Chapter 2

The Hunt for Furs in Siberia

By the late 1500s, after Russia’s conquest of the khanate of Sibir, Siberia’s vast lands lay open to exploration, conquest, and exploitation. Most of Siberia’s soils, vegetation, and climate did not hold out great appeal to the Russian peasant cultivator. Instead, Siberia offered the products of the hunt to Russian frontiersmen. Russians had long hunted or purchased from indigenous hunter societies the furs of the north. Furs were one of the most valued consumption items in Russia and one of its most profitable exports.

For centuries, the temperate-zone Christian, Islamic, and Confucian worlds have demanded high-quality furs. In these colder climates, furs were valued for their luxuriously warm comfort, their visual and tactile appeal, and their scarcity and high cost. Fur wearing permitted the wearer to display high social status, power, and wealth. The primary medieval sources of supply for the finest furs were the coldest and most remote lands in northeastern Europe and northwestern Siberia. According to Janet Martin, “It was here that fur-bearing animals grew the thickest, softest pelts in the purest winter hues.”

Killing furbearers—as well as processing, assembling, and grading their pelts and transporting them to distant markets—was a long-standing staple of the Russian economy and a principal source of income for the nascent Russian state. In the mid–fourteenth century, the princes of Moscow, taking advantage of the weakening hold of the Mongol Golden Horde, established control over their own fur supply network. Moscow’s rulers extended their military domination over the tribal peoples of Perm and Pechora to the northeast, who were required to pay tribute in fine furs. The Moscow state

negotiated arrangements with the Tatars of Kazan to permit passage of their furs through the Crimea to the Black Sea colonies of Italian merchants. Other furs found their way through Lithuania to the Hanse towns on the Baltic. Moscow became the leading fur supplier to the Ottoman realm and western Europe, as luxury furs like ermine, marten, and sable rose in popularity. Both European and Russian traders busied themselves in this vast traffic, bringing silver and gold as payment for furs.

By the beginning of the sixteenth century, despite fluctuations in routes and changing fashions in furs, the basic structural features of the northern fur trade were firmly fixed. Buoyant and growing demand by consumers fed the entire enterprise. For the consuming societies, furs continued to be a comfortable means by which to meet that most compelling human need: the visible display of high status and power combined with the appeal of warmth and comfort. Groups of foreign traders journeyed to Russian entrepôts equipped with silver and technical knowledge of northern furs. The furs were graded by species and quality by a customary schema. Russian and Tatar princes and merchants acted as middlemen in the trade. They obtained furs as tribute or in payment for iron goods, salt, or other trade goods from the indigenous peoples of the northern woods or, increasingly, Russian fur trappers. Russian traders and royal agents assembled, stored, and graded the pelts at entrepôts, which were also sites of growing state power.

Shortly after Ivan’s annexation of Kazan, Russia established for the first time a direct maritime trade link with western Europe. In 1554, an English trading ship in search of an Arctic route to China landed by accident at Archangel, the White Sea port. The English captain and chief merchant, Richard Chancellor, who was brought to Moscow, opened what proved to be a successful set of negotiations with Ivan IV. The tsar gave the English traders a charter guaranteeing them free trade in his domains. The resulting Muscovy Company, a joint-stock trading company with an official monopoly on the Russian trade, established trading missions in Moscow and at Kholmogory, just south of Archangel on the Dvina River. The company sent ships each year on direct voyages between London and Archangel.

Despite a short sailing season limited by Arctic ice, Archangel proved to be an important outlet for Russian furs that generated greater profits for the Russian state monopoly. English traders also bought naval stores such as tar, timber, and hemp rope, as well as wax and hides, in return for English cloth and other goods. There remained a favorable Russian balance in the exchange that forced the English to pay the remainder with silver and gold—largely from the New World discoveries.2

WESTERN SIBERIA

Demand increased, but annual yields of fur in the lands around the White Sea were not keeping pace. Siberia offered the prospect of new, abundant sources of the best quality furs for both consumption and export. The Russian occupation of Kazan opened up new opportunities for movement into Siberia. Driven by the prospect of fur profits, Russian frontiersmen followed the river systems north and east across the vast tracts of Siberia above the fifty-fifth parallel. Russian parties of explorers and traders trekked by boat along the rivers and by horseback, foot, and sledge on portage from one river to another. At strategic junctures, the Muscovite state, following closely after the frontiersmen, established fortified towns and administrative centers (ostrogs), to which it appointed military governors (voevody).

The first task was to annex the Tatar khanate of Sibir, already a tributary to the Russian tsar. In 1582, under the aggressive leadership of the Stroganov family, Russian forces crossed the Urals to attack Sibir, the capital, located on the Ob River. Eight hundred cossack mercenaries led by Yermak Timofeyevich defeated Kuchum, the Tatar khan, drove him into exile, and occupied Sibir. Despite continuing and bitter Tatar resistance that resulted in the death of Yermak and much of his force, the Russians persevered. In 1584, Tsar Fyodor, Ivan’s son and successor, sent military governors and official forces to consolidate Russian control over the Sibir khanate and its people.

Moscow moved quickly to seize control of western Siberia, the lands drained by the Ob River. Private groups of Russian fur trappers and traders had already ventured along the rivers of this vast region and begun both hunting and trading for furs. With the defeat of the Tatars, Russian official and irregular expeditionary forces established fortified posts at Tobolsk in 1587, Surgut and Tara in 1594, and Oborsk the next year. Mangazeya on the Taz River, established in 1601, and Tomsk, established in 1604, became staging points for the move eastward toward the Yenisey-Tunguska River basin. Directives and funds from Moscow organized and legitimated mixed official and trader attempts to explore the Yenisey River. The tsar ordered the founding of Turkhansk at the confluence of the Yenisey and the Lower Tunguska River in 1607 and the founding of Yeniseysk to the south, just north of the confluence of the Upper Tunguska and Yenisey, in 1619.

By 1620, Russians were the dominant power in western Siberia—an area


Map 3 Expansion and settlement of tsarist Russia
of 2 million square kilometers. The tsar’s writ ran from the Arctic Ocean to the Altai Mountains in the south and from the Urals to the valley of the Yenisey in the east. Conquest had more than doubled the territorial extent of the tsardom of Moscow.

Western Siberia’s lands divided into two distinct natural regions: the frozen tundra to the north and the taiga, or marshy wet coniferous forest, below. These were Arctic and sub-Arctic lands, not all that promising for sedentary cultivation or Russian settlement. The tundra stretches forty-five hundred kilometers from one end of Siberia to the other. Above the permafrost line, the tundra lands are frozen all year round. Low temperatures and limited sunshine permit only lichens, mosses, small woody shrubs, and small herbaceous plants to grow. Having 240 days of snow each year limits animal life as well. Polar bears, foxes, rodents, owls, reindeer, and aquatic birds share space with seals and walruses on land.

South of the tundra, the western plain of Siberia is primarily taiga, a sparse forest of fir, spruce, and cedar growing over peat bogs of moss and lichen. The taiga, generally wet terrain with many lakes, streams, and marshes, is inundated in the spring by pack-ice blockages at the mouth of the Ob and other rivers. Wildlife, common to all of Siberia, includes larger mammals such as the brown bear, wolf, elk, reindeer, and lynx. The smaller furbearers—the sable, marten, beaver, ermine, and squirrel—also can be found. To the south, in the vicinity of Tomsk, the terrain dries out and aspen and birch replace conifers. These thin out into woodland-steppe formations and eventually to steppe grassland.

The small bands of Russian invaders threaded their way along western Siberia’s rivers, founded fortified posts, and tried to impose new, one-sided relationships on the peoples they encountered. At first, the Siberians reacted violently to Russian demands and attacked the invaders, only to suffer bloody casualties and ignominious defeat. The killing power of Russian muskets and cannon was far superior to any weapons the Siberian natives employed. In sharp contrast to the Tatars, who terrorized and enslaved Russian settlers west of the Urals, the Siberian peoples were few, vulnerable, and divided. After they submitted, the Russians forced or enticed the tsar’s new subjects to help them with further expansion by serving as interpreters, guides, boatmen, and porters. Many were willing to serve as armed allies or auxiliaries and attack those neighbors with whom they had long-standing grievances.

After the Russians had demonstrated their military strength, their terms were simple. Each of the newly subdued Siberians had to offer ritual submission by means of a sworn oath to the tsar’s authority. And, to confirm this, each adult male had to deliver a specified number of furs and pelts in

payment of the *iasak*, an annual tax. These were the essentials, but soldiers and colonists often forced the tsar’s new subjects to help build forts, housing, and boats, to contribute other labor, or to supply foodstuffs. Russians seized and enslaved women to provide sex and domestic services for the male invaders. Although the Russians did offer gifts—metal utensils, knives, blankets, flour, tea, and especially alcohol—in return for furs, the exchange was certainly inequitable.

The total population of western Siberia in the last half of the sixteenth century probably did not exceed a hundred thousand persons, who were organized into small groups of preliterate hunter-gatherers. About half the population consisted of an estimated sixteen thousand Finno-Ugrian speakers thinly distributed across much of the western Siberian taiga. The Khantys and the Mansis—two distinct, but very similar, groups speaking mutually intelligible forms of the same language—divided the marshy spruce forestlands between the Ob and the Urals. They were organized into separate lineages, or clans, headed by a hereditary chief. Clan heads occupied forts protected by earth ramparts and stockades and amassed wealth in terms of silver objects and furs. They had access to some iron and steel objects through trade. Their weapons included longbows and arrows, spears, and, for protection, mailed coats and helmets.

Ordinary Khantys and Mansis lived in log huts in the wintertime and moved to temporary hunting quarters for the summer hunting season. They used dugout or bark canoes for transport in the summer and skis for the six months or more of snow-covered winter. They hunted, but did not domesticate, reindeer for their meat and hides. They hunted and trapped sables, marten, ermines, and foxes and wore and traded their furs. Fresh, dried, and smoked fish taken from the rivers and streams supplied a considerable portion of their diet. The Khantys and Mansis, like nearly all the indigenous peoples across Siberia, apparently did not make or consume alcohol in any form.

In their spiritual beliefs, the Khantys and Mansis worshipped a Nature god, Num Torem, as well as spirits that lived in all natural phenomena. Religious rites conducted by shamans in sacred clearings involved sacrifice of reindeer and other animals. Each person had his or her own totem animal represented by designs tattooed on the person. The Khantys and Mansis were split into exogamous moieties defined by clan totems. Hunters were supposed to refrain from killing their particular totem animal. Like virtually all Siberian natives, they venerated the brown bear, who was known as the “master of the forest” and only occasionally killed and eaten. When this occurred, special rituals designed to propitiate the bear’s spirit were performed before and during the village feast.

Also in western Siberia were the Samoyeds, Uralic language speakers whose numbers were similar to those of the Khantys and Mansis.7 The Samoyeds’ habitat extended across both tundra and taiga. In the extreme northern tundra, their culture was one shared by virtually all the indigenous peoples who lived in the harsh climate and terrain of northern Siberia. The Samoyeds fished and hunted seals and walruses in the long fjords of the Ob, Yenisey, and other rivers flowing into the Arctic Ocean.8 They kept herds of domesticated reindeer to pull light wooden sledges and for clothing, meat, and milk. Their white, bushy-coated Samoyed dogs assisted in herding the reindeer. They hunted wild reindeer for meat and hides. They lived in hide-covered conical pole tents up to nine meters in diameter. These were portable and frequently were moved as groups engaged in seasonal migrations.

To the south, other groups of Samoyeds lived in the swampy taiga forests as far as the middle Ob River. In this habitat, the Samoyed lifestyle and material culture were closer to those of the Khantys and Mansi peoples. Each branch of the Samoyeds was loosely organized into confederations of lineages or clans. The latter controlled marriage patterns; access to hunting, fishing, and grazing grounds; dispute settlement, and if necessary, organization for war. For the latter purpose, temporary chiefs were accepted.

The annual flow of furs from western Siberia grew steadily and soon added substantial amounts to the tsar’s revenues and generated considerable wealth for private Russian hunters and trappers. Pushed by depleted stocks of sable in western Russia, and encouraged by rising demand from Moscow, unofficial hunters and trappers, the promyshlenniks, and their hired armed guards moved restlessly eastward along the rivers. With extraordinary speed, the fur hunters dashed across Siberia in just a few short decades.9

CENTRAL AND EASTERN SIBERIA

Russian expeditions plunged eastward into the vastness of central Siberia along the three great tributaries of the Yenisey: the Lower, Central, and Upper Tunguska Rivers. In the 1620s, a band of cossacks followed the Lower Tunguska 2,400 kilometers to its source. There they found themselves on the bank of the upper Lena River. From its source near the western shore of Lake Baikal, the Lena River flows 4,400 kilometers northeastward to its great

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7. Other, much smaller groups were the Selkups, who spoke a Samoyedic language and lived in the southeastern part of western Siberia along the tributaries of the Ob River, and the Kets, found in the Yenisey River valley.
8. Ibid., 16–17.
9. Huttenbach, “Muscovy’s Penetration of Siberia.”
delta on the shore of the Arctic Sea. The cossacks did not hesitate but sailed downstream (north) to explore the Lena. In 1632, they founded Yakutsk in the middle reaches of the Lena, and 720 kilometers further north on the lower Lena they built the fort of Zhigansk. The next year, the Russians reached the Lena Delta and the open sea. By the end of the decade, the cossacks had explored and built several forts on the Vilui River, the Lena tributary that flows eastward across central Siberia from its source near the Lower Tunguska. As soon as the Russians were established on the Lena, they made their by now customary demands on the indigenous peoples for ritual submission and payment of iasak in furs.

Midway between the Yenisey and the Lena Rivers, the sparse fir, spruce, and cedar forests of the western Siberian taiga ended. Spruce, for example, is unable to survive temperatures below minus thirty-eight degrees centigrade. From that point eastward, larger, denser forests composed of larch and pine species covered central and eastern Siberia as far as the Pacific Coast. The European larch (Larix decidua or Larix europaea) at maturity stands twenty-four to forty-two meters tall. The larch is a conifer, has reddish gray bark, and sheds its short, needlelike leaves in the fall as deciduous species do. The Scots pine (Pinus sylvestris) attains a height of twenty to forty meters, has a straight trunk as much as a meter in diameter, red-brown bark, and blue-green foliage at the extremities.

Two distinct peoples—the Tungus, or Evens, and the Yakuts—inhabited the 5 million square kilometers of larch and pine taiga lands comprising central Siberia. The territory and population of the Altaic-speaking Tungus, of whom there were an estimated thirty-six thousand, were by far the largest. The Tungus were originally forest dwellers in the central Siberian larch forests; they had dispersed far from their presumed homeland near Lake Baikal. They were highly mobile hunters and herders of domesticated reindeer. They used bows and arrows, protective metal armor and helmets, and iron knives and swords. They were organized into twenty or more named tribes, or clusters of clans, without hereditary chiefs.10

The Yakuts were a Turkic people who spoke a unitary language and are thought to have migrated from the open steppe to their compact territory in the lowlands on the upper Lena River where it intersects with the Aldan River. Here, larch forests were interspersed with meadowlands. The Yakuts, who maintained large herds of horses and cattle, practiced short-distance seasonal transhumance by moving with their animals to summer grazing lands. They were organized into a single grouping of independent clans. Each clan had a hereditary chief and shared in a common language for all Yakuts. Each clan had control over communal grazing lands and hunting and fishing grounds. At contact with the Russians, the well-organized Yakuts

seem to have been in the process of expanding by colonizing new lands and assimilating Tungus and other splinter ethnic groups into their domain.  

The fort and town of Yakutsk, built in the Yakut homeland on the Lena River, quickly became the leading Russian administrative and trade center for central Siberia. In just over a decade, by 1650, the town and its hinterland had two thousand Russians in residence. Confiscations of Yakut horses and cattle provided both mobility and meat to the colonists. Prosperous fur traders trekked to Yakutsk from European Russia to obtain the abundant furs of the region directly at the source. The traders tended to employ private Russian trappers rather than attempt to buy furs from the Yakuts or Tungus, who were overly burdened with *iasak* demands. The stream of furs sent on the yearlong river journey to Moscow increased steadily in volume.  

A lengthy report dated September 6, 1633, by Petr Beketov, commander of a hundred-man company (*sotnik*), to Tsar Mikhail Fedorovich describes the founding of Yakutsk. The report nicely illustrates the mode and scale of Siberian conquest. According to Beketov’s narration, the military governor of Yeniseysk sent him with a company of musketeers and hunter-traders (*promyshlenniks*) on “distant service” to the Lena River with supplies for one year.  

The expedition actually took two and a half years, during which Beketov and his followers “suffered every deprivation,” but “brought under your Sovereign Tsarist mighty hand on the Lena River many diverse Tungus and Iakut lands.” From their inhabitants, Beketov succeeded in collecting *iasak*, or tribute in furs, including “61 forties and 31 sables [2,471 pelts], 25 Iakut sable *shubas* [coats], 10 sable *plastinas* [pelts sewn together,] 2 beavers, 7 red fox, and one red fox pup.” The remainder of the report details battles with Yakut chiefs, their ultimate submission to him, the tribute exacted, and the hostages taken, as well as forts constructed and manned. At no time does Beketov appear to have had more than one hundred men under his command, and he frequently mentions sorties with far fewer participants.  

In September 1633, Beketov built a fortification (*ostrog*) at Yakutsk on the Lena River “in the heart of the whole Iakut territory.” From here, he sent out parties to demand submission by the various Yakut princes:

11. Ibid., 55–57.  
12. Ibid., 61.  
14. Ibid., 1:137. Sable and other furs were generally counted and packed in stacks of forty compressed between two boards. Forty to fifty sable pelts were required for a coat.  
15. Ibid., 1:144.
On November 8 [1633], in accordance with the Sovereign’s ukas, I, Petr[,] sent servitors on the Sovereign’s service from the new ostrozhek on the Lena River to the Iakut prince Ineno-Oiun to collect iasak for the sovereign. The servitors traveled four days to reach Ineno-Oiun[,] and when they returned they reported [that] . . . this Iakut prince did not want to come under the Sovereign’s mighty hand nor go to the ostrozhek, and he and his people began to attack the servitors. The servitors invoked God’s mercy and fought them, and with the luck of the Sovereign they killed many Iakuts in that foray and shed their blood for the Sovereign Tsar and Grand Prince Mikhail Fedorovich [sic] of all Russia.

In the struggle they captured Prince Ineno-Oiun himself, and other . . . [missing]. In this battle the servitor Prokopii Vasilev was wounded by an arrow in his leg. They brought Prince Ineno-Oiun to the ostrozhek, and I, Petr, took him into the office and asked him why he had opposed the Sovereign Majesty. . . . The Iakut princeling said they had shot arrows at the servitors out of ignorance, that the Sovereign’s men had never come to them before and that they had never even heard about the Sovereign Majesty. He said he hoped the Sovereign would have mercy now and forgive them for their transgressions. . . . I brought Prince Ineno-Oiun to take the oath, and he swore that he and all his people would serve loyally under the Sovereign’s mighty hand for all time, and that they would pay iasak.16

The encounter closed when the Yakut prince handed over twenty sable pelts as his first payment of tribute to the tsar.

The lure of more furs sent Russian frontiersmen pressing on to the east with scarcely a pause. As the nineteenth-century tsarist historian Slotsov puts it, “The Iakutsk authorities, drawn to yasak [iasak] as surely as a magnet to the pole, went on sending out their scouts to track down any human retreat which had not yet been subjected to yasak.”17 Yakutsk, two-thirds of the way from the Urals across Siberia, became the jumping-off point for further Russian exploration and conquest. From Yakutsk, there were two onward routes. The first marched southeast 720 kilometers through mountainous country inhabited by Tungus peoples to the Pacific Ocean. In 1648, Russian contingents founded two coastal settlements, Okhotsk and Tauisk, on the shores of the Sea of Okhotsk.

The second, far more arduous, route to the northeast extended 2,400 kilometers across forest, tundra, and mountains as far as the Chukchi Peninsula thrusting out into the Bering Strait. The route followed an intricate pattern that made optimal use of the great rivers of the northeast. From Yakutsk, the Russians trekked overland to the source of the Yama River, took boats north along the Yama as it flowed to the Arctic, left the middle Yama for an over-

16. Ibid., 1:145.
17. Quoted in Forsyth, A History of the Peoples of Siberia, 75.
land trek to the source of the Aiazeya River, built boats and moved with the current as it flowed eastward, left the Aiazeya at its northward bend, trekked to the lower Kolmya River, floated with the northerly current of the Kolmya to its intersection with the Anyui, pushed against the current upriver eastward to the Anyui’s source, and then trekked overland to float along the upper Anadyr River as it flowed eastward to the Bering Sea. As early as 1649, a Russian expedition traversed this route and founded the town of Anadyrsk on the upper Anadyr River, 300 kilometers from the coast. By the mid-1600s only the Chukotsk and Kamchatka Peninsulas were left undisturbed.

Along this northeastern route, the Russians encountered a new set of indigenous peoples, whose population probably did not exceed forty thousand persons. First, they discovered a neolithic people they called collectively Yukagirs. From west to east, these were the Khoromos, Yandins, Uyandins, Shormobas, Omoks, Lawrens, Chuwans, and Anauls, who all spoke the same language, one unrelated to any other known human language. Each named group consisted of clans or patrilineages named after a single male founder. Under the guidance of a powerful shaman, the Yukagirs worshipped the clan ancestor.

These groups divided into the “reindeer Yukagirs” and the “settled Yukagirs.” The reindeer Yukagirs, who had no domesticated reindeer, moved with the wild reindeer herds of the region from the taiga forests in May as they grazed the tundra vegetation, and they followed the herds back toward the forests in August each year. When the herds congregated for mating in the fall, the Yukagirs organized killing drives and slaughtered great numbers for meat and hides. The “settled Yukagirs” lived in log cabins or lodges along the rivers and subsisted by fishing and hunting elk. The Yukagirs, like nearly all peoples in Siberia at the time, believed strongly in the notion of spirit guardians or “master” spirits of natural phenomena. The spirit guardians of the reindeer and the elk in particular had to be propitiated by various rites and rituals.

Further to the northeast, where the Russians reached the mouth of the Kolmya River, they first encountered settlements of Asiatic Eskimos along the frozen shore. The Siberian Eskimos, like their counterparts across the Bering Strait, were a coastal, winter people whose life was consumed with hunting seals, walruses, and whales. Interspersed among the Eskimos were the Chukchi and Korak peoples. Some had adopted a life of sea hunting virtually identical to that of the Eskimos and lived in permanent coastal settlements. Others, who herded reindeer, spent the year in a transhumance pattern similar to that of the Yukagirs. The Chukchi and Korak peoples were the dominant inhabitants of the eponymous Chukchi Peninsula, the easternmost extremity of Siberia, which thrust into the Bering Strait.

18. See ibid., 134, map 7.
FURS, TRIBUTE, AND THE RUSSIAN STATE

Moscow’s modest investment in ongoing Siberian conquest was more than amply repaid. The quantity of sable and other furs that flowed to Moscow from the new lands became one of the most valuable liquid assets of a cash-starved state. Devoid of domestic gold- or silver-producing mines, and lacking in much exportable agricultural and industrial production, the early modern Russian monarchy relied on the sale of furs to obtain coined and uncoined precious metals for its treasury. The tsar also used furs from his stores to reward exceptional service by his officials, nobles, and clergy; to make diplomatic gifts; and to make special purchases abroad of strategic or luxury goods. Furs were not used to pay salaries or for other ordinary disbursements within Russia, because the tsar wanted to realize profits from the export price in Moscow.

Some thirty elite merchants in Moscow, appointed by the tsar, purchased furs, usually of the best quality, from royal stores and were permitted to export these furs to foreign markets. Foreign merchants arriving in Moscow had to give first refusal to the tsar’s agents for their goods. Any purchases made from their stocks were paid in furs.

Moscow set up a network of customs posts at the border of Siberia, in every ostrog, and at portage points and other strategic locations along the main Siberian river routes. The regime recruited heads of customs posts from older Russian fur-trading towns west of the Urals, such as Ustuig, Vologda, Sviazhsk, Tot’ma, SolVyehgodsk, and Moscow itself. These were “sworn men,” or responsible notables with fur-trading experience, elected by the assemblies of these towns and sent for one- to two-year terms to Siberia. They were independent of the military governors. They were responsible for appropriating the best one of every ten pelts carried by traders or hunters, for storing these furs, and for shipping them to Moscow along with the tribute furs demanded from Siberian native hunters. Traders entering Siberia with goods for sale were charged a similar 10 percent tax, paid either in money or in kind.

Total yearly state revenue from Siberian furs grew steadily, from twelve thousand rubles in 1589 to a plateau of one hundred thousand rubles per year or more for the middle decades of the century, 1640 to 1680; the figure declined to an average annual return of seventy-eight thousand rubles in the 1690s. These very large sums, calculated on the original Siberian price of

furs, not the export price, constituted between 7 and 10 percent of the state’s rising income until the 1680s, when fur revenues began to drop off. Fur revenues defrayed total state expenditures in Siberia, with a comfortable margin to spare. By far, the greater portion of pelts taken by native hunters was appropriated by the tsarist state—not purchased by private traders.

The primary duty of Siberian military governors was to collect the *iasak*, levied in furs on every fit native Siberian adult male between eighteen and fifty years of age. Russian settlers were exempt from this tax, derived from an older Tatar practice that connoted subordination and defeat. Each group of Siberian natives that had submitted to the tsar was forced every year to pay the stipulated number of good-quality unfinished furs, preferably sable, which was the standard. In theory at least, each *iasak* payer should have hunted and trapped the furs himself. If sable pelts could not be obtained, the state would accept marten, beaver, otter, fox, ermine, lynx, wolf, or even squirrel at fixed ratios to sable.

The number of sables to be paid varied by district and over time. Originally set high, at ten to twelve sables per man per year, by the early 1600s the average was closer to five pelts. By midcentury the rate had dropped to three pelts per man in western Siberia. The state pragmatically adjusted its demand to the realities of declining sable populations.

Tsarist officials identified and fixed the territory occupied by each distinct ethnic and linguistic group as a tax district, or *volost*. Contiguous *volosts* were grouped into larger units with a Russian *ostrog* at the center that served as seat for the military governor. At the time of initial submission, as illustrated in the Beketov document quoted above, the Russians took two measures to ensure payment of the *iasak*: first, they exacted a solemn oath of allegiance to the tsar that included a commitment to pay the *iasak*; and second, they took one or two of the leading men from each *volost* hostage and kept them captive at the *ostrog*. Periodically the Russians exchanged their hostages for new ones. The Russians provided food for hostages, who were confined, often chained, and guarded to prevent escape or rescue. Nonpayment of the *iasak* by their group meant indefinite captivity or abuse and even death.

After the hunting season, by late fall and early winter, delegations of Siberians came from nearby *volosts* to the *ostrog* with the required number of furs to pay the *iasak*. They also presented additional furs to the military governor and his staff as a gift (*pominki*) in honor of the tsar. *Pominki* payments seem to have been retained as a personal perquisite by the *voevody* and his...

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22. Ibid., 120.

23. Ibid. For 1699, fur receipts in Siberia were 74,982 rubles against total expenditures of 54,086 rubles. The state collected an additional 56,538 rubles in money, so that the Siberian surplus that year was actually 77,434 rubles. Therefore, the fur revenues were almost entirely profit to the state.
staff. Before the natives handed over their *iasak* furs, the military governor was obliged to display the hostages from that *volost* as evidence of their good health and condition. Finally, the Russians feasted the natives with food and strong alcoholic drinks and gave them gifts. The latter consisted of beads, grain, iron knives and axes, and cloth—but not guns, ammunition, or alcohol. These gifts, although much anticipated by the *iasak* payers, were scarcely equivalent to what the Russians would have had to pay in barter if the Siberians were free to trade rather than forced to pay a tax. If any furs remained after the official payments, the governor or his staff usually offered to buy the surplus either for the treasury or for their private accounts.

To make collections from remote *volosts* or from some of the more mobile nomadic groups, especially in eastern Siberia, the Russians resorted to erecting networks of small blockhouses (*zimov’e*) in regions distant from the primary towns. Official parties traveled to collect the *iasak* at these points. Around 1629, for instance, the *iasak* collectors sent to certain nomadic tribes from Mangazeya (on the Taz River) would enter a *zimov’e* (usually a simple cabin with a stove adapted for wintering) and there await the natives with the furs. The natives, two or three at a time, would approach the place and throw the furs through the window. On their side of the window, the *iasak* collectors would show the hostages, whom they had brought along for this purpose from the *ostrog*, and throw back some beads, tin, and bread. Both sides regarded each other with extreme suspicion, because, as is stated in one of the *voevody*’s reports, “the natives are afraid of being seized as hostages, while the serving men are afraid of being murdered.” As this description suggests, *iasak* collection by tsarist officers was an adversarial, often brutal, expropriation of the products of the hunt from the weak indigenous peoples of Siberia. They hunted sable and other furbearers to avoid punishment, not for the incentives of trade goods and profit.

Submission to the Russians immediately forced Siberian natives into a new mode of hunting, carried out under duress, with a new set of priorities that designated sable as the most desirable prey animal. The *iasak* could be paid most efficiently by trapping or killing sable, followed by other furbearers according to the decreasing value assigned by the Russians. The *iasak* distorted the long-standing hunting patterns and the prey selections of the Siberians. The Khantys, Mansis, Samoyeds, Yakuts, Tungus, and Yukagirs had previously taken furbearers and either used or traded their furs, but not with the same desperate intensity. The energy they had expended in killing animals for meat was diverted to killing furbearers—especially sables.

The Siberian sable (*Martes zibellina*) shares many characteristics with the European pine marten (*Martes martes*) and the American marten (*Martes*  

Sables occur across 7 million square kilometers of Siberia’s cold taiga forests, from the Dvina River eastward to the Pacific Coast. Sables are superbly equipped to withstand cold temperatures, with adaptations such as furred feet and use of protected microhabitats. However, they cannot thrive in areas with high summer temperatures or in broadleaf forests. It is likely that their range increased somewhat to the south with the fall in temperature during the early modern centuries.

These animals are small, forest-dwelling carnivores; males weigh between .8 and 1.8 kilograms and females reach .7 to 1.5 kilograms. They have slender, long, supple bodies and elongated tails. Their winter fur consists of long, silky, lustrous guard hair with dense underfur. Their coat colors vary from light brown to dark brown. Their most important prey are voles (Clethrionomys rutilus or Clethrionomys gapperi), but they routinely kill and eat weasels (Mustela sibirica and Mustela nivalis); mice (Arvicolidae); pikas; small, tailless hares (Ochotona spp.); chipmunks (Eutamias sibericus); squirrels; the Siberian jay and other birds; and spawning salmon. In winter, sables will even kill and eat grouse (Tetraonidae) sheltering in snow holes and, in deep snow, musk deer (Moschus moschiferus) ten times their weight. They also gather and consume pine nuts from the Siberian pine species (Pinus sibirica and Pinus pumila), honey, and many types of bush berries and fruits. Adult sables are energetic hunters and foragers who cover long distances as they hunt by day and night.

Sables are solitary nesting and burrowing animals. Females select brood or maternal nests to occupy through much of the spring and into the summer. Both adult males and females in the summer and autumn move around to a number of nests and resting sites. Both sexes occupy permanent nests from December to April. These consist of sometimes lengthy burrows through the snow leading to round chambers usually placed under the trunk or roots of a tree.

The animals have few natural predators and may live up to fifteen years. Reproduction is on an annual cycle. Mating takes place from June to August, and birth of one to five kits per litter occurs in April or May. The total gestation period is actually 250 to 300 days because of delayed implantation; the actual development of the embryo requires only twenty-five to forty days.

27. Ibid., 248.
The young kits wean at seven weeks and attain adult body weight by five months.

Sables are fiercely territorial and sedentary animals. Barring fires or other disasters, they spend their entire lives in a well-defined range, within which they annually vary their nests and hunting territories. As the Russian biologists Solokov and Belousov comment, “The area inhabited by an individual sable is relatively small, 2–3 intermingled wood mounts, the heads of 2–3 neighboring rivulets, often a mountain taiga stream whose inflows drain an area of about 22–28 square versts [23.5 to 29.9 square kilometers]—this is the area where it [the sable] is born, lives and dies.” This may be an extreme statement of the sable’s range, since other reports suggest that density may be as high as 1.5 sables per square kilometer in some pine forests and reduced to 1 animal per 25 square kilometers in larch forests.

Sables were especially vulnerable to human predation during the winter when their burrows and nests were visible and their inhabitants could be readily caught and killed. However, collecting enough pelts to meet the *iasak* quota meant that Siberian hunters had to trek long intervals between one sable home range and another. Filling the annual quota for a single hunter killed off the sable population in areas measuring tens to hundreds of square kilometers. Because sables were solitary, territorial, sedentary, and slow-reproducing animals, once gone they were unlikely to be replaced by others. Each year, meeting the *iasak* required travel over wider tracts of territory with steadily growing stress and greater certainty that the quotas could not be met.

**RUSSIAN HUNTERS AND TRADERS**

Important as the state’s tax demand on the native Siberian hunters was, however, Moscow’s collection of sable and other furs did not come close to the furs taken by private traders who employed Russian trappers in Siberia. For example, in 1631 the tsar’s fur treasury sent out furs worth 42,000 rubles: 18,000 rubles from tolls and 24,000 from the *iasak* on Siberian natives. These data suggest that, in that year, the private Russian traders and hunters produced furs worth 180,000 rubles, or seven and a half times the value of the 24,000 rubles’ worth of furs paid in *iasak* by Siberian native hunters. Of the total 204,000 rubles’ worth of furs exported from Siberia in that year,
state-owned furs were valued at 42,000 rubles (20.6 percent) and private traders’ furs totaled 162,000 rubles (79.4 percent).

Native hunters faced direct competition from the Russian trappers who poured into Siberia. Russian merchants traveled themselves or sent their agents to Siberia to engage in a brisk private trade, but the indigenous peoples seem to have had little part in it. Many private Russian hunter-traders (promyshlenniks), whose hunting grounds had been depleted, crossed the Urals to take furs from the rich Siberian hunting grounds. Some came as members of expeditions financed and organized by traders; some came in self-financed groups of hunters. Most were experienced hunters whose families and villages had long been involved in commercial hunting in the Russian north. Areas such as Pomorye, the region surrounding the White Sea, prospered from profits made by its hunters in Siberia. Customs records suggest that 2,000 or more Russian hunters moved into Siberia each season. Large numbers moved beyond the Lena River into eastern Siberia. For example, in 1642, 839 Russian hunters heading east passed through Yakutsk.32

In Siberia, fur hunting and trapping took place in winter, when pelts were generally in their best condition. Young sables born in March and April each year had grown sufficient hair on their coats by the following winter to be worth taking. Hunting parties traveled in boats on the rivers to the hunting grounds before the winter freeze. In contrast to most Siberian natives, who hunted furbearers with bow and arrow, the Russians adopted trapping methods on a large scale.

At the onset of winter, Russian hunting bands divided into two- or three-man teams with agreed-on territories. They built numerous trap pits that consisted of deep holes dug in the ground surrounded by a palisade of six-foot stakes. At a single narrow entrance, they suspended a board baited with fish or meat. As soon as the animal alighted on the entrance board, the board turned and threw the animal into the pit. Each group made dozens of traps that they checked regularly. The hunters bludgeoned any animals found, reset the traps, skinned their prey, and smoked the pelts. An alternative method involved nets and dogs. The hunter tracked individual sables in the snow to their nest in the ground or in a tree, put a net around the site, and waited—sometimes for a full day—for the sable to emerge and become entangled in the net. Then the dog would kill the trapped animal. At times, when confronted with groups of sable holes, hunters used smoke to drive the sables into the open.35

Such methods as these produced massive harvests when applied by large numbers of Russian hunters. In newly opened tracts, such as the Lena River area in the 1640s, each man in a hunting party might take as many as 120

33. Ibid., 156–57, supplies a description of methods from the early 1700s.
sables in a season. Before the town burnt in 1643, Mangazeya on the Taz River was the dominant internal fur market for Siberia. In 1641, those private Russian traders returning to European Russia passed through customs at Mangazeya with 62,882 sable furs. Returns for the same year from Yeniseysk, to the south, amounted to 36,030 sable pelts carried by traders or hunters. In 1702, the tsarist regime did a financial survey that produced total figures for pelts exported from Siberia at the end of the century. According to this record, in 1698 the total number of pelts sent to European Russian towns was 256,837, and for 1699 the number was 489,900. Throughout the seventeenth century, a plausible Siberian harvest—including iasak and private hunting—would have ranged between 200,000 and 300,000 sable pelts every year.

Slaughtering fur-bearing animals in such numbers assuredly depleted animal populations. Since market demand and prices for Siberian furs increased steadily throughout the seventeenth century, it was cost-effective for many Russian hunters to search out hunting grounds bypassed in the initial rush eastward. They were able to obtain profitable harvests in areas on the tributaries of the great rivers that still had sizeable animal populations. It was this steady process of hunting out all available areas behind the moving frontier that bolstered the total annual catch and helped exhaust the fur-bearing stocks in Siberia.

State pressure on indigenous hunters did not relent in spite of protests and declining iasak returns. Between the 1620s and 1690s, iasak collections from western Siberia declined by about 45 percent. In 1638, Tsar Mikhail Federovich noted, “The voevodas [military governors] write to the Sovereign from Siberian towns that they cannot obtain any more furs. They report that these Siberian towns and ostrogs are experiencing a depletion of sables and other furbearing animals because the iasak-paying forest dwelling natives have trapped all the available animals.” The tsar’s solution for that problem was to send his officers eastward to the Lena River area. By the 1690s, sables had vanished as far east as the vicinity of Yakutsk on the Lena River.

During the 1690s, the Chinese market for furs, with its nearly insatiable

34. Ibid., 98.
36. R. H. Fisher, The Russian Fur Trade, 180. In 1698, the tithe equaled 16,800 and the iasak 105,837; in 1699, the tithe was 42,200 and the iasak was 109,900.
37. Richard Hellie, “Furs in Seventeenth-Century Muscovy,” Russian History 16 (1989). See p. 187, fig. 12, for the north and fig. 13 for Siberia. Prices at Moscow rose slowly but steadily throughout the century. See p. 186, fig. 11.
demand, opened to Russian fur traders. The territorial interests of tsarist Russia and Qing China collided in the Amur River valley. China prevailed and forced Russia out of the Amur Valley in a dispute settled by the Treaty of Nerchinsk in 1689. One article of the treaty provided that private traders from each country could trade in each other’s territory. The Chinese market paid high prices for all varieties of Siberian furs. Ermine and wolverine commanded better prices than sable or fox—although the latter sold well. In return, traders could bring back porcelain, silk, gold, silver, tea, precious and semiprecious stones, and ivory.\(^{41}\) Given the distances involved, Siberian furs were the only commodity available to Russia to exchange for these highly prized goods.

In the late 1690s, Peter the Great, anxious to engross the potential profits of the China fur trade and concerned by the state’s inability to obtain the finest-quality sables as the supply decreased, imposed a state monopoly on all export sales of furs from Russia and on all sable and fox furs in the domestic market. This new arrangement simply shifted the source of pressure and did not inhibit private Russians from hunting for furs. The new monopoly ended only in 1762, by which time dwindling harvests had reduced the monopoly’s importance for state revenues.

Overall, Russian and foreign demand for sable drove Siberian expansion. Of the furs, sable was most heavily valued and traded. Over a 125-year period for which information survives, sable accounted for just under 95 percent of the total monies paid for furs in sales at Moscow.\(^{42}\) The Moscow price of sable pelts, that benchmark of the Russian fur trade, rose steadily at a rate of 1.68 percent per year between 1600 and 1719. As Richard Hellie comments, “Certainly, this constant rise in the price of sable reflects relentless, ruthless trapping, without the slightest notion of conservation, of the Russians’ most valuable fur crop.”\(^ {43}\)

### CONQUEST AND SETTLEMENT

Why did the Russians prevail so quickly and easily over such a vast territory? First, and perhaps most important, the indigenous peoples were few and poorly organized. A generally accepted official Russian count for tribute purposes puts the indigenous population of all Siberia at only 227,000 in the

\(^{41}\) Ibid., 225.

\(^{42}\) Hellie, “Furs in Seventeenth-Century Muscovy,” 69–70, and table 4.8. All sable transactions totaled 2,469 (58.9 percent), from 4,191 total fur transactions. Total monies paid for sable in those transactions amounted to 1,631,047 rubles (94.7 percent) of a total expenditure of 1,723,205 rubles for furs.

\(^{43}\) Richard Hellie, The Economy and Material Culture of Russia, 1600–1725 (Chicago: University of Chicago Press, 1999), 62, fig. 4.4.
1600s.\footnote{Forsyth, \textit{A History of the Peoples of Siberia}, 71, table 5.1.} Even allowing for substantial underestimation by the widely scattered Russian officials, it is doubtful that the total early modern Siberian population exceeded 300,000 persons.

For the Siberians, who were organized into hundreds of discrete groups that lacked centralizing state structures, unified, large-scale effective resistance to the Russians was impossible. With technological capacities that at best encompassed some use of iron and steel, their weaponry could not match Russian firearms. To varying degrees, each group fought. Some groups fought desperately and some occasionally won victories, but overall they could not defeat the Russians. Both resistance and flight remained futile.

New diseases also weakened and demoralized the indigenous peoples of Siberia. The worst of these was smallpox “because of its swift spread, the high death rates, and the permanent disfiguration of survivors.”\footnote{Alfred W. Crosby, \textit{Ecological Imperialism: The Biological Expansion of Europe, 900–1900} (Cambridge: Cambridge University Press, 1986).} Smallpox first reached western Siberia in 1630. In the 1650s, it moved east of the Yenisey, where it carried away up to 80 percent of the Tungus and Yakut populations.\footnote{James Forsyth, “The Siberian Native Peoples before and after the Russian Conquest,” in \textit{The History of Siberia: From Russian Conquest to Revolution}, edited by Alan Wood (London: Routledge, 1991), 82–83.} In the 1690s, smallpox epidemics reduced Yukagir numbers by an estimated 44 percent. The disease moved rapidly from group to group across Siberia. Death rates in epidemics reached 50 percent of the population. The scourge returned at twenty- to thirty-year intervals, with dreadful results among the young. Venereal disease, called “the Russian disease” by the natives, spread widely as Russian intruders engaged in sexual relationships with native women. Venereal disease sharply reduced fertility and sent indigenous populations into decline. Other, airborne infections such as measles hit hard at the Siberians. Finally, alcoholism seems to have taken hold in populations that had not previously known its use, and it contributed to an increasing cultural and social malaise.\footnote{Ibid., 82.}

Because the indigenous populations were so weak, the manpower required to defeat them was relatively low. Russian exploration and conquest was the work of small parties of audacious private trappers and state service-men. Groups of only 20, 30, or 50 tsarist musketeers or cossacks routinely defeated larger forces of Siberians. Moscow sent relatively few men to Siberia. When, in 1696, the tsar was strapped for manpower by the race into central Siberia, he doubled the Siberian cadre of troops and officials, and the total number rose to a paltry 5,004 men (from 2,735 serving a decade earlier).\footnote{Lantzeff, \textit{Siberia in the Seventeenth Century}, 67.}
The hunt for furs in Siberia

After the initial phase of conquest and fur trading, Russian settlers did find their way to even the most distant and remote parts of Siberia. Apart from state officials and soldiers, hunters, and trappers, Siberia began to draw peasant migrants. Parts of the southern taiga forest in western Siberia lent themselves to sedentary plow cultivation. These attracted Russian pioneer settlers, who clustered near the Ural Mountains in Tobolsk district. By 1670, there were 7,586 peasant farmsteads with some 34,000 settlers occupying land after cutting and burning the taiga forest in that region. 49 Another area of peasant settlement and grain cultivation was located on the upper Ob River around Tobolsk.

In central and eastern Siberia beyond the Yenisey River, large areas under permafrost discouraged widespread Russian peasant migration. Some agricultural settlement occurred around Yeniseysk in the 1620s, in areas of black earth around Krasnoyarsk in the 1630s, and in pockets of good soil along the Angara and Ilim Rivers in the 1650s. 50 Officials imported many of these peasants to grow grains to feed their settlements. Native Siberians’ resentment over peasants grabbing and clearing their hunting grounds found expression in numerous complaints and even violent incidents.

The Russian population of Siberia grew steadily. The number of male peasants rose from 49,000 in 1678, to 173,912 in 1719, to 365,050 in 1762, and to 600,368 in 1811. 51 From these data, we can do a crude estimate of the growth of total agricultural area in Siberia. If each peasant pioneer occupied 20 hectares with his household area, arable land, hayfields, and woodlots (somewhat more than the 10–17-hectare average claimed by peasants in the Russian heartland), the totals for those years are as follows: 9,800 square kilometers in 1678, 34,782 square kilometers in 1719, 73,010 square kilometers in 1762, and 120,074 square kilometers in 1811. Although even the 1811 total is less than 1 percent of the total land area of Siberia (which covered 13.5 million square kilometers), in absolute terms the area of agricultural settlement was significant. Especially in western Siberia, Russian pioneers burnt and cleared forests, plowed for grain cultivation, and grazed their livestock—and thereby altered the existing habitat.

Impacts on Indigenous Peoples

As animal populations dropped in eastern Siberia, the living standards of the Tungus, Yakuts, and other eastern groups also worsened. Disease, the tsar’s continuing demand for iasak payment in sable furs, and Russian brutality and

50. Ibid., 64.
corruption all exacted a heavy toll on native populations across Siberia. A 1744 memorial written by Heinrich von Fuch, a political exile with extended experience among the Yakut and Tungus peoples of northeastern Siberia, eloquently protested their hardships suffered as furs became harder to harvest. When von Fuch departed Siberia, he “promised the Iakuts and Tungus, who had petitioned me, that I would report these conditions to Imperial authorities.”

He points out, “At first there were plenty of furbearing animals there, but now there are no sables and not many foxes in those Iakut lands, from the shores of the [Arctic] ocean all the way south to the great Lena River.”

Moreover, contagious disease had devastated the Siberians—“when they are stricken with smallpox they die like flies.” Even more devastating was the inflexibility of Russian officials who forced survivors to pay the iasak owed by their dead relatives. According to von Fuch:

I personally knew several wealthy Iakuts who had to pay for four or five of their dead relatives. They were so impoverished that before I left they had to forfeit all their livestock and horses, and sometimes pawn their wives and children [to Russian officials]. Some of them hang or drown themselves. This is a natural consequence because a local native works very hard in the forest all winter and suffers hunger and cold until he traps enough to pay his iasak and make gift[s of furs] to the iasak collector and his assistants. If in addition to this he is forced to pay the iasak for those who have died or who have run off, first he loses all his livestock, then his wives and children. He cannot hunt without horses, so he commits suicide or runs off. Then the collectors find his relatives and force them to pay. The collectors take everything until the natives are destitute.

Von Fuch recommended that the iasak payers be permitted to submit fixed numbers of squirrel and wolverine pelts instead of the diminished sable and fox.

Greedy Russian officials exacted large illegal bribes and gifts from the natives that were often equal to the amount of the iasak paid. If officials were not paid what they demanded, they “then take the native’s wives and grown children to work for them. They also take the nets, axes, tools, boats, bows and arrows. Sometimes they take the clothes right off the backs of the natives, and beat and torture them secretly in their iurts [encampments].” Perhaps most deplorably, according to von Fuch, the native peoples had no recourse, no representation, no means by which their ill treatment could be protested.

52. Ibid., 187.
54. Ibid.
55. Ibid., 1:173.
effectively. The military governors were invariably influenced by their local native interpreters, who benefited from the existing corrupt system.

The native Siberian population did not disappear, in spite of Russian brutality and the ravages of smallpox and other diseases. For western and eastern Siberia combined, the total native population recorded in 1790 was 303,395 persons.\textsuperscript{56} The 1790 total is slightly more than the estimated pre-conquest population of 227,000. Part of the increase may be accounted for by the inclusion of a growing number of mixed-race, Russian-indigenous persons counted as Siberians by officials.

KAMCHATKA AND THE PACIFIC

The search for new sources of fur led the Russians to further eastward advances in the first half of the eighteenth century. In 1696, a cossack commander, Vladimir Atlasov, led an overland expedition out of Anadyrsk fort on the Anadyr River in northeast Siberia on an eighteen-hundred-kilometer trek south into the Kamchatka Peninsula. Two years later, Atlasov returned with 3,640 sable pelts taken as \textit{iasak} from the Itelmen—the natives of Kamchatka—or trapped by members of the expedition. The numerous Kamchatka sables were larger than ordinary Siberian varieties, and their furs brought higher prices at market. The Russians soon returned to obtain more furs. Over the next quarter century, a steady stream of Russian cossacks followed the long, arduous route to Kamchatka, forced the Itelmen to submit to the tsar in time-honored fashion, and exacted \textit{iasak}.

The Kamchatka Peninsula is one of the most unstable regions on earth, with its twelve active volcanoes and the earthquakes and tidal waves associated with frequent volcanic eruptions. In the 1690s, the birch and larch forests of the Kamchatka River plain supported a sizeable human population, perhaps thirteen thousand Itelmen people (called Kamchadals by the Russians). These Paleo-Siberian language speakers used bone and stone implements, hunted reindeer, fished salmon, hunted seals, and carried out modest horticulture. The Itelmen were a warrior people accustomed to tough internecine warfare among themselves, who lived in villages fortified by palisades to protect themselves against interlineage raiding.\textsuperscript{57}

The lengthy circuitous land route to Kamchatka was made hazardous by attacks from the northern Korak peoples, who had obtained firearms by this time. Lack of a defined sea route impeded exploitation of the peninsula’s resources. Finally, in 1716–1717, after several failed attempts, the cossack Kozma Sokolov successfully navigated from Okhotsk to the peninsula, and

\textsuperscript{56} Forsyth, \textit{A History of the Peoples of Siberia}, 115, n. 14.
\textsuperscript{57} Ibid., 132–33.
the land route was virtually abandoned. Okhotsk became Russia’s chief Pacific port until the mid-nineteenth century.\textsuperscript{58}

Apparently unchecked by the imperial authorities, the cossacks treated the Itelmen with contempt and cruelty that went well beyond the usual Russian practice in Siberia. They extorted furs far in excess of the numbers specified for payment of the iasak and brutally punished those Itelmen who did not meet their demands. If the Itelmen could not hand over the demanded furs, the cossacks seized and enslaved Itelmen women and children. In 1724, the Russians at the Upper Kamchatka and Big River forts possessed among them 209 Itelmen slaves.\textsuperscript{59} The cossacks also forced Itelmen to use their sled dogs and canoes to transport seaborne supplies to Russian forts.

Itelmen resentment against cossack brutality caused numerous small-scale violent attacks that the cossacks punished ferociously. This ongoing hostility triggered three large-scale rebellions, in the periods 1706 to 1713, 1731 to 1732, and 1741 to 1742. Even though the Itelmen acquired firearms and developed effective war chiefs, they did not prevail. Punitive campaigns and massacres of the Itelmen followed each of these uprisings. Despite the unrest, the flow of sable furs from Kamchatka continued and the sable population declined steadily. Itelmen numbers dropped too: from 13,000 when the Russians arrived in the 1690s to about 6,000 by 1767. The smallpox epidemic of 1768–1769 reduced that number to about 3,000 at its end. Many of the Itelmen were in fact of mixed Russian-Itelmen descent by that time.\textsuperscript{60}

**SEA OTTERS IN THE PACIFIC**

Russian interest in the Pacific Coast intensified when Peter the Great sent Captain Vitus Bering on the first Kamchatka exploration in 1725, just before the tsar’s death. Bering sailed along the Kamchatka coast as far north as what came to be called the Bering Strait, before turning back.\textsuperscript{61} The second Kamchatka expedition (1733–1734), led by Bering and A. I. Chirikov, brought a wave of new settlers to Okhotsk and the Pacific Coast. In 1738, Bering sent ships from Okhotsk to Kamchatka and then to the Kuril Islands. In 1739, a second expedition to the south reached Hokkaido in Japan. On June 4, 1741, Bering sailed from Kamchatka for America across the Bering Sea. He commanded one twenty-four-meter sailing vessel built in Okhotsk, the \textit{Svyatoy Petr}, and Chirikov commanded its sister ship, the \textit{Svyatoy Pavel}. Although the

\begin{itemize}
\item \textsuperscript{58} James R. Gibson, \textit{Feeding the Russian Fur Trade: Provisionment of the Okhotsk Seaboard and the Kamchatka Peninsula, 1639–1856} (Madison: University of Wisconsin Press, 1969), 9–11.
\item \textsuperscript{59} Forsyth, \textit{A History of the Peoples of Siberia}, 135.
\item \textsuperscript{60} Ibid., 140–43.
\end{itemize}
ships became separated, each commander landed on North American soil safely by mid-July—Bering in the Gulf of Alaska and Chirikov near Prince of Wales Island. Chirikov returned safely to Kamchatka by mid-October. Bering landed erroneously on an uninhabited island (Bering Island) two hundred kilometers east of Kamchatka. After his ship wrecked offshore, Bering died from an illness, and the crew spent nearly a year there until they built a new vessel and sailed home. The rebuilt ship sailed to Kamchatka in August 1742, wintered over, and finally arrived in Okhotsk in June 1743.

The reconstructed Svyatoy Petr returned with several hundred sea otter pelts taken on Bering Island during the crew’s long sojourn. They reported that great numbers of sea otters were to be found along the coasts of the islands in the Bering Sea. So luxurious were these furs that they brought the astounding price of eighty to one hundred rubles each when sold in Siberia. The best sea otter pelts were nearly 2 meters long and .7 meters in width when stretched before drying. Their fur was rich jet black and glossy, with a slight intermixture of white hairs that conveyed a muted silver color in the background. The normal price steadied at about double that of sable pelts, or four rubles per skin. So much in demand were sea otter furs in China that formerly land-bound Siberian traders and hunters took to the sea in pursuit of the sea otter.

The sea otter (Enhydra lutris) lives in shallow waters with kelp and shellfish beds along the coasts of the northern Pacific from Hokkaido in northern Japan to southern California. Grouped in schools of seventy-five to a hundred, sea otters eat crabs and fish in summer and sea urchins and mollusks in winter. They are slow to reproduce, since females bear only one pup each year. Although mammals, they spend most of their lives in the water and come ashore to rest primarily at night and in times of hard winds and foul weather. During fair weather they spend the winter on the Commander Islands. Here, they hunted sea cows for meat and sea lions and fur seals for their hides. The following summer, the boats sailed to the Aleutians, where they operated from one of the small beaches. They forced the Aleuts to join the hunting parties formed by the Russians and to net or harpoon sea otters. The crews put to sea in the Aleut baidaras or umiaks, which were made from the hides of sea cows and held six to eight men. In the course of a summer, they could take 100 or more pelts per crew member for the return to Okhotsk. A full load of furs
returned ten thousand to thirty thousand rubles, or twice the cost of outfitting an expedition.\footnote{Between 1743 and 1800, Russian hunters made 101 officially counted voyages to the Aleutian Islands, the Commander Islands, and Alaska. The half-century harvest (1743–1798), from which tsarist officials took their 10 percent tax, amounted to 186,754 pelts. As early as 1750, sea otters had disappeared from the coast of the Kamchatka Peninsula; by 1780, they had disappeared from the Kuril Islands; and by the 1790s, their numbers on the Aleutians had perceptibly dropped. The North Pacific shores of Alaska marked the terminus for the Siberian hunt for furs.}

ENVIRONMENTAL EFFECT OF THE RUSSIAN CONQUEST

The Russian advance into Siberia noticeably changed the faunal composition of the entire region from the Ob River to the Kamchatka Peninsula. With every passing decade, Russian and native hunters further depleted the sable population all the way across Siberia. Was this a significant loss that caused major changes in Siberian ecosystems? Probably not. The sable was not a keystone species equivalent to the American beaver or even a dominant carnivore in Siberia. That role can be assigned to larger animals such as the bear or wolf. The sable’s disappearance might have reduced pressure on its many prey species. However, so many species prey on smaller rodents that the effect would be virtually impossible to measure. The Siberian weasel may have increased its numbers and pines might have had better seed distribution when sables stopped eating, and thereby killing, pine nuts. The ecological consequences of the sable’s departure were diffuse and hard to detect in the historical record.

Perhaps more significant is the fact that, with the Russian advance into Siberia, other furbearers, especially carnivores, came under new hunting pressures. Over twenty species of furbearers were sold, many for substantial prices, on the Moscow market. Moscow transactions data, however, understate the intensity with which Russian and native hunters pursued bears, wolves, wolverines, foxes, bobcats, cats, otters, minks, ermines, and weasels. Some furs, like ermine, were preferred and were sold to the Chinese market. Most of the remainder were immediately fabricated into clothing or sold on the domestic market.

\footnote{For a discussion of keystone species, see M. E. Power et al., “Challenges in the Quest for Keystones,” \textit{BioScience} 46 (1996).}

\footnote{I am grateful to Steven Buskirk for making these points in a personal communication.}

\footnote{Helle, \textit{The Economy and Material Culture of Russia}, 53–54. Foxes, at 11.2 percent of recorded transactions, and marten (5.8 percent) were prominent in sales at Moscow. Noncarnivores included beavers, at 5.6 percent of the total transactions, and squirrels, at 7.7 percent. Transactions involving other animals combined were no more than 2 to 3 percent, if that.}
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local and regional markets for domestic consumption. As sable catches declined, it is likely that Russian and native Siberian hunters put more effort into taking these other species. Human predation can easily have a deleterious effect on relatively small populations of carnivores, whose average population densities are only 3 percent of those of their prey. The end result of this stepped-up effort would have been the depletion of the wolf, usually considered a keystone carnivore because of its size and effect on herbivores, and similar reductions in virtually all smaller carnivores. Whether surges in herbivore prey populations occurred in early modern Siberia as a result—and if so, to what extent—is an unanswered question.

Finally, as the hunt thrust out into the Pacific Ocean, the war on the sea otters had a significant ecological effect on the coastal fauna around its rim. The sea otter is a “conspicuous predator in nearshore communities of the northeastern Pacific Ocean” and can be considered a keystone species for those communities. When sea otters were plentiful, they preyed heavily on the invertebrate herbivore the sea urchin (*Strongylocentrotus polyacanthus*), whose populations live in shallow waters. When sea otters reduced sea urchin populations, these herbivores no longer heavily grazed kelp or macroalgae (*Alaria fistulosa, Laminaria spp., and Agarum spp.*), and kelp forests grew luxuriantly. The kelp canopy in turn provided important food and cover for a wide range of fish and other species. Intensified human hunting in the Aleutians reversed this sequence. Sea urchin populations shot up and grazed kelp and other macroalgae to a remnant layer and reduced fish and other coastal marine populations.

CONCLUSION

A century and a half after the 1552 conquest of Kazan, the Russian tsar ruled over all Siberia. The early modern Russian state rarely wavered in its expansionist resolve as, decade after decade, Moscow mobilized resources and deployed military force in service of expansion into Siberia. Russian frontiersmen, some of them directly employed by the state and some of them private

66. Steven Buskirk and Gilbert Proulx, “Furbearers, Trapping, and Biodiversity” (manuscript, 2000).


entrepreneurs, carried out an audacious feat of exploration and ruthless conquest.

The tsars, heads of a centralizing and aggrandizing regime, maintained continuity of purpose from reign to reign. In large measure, Moscow’s determination can be explained by the fact that the world fur market continued to send out strong demand signals. The regime reaped high returns from the furs demanded of Siberian natives as a tax. A large, perhaps even dominant, share of fur profits went to the private sector. Violent, hardy, private fur trappers and traders had much to gain by pushing deeper and deeper into Siberia to gain access to untapped stocks of sables and other furbearers. The profits obtained in the form of furs amply repaid the costs of this great national venture.

Whatever their numbers, the indigenous peoples of Siberia did not flourish or prosper under early modern Russian rule. The pressures they endured and the cultural and social devastation that ensued was nearly identical to those faced by the Indians of North America, described in the previous chapter. Aside from the strains they suffered in paying the iasak, the natives of Siberia became increasingly dependent on Russian-produced and -traded consumer goods. They developed a taste for and need for bread, became addicted to alcohol and tobacco, and relied on firearms and purchased ammunition. They lost possession of their choicest hunting grounds and fishing rights after taking fraudulent loans from settlers. They found the settlers competing with them in gathering such edible forest produce as the nuts from the cones of Siberian pine as well as honey from wild bees. Many natives were reduced to dependency and beggary on the outskirts of Russian settlements. Others retreated to more distant, less productive areas, in the hope that they could avoid these pressures.

Active, commercial hunting by both Russian settlers and indigenous peoples stripped the larger carnivores from the Siberian landscape. What for Russians began in the sixteenth century as commercialized hunting of sables in western Siberia had, by the late eighteenth century, intersected with the world hunt for sea mammals in the northern oceans.