchased many ships from abroad to bolster its seaborne transportation capabilities.

days per trip, as well as numerous wind-driven Japanese junks delivering supplies around the coastline.¹⁵⁶ While these two cities were certainly growing up, and travel by water was becoming increasingly easy, overland transportation routes proved more of a challenge to construct.

A number of schemes had been thought up to better connect the capital to the world economy, as the road between Sapporo and Hakodate was long and difficult to maintain. One of these was to develop waterways, making use of existing rivers and connecting canals, though this proved too costly and difficult, and was quickly abandoned. The other was to connect Sapporo via a good road to the nearest northern coastline and port city there, called Otaru. Between 1880-82, the twenty miles between Sapporo and Otaru were bridged not just by a new surface road, but by a new railroad, just the third in Japan. This construction was overseen by American engineer J.U. Crawford, and built with Japanese labor.¹⁵⁷ From Otaru, goods could be transferred to more rapid water transportation and shipped to anywhere in Japan or abroad. This railway was soon extended thirty-five miles to Poronai, a region that held one of the large coal mines discovered by Benjamin Lyman some years before. This allowed for a far more rapid extraction and sale of the plentiful Hokkaido coal than ever before.

Other routes that required less technical knowledge were built on the backs of convict labor, along with some paid workers, a practice beginning with the push to

¹⁵⁶ Yokohama is major port city, just to the south of Tokyo.

¹⁵⁷ *Foreign Pioneers: A Short History of the Contribution of Foreigners to the Development of Hokkaido*, trans. Sapporo Foreign Language Services Center, ed. General Affairs Dpt. Archives Section, Hokkaido Prefectural Government (Hokkaido: Hokkaido Prefectural Government, 1968), 158.

construct roads leading into the interior in 1886.¹⁵⁸ John Milne later came across as many as 1,800 convicts at once building roads in northeast Hokkaido. These individuals were made up of common criminals, or those who had rebelled against the Meiji government in several rebellions during the 1870s. Milne said that the convicts who had served a number of years with good conduct could earn stripes, and when a “convict has obtained four such stripes, he may possibly obtain permission to settle outside the prison on a farm, and when surveillance ceases, perhaps be absorbed amongst the ordinary colonists.”¹⁵⁹ This was a limited way of populating the more undesirable regions of Hokkaido, as well as making improvements to them. The practice of using convict labor, however, also partially gave Hokkaido a bad reputation that might have curtailed the immigration of potential new settlers. The treatment of some prisoners was particularly harsh and the progress toward the interior did cost some lives. Most of inland Hokkaido, outside of the area around Sapporo or large resource nodes, however, would still remain the domain of forests that were “truly primeval” and difficult to navigate within for many years to come, though this was a start.¹⁶⁰

By 1882, the population of Hokkaido had increased to around 250,000, about two and a half times that of when Capron had arrived in 1871.¹⁶¹ This steady increase can be attributed to both the increasing number of foodstuffs and the continued development of the island’s infrastructure, which resulted in a growth of Hokkaido’s primary cities and

¹⁵⁸ Fumiko Fujuta, *American Pioneers and the Japanese Frontier: American Experts in Nineteenth-Century Japan* (Westport, CT: Greenwood Press, 1994), 133.

¹⁵⁹ Milne, "Notes on a Journey in North-East Yezo and Across the Island," 491.

¹⁶⁰ Wheeler, letter to his mother, Sept. 10, 1876, William Wheeler Papers. In this letter, Wheeler accounts for the difficulty of navigating in the forests outside of the most settled areas.

¹⁶¹ Harrison, *Japan's Northern Frontier*, 61.

economy. The year of 1882, however, would also mark the end of the Kaitakushi and many government-operated ventures, as well as the shift away from the use of foreign advisors.

The End of the Kaitakushi

The budget of the Kaitakushi was guaranteed for a total of 10 years, from 1872-82. The office itself was on shaky ground by that point, however, due to a combination of an overall budget crisis and the cost of development programs, as well as an 1881 scandal over land and asset sales in Hokkaido. A decade of rapid change and attempts to revamp Japan economically, politically, intellectually, and culturally had come at a high monetary and personal cost, prompting the young Meiji government to literally have to fight new battles, and slow down from its initial pace. Hokkaido was caught up in all of these events.

Besides the heavy investment in foreign advisors and technologies, the samurai were also largely responsible for an ongoing budget crisis. In 1873, the government raised a new conscript army drawn from men of all classes, though the soldiers mostly came from the ranks of the farmers. It later specifically forbade the samurai their traditional privilege of wearing two swords, while the advancement of the peasants to soldiers ended the samurai's role as the sole protectors of Japan. Initially, the samurai retained their traditional yearly stipends, though the cost on the young government was too great. It began offering samurai their total stipends in single lump-sum bonds, supposedly worth five to eleven years of a man's salary. In 1876, this change was made mandatory for all. Rampant inflation and a fluctuating currency meant that many samurai actually got very little spending power from their bonds, effectively ending the lifestyles

they and their ancestors had enjoyed for hundreds of years and reducing them to abject poverty.¹⁶² This crisis, along with the removal of their symbols of power, pushed many samurai to the edge, and in 1877, the Satsuma Rebellion broke out, led by Saigō Takamori, formerly one of the most powerful leaders of the Meiji oligarchy. While the new conscript army (which Kuroda helped partially lead) succeeded in defeating the samurai rebels, the financial cost to do so was immense, further straining the government reserves.

This ongoing budget crisis began a period of belt-tightening, a fiscal pullback after a decade of heavy spending. Hokkaido, along with the rest of Japan, felt the impact of this. William Wheeler noted in 1877 that “throughout Japan, all departments have an abundance of schemes for improvement in hand” but the government was “too poor to pay for them all,” particularly now that the “war has crippled her [Japan] still more seriously.”¹⁶³ Shortly thereafter, Wheeler reported that the government reduced the salaries of officials by twenty percent across the board and put a moratorium on hiring new foreign professors at SAC. Instead, it designed to replace those departing the college with top graduates from Tokyo University, some experienced SAC graduates, and Japanese who had studied abroad.¹⁶⁴

While the intent was never to have costly foreign employees in place forever, the budget crisis hastened the transition from foreign teachers and experts to native Japanese ones. Besides their cost, historian Fujita Fumiko, writing about the foreigners employed

¹⁶² Beasley, *The Meiji Restoration*, 386-90.

¹⁶³ Wheeler, letter to his mother, June or July, 1877, William Wheeler Papers.

¹⁶⁴ Wheeler, letter to his mother, Dec. 3, 1877, William Wheeler Papers.

in Hokkaido, also notes that there was some “difficulty [in] employing individualistic foreigners,” many of whom were overconfident in their cultural superiority to the Japanese.¹⁶⁵ Such cultural differences might have played a factor in cutting the positions of foreigners, along with the continuing English-Japanese language barrier. More than that, however, was a continuation of the Japanese goals of learning from the West in order to stand on par with them. This could only be accomplished through Japan’s own unaccompanied success in the modern world.

While these transitions weakened the expensive Kaitakushi, still only able to recoup a portion of its development expenses in any given year, it was a scandal that saw the close of the office. Having reached the end of its tenure, the Kaitakushi began selling off some of its assets in order to pay for the many continuing industries (not all immediately profitable) that it still funded. A private company consisting of current and former Kaitakushi employees, and backed by merchants from Osaka, Japan’s wealthiest port city and home to much of its financial community, was formed. It proposed to buy the governments’ assets, including such things as offices, warehouses, ships, factories, breweries, farms and buildings, canneries, and port facilities.

Kuroda praised the move, and in a long statement, argued that “Businesses that should be in the hands of the people should be released from government control,” and that those who had already contributed so heavily to the development of the island should continue to see it on its way to success, even if in a private capacity.¹⁶⁶ Kuroda might have been influenced by Capron, who had insisted through his reports that “It has been

¹⁶⁵ Fujuta, *American Pioneers and the Japanese Frontier*, 130.

¹⁶⁶ Harrison, *Japan's Northern Frontier*, 129.

the experience of England and America that such enterprises are never productive of so satisfactory results under government auspices as when left to individual effort," though it was also the overall intention of the Meiji government to transfer many start-up industries into private hands eventually.¹⁶⁷ During the course of a political struggle between Meiji oligarchs, however, it was revealed to the public that the assets of the expensive Kaitakushi were being sold off for only three percent of their projected value. The ensuing scandal cancelled the sale, painting Kuroda's intentions in controversy. Kuroda attempted to procure further funding for the continuation of the Kaitakushi, though this was denied. Kuroda quickly resigned, the Kaitakushi was dissolved, and a temporary government was put in its place.

The change to Hokkaido was more symbolic than actual. Soon after, Hokkaido was split into three prefectures, which were also quickly abolished in 1886, and replaced by a more consolidated government, though still mostly under the heel of the central government in Tokyo. These new entities retained many of the same staff and kept the same laws that were in place under the Kaitakushi, and attempted to oversee industries in much the same way as before, albeit with less funding. Immigration did begin to pick up during the 1880s, mostly due to poor economic conditions on the mainland for many Japanese. In the case of the samurai, their bond money was likely running out. From 1882-1889, the central government (much as the Kaitakushi had done) set aside 150,000 yen annually as loans to samurai families willing to immigrate to Hokkaido. This time, almost 7,500 families were recruited, triple that of previous attempts, while farmers also

¹⁶⁷ *Reports and Official Letters to the Kaitakushi*, 42.

began to make the move in larger numbers.¹⁶⁸ The employment of some foreign engineers continued, though they were increasingly replaced by Japanese ones. With the improving infrastructure, and a decade's worth of experience in new farming techniques, the prospects of Hokkaido began to attract more immigrants, as well as investors who could provide needed capital. The Hokkaido Coal-Mine Railway Company was established and helped construct additional rail lines and expand the coal mines.¹⁶⁹ The investment of imported knowledge and the hard work of the Japanese were beginning to pay off. At the turn of the century, almost a million Japanese called Hokkaido home, a dramatic increase from the early years when the island was still called Ezo.

Conclusion

Over its ten year tenure, the colonial office and the development projects in Hokkaido drew their fair share of supporters, detractors, and those in between. For instance, in 1881, Isabella Bird stated of the Kaitakushi that "This department has spent enormous sums upon Yezo, some of which have been sunk in unprofitable and costly experiments, while others bear fruit in productive improvements."¹⁷⁰ Some foodstuffs were very successful, while other elements of Western technology, crops like sugar beets, or livestock such as sheep, were not. Two years later, Blakiston noted in 1883 that "Almost every article required for use in daily life," outside of some foodstuffs, lumber, and coal was still imported.¹⁷¹ Labor was generally still more expensive in Hokkaido than

¹⁶⁸ Harry D. Harootunian, "The Economic Rehabilitation of the Samurai in the Early Meiji Period," *The Journal of Asian Studies* 19, no. 4 (Aug. 1960): 439.

¹⁶⁹ Sato, "Hokkaido and Its Progress in Fifty Years," 523-29.

¹⁷⁰ Bird, *Unbeaten Tracks in Japan*, 3.

¹⁷¹ Blakiston, *Japan in Yezo*, 113.

the main islands, while many Japanese were initially hesitant to give up their traditional diets and relied on the import of such goods as rice, miso (fermented bean paste), or sake. The flurry of initial development would only begin to take a firm hold in the decade after the office of the Kaitakushi was abolished, when some early projects began to find some success.

John Milne wrote that by 1893, “One hundred and ninety-six miles of railway are nearly completed, roads have been constructed, farms of various descriptions established, coal mines opened, canning establishments, hemp, and other mills started, and fisheries encouraged.” While he was quick to point out that “most” of the government’s attempts at development had been unprofitable, he nonetheless emphasized that largely “owing to the Government’s assistance, Yezo is becoming populous and self-supporting.”¹⁷² That Hokkaido was becoming self-supporting was fulfilling a major goal. No longer was Hokkaido merely spotted with a few small colonies to prevent a Russian land grab; rather it was also beginning to produce its own goods, take on its own character, and become an irreplaceable part of Japan proper. Hokkaido was undergoing the transition from an external colony to an internal land. The initial investment may have been significant, and like any new experience it was fraught with much trial and error before paying any dividends. And dividends it would pay.

¹⁷² Milne, "Notes on a Journey in North-East Yezo and Across the Island," 503.

CHAPTER 4 – PROGRESS, THE AINU, AND THE ENVIRONMENT

There is one final element of Hokkaido's development to consider between 1868-1900. Hokkaido was an experiment in colonialism, and an attempt to turn the land itself into a useful and productive machine from which goods might flow to enhance the empire, in addition to providing additional living space for the Japanese. The other remaining aspect of this learning experience was in regulating the peoples who had originally made Hokkaido their home before the arrival of the Japanese. By the time Japan opened up to the West, several centuries of Japanese-Ainu trade and relations had taken their toll on the Ainu, a process continued by the modernization of the Meiji era.

Contrary to the actions of the Matsumae during the Tokugawa era who had compelled the Ainu to appear as a barbarous other, the Meiji government attempted to force upon the Ainu the trappings of Meiji-style civilization. This included attempts to regulate the Ainu's appearance and hunting practices, the latter to encourage them to settle down and farm. Though the Ainu were initially protected from some of the requirements of modern society by certain legal and tax exemptions, they were not able to make their way easily in the modern economy and society that was rapidly being built up around them. Entire communities were sometimes uprooted and moved to make way for Japanese progress. In 1899, they were stripped of any remaining legal protections, and classified by the ambiguous title of "Former Aborigines." Thereafter, they were forced to make their living as Japanese citizens, yet without the benefit of actually being ethnically Japanese, or being fully integrated into Hokkaido's citizenry or economy.

The Ainu proved themselves to be agents of environmental change, utilizing their hunting and fishing skills to provide the growing population of Hokkaido with skins, meat, and fish. A combination of the large influx of Japanese immigrants, the demand of Hokkaido goods in the mainland and abroad, and new technologies that increased the efficiency of game and fish harvesting, when combined with improved transportation systems, quickly devastated local animal and fish populations. Ainu guides would be instrumental in exploring Hokkaido's forested inland, including aiding the foreign advisors in their travels. Finally, the relationship between Ainu and Japanese in the underdeveloped portions of Japan was not always as strained as the relationship between the Ainu and the Japanese government. In these areas, the Japanese, though often exploitive of Ainu labor, also shared goods, ideas, and spaces with the Ainu. Through the use of their traditional skills, the Ainu were able to express some of their own agency, however limited, in the development of Hokkaido.

The Ainu in a Modernizing Japan

Through trade with the Matsumae clan, the earlier subsistence patterns of the Ainu had been altered to make many Ainu tribes semi-dependent on the Japanese for foodstuffs and had commoditized the hunting practices of the Ainu. The Matsumae had taken advantage of their distance from mainland Japan to forcibly conscript Ainu to work at southern Ezo fisheries. The Ainu labored under sometimes harsh conditions, often with little or no pay.¹⁷³ Some of these abuses were ended when the Tokugawa government took over control of the island from the Matsumae in the 1850s, and again when the

¹⁷³ Shigeru Kayano, *Our Land Was a Forest: An Ainu Memoire* (Boulder, CO: Westview Press, 1994), 26-36. See Kayano's long quotation from a Japanese diary regarding villages who had members forcibly conscripted from them. The author notes that his grandfather tried to injure himself when young to be returned to his native home. Conditions throughout the island did vary, however.

Kaitakushi was established to oversee the renamed Hokkaido in 1871. The Kaitakushi and subsequent governments operated with the goal of assimilating the Ainu into the Meiji state. While outright abuses by the government might have ended with the transition from Tokugawa to Meiji, and though the Kuroda and the central government prescribed that the Ainu be treated well, these actions did not necessarily change the views of many Japanese toward the Ainu, who the Japanese saw as uncultured and uncivilized. Nor would these prescriptions immediately improve the poor social and economic condition of the Ainu, even those tribes who had not been directly exploited by the Japanese.

Upon their arrival on the scene, Westerners overwhelmingly commented on how seemingly thin the Ainu appeared in body, mind, and population after the impact of hundreds of years of even a partial Japanese occupation of the island. John Batchelor, a missionary who devoted much of his life to the improvement of the Ainu after his arrival to Japan in the 1870s, said of the Ainu that they “were one and all imbued with the inferiority complex” as a result of their interaction with the Japanese. He continued that “They had been thoroughly cowed and became hopeless,” and “knew themselves to be a doomed race.”¹⁷⁴ The Matsumae had also discovered the weakness of Hokkaido’s natives to alcohol. This had prompted the Matsumae to import a steady stream of sake to Ezo, where the drink became an important trade good between the Japanese and Ainu, as well as between Ainu tribes. Sake found its way into Ainu rituals, creating alcoholism amongst the Ainu, who the Japanese and Western observers unilaterally agreed drank heavily. Bird noted the continuation of this practice in 1881, as she witnessed numerous

¹⁷⁴ John Batchelor, "Steps by the Way," in *Early European Writings on Ainu Culture: Travelogues and Descriptions*, ed. Kirsten Refsing, vol. 5 (Richmond: Curzon, 2000), 109.

Japanese “horses laden with sake going to the interior” for trade with the Ainu.¹⁷⁵ The influence of the Japanese, labor exploitation, and alcohol “gradually degenerated” the condition of the Ainu, according to Dun, who thought “their spirit as a people was broken and ‘sake’ and disease did the rest.”¹⁷⁶

Disease had weakened the Ainu in the Tokugawa era, though this continued during the Meiji period as well. Despite some attempts of the Japanese to vaccinate the Ainu, many were still vulnerable to diseases introduced by a growing number of Japanese. Unable to cure it on their own, the Ainu often had no choice but to flee at the appearance of smallpox in their villages. St. John observed in 1880 that when faced with the disease that the “Ainos immediately disperse into the interior when this dreaded disorder reaches them, and break up into small bands until it is over and past.”¹⁷⁷ This major disruption could be temporary or permanent, depending on the number of victims.

Besides these challenges, the Japanese government also increasingly tried to regulate the daily lives of the average Ainu, attempting to force the Ainu to conform to a more modern Japanese-like appearance. Ainu men traditionally wore flowing long hair and grew beards just as lengthy. The Japanese, however, encouraged or outright forced many Ainu to shave their heads. During the Tokugawa era, long hair worn in topknots was common for Japanese men, though in an effort to visually remake themselves like the Westerners, it was expected that most Meiji men wear short hair. For the Ainu, long hair was representative of long life-spans, and cutting a man’s hair was therefore

¹⁷⁵ Bird, *Unbeaten Tracks in Japan*, 31.

¹⁷⁶ Dun, *Reminiscences of Nearly Half a Century in Japan*, 46.

¹⁷⁷ St. John, *Notes and Sketches from the Wild Coasts of Nippon*, 22-23.

equivalent to shortening his life. The Ainu also feared that enemies could harm them through black magic rituals involving their hair.¹⁷⁸ Ainu women also traditionally practiced tattooing their lips blue, beginning in a small area on the upper lip, then spreading to both upper and lower lips, while circles were tattooed on their forearms. When Isabella Bird toured a Japanese village forbidden to perform the practice, she noted that the inhabitants “expressed themselves as very much grieved and tormented by the recent prohibition of tattooing,” fearing that their gods would be angry with them.¹⁷⁹ The Ainu told Bird that without such tattooing, their women couldn’t marry, and begged her to speak to the government and try to get the Japanese to overturn the law. Instead of the Ainu being made out to be barbarians by the Matsumae in the Tokugawa era, they were now expected to conform to the new Meiji expectations of what a civilized people should look like. This expectation was carried out without consideration for what these changes might have meant for the Ainu and their traditional culture.

The Japanese government did not stop at appearances. It also attempted to regulate the hunting and subsistence practices of the Ainu. To the Ainu, bears were sacred, as was the practice of hunting them. While the Meiji era Japanese considered bears a nuisance that occasionally killed horses and sometimes even people, the hunting practices of the Ainu also proved an issue of contention. To better enable them to hunt bears, the Ainu had long utilized a number of potent poisons, applied to their weapons, in order to slay their dangerous prey. This also included setting poisoned arrow traps to remove the dangers of direct confrontation. This proved a problem in modern Hokkaido,

¹⁷⁸ Batchelor, "Steps by the Way," in *Early European Writings on Ainu Culture*, 111.

¹⁷⁹ Bird, *Unbeaten Tracks in Japan*, 80.

however, as traveler Edward Morse discovered in 1878 when he unknowingly wandered onto such a hunting ground and was only warned back by the cries and gestures of local Ainu.¹⁸⁰ Hidden traps and errant poison arrows were more dangerous to the increasing number of foreign travelers and Japanese settlers than they were to the Ainu who knew their local hunting grounds. Therefore, the Japanese government decided that the use of such poison had little place in a modernizing Hokkaido.

While fishing had become a less exploitative profession in the Meiji era and many Ainu had begun working in the emerging logging industries, the government's preference was for most tribes to settle down and take up agriculture as a primary means of earning a living. While Kuroda apparently never solicited the advice, Capron had nonetheless offered it during his time in Japan. He wrote that he foresaw the "same difficulties are to be encountered in efforts to civilize these people" as the American government had faced in its expansion westward. From his perspective, Capron warned that the Ainu and American Indians shared a "fondness for the chase, and for an exiting and almost irresponsible life, with a corresponding distaste for steady and industrious application."¹⁸¹ Dun similarly claimed that they had excellent woodcraft skills, though "soon tire of steady employment."¹⁸² It's unclear to what extent Capron influenced any of the policies of the Kaitakushi toward the Ainu, though the path that the Kaitakushi took certainly followed an attempt to get the Ainu to settle down and become proper Japanese citizens. As farmers, the Ainu would conceivably contribute to the state and be more easily

¹⁸⁰ Edward S. Morse, *Japan Day by Day, 1877, 1878-79, 1882-83* (Boston: Houghton Mifflin Co., 1917), 12.

¹⁸¹ *Reports and Official Letters to the Kaitakushi*, 266-67.

¹⁸² Dun, *Reminiscences of Nearly Half a Century in Japan*, 45.

controlled, rather than living outside of it. Seasonal wage earning was therefore discouraged in lieu of agrarian pursuits.

The little agriculture practiced by Ainu tribes didn't fit into the Japanese model. Bird reported that the Ainu cultivated an area until "nothing more" would grow there, then they would "partially clear another bit of forest, and exhaust that in turn."¹⁸³ This practice encouraged mobility and expansion, and didn't stay within the borders of delineated private property, even as the best land was slowly being divided up between incoming immigrants. For settlements further inland where the primary source of foodstuffs was not fish, Benjamin Lyman, in his travels to the interior, commented that the "forest is their garden," and that the Ainu there hunted and gathered foodstuffs, clothing materials, and trade goods from wide swaths of land.¹⁸⁴ This traditional way of life clashed with the expectations of Meiji Japanese. Forcing the Ainu to settle down would keep them from trespassing on new private property, plug them into the Japanese economy, further increasing their reliance on Japanese goods, while decreasing any competition between the Ainu and immigrant Japanese for forest goods gathered in unsettled areas.

Congregating the Ainu in specific areas also made it easier for the Japanese government to remove them when it suited Meiji progress. The creation of the aforementioned 35,000 acre Niikappu ranch, for instance, came at the expense of the Ainu who had lived there. Kayano Shigeru, an Ainu descendant, writes that the Japanese

¹⁸³ Bird, *Unbeaten Tracks in Japan*, 64.

¹⁸⁴ *Reports and Official Letters to the Kaitakushi*, 380. The Ainu traditionally used bark fibers to weave into clothing. Given the Japanese influence, however, many preferred the more comfortable Japanese textiles. Clothing therefore also played its part in assimilation.

desired the Ainu lands for their fertility or for the availability of game. The grasslands of Niikappu were one such area, from which entire Ainu villages were forcibly relocated. Kayano says that “The Ainu could not comprehend being told to move from the fertile region they had inhabited for generations to a barren land.” He lamented that there was “no way to prevent the overwhelmingly powerful *shamo* from forcing the reluctant Ainu off of Niikappu.”¹⁸⁵ The Ainu, of course, had long since settled on the best lands available to them for the benefit of their people, though the Meiji state saw itself as taking priority over the Ainu’s existing habitations. Similar relocations happened all around Hokkaido at least twenty times between 1872-1902.¹⁸⁶

The most extreme dislocation came when Japan signed over its interests in Sakhalin in exchange for the Kuril Island chain. Japanese assimilationist policy tried to portray all Ainu as part of the Japanese state, so when Russia took formal control of Sakhalin, the Ainu living there were relocated across the sea to Hokkaido. William Brooks spoke to an Ainu chieftain from Sakhalin, who longed to return to his old home, and said that the move and the new climate of Hokkaido had weakened his people and that “the deaths in his tribe now outnumber the births.”¹⁸⁷

Besides competition for land, there also was a growing antagonism for resources, as more immigrants arrived. Beginning in 1871, money was pumped into Hokkaido, not for the benefit of the Ainu, but for modern development and for the sake of interesting potential Japanese immigrants. Whatever the success of individual Kaitakushi programs,

¹⁸⁵ Kayano, *Our Land Was a Forest*, 38. *Shamo* is one of the Ainu words for the Japanese.

¹⁸⁶ Howell, *Geographies of Identity*, 184-85.

¹⁸⁷ Brooks letter to sister, Aug. 8, 1880, William Penn Brooks Papers.

the result overall was a dramatic increase in the island's population. In 1873, the official Ainu population of Hokkaido stood at around 16,000. By 1903, it was closer to 17,500. However, during this same period, as Japanese immigrants trickled, then poured, into Hokkaido, the Ainu went from being about 15 percent of the island's population, to barely more than 1.5 percent.¹⁸⁸ Even if some Ainu suddenly gave up their native traditions (many did not), they still found difficulty competing against the sheer numbers of Japanese now making the island their home and employed in its industries. The Japanese brought their own economy to the island with them, something from which the Ainu were still culturally estranged. Jobs for which Japanese merchants utilized the Ainu were limited to labor or work that made use of their traditional hunting, fishing, or guiding skills, even as the government officially attempted to transition the Ainu to agriculture.

The spread of Japanese influence was also clear in other ways. While Ainu nomenclature was kept in some instances, the rebranding of Ezo to Hokkaido ("northern road") was also imposing upon the island a new 'Japaneseness,' and served to claim the island and its lands against both the Russians and the Ainu. Benjamin Lyman, in his many surveying field expeditions across Hokkaido, remarked that the Japanese explorers and assistants who accompanied him often renamed geographical features they 'discovered' and noted such locations under their new names on field maps.¹⁸⁹ Even if native place names were utilized, they were still written so as to be pronounceable in Japanese with katakana, or even outright assigned particular kanji readings on printed

¹⁸⁸ Siddle, *Race, Resistance, and the Ainu of Japan*, 59. This increase may be due to a larger number of Ainu with mixed Japanese and Ainu heritage, or differences in accounting for such individuals.

¹⁸⁹ *Reports and Official Letters to the Kaitakushi*, 357.

maps.¹⁹⁰ The name of Sapporo, for instance, was taken from an Ainu word, but was written in kanji, not katakana. Foreigners or Japanese who didn't know better would see such kanji and only casually assume them to have always had Japanese names, another important part of the process of claiming Hokkaido and the Ainu for the Japanese and assimilating them into Japan proper.

The final element of the attempted assimilation of the Ainu was education. Before 1900, no serious attempt was made at educating all of the Ainu of Hokkaido. Instead, what education there was for the Ainu in the 1870s was more experimental in nature, as the Japanese sought to see if they could educate the Ainu in new Japanese ways. These attempts took Ainu boys and men of various ages, not always voluntarily, both to Tokyo and Hokkaido's larger cities, where the focus was placed upon the scientific-style Western agriculture that was being imported through Hokkaido. Again, opposite the Tokugawa era Matsumae practices where knowledge of Japanese was supposedly forbidden to the Ainu, the learning and use of Japanese was now required for Ainu pupils. Educators in such schools made no attempt to preserve the Ainu language, and instead pushed the acquisition of Japanese as a tool of assimilation. Many of these experiments in education were ended when officials noted that the Ainu who returned to their villages after a period of education once again took up their traditional practices and didn't pass on what they had learned to their fellow Ainu.¹⁹¹ In the 1880s until the end of the century, most Ainu education came through the form of foreign missionaries like John Bachelor,

¹⁹⁰ Kanji are ideograms/pictograms adopted from the Chinese. The Japanese use a combination of modified Chinese kanji, along with two alphabets, one for native words (hiragana) and another only for foreign loan words (katakana).

¹⁹¹ Christopher J. Frey, "Ainu Schools and Education Policy" (PhD diss., Department of Education Leadership and Policy Studies, Indiana University, 2007), 69-105.

though rarely with the support of the Hokkaido government. Only after the 1899 Former Aborigines Act was passed did the government seriously undertake the education of the Ainu.

All of these elements combined to create a deep distrust on the part of the Ainu towards the Japanese government, while Japanese administrators were mutually distrustful of the Ainu. When Isabella Bird visited an Ainu village to the south of Sapporo, she inquired about their customs, though “Before they told me anything, they begged and prayed that I would not inform the Japanese Government that they had told me of their customs, or harm might come to them.”¹⁹² While their fear might have been exaggerated, it’s clear that the government was putting pressure on the Ainu to remain mum on any cultural differences between themselves and the Japanese. The drive to end the external differences of the Ainu from the Japanese was also accompanied by a desire to make the Ainu culturally more like the Japanese, and not express their native culture or share it with outsiders, who might emphasize the uniqueness of Ainu traditions. St. John mentions that during his travels, within one village he encountered, “Japanese law [was] publicly read every 15th of November,” to remind the Ainu there of their obligations to the Meiji state.¹⁹³ Lyman, when out looking for mineral resources, was told by government officials that they had sent advance scouting parties into Ainu territories because the Ainu supposedly had “so much dislike to reveal the mineral resources of their hunting grounds” that the government suspected the Ainu were intentionally hiding their

¹⁹² Bird, *Unbeaten Tracks in Japan*, 58.

¹⁹³ St. John, *Notes and Sketches from the Wild Coasts of Nippon*, 29.

knowledge of such resources.¹⁹⁴ These clashes pulled the Ainu even further away from the government.

Through a variety of methods, the Meiji era governments of Hokkaido attempted not only to make the former Ezo into an internal part of Japan, they also tried to do the same with the Ainu. In contrast to what occurred during the tenure of the Matsumae in the Tokugawa period, the Meiji government tried to make the Ainu look and behave Japanese, even if they weren't. This included prohibitions on hairstyles and tattooing, while the government tried to push the Ainu away from wage employment and to settle down permanently as farmers, even as it outlawed some traditional hunting practices. Such attempts at integration were pushed aside when Ainu villages stood in the way of progress and many Ainu were forcibly relocated for the benefit of the Japanese.

The Ainu, Japanese Immigrants, and the Toll on the Environment

Actual Japanese acceptance of the Ainu varied between regions. An examination of frontier lands reveals that tensions between the Ainu and Japanese were not so great as between official government policies and the Ainu. Here, where the Japanese and Ainu often had to work together to prosper and survive, both cultures took useful elements from one another, while some intermarriage existed. Divisions between Japanese and the Ainu were more dramatic in more developed regions, where Japanese cultural expectations clashed with the values of the Ainu. The new economy of Hokkaido was initially very reliant on goods from natural industries, something to which the Ainu with their hunting and fishing skills contributed heavily. The gathering of game and fish was sometimes taken to an extreme in order to satisfy Hokkaido's own food requirements, let

¹⁹⁴ *Reports and Official Letters to the Kaitakushi*, 422. A notion that Lyman disagreed with.

alone to export foodstuffs and other goods to mainland Japan, or even abroad. Here, the Ainu would leave their own mark on a changing Hokkaido ecosystem.

During the Capron survey period, the Ainu had been invaluable serving as guides and as labor to help pack surveying instruments and foodstuffs for both Japanese and Western explorers. Lyman, who spent more time in the interior than many of the Western advisors, consistently lavished praise on the ability of the Ainu to carry heavy loads in rough terrain. He said that only “About once in two thousands steps the Ainos would stop to rest, and it seemed to a greenhorn astonishing that they could carry such loads even so far as that,” while Lyman, despite being an active man, struggled with just a small pack.¹⁹⁵ The utility of the Ainu was also valuable to such expeditions, as no one was as skilled at living off of the land as they were. Lyman found them always to be in good humor during such expeditions and observed that his guides “seemed equally to understand all the affairs of backwoods life” and traveled together without sense of clear leadership, but instead with a “common understanding” that didn’t necessarily require words.¹⁹⁶ The Japanese often learned hunting or fishing techniques using spears and hooks from the Ainu in order to at least subsist and later profit off of the land. Most Japanese were respectful of the Ainu woodcraft skills. Lyman, for instance, saw Japanese boatmen give up control of their craft to the more experienced Ainu navigators, and commented that never in his several years in “Yesso have I been able to see the least jealousy or hatred between the Ainos and Japanese” who lived there.¹⁹⁷

¹⁹⁵ *Reports and Official Letters to the Kaitakushi*, 352.

¹⁹⁶ *Reports and Official Letters to the Kaitakushi*, 386-87.

¹⁹⁷ *Reports and Official Letters to the Kaitakushi*, 518.

For settlers, marriage (however formal) between Japanese men and Ainu women did certainly occur, as multiple sources observe. A.H. Landor, who toured Ainu villages throughout Hokkaido and the Kuril Islands, wrote that “Intermarriage between the two races is frequent, not to say common; and therefore a large average of the population...is composed of half castes, and even second and third crosses.”¹⁹⁸ Blakiston and Milne also noted that they encountered similar practices.¹⁹⁹ Individuals of a mixed race probably were registered under Ainu census rolls rather than Japanese ones, if at all, while Landor estimated that somewhere in the vicinity of half of the Ainu he encountered were of mixed ethnicity. In some cases, the unions between Japanese men and Ainu women were short lived, as evidenced in one example given by Batchelor, where a Japanese man who had to return to the mainland “refused to take” his wife “with him because she was tattooed,” and wouldn’t be accepted into his native village. On one hand, this demonstrated that Japanese men weren’t unwilling to eschew ethnic purity while on the frontier, though at the same time, such unions were limited to the area of Hokkaido, and not beyond.

Besides tattooing, there were many other physical and cultural differences that may have set the average Japanese apart from the Ainu. While Lyman observed that he was “satisfied on the whole the Ainus are no more hairy than Caucasians,” the hairiness of the Ainu (including body hair) was strange and off-putting to some Japanese, who largely lacked body hair, especially with new Meiji prescriptions on having a clean-cut

¹⁹⁸ Landor, "A Journey Round Yezo and up Its Largest Rivers," 521. Landor refers here to Volcano Bay, or the horseshoe-shaped bay between Hakodate and Muroran.

¹⁹⁹ See, for example, Blakiston, *Japan in Yezo*, 101; as well as Milne, "Notes on a Journey in North-East Yezo and Across the Island," 485.

appearance.²⁰⁰ A major cultural difference came in views on bathing. Shintoism, the native animistic religion of Japan, values cleanliness and requires purification for a number of rituals. Japanese culture, from its earliest origins, therefore valued cleanliness, and frequent bathing was long an established practice. This included avoiding tasks that might cause defilement, such as hunting, encountering blood, or working with the carcasses of dead animals or human bodies, activities in which the Ainu were involved.²⁰¹ The Ainu were less accustomed to bathing, a fact many Japanese found loathsome, and may have caused frequent skin diseases among the Ainu.²⁰² Travelers such as Landor, who stayed in Ainu huts, also reported that their huts were often infested with flies, attracted by refuse that was not disposed of outside the village.²⁰³ Other cultural values, though more subtle, may have also played a role. Ainu chieftains were more figureheads than wielders of actual power, something that didn't fit in with a more hierarchically-oriented Japanese social structure. Ainu women, though they had some different roles in religious rituals and weren't hunters, more or less did much of the same work as many of the men, especially when it came to fishing. Though the gender roles of Japanese peasant women in the Tokugawa period were largely equivalent to those of men, the increasingly affluent Meiji society began to create a greater separation between the spheres of men and women.

²⁰⁰ *Reports and Official Letters to the Kaitakushi*, 332.

²⁰¹ Such associations are one of the frequently cited causes for the low status of the Japanese outcaste population, some of whom worked as leatherworkers or dealt with the disposal of human remains.

²⁰² Bird, *Unbeaten Tracks in Japan*, 48.

²⁰³ Landor, "A Journey Round Yezo and up Its Largest Rivers," 524.

The relationship between the average Japanese and the Ainu, was therefore more ambivalent than that of the official government and the Ainu. Isabella Bird was assigned an assistant who was a former samurai, and when Bird chastised him for poorly treating the Ainu they encountered, he replied, “They’re just dogs, not men.”²⁰⁴ This was one extreme. Most individuals from samurai origins, however, had a stronger sense of cultural superiority than did the poorer classes which Hokkaido’s promise initially attracted. It was the poorest laborers, who worked beside the Ainu, and not the government officials and former samurai who relied on Ainu knowledge the most. The poor had the least distance between themselves and the Ainu. Still, the Ainu would never be Japanese. Blakiston commented that “although [the Ainu] have been recognized of late years by the government as having equal rights,” he doubted “that they will ever regain a status of equality” because of continuing cultural differences.²⁰⁵

Some differences were not only cultural, but economic. The number of trades to which the Ainu could apply their traditional skills were limited, and the commoditization of Ainu hunting and fishing knowledge, combined with Hokkaido’s modern economy, was ultimately the undoing the Ainu and some of Hokkaido’s native animal populations. Evident in the progress of Hokkaido’s development was such environmental degradation. Deer, wolf, and salmon populations dramatically decreased throughout the island due to a combination of the demand for goods, the protection of livestock against predators, and Ainu and Japanese overhunting and overfishing.

²⁰⁴ Bird, *Unbeaten Tracks in Japan*, 48.

²⁰⁵ Blakiston, *Japan in Yezo*, 30. By “equal rights,” Blakiston is referring to the government’s attempts to incorporate the Ainu into the modern Japanese state, in that they were to be treated better and less overtly exploited, while beginning to take on the trappings of Japanese civilization.

The tale of Hokkaido's wolf has been well documented by Brett Walker in *The Lost Wolves of Japan*. For the Japanese peasants of the Tokugawa era, wolves had been worshiped as deities that kept herbivorous animals from eating their crops. In Meiji Hokkaido, however, with the introduction of large numbers of stock animals to the island, wolves, as Walker argues, became “‘noxious animals’ who needed to be killed...in the context of Japan's burgeoning industrial order.”²⁰⁶ Edwin Dun, who was initially responsible for the care of many of the imported animals and whose views on pastoralism had great influence on the Japanese, played a major role in the destruction of Hokkaido's native wolf population. In attempting to establish the large Niikappu ranch, for instance, Dun wrote that “to our horror we discovered that wolves with which that part of Hokkaido was at the time infested seemed competent to devour horse flesh rather faster than we could produce it.” In his attempts to breed ninety mares, all of whom had colts, he returned to the pens where the animals were kept after a period of a week's absence, only to find that all of the colts had been killed, with their bones “scattered all over the place.”²⁰⁷ Owing to this new source of meat, the wolf population temporarily boomed, and killed increasing numbers of the stock that the Japanese and their foreign advisors were already struggling to establish in Hokkaido. Wolves in this case were not a helpful deity, but a bloodthirsty animal standing in the way of Hokkaido's development. As a result, Dun and the Japanese began poisoning horse carcasses, resulting in massive casualties in the wolf population.²⁰⁸ The government also enlisted the Ainu as wolf

²⁰⁶ Brett L. Walker, *The Lost Wolves of Japan* (Seattle: University of Washington Press, 2005), 9.

²⁰⁷ Dun, *Reminiscences of Nearly Half a Century in Japan*, 36.

²⁰⁸ The use of poison was therefore granted to wipe out wolves for the sake of Japanese modernization, though withheld from the Ainu as being too barbarous a tool when in their hands.

bounty hunters, who were paid for every proven wolf kill they turned in.²⁰⁹ This movement extended beyond Hokkaido, and by 1905, the entire wolf population of Japan was extinct, a result in which the Ainu played a large part. The bears of Hokkaido, important to many Ainu rituals, were also placed on the list of undesirable predators, though they didn't suffer the same fate due to their smaller populations and less socialized hunting practices.

Changing times also devastated Hokkaido's deer, particularly in the south. Following the advice of Capron, the Kaitakushi established several canneries to pack, preserve, and export meat. While most of these were designed for salmon and other fish goods, the government also built several canneries for venison. Deer meat was consumed by the Ainu, foreigners, and a growing number of Japanese, who took up the practice of hunting or purchasing meat out of necessity, during the period of transitioning from living on the mainland to living in Hokkaido. Moreover, deer skins were of increasing demand for export and use in mainland Japan. With the growth of foreign trade, the deer antlers were desired by the Chinese, who ground them up and used them as a curative. Deer had moved from being merely a foodstuff, to a product for which there were multiple uses. Dun reported when one particularly harsh winter in 1878-79 confined herds of deer to lowland areas, still heavily snowed under, that the "Ainu on snow shoes overtook them easily and slaughtered many tens of thousands with clubs and dogs." Some "75,000 skeletons were counted in the spring," the result being a "practical extermination."²¹⁰ Blakiston noted seeing several canneries, the "use of which has

²⁰⁹ Walker, *The Lost Wolves of Japan*, 165-70.

²¹⁰ Dun, *Reminiscences of Nearly Half a Century in Japan*, 52.

become obsolete, owing to the deer seldom if ever now resorting to this part of the country.”²¹¹ The venison boom had ended due to overhunting. The lack of profitability closed the expensive deer canneries entirely, for want of local deer to can. Only through the intervention of the government were limits on hunting put in place, which allowed the deer populations outside of the west to slowly recover.²¹² Of course, such limits also hurt the Ainu who relied on the income and foodstuffs that hunting provided for them. The Ainu, initially shunning efforts to get them to become farmers, attempted to make their living through traditional means. Need to subsist and high Japanese demand had pushed them to overhunt particular areas. The trade was therefore very good for a few years, though it was quickly crippled, to the detriment of the Ainu.

Finally, the Ainu were employed in fisheries throughout Hokkaido. Japanese workers regularly came and went on a seasonal basis, though it was the Ainu who lived in most fishing villages year-round and who most heavily relied on the proceeds that salmon fishing brought in. Dun in particular complained about “companies over which no restraint nor control of any kind was exercised.” Unregulated fishermen deployed a virtual gauntlet of nets and traps that prevented many fish from reaching their spawning beds, not allowing the fish to regenerate their population. As a result, the “the yearly catch was but a small fraction of what it had been” compared to the times where the salmon runs had swelled the banks of Hokkaido’s rivers.²¹³ Only after this dramatic decrease did the government see fit to establish a fisheries commission for tighter

²¹¹ Blakiston, *Japan in Yezo*, 66.

²¹² Milne, "Notes on a Journey in North-East Yezo and Across the Island," 498.

²¹³ Dun, *Reminiscences of Nearly Half a Century in Japan*, 60.

regulation of Hokkaido's fishing. This would, again, serve to push the Ainu away from easily accessing one of their traditional methods of food gathering.

Conclusion

The rapid modernization of Japan and the industrialization that would come certainly had its side effects. In the effort of the Japanese government to become equals with the West, some things were to be lost along the way as lesser priorities. The Ainu were one such casualty. In the Meiji era, the Japanese government sought to end cultural and physical differences between the Ainu and the Japanese by banning the practice of a number of traditional Ainu customs. The government attempted to make the Ainu settle down to control them more easily, while demonstrating its true intentions in favoring Japanese interests over Ainu ones in the frequent displacement of Ainu villages for Japanese progress. Despite such assimilationist policies, the attitude of the government and many citizens toward non-Japaneseness revealed a number of Japanese cultural biases that would later play out in external colonization.

Civilization was also brought to Hokkaido in terms of economics, as Hokkaido developed around, not with, the Ainu. The devastation of Ainu foodstuffs and trade goods, often at their own hands, did as much as anything to change Hokkaido's environment and the traditional patterns of the island's natives. The influence of foreigners and the opening of Japan to the world's markets were also obvious in what was intentionally destroyed, overhunted, and overfished, including wolves, deer, and salmon respectively, as Japan tried to grow strong. The biodiversity of Hokkaido due to the loss of these animals was therefore quite altered from its original state.

When initial attempts at forcing the Ainu to settle down were frequently unsuccessful, along with the economic need to find new roles for them, the government passed the oddly worded 1899 Former Aborigines Act. The very title implied that the Ainu had to become like modern Japanese, yet would still be wholly prevented from doing so by their ethnic and cultural heritage. The actual tenets of the act gave all Ainu small plots of land where they were supposed to farm, incentivized by tax waivers, though also bound by the fact that the Ainu could not sell the plots if they wished to continue their traditional ways of life. The new law provided medical subsidies for the poor or ill, while requiring education for younger Ainu. Children were taught in segregated schools, however.²¹⁴ On the surface this was billed as a series of social programs to aid the increasingly destitute Ainu, though at the same time, the law was also the final assimilationist hammer, which ended many Ainu attempts to retain their traditional lifestyles and live apart from the modern Japanese state.

²¹⁴ Siddle, *Race, Resistance, and the Ainu of Japan*, 70.

CHAPTER 5 – HOKKAIDO AND THE EMPIRE BEYOND

The story of Hokkaido and the lessons learned in the island's initial development does not end in 1900. Many of the individuals trained directly by foreign advisors went on to become significant figures in their respective fields, while later iterations of Sapporo Agricultural College continued to turn out high achieving graduates. In the space of a few decades, Japan had learned how to navigate its way among the modern world, the results of which were evident in its expanding empire, economy, military, and overall industrial growth. Japan acquired new additions to its empire through wars against China and Russia. In 1895, Japan was awarded the island of Formosa (now Taiwan) as a result of the Sino-Japanese War (1894-95) and regained the southern half of Sakhalin in 1905, out of the Russo-Japanese War (1904-05). In the industrial age, Japan was the first non-Western nation to defeat a Western power in a war, and found that its influence and markets in East Asia expanded dramatically as a result. Japan would formally annex Korea in 1910, ending Russian interest and Chinese influence there, while it would also acquire Manchuria before reaching its colonial peak during World War Two.

The administration and development of some colonies, such as Formosa and Sakhalin, showed the influence of the earlier work in Hokkaido. Formosa was an unplanned spoil of war with China and the island itself was in an undeveloped state and presented challenges not dissimilar to those of Hokkaido. Throughout its growing empire, Japan faced difficulty in attracting settlers to populate its new acquisitions. The infrastructure and economy of Formosa were very much embryonic, while the island had

an existing aboriginal and immigrant Chinese population, which the Japanese attempted to assimilate. Similar to the Japanese government's stance on the Ainu, it attempted the assimilation of the inhabitants of Formosa, and later Korea, by a combination of the denial of native culture, while endorsing Japanese ethics, practices, and language. Japan also attempted to erase many of the differences between the Japanese and colonial citizens in Formosa and Korea, though as was the case with the Ainu, Japanese cultural biases prevented most assimilationist policies from being implemented as they were originally intended. The development of Hokkaido also proved invaluable when Japan acquired the southern half of Sakhalin, as the Japanese faced many of the same problems with encouraging immigration and providing foodstuffs as they had encountered in Hokkaido.

Not only would the experience earned in Hokkaido's development turn out to be important to Japan's later colonization, but Hokkaido would become (and remain until today) one of the largest producers of many of the agricultural and livestock products introduced by foreign advisors in its early stages of development. The coal of Hokkaido, along with many other minerals, plus timber, would also become important resources that would help propel Japan's industrialization and allow Japan to become the dominant economy in East Asia, eventually outcompeting the Western colonies there. Such resources would also play a role in the years leading up to the Second World War. Hokkaido's post-war population would rise to as high as five and a half million people, while the capital of Sapporo is currently Japan's fifth largest city. Though the island's population density is low compared to the rest of Japan, Hokkaido has nonetheless made

a successful transition to becoming an integral, indispensable part of Japan, and still offers important natural resources and potential expansion room.

Hokkaido's Place in the Empire after 1900

Japanese who had worked with or under foreign advisors and technicians during Hokkaido's initial development period frequently went on to become influential in their own right. Two of the top assistants of J.U. Crawford, who had built Japan's third railway connecting Sapporo and Otaru, eventually became in quick "succession chiefs of the Imperial Government Railways," the governmental bureau that thereafter oversaw the construction of all new railways throughout Japan.²¹⁵ These later railways would be developed with minimal input from foreign sources. In the days that Benjamin Lyman had conducted his geological surveys of Hokkaido, he took pains to ensure that his assistants had been educated sufficiently in surveying and map drawing practices, and also in leadership roles, even if projects took longer to finish. His assistants therefore gained the practical experience to later undertake surveys themselves. He claimed that his assistants were not only the "first Japanese but the first Asiatics to undertake the study and practice of geology." The Japanese, in his view, would "become in a few years independent of foreign countries in their profession."²¹⁶ This proved correct, as not only did Lyman's assistants later hold positions in the Mining Bureau, but they also discovered two large mineral deposits in 1880 and 1888 during surveying expeditions.²¹⁷ The goal for the Japanese had never been merely to have foreigners do all of the work for

²¹⁵ Dun, *Reminiscences of Nearly Half a Century in Japan*, 57.

²¹⁶ *Reports and Official Letters to the Kaitakushi*, 120. See 633 for a similar quote, along with Lyman's philosophy on educating his assistants.

²¹⁷ *Foreign Pioneers*, 36.

them, but to take the lessons provided by the foreigners to heart and go on to implement them and become accomplished technicians in their own right.

By 1890, SAC sported an all-Japanese teaching staff.²¹⁸ It was later renamed and reorganized, losing some of its focus solely on agricultural education, before later becoming Hokkaido Imperial University in 1918, one of nine such imperial universities throughout the Empire of Japan. Some notable graduates would include figures like Yanaihara Tadao, later Chancellor of Tokyo University, and Hashimoto Tanzan, a post-war prime minister. Less prominent figures included the previously noted large numbers of teachers who came out of the university, and whose example would inspire a generation of Japanese who came of age with the turn of the century, as Japan was making itself into a true world power. As Sen had noted, graduates of SAC were indeed “conspicuous figures...throughout the empire.”²¹⁹

The greatest deterrent to Japanese immigration to Hokkaido was solved in the first decade of the twentieth century by the persistence of local Hokkaido farmers. A “new type of quick-maturing rice plant” was developed for use in Hokkaido.²²⁰ This and other new varieties were engineered to ripen quickly and mature for harvest before the harsh Hokkaido frosts set in. This allowed the Ishikari to blossom as a rice-growing plain. Agriculturists were also able to develop a crop that grew quickly enough to be practical for use even in the more frigid northern and eastern portions of Hokkaido. By the 1950s, Hokkaido would only import 20 percent of its rice from elsewhere in Japan, whereas at

²¹⁸ *Foreign Pioneers*, 160.

²¹⁹ Willcock, "Traditional Learning, Western Thought, and the Sapporo Agricultural College," 991. See Willcock 1015 for prominent graduates.

²²⁰ Jones, *Hokkaido: Its Present State of Development and Future Prospects*, 21.

the start of the Meiji era, this figure was closer to 100 percent.²²¹ None of the eventual successes with rice cultivation invalidated the introduced crops or minerals discovered in the time of the Kaitakushi, while the contributions of the foreign advisors did not become any less important, however. Rice was obviously not an export product of Hokkaido, though other goods were.

Coal, discovered by Lyman and his former assistants, became one of the principle exports of Hokkaido. Even by 1893, John Milne reported that domestically, “Yezo coal is already largely used on the railways, at manufactories, and on steamships.” Moreover, Hokkaido’s coal was “rapidly increasing” its “influence on Eastern commerce” and becoming a product sold abroad in Hong Kong and Shanghai.²²² Profits from coal alone would increase from 3.9 million yen in 1900, to 196.4 million in 1940, as Hokkaido’s industry and transportation systems were built up to support heavy, regular extraction.²²³ Hokkaido deposits represented about half of Japan’s coal reserves, even if the production of Hokkaido lagged behind that of the more developed southern island, Kyushu. Hokkaido only produced about a quarter of Japan’s total coal before World War Two. This coal, however, was hailed as having “The highest calorific value of coal” of Japan, or the coal that produced the most energy per volume.²²⁴ A headline in the *Los Angeles Times* from 1906 proclaimed that England was by that time losing its grasp on the coal markets of Asia. The article noted that Japanese coal was “expelling English coal from

²²¹ Jones, *Hokkaido: Its Present State of Development and Future Prospects*, 57.

²²² Milne, "Notes on a Journey in North-East Yezo and Across the Island," 497.

²²³ Jones, *Hokkaido: Its Present State of Development and Future Prospects*, 57.

²²⁴ Melvin Pollard, *Japanese Mineral Resources* (Tokyo: Supreme Commander for the Allied Powers, Natural Resources Section, 1951), 81.

China, the East Indies and India.”²²⁵ In 1913, Japan imported a mere three percent of the total coal that it consumed.²²⁶ Though Japan is usually characterized as having little in the way of mineral deposits, coal was one exception. Hokkaido in particular had active mines producing iron, cobalt, chromite, mercury, tin, asbestos, barite, pyrite, and sulfur.²²⁷ Even if Japanese mineral deposits were not sustainable in the long-term, they nonetheless also gave Japan a boost to catch up quickly with the West. The early availability of such resources also created markets and products for the long-term demand for certain minerals, and such growing need would materialize itself in the period of Japanese colonization from 1895-1945.

The non-rice agriculture of Hokkaido also took off, as did profits from fishing and the timber industries. Hokkaido was home to much of Japan’s corn and grass products and was the sole supplier of oats, which were used to fatten up animals and sate a growing demand for meat. Hokkaido produced as much as half of Japan’s potato supply, almost all of its flax, and two-thirds of its pyrethrum (an important product used as a natural insecticide around the world before the introduction of now-banned chemicals like DDT).²²⁸ Besides the sulfur it produced for use in chemical fertilizers, Hokkaido farmers also frequently utilized animal fertilizers as well as fish products to enhance their

²²⁵ “England Loses Orient’s Trade,” *Los Angeles Times* (Aug. 5, 1906).

²²⁶ Bureau of Mines, *Mining Industry in Japan* (Tokyo: Imperial Bureau of Mines, 1914), 52.

²²⁷ Pollard, *Japanese Mineral Resources*, 1.

²²⁸ This was a product Japan introduced from England to help meet the food needs of its growing population, though Japan became a net exporter of the product to the West in only a few decades. The product was used heavily around the world, and Japan became one of the largest exporters of pyrethrum (chrysanthemums) until its defeat at the end of World War Two destroyed most of the Japanese industry. See Brett L. Walker, *Toxic Archipelago: A History of Industrial Disease in Japan* (Seattle: University of Washington Press, 2010), 56-57.

crops. By 1940, Hokkaido's timber industry had grown to 34.2 million yen annually, as the island's comparatively voluminous forests came under regular exploitation. This helped to not only supply an industrializing Japan with wood, but "surplus timber in Hokkaido" was also being exported as building materials and "railway sleepers...to China and Korea."²²⁹ The fishing catch, worth 12.3 million yen in 1900, soared to 305.6 million (worth more than coal) in 1940.²³⁰ Hokkaido became the home base for Japanese trawlers (no longer wind powered) that sailed to the north, fishing from the plentiful fishing grounds around the Kuril Islands and Sakhalin. Canning salmon, a practice suggested by Capron, became automated and sold well both domestically and abroad. Overexploitation of Hokkaido's rivers had forced the Japanese to travel into deeper waters in search of salmon and other fish, another reason for the outward push of Japanese sea boundaries.

Japan's consumption of meat did increase dramatically, as statistics of livestock slaughtered reveal, jumping up by three to four times between 1900-1940. Hokkaido possessed large numbers of stock and produced about a third of the milk of Japan. Even if meat didn't come directly from Hokkaido, breeding stock likely did, and the average weight of livestock in Japan also increased notably.²³¹ The legacy of the work done by Edwin Dun in this regard was significant. Even prior to the war years, the Japanese Imperial Army had been a big purchaser of Hokkaido horses for use in transporting men,

²²⁹ *Forestry of Japan* (Tokyo: Bureau of Forestry, Dept. of Agriculture and Commerce, 1910), 15.

²³⁰ Jones, *Hokkaido: Its Present State of Development and Future Prospects*, 20. See 55-57 for information on the fertilizers and crops which Hokkaido produced the majority of.

²³¹ Joseph C. Dodson, *Japanese Crop and Livestock Statistics: 1878-1950* (Tokyo: Supreme Commander for the Allied Powers, Natural Resources Section, 1951), 127-28.

goods, and weaponry in Manchuria and later across China's eastern seaboard.²³² Despite the frustration encountered by Dun, residents of Hokkaido still ran sheep across the island, from which they produced wool. Animals, along with fishing, provided an important foodstuff for Hokkaido, which still had little farm ground. As late as the 1950s, Hokkaido only possessed 6.4 percent of the cultivated land of all Japan, mostly due to its comparatively mountainous and forested terrain.²³³

Hokkaido was by no means the most significant of Japan's islands with regards to its material contributions to the empire. The impact and continuing potential of Hokkaido's products in Japan are nonetheless very substantial. After the turn of the twentieth century, Hokkaido became largely self-sufficient in terms of foodstuffs, while building up massive profits in its biggest industries of fishing, coal, and timber. Even decades later, the impact of the foreign advisors and SAC staff could still be seen in the foods consumed by residents around the island, as well as those all across Japan. Japanese agriculturists also proved their own skill in finally developing varieties of rice that would grow in Hokkaido's climate, making immigration to the island even more attractive. The population of Hokkaido tripled to 3,173,000 people by 1940, demonstrating that Hokkaido was fully integrated into Japan proper by the outbreak of World War Two in Asia.²³⁴ Equally important was the continuing influence of those who had trained under the foreign advisors, or who graduated from Sapporo Agricultural

²³² Jones, *Hokkaido: Its Present State of Development and Future Prospects*, 57.

²³³ Dodson, *Japanese Crop and Livestock Statistics: 1878-1950*, 194.

²³⁴ Jones, *Hokkaido: Its Present State of Development and Future Prospects*, 22.

College and its later iterations, many of whom became teachers or important leaders in the Japanese government.

The Legacy of Hokkaido in the Growing Empire

The influence of the lessons learned in Hokkaido also becomes clear upon an examination of the Empire of Japan at large, while difficulties in several colonies mirror many of those faced in Hokkaido. Japan did not plan for the acquisition of colonies like Formosa any more than the young Meiji government had time to create intricate designs for the assimilation of Ezo/Hokkaido into part of Japan proper. While different circumstances and environments dictated separate approaches to colonization from that of Hokkaido, the framework through which the Japanese developed their new colonies was often similar to that of Hokkaido. This was particularly evident in the case of Formosa.

As a result of the Sino-Japanese War of 1894-95, Japan acquired the island of Formosa out of the Treaty of Shimonoseki, which required China to cede the island and pay the Japanese an indemnity. The war had broken out over competing interests in Korea, with the Japanese surprisingly proving victorious, supplanting China to become the dominant power of East Asia. Japan's only involvement with Formosa before the war was for a short period in 1874, when Japanese military forces had invaded the island as a direct response to the execution of a number of its shipwrecked sailors by Formosan natives (one of the same reasons that the West had desired to force Japan open two decades before). Many Japanese, however, quickly justified Formosa's place in the expanding Japanese Empire as a natural one. Shinichiro Kurino, Japanese Minister to the United States, reflected this view in an interview shortly after the Japanese gained possession of Formosa. He stated "Formosa is essentially a part of a long train of the

Japanese islands. These run from [Yezo] down to Nagasaki...Formosa is a natural part of this chain."²³⁵ Just as the Japanese had perceived Hokkaido and the Kuril Islands as being a natural part of the Japanese archipelago in the early Meiji era, so too were similar justifications given for Formosa's inclusion in an expanding Japanese island chain of influence.

Though its population was in the millions, consisting mostly of Chinese and some aboriginal peoples, Formosa was in a relatively underdeveloped state in 1895. In his interview, Kurino stated that Japan did, however, have experience in working under such circumstances and that it had had "some degree of success" in its efforts to develop Hokkaido. He argued that "Formosa will prove a more tempting field for immigration, especially to the inhabitants of Southern Japan," than the colder and undercapitalized Hokkaido did.²³⁶ Moreover, Formosa did have a geographical advantage; unlike Hokkaido, the warmer southern climate of Formosa was suitable for rice agriculture. Formosa is additionally less than half as large as Hokkaido, easing transportation and requiring less development over a smaller area. While Formosa didn't need to be populated for purposes of labor as was the case in Hokkaido, the infrastructure and economy of Formosa were largely nonexistent. Like the Kaitakushi, government offices were set up and given a fixed annual amount for development projects.

Formosa, unlike Hokkaido, was developed by Japanese experts, not foreign ones. Modernizing food production was again among the early objectives in Formosa's

²³⁵ "Minister Kurino: Japan's Famous Diplomat Gives a Broad-gauge Interview upon the War, and Asiatic Matters," *Los Angeles Times* (June 2, 1895).

²³⁶ "Minister Kurino: Japan's Famous Diplomat Gives a Broad-gauge Interview upon the War, and Asiatic Matters," *Los Angeles Times* (June 2, 1895).

development. Shimpei Goto, a governor-general of Hokkaido, wrote that one of the early tenets of the government's development programs was to "appoint men specially qualified to instruct and direct the people" in the ways of modern agriculture.²³⁷ Shimpei hoped that these undertakings, so "zealously promoted by the government," would "be conducted in such a way as to furnish successful models for private enterprise" and encourage continuing capital investment in Formosa's development.²³⁸ These quotes almost exactly mirror the policies of Kuroda in establishing the Kaitakushi and SAC as examples from which the people might learn and begin to implement, while simultaneously attempting to attract external private investors to fund industries after the government's initial help.

Meanwhile, the government focused on the construction of infrastructure to encourage the development of self-supporting industries, while implementing social programs designed to proliferate Japanese control over Formosa's population. This enhanced their ability to be productive subjects for the empire. Besides its annual operation budget, the colonial government was authorized to raise a loan of some 35 million yen, the principle of which was used to build a railroad connecting the island's northern and southern halves, while also providing for general improvements, the construction of sea ports, and the creation of government buildings. The government connected Formosa and the mainland with several undersea cables, contracted shipping businesses to supply the island, and built telegraph offices all over Formosa.²³⁹ The

²³⁷ Shimpei Goto, "The Administration of Formosa (Taiwan)," in *Fifty Years of New Japan*, eds. Shigenobu Okuma and Marcus B. Huish (London: Smith, Elder, and Co., 1910), 540.

²³⁸ Goto, "The Administration of Formosa (Taiwan)," 553.

²³⁹ Seiji Hishida, "Japan's First Colony," *Political Science Quarterly* 22, no. 2 (June 1907): 271-77.

government instituted complete monopolies over camphor, salt, and opium, using the proceeds from each to fund the island's continuing development, similar to the Kaitakushi's monopoly over fishing rights in Hokkaido.²⁴⁰

The Japanese also implemented compulsory public education, setting up schools across Formosa. The curriculum in these institutions included reading, writing, geography, arithmetic, history, and especially instruction in the Japanese language. This education also came with a heavy dose of Confucian ideals, promoting loyalty to the new Japanese colonial rulers. Telling of the intention of the Japanese state to create doers and technicians, not thinkers, education in literature, law, politics, or philosophy was discouraged. Patricia Tsurumi, historian of Taiwan's education system under Japanese colonialism, argues that the strong focus on Japanese language and history was to "detach each Taiwanese from any past he or she might perceive," and encourage loyalty to and assimilation into the Japanese state.²⁴¹ The Japanese also created teacher-training schools and established Taihoku Imperial University in modern day Taipei.²⁴² Schools were segregated (as they had been between Japanese and Ainu in Hokkaido) between those for the native inhabitants of Formosa, the ethnic Chinese majority, and Japanese settlers.

The natives of Formosa, according to Kurino, were "savages, who live by hunting" and who also "tattoo their faces and skin" and were organized in tribes.²⁴³

²⁴⁰ Western countries had begun importing highly addictive opium into China in return for silver, tea, and other Chinese goods. Use of the drug had spread to Formosa as well. While the Japanese government didn't explicitly outlaw the drug, its pricing practices slowly phased out opium use.

²⁴¹ E. Patricia Tsurumi, *Japanese Colonial Education in Taiwan, 1895-1945* (Cambridge, MA: Harvard University Press, 1977), 213.

²⁴² Now National Taiwan University.

²⁴³ "Minister Kurino: Japan's Famous Diplomat Gives a Broad-gauge Interview upon the War, and Asiatic Matters," *Los Angeles Times* (June 2, 1895).

Unlike the Ainu, who hadn't rebelled against Japanese rule since the eighteenth century, some of Formosa's native peoples were actively organized and resisted the Japanese, violently in some instances. As a result, many of the Japanese who occupied the island in the early stages of colonization were police or military men. From the Japanese perspective, the natives were an impediment to stability and order. In a 1910 government report detailing the state of forestry in Formosa, the author noted that with regards to the timber industry, "Until these barbarians are tamed and made good citizens of the empire, the utilization of these forests...is next to impossible." Through a combination of economic pressure, education, and (unlike Hokkaido and the Ainu) outright might, the author bluntly noted that the natives were slowly coming under imperial authority and being "converted into what is called 'tamed savages.'"²⁴⁴

The warmer Formosa could actually support rice agriculture, though the island's climate also possessed its own dangers. Diseases, particularly malaria and smallpox, were rampant throughout the island. These killed a number of Japanese during the early occupation of the island. Disease discouraged the immigration of Japanese settlers, prompting the government to introduce strict sanitation practices, create drainage systems, and establish hospitals. Mandatory vaccination was introduced for the natives, who most often carried the diseases. They were vaccinated in the tens of thousands, a tool of assimilation similar to the attempts of the late Tokugawa government in Hokkaido.²⁴⁵

Japan shocked the world in 1905 when it emerged the victor against Russia in the Russo-Japanese War. Though the small return was much protested in Japan, the Japanese

²⁴⁴ *Forestry of Japan*, 54.

²⁴⁵ Hishida, "Japan's First Colony," 274-75.

Empire merely received the southern half of Sakhalin (called Karafuto by the Japanese) through treaty with a beleaguered Russia, in the midst of the 1905-08 revolution. Besides cementing Japanese interests in Korea, this further extended the chain of 'Japanese' islands now stretching from Formosa in the south to Sakhalin in the north. The Japanese had been one of the first non-native explorers of Sakhalin in the Tokugawa period, while there were some Japanese living in the southern half of Sakhalin before the 1875 treaty with Russia swapped Japanese influence on Sakhalin for the sole possession of the Kuril Island chain. Acquisition of Sakhalin also went with the official government line, that all Ainu were subjects of the Japanese Empire.²⁴⁶

Sakhalin, like Hokkaido, did not possess an environment conducive to rice growing and was even colder than its southern neighbor. Hyman Kublin, writing on the evolution of Japanese colonialism, correctly argues that the "late nineteenth century experimentation in the development of Hokkaido was to furnish experience fruitfully applied in South Sakhalin."²⁴⁷ The list of prominent crops grown in the Japanese half of Sakhalin, including buckwheat, barely, oats, wheat, potatoes, beans, sugar beets, grasses, and hay, almost precisely matches the non-rice crops that were attempted and that had flourished in Hokkaido. Cattle, sheep, and hogs also provided an additional boon to the island's food supplies. Though agriculture existed under the Russians, as an observer in 1945 noted, the "scientific guidance of the Japanese" eventually developed the island's agriculture into "something considerably more important and profitable."²⁴⁸ Lucrative

²⁴⁶ The Ainu were also native inhabitants of Sakhalin, as well as Hokkaido and the Kurils

²⁴⁷ Hyman Kublin, "The Evolution of Japanese Colonialism," *Comparative Studies in Society and History* 2, no. 1 (Oct. 1959): 79.

²⁴⁸ Richard F. Logan, "Survey of Sakhalin," *Far Eastern Survey* 14, no. 15 (Aug. 1945): 211.

industries included the exploitation of timber and coal, while the Japanese retained the rights to pump oil on the northern Russian half of the island until 1944. In 1940, the Japanese were able to extract four million barrels of oil from Sakhalin, which represented a quarter of all domestic Japanese production.²⁴⁹ Just as important as the island itself were the fishing rights of the plentiful northern waters, and the Sakhalin ports at which Japanese fishing vessels could resupply and unload their catches for processing. These elements partially helped Hokkaido fishing to blossom into the 305.6 million yen industry that it had become by 1940. Sakhalin's profitable products included herring, which was still used as a fertilizer, and crab, among other marine products.²⁵⁰ Due to these agricultural successes, along with Hokkaido's conditioning of immigrants to live and prosper under colder conditions, the population of Sakhalin increased from a mere 12,000 in 1906 to 415,000 people in 1940, and was officially considered an "internal land" along with Hokkaido and the main islands by the same year.²⁵¹ This was unlike Formosa or Korea, which were treated as colonies for occupation and exploitation.

The history between Japan and Korea is far more storied than that of Japan's other colonies. The second of Japan's unifiers, Toyotomi Hideyoshi, had attempted to invade Korea twice between 1592-98, but his soldiers were repelled by the Koreans and their Ming Chinese allies. Japan had only maintained minimal diplomatic relations with Korea, while the island *han* of Tsushima had an isolated trading post on the Korean coast after

²⁴⁹ Oil was a resource which the Japanese utterly lacked and needed to supply their economic and war machine after several years of war in China (beginning in 1937), while the West (America in particular) eventually cut off Japan's oil supply. This was taken by the Japanese as an act of war, and was used to justify Japan's expansion into Southeast Asia and attack on Pearl Harbor.

²⁵⁰ Logan, "Survey of Sakhalin," 211-13.

²⁵¹ "Hokkaido and Karafuto: Japan's Internal Frontier," 9.

Japan had limited its foreign trade and relations during the Tokugawa era. After the transition to Meiji occurred, and Japan began to reassert itself in East Asia, the Japanese took a page from Matthew Perry's book, and in their own act of gunboat diplomacy, forced an 1876 treaty upon Korea, opening up formal diplomatic relations and treaty ports to Japanese trade. Relations between Japan and Korea remained strained, particularly after Japanese agents assassinated the Empress Myeongseong in 1895 in an attempt to influence Korean politics.

As the Japanese established the imperial buffer zones of Hokkaido, the Kurils, and Sakhalin to the north, and Formosa to the south, they justified their interest in Korea as a security issue. Yamagata Aritomo, then Prime Minister of Japan, wrote in 1900 that Korea was only separated from Tsushima by a "mere girdle of water," and that if Korea "were to fall under occupation by someone else, our people no longer [sic] sleep undisturbed."²⁵² With the defeat of China and Russia, Japan gained control over Korea in 1905, and formally annexed it in 1910. This completed a trend of competition with Russia over expanding Japanese spheres of influence, which had begun with the development of Hokkaido. Japan had now insulated its main islands to the north, south, and partially to the west.

Korea was by far the most developed colony that Japan possessed, having its own existing complex history and heavily populated society. The Japanese tried to control the Koreans, as was the case with the Ainu and in Formosa, through attempts at assimilating them into the empire. The Japanese argued that because they shared so many cultural similarities with the Koreans, they would be successful at assimilating the Koreans, rather

²⁵² Kim Ki-jung, "The Road to Colonization: Korea Under Imperialism, 1897-1910," *Korea Journal* 38, no. 4 (Winter 1998): 47.

than merely ruling over them. Mark Caprio, writing on the Japanese assimilation practices in Korea, notes a specific reference from Japan's time in Hokkaido. Caprio relates the instance of Kita Sadakichi, a Ministry of Education official, who "justified Korean assimilation by claiming Japan's success in assimilating the Ainu, a people he argued to be now 'almost indistinguishable' from Yamato Japanese."²⁵³ This was again attempted through a combination of education, the encouragement of Japanese language studies, and the raising of Korea's infrastructure. As was the case in other instances, however, the actual cultural biases of the Japanese became obvious as the Japanese segregated themselves in separate spheres within Korea and invested in education only to the point of improving the production power of their colonial subjects. Koreans were often described by the Japanese as being 'dirty,' an epithet similar to Japanese descriptions of the Ainu.²⁵⁴ Caprio argues that as is the case in Korea, the Japanese people could not ever accept peoples of a different ethnic heritage as equal citizens. This was evident in earlier policies toward the Ainu. The government itself sent out mixed messages with labels like "Former Aborigines" and its dual encouragement and exploitation of colonized or 'assimilated' peoples.

Like Formosa, Japan's approach to Korea was to convert the peninsula into what Samuel Pao-San Ho calls an "agricultural appendage," which would produce rice and other goods to keep Japanese prices down, while providing a market for Japanese

²⁵³ Mark E. Caprio, *Japanese Assimilation Policies in Colonial Korea, 1910-1945* (Seattle: University of Washington Press, 2009), 83.

²⁵⁴ See, for example, how Korean immigrants in Japan are described in Michael Weiner, *The Origins of the Korean Community in Japan 1910-1923* (Atlantic Highlands, NJ: Humanities Press International, INC, 1989), 85-90.

manufactured goods.²⁵⁵ As was initially the case in Hokkaido, the Japanese government had trouble encouraging Japanese citizens to take up residence in any colonial areas. By 1935, the Japanese had only settled 2,168,000 citizens abroad, or only about 2.9 percent of the total population of Japan, which was topping 70 million by the 1940s. Japanese abroad only constituted 5.3 percent of the entire population of Formosa, and less than three percent in Korea and Manchuria.²⁵⁶ In comparison, more Japanese had settled in Hokkaido than all the external Japanese colonies combined, while among all their colonies the Japanese only made up a large percentage of the population in Sakhalin, which was about four-fifths Japanese. Japan, like Germany, had sometimes justified its colonization in terms of gaining room to expand. Despite the tightly packed population of its main islands, however, immigration statistics don't reflect the desire of the average Japanese to immigrate abroad. Colonies were therefore more for their resources than room to grow, at least from the perspective of Japanese citizens.

Similarly, Japanese policy in Manchuria was mostly focused on what the Japanese could get out of the area. Between the beginning of war between Japan and China in 1937, the breakout of World War Two in Europe, and the involvement of the U.S. in the Pacific War in 1941, the Japanese managed to conquer the eastern seaboard of China and most of Southeast Asia. Though the Japanese encouraged nativist movements in Southeast Asia to uproot the British, French, American, Portuguese, and Dutch colonial powers there with the promise of an 'Asia for Asians,' the Japanese quickly lost any early favor they

²⁵⁵ Samuel Pao-San Ho, "Colonialism and Development: Korea, Taiwan, and Kwangtung," in *The Japanese Colonial Empire, 1895-1954*, ed. Ramon H. Myers and Mark R. Peattie (Princeton, N.J.: Princeton University Press, 1984), 348-50.

²⁵⁶ *Foreign Minerals Survey: A Regional Review of Mineral Resources, Production and Trade* (Washington, D.C.: United States Bureau of Mines, 1945), 6.

had curried there due to oppressive and self-serving policies.²⁵⁷ It was here in particular that the Japanese cultural biases, evident in Japanese-Ainu relationships beginning in Hokkaido, manifested themselves as the Japanese tried to accumulate resources from these newly conquered lands. Ultimately, when the U.S. war machine ramped up after America entered the war, the Japanese were entirely out-produced. The tiny island nation overextended itself, with Japanese ambitions outpacing their ability to secure resources, deal with the limitations of its population, and fend off the Americans.²⁵⁸ Though the Japanese Empire ended after World War Two, one of the reasons that the Japanese were so successful in their empire building in the first place was due to the Hokkaido experience.

Therefore, the development of Hokkaido was a proving ground for the Japanese. Whereas American technical knowledge helped to develop Hokkaido, it later was the ability of the Japanese to apply the techniques of scientific agriculture adopted from the West, along with the technical abilities to create an infrastructure from scratch (as in Formosa and Sakhalin) that allowed Japan to create the empire that it did. In Japan, rice was king, while Japanese citizens were hesitant to immigrate abroad. These challenges were faced in Hokkaido, and again in its colonial ventures. Sakhalin in particular adopted the same crops that flourished in Hokkaido. In Formosa and Korea, the Japanese attempted to assimilate the native peoples there through selective education, Japanese language training, and social and infrastructural programs. Unlike with the Ainu, who

²⁵⁷ Peattie, "Japanese Attitudes Toward Colonialism" in *The Japanese Colonial Empire, 1895-1954*, 123-26. This was the Greater East Asian Co-Prosperity Sphere.

²⁵⁸ See Hane for the economics of the war. Mikiso Hane, *Modern Japan: A Historical Survey* (Boulder: Westview Press, 1986), 331-33.

were few in number and who had already suffered centuries of Japanese manipulation, the populations of Formosa and Korea in particular already had their own cultural precedents, and were less receptive to sometimes transparent Japanese self-interest and segregation of native peoples.

Japan and Hokkaido after World War Two

Japan was entirely divested of its colonies following its unconditional surrender of the Japanese to the Allied Powers in 1945. Though the Empire of Japan wasn't officially dissolved until the installation of a new constitution in 1947, the Japanese colonial age ended with its wartime defeat. Japan had possession of Formosa/Taiwan for fifty years, control over half of Sakhalin for forty, had influenced Korea even before its thirty-five years of official power there, while it maintained parts of China for a decade and a half. All of these colonies were either returned to their original owners or were placed in the hands of Western victors, America and the Soviet Union. Even the entire Kuril Island chain, partially discovered by the Japanese in the Tokugawa period and granted to Japan through a non-wartime treaty in 1875, was occupied by the Soviet Union.

The lone exceptions to this list are the Ryukyu Islands, conquered by the Satsuma *han* and made into a tributary in 1609. The other, of course, is Hokkaido, only formally annexed in 1869. The question of Hokkaido's ownership was never even on the table as Japan surrendered, even though the remainder of the empire was swiftly cut apart. Beginning mostly with the declaration of the young Meiji emperor and the new government to develop Hokkaido, the Japanese steadily claimed unchallengeable dominion over the entire island. Though the actual initial stages of Hokkaido's development from the 1870s-90s were often fraught with difficulty, high costs, and

numerous failures, in the end Japan still retained Hokkaido after the conclusion of the Second World War. Indeed, the average Japanese today would never begin to question the issue, nor did any Westerner following the end of the war.

It was instead the Ainu who were the losers in Hokkaido's development and Japan's colonization of Sakhalin and the Kuril Islands. So well had the Japanese established that the Ainu were Japanese subjects that most of the native Ainu of Sakhalin were 'repatriated' after the war, being forced by the Russians to move to Hokkaido. The Cold War that quickly followed separated and kept apart families and friends, at least until relations with Russia improved decades later.²⁵⁹ The situation was similar in the Kurils, where the Russians occupied all of the islands, from those in the north to some that are visible from the coast of Hokkaido. The Hokkaido government maintains several pages on its website, claiming that the Kurils are "Japanese territory we have inherited from our ancestors" and that the "islands are currently illegally occupied by Russia."²⁶⁰ This remains little consolation for the Ainu, who were only formally recognized as a separate indigenous ethnic group by the Japanese government in 2008, reversing the 1899 declaration denying their separate non-Japanese heritage.

Hokkaido today boasts a population of about 5.5 million, while Sapporo has grown into Japan's fifth most populous city. Overall, it is still mostly the southwestern area around Sapporo that is the most densely populated, while only 4.3 percent of

²⁵⁹ Tessa Morris-Suzuki, "Lines in the Snow: Imagining the Russo-Japanese Frontier," *Pacific Affairs* 71, no. 1 (Spring 1999): 76.

²⁶⁰ Hokkaido Government, *The Hokkaido Government's Views on the Northern Territories Issue*. 2011, Hokkaido Prefectural Government, (accessed September 18, 2011) <<http://www.pref.hokkaido.lg.jp/sm/hrt/hp-en/polic-en.htm>>.

Japanese overall live in Hokkaido.²⁶¹ If anything has been indicative of the success of Sapporo and Hokkaido as whole, it's the world-wide recognition the island garnered from being the host to the 1972 Winter Olympic Games.

The legacy of the Kaitakushi and the foreign advisors is also clear when evaluating the products that Hokkaido produces today. The natural resources so lauded by the foreign advisors are still top products of Hokkaido. The island's timber represents sixteen percent of Japan's forests. Hokkaido's fishing grounds provide about a third of Japan's annual catch, now an almost 300 billion yen industry. Coal mining in Japan has mostly petered out after decades of heavy exploitation during the colonial and war years, and again as the Japanese economy rose from the ashes in the 1940s and 50s to become one of the world's largest, though Hokkaido still supposedly possesses large reserves.²⁶² Hokkaido only generates 7.3 percent of Japan's total rice crop; however, it produces the largest quantities of many products originally imported in the 1870s. This includes such foodstuffs as wheat (61.5%), adzuki beans (88.5%), onions (56.9%), green corn (47.8%), potatoes (77.7%), kidney beans (95.5%), pumpkins (49.8%), and grasses and other forage-stuffs (65.1%). Other products include carrots (30.3%) and soy beans (21.7%). Interestingly, despite their initial failure, Hokkaido produces all of Japan's sugar beets, one of the few sources of domestic sugar after the loss of imports from Formosa. Hokkaido also possesses more than half of Japan's total dairy cows, horses, and sheep, with about a fifth of its beef cattle.²⁶³

²⁶¹ Hokkaido Bureau of Economy, Trade and Industry, *Visual Introduction of Hokkaido Industry*, 1.

²⁶² Hokkaido Bureau of Economy, Trade and Industry, *Visual Introduction of Hokkaido Industry*, 6. See 50 for a breakdown of coal mining since the 1970s. While Japanese mines used to supply a majority of Japan's coal, only .7 percent of coal is now mined domestically, all within Hokkaido. The remainder is imported.

²⁶³ Hokkaido Bureau of Economy, Trade and Industry, *Visual Introduction of Hokkaido Industry*, 24-25.

Other influences that Hokkaido has historically had upon Japan are harder to quantify. What is clear, however, are the number of parallels and outright inspirations that Hokkaido had on the larger approach to Japanese colonization before World War Two. This came in the manner in which colonies were developed effectively with Japanese technical skill, some of which was born in Hokkaido, while also informing the exclusionary yet assimilationist policies that were used to manage subjects of the empire. Japan had learned the 'great game' of the West and created its own colonies beyond the island. Hokkaido's role in Japanese history has been a small but important one, as it made the transition from outer to inner land.

CONCLUSION

Hokkaido was a small, but important, part of Japan's modernizing process, the influence of which cannot be underestimated. The period between the 1870s-90s was generally a critical period of transition for Japan. Japan modernized, as did Hokkaido, though not before experiencing a number of failures. The Japanese, with some initial help, managed to develop Hokkaido into a land almost self-sufficient, in terms of food, in just a few decades, while populating the island with millions of Japanese by World War Two. Hokkaido made many contributions to the Meiji, Taisho, and Showa economies in terms of coal and other minerals, lumber, fish, and other foodstuffs and products. Its development also contributed valuable knowledge that helped translate into the dramatic growth of Japan overall, while the individual wielders of technical and scientific knowledge assisted Japan's advance from below.

The impact of the United States in Hokkaido's development is clear in the methods and laws employed by the Kaitakushi. Many of the crops recommended and tested in the 1870s-80s are still grown in Hokkaido, though in varieties that are now even more suited to the island's environment. The Kaitakushi's foreign advisors were responsible for the importation of countless fruit trees seeded around Japan, while some of the Japanese desire to consume meat came out of the number of animals introduced into Hokkaido. Hokkaido's quick adoption of the techniques of scientific agriculture helped to feed a population that more than doubled between the end of the Tokugawa era and World War Two.

In Hokkaido, as elsewhere in Japan, mechanization was sometimes adopted before actually being economically viable while there were often negative environmental consequences resulting from its implementation. Not everything attempted by either the Japanese or the foreign advisors was successful, though failure can often be just as educational. The Japanese had to take the methods and techniques of the outsiders first and make them their own through years of trial-and-error before ultimately finding success.

Beginning in the Tokugawa period, Japan engaged in a territorial rivalry with Russia over Ezo/Hokkaido, the Kurils, Sakhalin, and Korea, which eventually developed into a bloody war in 1905. Though less contentious today, the ownership of the islands to the north of Hokkaido is still a debated issue. That this struggle was fought over lands upon which neither Russians nor Japanese traditionally lived was only seen as a minor issue. Acculturation in the Tokugawa period made the Hokkaido Ainu increasingly reliant on Japanese goods, while the Ainu themselves were forced to become 'Japanese' by law in 1899, a law only repealed in recent years.

An examination of Hokkaido's development also yields some insight not just into the motivations of Japanese colonialism, but also why Japan's imperialism played out as it did. Patterns established in the development of Hokkaido were continued in modified forms throughout the Japanese Empire. Japanese cultural biases against peoples of different ethnicities, revealed in Japanese rule over Hokkaido's Ainu, also were a factor in the treatment of colonized peoples. The peoples of Formosa and the Koreans were supposed to be assimilated, yet were still viewed by the Japanese as 'others' and only educated to the point of providing productive workers for the Japanese Empire, while the

few Japanese who immigrated to colonies kept themselves segregated from conquered subjects. That the Japanese were able to develop the agriculture, infrastructure, and economies of their colonies effectively and provide their own models of scientific agriculture to occupied lands showed that the lessons learned in the development of Hokkaido were paying off. Sakhalin, with similar conditions to Hokkaido, proved to be one of the more popular destinations for Japanese immigrants, as the Japanese were able to transport their successes easily to an island even further to the north.

Much work on the development of Hokkaido and its larger role in Japan's modernization and colonial empire that came can still be done. This thesis is an attempt to spur future scholarship in the direction of considering not just the island alone, but also its larger significance to Japan and the eventual Japanese empire. Hokkaido made the transition from outer to inner land, and so too should scholarship make Hokkaido an integral part of the standard Japanese history narrative.

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