

Indigenous People and Marine Resources of the North Pacific Rim: Focus on the Ainu, the Fur Trade, and Sea Otters

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INTRODUCTION

The fur trade was a significant aspect of the economy of the northern hemisphere in the 17th through 19th centuries, and furs were the “black gold of the far north in the pre-industrial era of global trade”. There was high demand for fur in Europe and China, and furs were the most valuable item that the West could provide to China (Fernandez-Armesto 2009: xiii). The fur trade in North America has been extensively studied, but the maritime fur trade in the North Pacific has not been the focus of as much research (Fernandez-Armesto 2009: xiv-xv; Bockstoce 2009), and this is particularly true for the northwestern (Asian) Pacific (Ravalli 2018: xiii, 2; Takahashi 2006: 37).

Most people are familiar with sea otters as cute and entertaining animals often seen today along the California coast, but many are not aware of their past importance in the Pacific maritime fur trade. Sea otter pelts were the most valued resource in the North Pacific fur trade for hundreds of years in the pre-industrial era. Pelts from Hokkaido and the Kurils reached Chinese and Japanese consumers (Ravalli 2018: xiii), and later US and European markets as well. Sea otters helped to bring about a commercially, geopolitically, and environmentally interconnected Pacific Rim (Ravalli 2018: xiv). Studies of the Asian maritime fur trade have focused on the trade itself and its eventual decline, but not as much on the specific role of sea otters (Ravalli 2018: xiii-xiv) or on the effect of the trade in sea otter pelts on the indigenous people of the North Pacific. The sea otter trade “was responsible for the intensification of foreign activity” in the Pacific, and it “reshaped geopolitical boundaries in the region” (Ravalli 2018: xiii) severely disrupting traditional indigenous ways of life as well as depleting sea otter populations.

This paper describes sea otters and their importance to indigenous people of the Pacific Rim and the effects of the trade in sea otter pelts on indigenous people, particularly the Ainu of Japan. The subsequent decimation and then recovery of the sea otter population is also discussed including current issues relevant to indigenous people today.

SEA OTTERS

The sea otter (*Enhydra lutris*) lived in nearshore habitats throughout the North Pacific for thousands of years before human habitation (MacLeish 2018: 6; Ravalli 2018: xvii-xviii). It once ranged from Baja California to the Pacific Northwest and into northern Japan and eastern Russia, the original population estimated to be in the hundreds of thousands. Three subspecies are recognized with minor differences between them. The sea otters found in the Commander Islands, the Kurils, and Japan are known as the Asian or common sea otter (*Enhydra lutris lutris*) (Hattori et al. 2005: 41; MacLeish 2018: 7; Society for Marine Mammalogy 2025) and are the focus of this paper.

Sea otters are the smallest of the marine mammals, but the largest member of the weasel family (*Mustelidae*) (MacLeish 2018: 5; Society for Marine Mammalogy 2025). Males can be 5 feet long and weigh 100 pounds. Sea otters eat 25 to 30% of their body weight each day to stay warm, and their diet consists of sea urchins, clams and other mollusks, crabs, sea cucumbers, abalone and other sea snails, and sometimes fish and birds (MacLeish 2018: 7). Unlike other marine mammals, sea otters lack blubber and instead stay warm by having the densest fur of any species of animal (MacLeish 2018: 5, 11-12; Society for Marine Mammalogy 2025). This warm dense fur is what made them attractive to fur traders (MacLeish 2018: 12; Ravalli 2018: xviii). The low reproductive rate (i.e., one pup per year) makes sea otter populations particularly vulnerable to overhunting and habitat loss (Ravalli 2018: xix). Other threats include oil spills and other pollution, diseases transmitted from domesticated animals, predation from killer whales and sharks, and climate change (Doroff, et al. 2011: 22, MacLeish 2018: 54-55, 105-106, 149-157, 211, 217-220; McAllister 2022; Popov and Scopin 2021: 532-533; Ravalli 2018: 100-101).

Sea otters play a vital role in maintaining the native kelp forest by eating sea urchins, abalone, and other species that eat kelp. If kelp is depleted fish, crabs, snails, and sea lions decline in numbers and even disappear (MacLeish 2018: 4-5). Thus, the sea otter is considered a “keystone species” that plays a crucial role in maintaining the kelp ecosystem (MacLeish 2018: 8; Ravalli 2018: xviii; Society for Marine Mammalogy 2025). Otters gather in sex-segregated groups called “rafts” and spend most of their time in the water (MacLeish 2018: 10; Ravalli 2018: xix). Sea otters are one of only a few mammals known to use tools utilizing rocks to break open abalone shells (MacLeish 2018: 5, 10-11; Society for Marine Mammalogy 2025).

Their appearance and behavior has long been appealing to people. The first detailed European description of the sea otter was in 1751 by German naturalist Georg Steller of the second Bering Expedition. He said, “They play together, and like human beings, embrace with their arms and kiss each other” (Ravalli 2018: xix). He also said, “They surpass all other amphibia in play and frolicsomeness”, and “They throw the young ones into the water to teach them to swim and then tired out they bring them to shore again and kiss them just like human beings” (Ravalli 2018:12).

SEA OTTERS AND INDIGENOUS PEOPLES

Indigenous people of the North Pacific Rim include the original inhabitants of the US Pacific Northwest, the west coast of Canada, and the Aleutian Islands of Alaska as well as the Ainu of Japan. In recent centuries the Ainu have only occupied Hokkaido (Japan), southern Sakhalin (Russia), and the Kurils (Russia), but in the past their territory also extended into Kamchatka (Russia), northern Sakhalin (Russia), the lower Amur River region (Russia), and northern Honshu (Japan) (Ohnuki-Tierney 1976: 297-298). There are other non-Ainu native people on Sakhalin and in the Amur River region. This paper focuses on the Ainu with some references and comparisons to indigenous people in the US and Canada.

Native people have hunted sea otters in the North Pacific for thousands of years. Sea otter bones found in archaeological sites indicate that people of the Japanese Jomon culture hunted sea otters 12,000 years ago and that the ancestors of the Haida people of British Columbia hunted them 10,000 years ago. There is also archaeological evidence of ancient sea otter hunting from the Channel Islands in southern California (Ravalli 2018: xx-xxi) and from the Oregon coast (Elakha Alliance; Wellman 2022).

Sea otters were used mainly for fur (de Laguna 1990b: 210; MacLeish 2018: 14; Moss 2020; Wellman 2022). In the Aleutian Islands there was definite distaste for eating sea otters (Ravalli 2018: xxiii), but

their bones were sometimes used for ornaments or games. In the Pacific Northwest robes made from sea otter pelts were worn by high ranking individuals (and also bestowed status on the wearer), used for bedding, traded as status items, offered as marriage payments, and given away at the traditional potlatch ceremony (Elakah Alliance; MacLeish 2018: 14, 203; McAllister 2022; Ravalli 2018: xxii-xxiii). The Ainu primarily used sea otter pelts for warm clothing (Hokkaido Museum 2019: 7) and as trade goods. In North America hunting was seasonal (spring into fall) and carried out from canoes using harpoons and sometimes the bow and arrow (Arima and Dewhirst 1990: 395; Blackman 1990: 244; de Laguna 1990a: 190, de Laguna 1990b: 206, 210; Halpin and Seguin 1990: 271; Hilton 1990: 315). The Ainu used similar hunting methods (Ohnuki-Tierney 1976: 305; Ravalli 2018:5; Tezuka 2009: 120-121).

The sea otter was important in native lore and mythology. The “Kutune Shirka” is a classic Ainu epic oral tradition about a quest for a golden sea otter in which the hero tries to capture the otter with a magic sword to win a particular woman as his bride; he succeeds, but then many battles, conflicts, and complications ensue (Kannari 2008; Ravalli 2018: xxii). An Ainu myth from Hokkaido says that spiritual beings put on sea otter pelts as clothing and by doing so assume the form of the sea otter. In this form they visit humans and bestow the right to hunt the sea otter (Ohtuni-Tierney 1976; Ravalli 2018: xxii). An Aleut (Aleutian Islands) story tells of forbidden lovers who become sea otters (Ravalli 2018: xxii). Other Aleut stories include white or silver sea otters (Society for Marine Mammalogy 2025), and white sea otters are featured in stories from the Pacific Northwest as well including a story in which a hunter’s wife who is cleaning a white sea otter pelt is taken away to an underwater home by a supernatural being and subsequently rescued by her husband (Ravalli 2018: xxiii).

SEA OTTERS IN THE NORTH PACIFIC MARITIME FUR TRADE

Sea otter pelts from the Kurils reached China very early as the Ainu passed pelts to China via Sakhalin and the Amur River region (Ohnuki-Tierney 1976: 300-301; Ravalli 2018: 6; Sasaki 1999: 86-87; Takahashi 2006: 37; Walker 2001: 131-133). The Ainu navigated the Japan Sea, the Sea of Okhotsk, and the North Pacific in small craft with sails, and maritime trade was as important to their economy as hunting, gathering, and fishing (Ohnuki-Tierney 1976: 308; Ravalli 2018: 5-6; Sasaki 1999: 98; Walker 2001: 156). Trade networks extended from Hokkaido to Kamchatka and into Russia from which the Ainu obtained leather garments and liquor (Walker 2001:156). Sea otter fur reached China by sea as early as the Ming Dynasty (1450-1550) with sea otter pelts acquired in the Kurils and Hokkaido by Ainu who brought them to Hokkaido trading posts; the pelts were then transported by Japanese merchants to Nagasaki for shipment to China (Ohnuki-Tierney 1976: 301; Ravalli 2018:4; Takahashi 2006: 37, 40-41; Walker 2001:158).

The Ainu exchanged goods with Japanese traders as long ago as at least the 15th century (Siddle 1999: 68), but trade in sea otter pelts became particularly important after 1700 (Tezuka 2009: 117, 120-121) when Japan established a trading post in the Kurils on Kunashir Island, the southernmost island of the Kuril chain (Ravalli 2018: 7). The Japanese elite valued sea otter pelts as luxury goods (particularly white ones and large ones) for their own use, the pelts making their way from the Kurils to Hokkaido and then south into other regions of Japan. The Kurils consist of 56 volcanic islands extending 800 miles from Japan to Kamchatka, and sea otters were an important resource of the Kurils (Ohnuki-Tierney 1976: 304 ; Ravalli 2018: 6-7; Walker 2001: 157). During the period of the Japan sea otter trade the Kurils were known as “Rakkoshima” or “Sea Otter Islands” with the island of Urup the center of the trade (Ravalli 2018: xxiv, 6; Tezuka 2009: 120-121). At one time 1/3 of the world’s sea otter population was found in the Kurils, and sea otter pelts from the Kurils and from Kamchatka were considered the best quality

(MacLeish 2018: 14; Takahashi 2006: 42-43; Tezuka 2009: 120). Typically, sea otter pelts were used to line winter clothing (MacLeish 2018: 14). In Japan the pelts were also thought to have special properties. It was believed that sitting on the pelts improved circulation and could even help to cure smallpox (Ravalli 2018: 6; Walker 2001: 157).

The Ainu killed sea otters with bows and arrows or harpoons from small boats, but spears or clubs as well as the cross bow and poison arrows were sometimes used instead. Sometimes hunting, especially clubbing, was done on the ice rather than in open water (Ohnuki-Tierney 1976: 305; Ravalli 2018:5; Tezuka 2009: 120-121). In later phases of the fur trade (i.e., by the 1790s) the Ainu used nets and guns (Tezuka 2009: 120-121). In exchange for sea otter pelts as well as eagle and hawk feathers, dried sea cucumber, shark fin, dried abalone, fish oil, and dried fish, the Ainu received goods such as salt, tobacco, cotton and silk cloth, metal tools, rice, yeast, and sake (Ohnuki-Tierney 1976: 308; Ravalli 2018: 5-6; Tezuka 2009: 123-124; Walker 2001: 96-97).

One high quality sea otter pelt could be traded for a large amount of rice, yeast, sake, and tobacco, and trading posts became markets “which shaped the seasonal rhythms of Ainu hunting and fishing” (Walker 2001: 97). Sea otters and other Ainu natural resources became commodities to be exchanged for status-enhancing foreign goods, and depletion of resources followed (Walker 2001: 117-123). Imported sake was added to rituals (Walker 2001: 112). Over time there was dependence on trade for economic survival and the decline of traditional subsistence activities (Ravalli 2018:8; Walker 2001: 97-98) so that “the acquisition and use of Japanese goods became integrated into the very fabric of Ainu society” (Walker 2001: 97).

By the late 1700s Japanese merchants had established themselves on Hokkaido imposing poor exchange rates on the Ainu and employing Ainu in fisheries with poor working conditions (Sasaki 1999: 91; Howell 1999: 98-99). Merchants and their managers physically attacked, injured, and intimidated Ainu, and Ainu people were forced into labor contracts which further removed them from traditional subsistence activities and into commercial fisheries (Siddle 1999: 70-71; Walker 2001: 160). Ainu communities grew in size and became permanently located near the fisheries (Howell 1999: 99-100).

Bartering fish and animal products directly with Japanese, other Ainu, and later Russians had originally allowed the Ainu to keep some of these products for themselves for their subsistence needs, but increased demand for the products they procured led the Ainu to spend all of their time involved in commercial activities in which they became dependent on trade goods (Siddle 1999: 70) in an endless cycle of “commercialization” and “immiserization” (Walker 2001: 174, 176). Introduced diseases such as smallpox also decimated Ainu communities (Howell 1999: 100; Sasaki 1999: 91; Walker 2001: 178-193). The same processes also affected indigenous groups of Alaska, Canada, and the US who participated in the fur trade (Cole and Darling 1990).

In the 16th and 17th centuries Russia conquered Siberia giving Russia exclusive access to fur regions (Fernandez-Armesto 2009: xiii). By the early 1700s Russia had extended its fur trade into the Pacific, hunting sea otters and trading the pelts to China (Bockstoce 2009: 4, 103, 105, 110, 117, 203; Ravalli 2018:8). Russian fur traders traveled down the Kuril island chain where they encountered the Ainu (Tezuka 2009: 120-121) and then continued to the Commander Islands in the Bering Sea, the Aleutian Islands (Bockstoce 2009: 79, 117; Ravalli 2018: 10-11), and down the Pacific Northwest coast all the way to Fort Ross (1812-1841) in northern California (Cole and Darling 1990: 119; Essig 1933; Takahashi 2006: 38). The actual hunters of the furs were Ainu and other indigenous (e.g., Aleut) men (MacLeish 2018: 15; McAllister 2022; Ravalli 2018: 10-11, 44). Sometimes Russians directly engaged Ainu groups in violent

battles over contested hunting areas and demands for tribute in sea otter furs to Russia. One notable conflict occurred in 1770 -1771 when a number of Russians and Ainu were killed on Urup Island which the Ainu then temporarily reclaimed from the Russians (Ravalli 2018: 1-2; Walker 2001: 162-163). In 1785 a Japanese official, Mogami Tokunai, said, "The Kuril Islands belong to Japan. Sea otter fur is the best product of Ezochi [Hokkaido]. It has been sent to Nagasaki to be sold to Chinese ships since the old days. However, in recent years, the Russians have come to collect sea otters and sell them to Beijing as a Russian product. This is a shame and a serious problem for Japan" (Ravalli 2018: 8-9; Takahashi 2006: 42).

Japan and Russia competed for the sea otter trade (Ravalli 2018: 8; Tezuka 2009: 120-121), and neither was able to establish complete control over the sea otter regions of the northwest Pacific. There was ongoing conflict between the two countries including hostage taking, vandalism, and attacks on Urup, Iturup, and Kunashir in the Kurils and on Sakhalin (Ravalli 2018:15-16). The Ainu were often involved in these conflicts as Japan attempted to control the Ainu in efforts to deter or remove the Russian presence in the Kurils (Ravalli 2018: 3, 14; Howell 1999: 100-101; Siddle 1999: 71; Takahashi 2006: 41-42; Tezuka 2009: 128; Walker 2001: 161). In 1795 forty Russians settled on Urup Island in the Kurils, and an Ainu chief from Hokkaido and some members of his community went to Urup during the winter seasons to hunt sea otter and trade the pelts to the Russians. However, in 1803 the Tokugawa Shogunate banned the Ainu from hunting on Urup, the Russians abandoned the island in 1805, and the shogunate organized its own annual hunting parties of Ainu and Japanese hunters there starting in 1807 (Tezuka 2009: 126). Now the Ainu hunted sea otters for Japan. In 1875 the Treaty of St. Petersburg gave Japan the Kurils and gave Russia Sakhalin (although today the Kurils are disputed territory administered by Russia) (Choudhury 2024).

At the beginning of the 19th century more than 10,000 sea otter furs and more than 100,000 seal skins were imported by China every year (Takahashi 2006: 39), and the US and Great Britain became more active participants in the sea otter trade (Bockstoce 2009: 5; McAllister 2022; Ravalli 2018: 57-59, 79, 88). The US in particular "took over a sizable portion of the sea otter's habitat at the middle of the nineteenth century" (Ravalli 2018: 48). The US sea otter trade was initially focused on western North America where indigenous people suffered from violent altercations as well as unequal benefit from trade goods (Ravalli 2018: 59-61). However, in 1872 a US ship hunting sea otter near the Channel Islands in California (the *Cygnets*) sailed to the Kurils and took 200 sea otter pelts to Hokkaido, and US and British maritime trade in the Kurils increased after its 1872 voyage (Ravalli 2018: 77-78, 88). In the late 19th century a British ship under H.J. Snow operated out of Yokohama, launching small boats out of the larger ship which contained Aleut hunters who used guns to kill sea otters. The ship also employed Japanese and Chinese hunters and sailors. This phase of the North Pacific sea otter trade was characterized by numerous injuries and deaths due to gun fire accidents and general accidents at sea. There was also conflict between Japan, Russia, and the US over hunting rights. The British sea captain H.J. Snow was arrested once by the Russians in the Commander Islands and once by Japan in the Kurils (Ravalli 2018: 89) for encroaching on hunting territories. After 1850 demand for sea otter pelts had declined in China, and most of the sea otter fur was used in the US and Europe (Ravalli 2018: 79).

DECIMATION AND RECOVERY OF SEA OTTER POPULATIONS

By the late 19th century sea otter populations had severely declined (Bockstoce 2009: 40, 171; MacLeish 2018: 19; Ravalli 2018: 92), and there were perhaps as few as 1000 remaining by the early 20th century (MacLeish 2018: 6). In 1911 a coalition of conservationists in the US helped to bring about the North

Pacific Fur Seal Convention which involved the US, Russia, Japan, and Canada/Great Britain, applied to the Bering Sea, and included protections for sea otters. This was the first international treaty to address wildlife preservation (Ravalli 2018: 78, 93-97).

Other actions followed the 1911 treaty including restrictions on hunting sea otters in Japan (1912), the establishment of an Aleutian Islands refuge (1913), a ban on killing sea otters in California (1913), and a ban on the hunting of sea otters in Canada (1931) (Ravalli 2018: 97-98). In the Commander Islands in the Bering Sea sea otters had recovered quite successfully by the 1930s to the point that Soviet researchers kept some in captivity to study and also tried unsuccessfully to relocate some to other locations (Ravalli 2018: 98). In 1938 sea otters were “rediscovered” in Monterey Bay in California and were also observed in Big Sur, California (Ravalli 2018: 99).

In 1945 the Kurils came under Soviet control, and a sea otter refuge was established around Urup in 1958 (Popov and Scopin 2021: 529; Ravalli 2018: 109-111). The best recovered sea otter populations today are in the Kurils and particularly in the northern Kurils, but illegal poaching is a problem with poachers selling fur in China where the pelts are valued for decorative fur and used in traditional medicine (Popov and Scopin 2021:533).

Over time sea otters became increasingly linked to environmental and related causes (Ravalli 2018:104). Resistance to nuclear testing in the Aleutians in the 1960s was related at least in part to the sea otter refuge there, and the US Atomic Energy Commission funded the relocation of sea otters in the 1960s and 1970s (Doroff et al. 2011: 26-27; MacLeish 2018: 169-174; McAllister 2022; Ravalli 2018: 107-109). At least 35% of all sea otters currently in British Columbia, Washington, and Oregon are descended from those relocated from Amchitka in the Aleutians (MacLeish 2018: 196; Ravalli 2018: 107-109).

In 1966 the US Fur Seal Act provided protections for sea otters (Ravalli 2018: 112). In 1970 Canada enacted protections for sea otters which had increased in number near Vancouver Island. The 1972 US Marine Mammal Protection Act is the main piece of legislation that protects sea otters in US waters with exceptions for subsistence use (including clothing and handcrafts) by Alaska native people. The 1973 Endangered Species Act also protects sea otters (MacLeish 2018: 29; Ravalli 2018: 112-113).

In 2015 125,000 sea otters were counted (in separate studies and counts) in California, Washington, British Columbia, southeast Alaska, Prince William Sound, the Aleutians, and the Commander Islands (MacLeish 2018: 7) with additional small numbers observed in Oregon (MacLeish 2018: 175) and Hokkaido. In 1996 sea otters were sighted along the eastern coast of Hokkaido, and there have continued to be occasional sightings in Hokkaido since then (Chang 2020; Hattori et al. 2005: 41). The present day Hokkaido sea otters are probably the result of population expansion from the southern Kurils (Doroff et al. 2011: 23; Hattori et al. 2005: 42).

PUBLIC INTEREST AND CURRENT ISSUES

As sea otter populations rebounded, the animals became the focus of public and media attention. A 1958 article in the publication *Outdoor California* described how “cute” sea otters were and said. “Even a mounted specimen looks playful” (Ravalli 2018:106-107). In the 1970s sea otters started to receive publicity on the popular television programs *Undersea World of Jacques Cousteau* and *Wild Kingdom*. A 1972 newspaper article called sea otters “Teddy Bears of the Ocean” (Ravalli 2018: 111-112). In 2007 a University of British Columbia student posted video of two sea otters at the Vancouver Aquarium on You

Tube (which was new at the time), and the video had 1.5 million hits in 2 weeks (Ravalli 2018: 103-104). In 2020 the town of Hamanaka on the eastern side of Hokkaido saw an increase in tourists because of sea otter sightings near there at Cape Kiritappu (Kyodo News 2020; Shimbun Hokkaido 2022). Because of the “curse of cuteness” (Ravalli 2018: 119-123) large numbers of sea otters are now confined in aquariums and zoos so that the public can see them (Ravalli 2018: 114-119).

The reestablishment of sea otter populations has raised new issues involving sea otter and human interactions. When sea otters returned to California in the 1940s, 1950s, and 1960s, abalone populations decreased causing distress among abalone fishermen including commercial fishermen. Efforts to move otters and segregate abalone areas from sea otter areas were difficult and controversial (MacLeish 2018: 19-35). Traditionally indigenous people in Alaska and British Columbia prized sea otter fur for its warmth and beauty often reserving fur robes and anklets for people of higher rank (MacLeish 2018: 14, 203). The fur trade ended this traditional use of sea otter fur, and today many indigenous groups have not welcomed the recent increase in sea otter populations because sea otters prey on shellfish that they now utilize (MacLeish 2018: 91, 131-144, 203-206). In addition to conflicts with abalone fishermen in California and conflicts with indigenous shellfish harvesting, there are also conflicts with commercial fishing in the US and Japan (MacLeish 2018: 91-92, 117-129) plus controversy over what constitutes appropriate use of sea otters for indigenous people today (Moss 2020; Ravalli 2018: 113-114; Wellman 2022).

CONCLUSIONS

Natural resources and the natural environment are significant in regional histories including that of the North Pacific. Disruption and depletion of the natural environment particularly affects indigenous peoples of these regions but also other aspects of human and non-human life. The story of the sea otter in the North Pacific highlights the common experiences of indigenous and other people throughout this vast region, and it also points out that the story of animals like the sea otter is interwoven with the story of humans in the past and present. In short, the story of the sea otter is also the story of the history of the Pacific Rim and its people. Even though the sea otter has returned from the brink of extinction its future and the future of the people living near its habitat are still intertwined. The threats currently faced by sea otters such as pollution and climate change are also threats to people and involve the same complex interactions between human behavior and the natural world that were crucial parts of the maritime fur trade in the North Pacific. Understanding these complex relationships and processes requires an interdisciplinary approach that includes information from the disciplines of history, anthropology (including archaeology), biology, economics, and more.

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