

Module 4

People of the Tundra and Mountains

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Course objectives

The objective of this module is to discuss those features that define the livelihoods of the peoples of the tundra zone. Starting with the switch from reindeer hunting and small scale herding to large-scale reindeer herding, we will explore possible causes of the intensification of reindeer herding, a fundamental part of the traditional livelihood of the indigenous people living of the tundra. It will be argued that intensive reindeer herding was a reaction to colonialism, as southern powers were extending their power over the circumpolar peoples. Reindeer herding allowed for greater mobility and, in turn, permitted certain indigenous populations to move away from colonial powers. In addition, this module will compare the culture – material and spiritual – of a number of reindeer herding peoples in order to foster an understanding of the commonalities in reindeer herding in a vast territory stretching east from Norway to Alaska.

After completing the module the student should be able to:

1. describe traditional livelihoods of the tundra zone;
2. describe the history of reindeer herding and the evidence supporting it;
3. describe the varieties of reindeer, their distinguishing features, behaviours, life cycles, and predators;
4. show the similarities and differences between the reindeer herding peoples described in this module in terms of their histories, cultures, and interdependence with the reindeer.

Introduction

The treeless landscape in high mountain areas or in the far northern latitudes is called the tundra. The peoples of the tundra live across the wide territory in the North from Norway in the west to the Bering Strait in the east (see Fig. 4.1). Some of the main populations living in these areas are the Sami, Komi, Nenets, Evenki, Sakha and Chukchi people (sometimes spelled Chukchee). Some of these people, such as those living in the Komi Republic, live in a territory characterized by tundra in the north – where the summer pastures of the collective-farm herds of reindeer are situated – and taiga (boreal forest) in the south, where there is a great diversity of animal life and vegetation. Though there are differences between the various reindeer herding strategies, reindeer herding is considered to be the main activity for economic development for those living in the tundra. The main focus of this module, therefore, is on reindeer herding. Unlike caribou, reindeer are not native to Northern America, and subsequently were introduced in Alaska, for example, on the Pribilof Islands. The indigenous people of Northern America, however, hardly converted to reindeer herding or gardening, although there were several attempts by the federal government to make them do so. The overall pattern can only be understood within the context of colonization and change in the face of encroaching colonial powers. In this module, we will look at how primary societies that relied on foraging, fishing, and the hunting of wild reindeer, gradually intensified their reindeer herding efforts after being impacted by the expansion of colonial powers from the south; and how, later, reindeer herding was transformed into a modern industrial economy.



Fig. 4.1 Reindeer herding peoples from Norway in the west to the Bering Strait in the East.

Reindeer and caribou biology

Reindeer (*Rangifer tarandus*) share much in common with their wild North American counterparts, the caribou of the tundra. Both reindeer and caribou are considered to belong to one biological species, though they are classified into different subspecies.¹ Both caribou and reindeer are herd animals that migrate large distances from winter to summer ranges and back. Reindeer are the only deer where both the male and the female of the species grow antlers. They use the antlers to dig through the snow layers in winter to get down to the lichen (See Fig. 4.2). Moreover, both caribou and reindeer migrate in the summer to escape biting insects and the heat, which can be detrimental to their health. One of the parasites that attack reindeer is the warble fly (*Oedemagena tarandi*), which lays its eggs on reindeer in the summer. When the egg hatches on the skin, the larva burrows into and under the skin. After moving through the body of the reindeer, it forms a lump under the skin – a warble – and the parasite lives under the skin of the reindeer, breathing through a hole it bores. Upon maturing in the spring, the grub leaves the reindeer through its air hole and drops to the ground to pupate; it then

¹ In the *New York Times* article “The Call of the Wild Takes Its Toll on Reindeer”, Andrew C. Revkin reported that the domesticated reindeer introduced to Alaska are being lost to the “call of the wild” (January 23, 2001). That is to say, the expansion of caribou herds into the Seward Peninsula, after overhunting in the nineteenth century, is threatening the remaining reindeer. The reindeer merge with the caribou herds, though they rarely survive the transition into the wild herd.

emerges as an adult fly, completing the cycle. The main predators of reindeer – excluding humans – used to be bears and wolves, but as these species have been greatly reduced in Scandinavia, lynx, wolverine and eagles (that take the small calves) are the major threat today. The main forage for reindeer is lichens and grasses. In the summer, reindeer will graze on a variety of plants, such as various grasses, marsh plants, and the leaves of birch and willow trees. Reindeer also like to feed on mushrooms and both caribou and reindeer will use their sense of smell to find forage under thick layers of snow.



Fig. 4.2 Reindeer

Reindeer calves are born in late April, and the six months that follow are the most important for both reindeer and reindeer herder. The ideal weather for the reindeer is that of a cool, wet, and windy summer. Such weather keeps the animals in good health and keeps away biting insects and other parasites. In the summer, mountain areas or tundra provide the reindeer a protein-rich diet of grasses and foliage that is easily digested. Calves grow quickly, and the adults accumulate a thick layer of fat that will help them survive through the winter. Calves will continue to grow – slowly in the winter – and will then resume their growth spurt in the second summer. By the age of sixteen months, young reindeer are close to their full adult size. Females continue to gain weight until they peak in the third year, while bulls may continue to

grow until their fifth year. The ideal time to kill a reindeer calf for its hide is after the first summer, for the meat, it is best to kill a reindeer after its second summer.

Reindeer are most active in daytime, especially in the summer months when the constant light facilitates movement. In this period, reindeer herders are busy keeping the reindeer from straying too far: on a daily basis, herders will go out to the herds and keep them from drifting away. However, the task of herding is facilitated by the reindeer's inclination to keep circling in a tight group; by contrast, wild caribou – even though they are herd animals, too – will scatter over a much larger territory. Reindeer are also more docile than the wild caribou, though they are much more skittish than other domesticates, such as cattle and goats.

During the long winter days of darkness, reindeer are less mobile, but they face two threats: ice and wolves. Sheltered in the forest, reindeer rely for subsistence on lichen and other plant material buried under the snow. Reindeer are well adapted for snow and tundra, having large lateral hooves that facilitate movement across snowy or soft and marshy terrain. The hooves are in fact concave, which facilitates digging in the snow for forage. One threat to the reindeer, therefore, is warm weather that melts the upper layer of snow, which then might freeze into a thick crust that the reindeer are not capable of breaking through. Under such conditions, reindeer face starvation unless they can find suitable pastures. The other threat that the reindeer face is posed by predators. Under the darkness of long winter nights, predators can fall upon reindeer herds and kill large numbers. In winter, reindeer herders cannot protect their herds as effectively as in the summer.

Reindeer are semi-domesticated animals. Unlike cattle, sheep or other domesticated animals which must have food harvested for them, reindeer are released in open pastures to feed themselves. Moreover, it has not been necessary to keep reindeer within fences. Although reindeer have been domesticated for a long time domestication inevitably leads to changes. The domestication of cows led to a number of changes over the millennia as farmers selected certain traits for their cattle; but under most circumstances, cattle are not capable of surviving in the wild without the help of humans. Domesticated reindeer with their shorter legs, are not as effective at evading predators as are the wild reindeer and caribou. Reindeer retain wild instincts and can quickly become feral without constant interaction with humans. Though there are signs of human selection – domesticated reindeer are smaller and demonstrate a

much greater range of colour – if a herd is not attended, it will quickly become very skittish and will seek to stay away from humans, as would wild reindeer or caribou.

The history of reindeer herding

There is little evidence of intensive reindeer herding prior to 400 years ago in many areas that now feature intensive herding. The indigenous peoples living off the tundra have historically relied on the hunting of wild reindeer rather than herding.

The archaeological evidence does point to a limited domestication of reindeer in the Russian north. It is hypothesized that the peoples of the North – including the Nenets and the Sami – did possess limited numbers of domesticated reindeer. These reindeer would have been used for pulling sledges (see Fig. 4.3) – as the presence of harnesses found in Iron Age archaeological sites indicate – and would likely have served as decoys to facilitate the hunting of wild reindeer. It is only in recent centuries that herding intensified and that, as some researchers have called it, a “reindeer revolution” has occurred (International Centre for Reindeer Husbandry: n.d.).

A number of hypotheses were put forward to explain the transition from hunting wild reindeer and limited herding to an increased reliance on large-scale reindeer herding. Two main factors considered to have contributed to this change are: economic and social. An economic argument hypothesizes that changes in reindeer pastoralism were the result of the depletion of wildlife from taxation pressure imposed by states (Beach 2000:227). In Scandinavia researchers have argued that a more efficient hunt of wild reindeer during The Late Middle Ages reduced the wild reindeer stock dramatically, forcing hunters to adapt to reindeer herding as a substitute. A combination of the introduction of guns among the Sami at this time, and remnants of extremely large fence and pit constructions in northern Finnmark to catch wild reindeer in this period, supports the hypothesis. The background to this must have been the demand for reindeer hides among the Norwegian, Swedish and Russian merchants of the area.

A social hypothesis suggests that, in Russia for instance, colonial powers encouraged – or in some cases mentioned demanded – that reindeer herds be increased to feed growing markets

(Anderson 2000:67). Moreover, a third hypothesis proposes that large herds would have been necessary for indigenous populations to move away from colonial outposts to more distant and isolated tundra terrains. Having large herds – not only for transportation and for serving as decoys to lure wild reindeer to hunters – allowed indigenous populations a greater mobility because then they were not dependent on wild reindeer for food; rather they could rely on the semi-domesticated reindeer which they could guide in their annual migrations away from the colonizing power. Coupled with ecological factors, this could have been a strong determinant in the transition from foraging to a life of herding – that is, pastoralism.

In the Russian Far East, Russian colonialism would have favoured the spread and expansion of reindeer herding. The spread of Russian colonial power from the sixteenth to eighteenth centuries was motivated by the desire to acquire the highly coveted sable furs (and later the sea otter) of Siberia and the Far East. Russian colonialism devastated those populations that relied on hunting and fishing. The foraging peoples were forced to pay tribute to, and often fought vicious battles against, Russian forces. As a result, their populations were often drastically reduced over the course of Russian colonization. Populations that had once been quite numerous – for example, the Yukagir – were reduced to a few hundred individuals by the end of the nineteenth century. With the decline of many indigenous populations, there was a corresponding increase and spread in the populations that relied on reindeer herding. These included the tundra Nenets of the Russian north, the Evenki and Chukchi of the Russian Far East (see fig. 4.1). Intensified reindeer herding was a way of dealing with the encroachment of Russian colonial forces, as it allowed for movement away from Russian outposts and escape from the tribute-seeking Russian authorities. Those people that did not adopt reindeer herding moved towards an intensification of trapping and hunting for furs in order to pay tribute to the Russian forces and to trade for industrial goods.

Among the Sami of northern Scandinavia there are historical records mentioning that the Sami tied female reindeer decoys to a stake in the ground to attract wild reindeer in the rutting season; also that a buck would be staked out to attract “competitors” – wild male reindeer that would come to challenge and drive out the contender. The goal was the same: to effectively hunt wild reindeer. It is thought that the Sami and Nenets had reindeer for decoy and for transportation already in the Viking Age, as was later the case with other populations across the Arctic (International Centre for Reindeer Husbandry: n.d.). The Swedish Crown in the fifteenth century issued royal charters authorizing trade in Sami lands with a proviso that a

portion of the proceeds was to be returned to the Crown. Given that the traders did not fully reimburse the Crown what it was owed, the Swedish kingdom extended its authority and right to taxation far north into Sami lands. Taxes were paid in the form of furs and barrels of fish. As a consequence, the Sami had to contend with three authorities vying for authority (and tribute): the kingdoms of Norway and Sweden, and the principality of Novgorod in north-western Russia. However, given the competition, these southern powers were relatively mild in their colonial treatment of the Sami; they could not risk offending “their” Sami as they sought to exert their influence in the contested region.

The intensification of reindeer herding from the sixteenth century onwards led to a change in Sami social organization. With larger herds, the larger winter villages of the past were no longer viable because there was not enough winter forage for the larger herds. Also, with colonization, southern colonists moved into southern Sami territory to settle and farm. In the late nineteenth century, the nation-states of Scandinavia first regulated grazing lands and social organization. The Sami were seen as inferior to ethnic Swedes or Norwegians and Finns and the states sought to ensure that the reindeer herds would not damage farmland and that the Sami would be responsible for any damages that did occur. The state, therefore, encouraged greater nomadism and wanted to ensure that the Sami would continue to look after their herds and control the reindeer. Such policies came to identify the Sami with reindeer herding, though significant numbers of Sami still subsisted on hunting, farming and fishing.

Nomadism, semi-nomadism, and transhumance

Given the necessity to be constantly in contact with the reindeer to keep them domesticated, the migration patterns of reindeer necessitate a great deal of mobility on the part of the herders. The nomadic movement of the herders and their reindeer can be best described as a form of transhumance – the seasonal moving of livestock to different regions. In certain cases, this movement is closer to nomadic in nature, as no long-term residences are ever established; in other cases, it is a form of semi-nomadism, as the reindeer herders have permanent houses in their winter ranges or close to their winter ranges. Transhumance is not limited to reindeer herders, as it is also practiced in places such as around the Mediterranean, where shepherds move their herds up into the mountains in the summer and down into the valleys in the winter.

Though the shepherds move great distances, their patterns of migration changed very little over the years, and they return to the same pastures year after year. The rationale is the same: move the herds in order to capitalize on ecologically distinct zones that offer forage at different times of the year.

The typical cycle for most reindeer herders is to leave their winter range in spring (March or April) and then to begin a long trek to their summer grazing lands. Along the way, a stop is usually scheduled on spring calving grounds to allow the female reindeer to give birth (usually in mid-spring: in late April or early May). After the calving is over, the reindeer herders can then lead their herds to their summer pastures, where they remain for several months. The following fall (October or November), the herders lead their herds back to their winter range. It is usually at this time, in late fall or early winter, that the herd is culled and reindeer are butchered for their hides and their meat, as it is the time of the year when the reindeer provide the best hides. The herders then continue their migration to their winter range in forested territory – with proper forage – where they spend several months before the annual cycle begins again.

The annual cycle also requires the ability to pack up and to set up camps in a matter of hours. Given that much of the year is spent in the tundra, where there is little wood, the reindeer peoples carry all of their necessary belongings as the herd moves over the course of the year. The peoples of the reindeer have adopted a material culture that facilitates their movement over the territory.

The most common lodging among reindeer herders is the tent. In the Russian north, the *chum* is common to all reindeer herding peoples, while in Scandinavia the tent is called the lavvo. The chum is a conical structure consisting of poles covered by hides (or, more commonly in modern times, by a tarp). At the centre of the tent is a hearth or a box stove, while on either side are two rows of wooden floorboards. The chum has one entrance, and on the opposite side is the space that is usually reserved for women (where the household goods and implements are usually stored). In the chums of the Orthodox Izhma Komi, an icon is also hung in this location. On the outer edges of the floorboards are piled layers of reindeer hides that serve as a mattress for the sleeping area. In certain regions, curtains are attached to the sides of the chum and can be unrolled at night to make for closed-off sleeping areas. Above the hearth, horizontal poles run across the tent. These poles are used to dry damp clothes, to

smoke various pieces of clothing apparel that are made from hides, and to hang pots and kettles over the fire so they can easily be raised or moved during the course of meal preparation. The lavvo has many similar characteristics.

The chum and lavvo can be easily dismantled. In the case of the Izhma Komi, women are responsible for dismantling and raising the chum. In the spring and fall, when the herds are being removed, this is usually done on a daily basis. In the Russian north, a number of castrated bull reindeer are kept for the purpose of pulling wooden sledges. These sledges – built solely with an axe and not requiring any nails – are made and maintained by men and used year-round. The sledges would then be harnessed to a fan-like formation of reindeer.

Reindeer herders have established trails that they use year after year to move over the territory. Reindeer herders in Russia also have established locations where they set up their chums. They often cache goods along the trail; for example they leave sledges packed with winter clothing and goods as they move to their summer pastures; then they pick up these supplies on their return in the fall. In Scandinavia the Sami used to build small storehouses of timber along the trail, often on poles to avoid attacks from large animals. But today the Sami reindeer herders live with their families in modern and permanent houses at the winter site, and in the migration period with the reindeer herd, in smaller cottages or tents along the trail. The modern ways of herding using snowmobiles, terrain motorcycles and even helicopters, have made storage points along the trail superfluous.

In the Russian Far East, indigenous reindeer herders do not make use of sledges, preferring to ride reindeer or use them as pack animals in order to haul the goods that they need for their survival. Also, among the Evenki, few domesticated reindeer are killed for meat; instead, the Evenki milk the reindeer.



Fig. 4.3 Nenets reindeer herder with sledge and team of reindeer, Ural Mountains. Photo: Courtesy of Michel Bouchard.

Reindeer herding in Northern Europe and Northwest Russia

Although the Sami in Northern Europe and the Izhma Komi in Northwest Russia are distant linguistic relatives – both peoples speak Finno-Urgic languages and developed the practice of reindeer herding – the two provide a different point of departure in understanding the origins and development of reindeer herding. The Sami are indigenous northerners whose ancestors had a long history of relying on wild reindeer. Archaeological and historical evidence indicates that the Sami have been hunting reindeer for millennia and also that they used limited numbers of domesticated reindeer as decoys for hunting and for transportation. Four to five hundred years ago, the Sami, intensified their herding and moved from foraging and the hunting of reindeer to reindeer pastoralism.

The indigenous populations in the North-western part of Russia pushed north by population pressure and the migration of Russians into their traditional territories starting in the 12th

century (Niemi 1992:9). Today, most of the Komi people live in the Republic of Komi located in the northern part of Russia between the Ural Mountains to the east and Arkhangelsk Oblast to the west of the Russian Federation.² Though they were traditionally hunters and gatherers, the Komi adopted the cattle-breeding traditions of their ancestors, the Zyrian people. Other Komi, such as the Izhma Komi who interacted with the Nenets, moved into Sami territory on the Kola Peninsula, in what is today the Nenets Autonomous Okrug where they gradually developed a form of intensive reindeer husbandry that they practice to this day.

Although there have been conflicts between Sami and Komi over reindeer pastures, this interaction between the two indigenous populations helped to forge a common reindeer herding economy that persist to this day. There are, however, also variations in herding practices between the different groups. Both implemented systems of constant surveillance over their herds to minimize losses and to maximize herds. When the Sami in the nineteenth century extended their herds, they began to let the herds scatter more over their summer pastures and then gather their free-ranging herds in the fall in preparation for migration to the winter pastures. The Komi herders continued to watch the herds around the clock. Working in twenty-four-hour shifts, Komi herders and their employees – often Nenets reindeer herders who have no herds of their own – guard the herds throughout the spring, summer, and fall to minimize losses to predators or to the wandering nature of reindeer. A minimum of four herders, and preferably six or more, would thus take turns herding the reindeer. Besides being excellent herders, the Komi were renowned merchants and traders in the pre-revolutionary Russian Empire. Reindeer herding intensified as it ensured goods for trade, and in the eighteenth and nineteenth centuries a wealthy class of herders and merchants emerged in the Komi Republic. Though the reindeer herders were nomadic, prosperous herders owned large two-storey houses in the villages of the region. The Sami, the Komi, and the Nenets all use dogs to help them herd reindeer. The dogs resemble small huskies, and a pair of well-trained dogs is an invaluable tool in herding reindeer. The dogs, following the commands of their owners, run out to guide straying reindeer back to the collective safety of the herd. But, as mentioned before, motorized vehicles have now become the main means used in herding reindeer.

² The Komi people are a minority in the Republic of Komi and are not officially recognized by the Russian Federation as indigenous people. Instead, they have the status of ‘less numerous people than others’. However, the Komi people have the status of indigenous people in the Komi Republic. Other Komi people can be found in the neighbouring Nenets Autonomous Okrug, Arkhangelsk Oblast and Murmansk Oblast.

Both the Sami and the Komi mark their reindeer with an elaborate system of notches and incisions in the animals' ears. Similar in principle to the "brand" used to mark and identify cattle on the ranches of North America, each Sami or Komi reindeer herder marks the ears of his animals with a distinctive set of marks that belong exclusively to that particular reindeer herder. When herds do mix, it is possible to separate the herds and return the reindeer to their owners. This system has long been in use among the Komi and other indigenous reindeer herders in northern Russia.

Few reindeer are killed over the summer. Given that there is no means of preserving the meat in the heat of summer, reindeer are killed one at a time on an as-needed basis and the meat is consumed before it spoils. In order to kill a reindeer, one animal is separated from the rest of the herd; a lasso is used to catch the reindeer, and the animal is usually killed with a knife. It is quickly skinned – usually by pulling the hide off the carcass – and the herders then butcher the carcass. Certain parts of the reindeer are prized: among the Komi and other reindeer herders, frozen, raw, salted liver is a delicacy. The meat is usually boiled and is mixed, today, with various forms of pasta (for example, macaroni) to serve as one of the principal meals. In Scandinavia where the herds often are extremely large, the main autumn slaughtering has been industrialized and is done at slaughterhouses which are approved by the state authorities.

Reindeer herding was and is performed through the division of tasks according to gender. One of the principal tasks of all reindeer herding women is to prepare all the clothing. Among the Sami, women spend a lot of time in the summer cutting and collecting sedge grass in marshes. This grass is prepared by the women and used to line moccasins. Only the best hides would be selected for sewing the highly decorated clothing reserved for holidays and ceremonies. A variety of scraping instruments are used to clean and prepare the hide. In order to keep the fur on the hides, the hides are not tanned. Various recipes are used to treat the inside of the hide, including boiled reindeer-liver broth, in order to make the inner hide soft and supple. Once the hide is prepared, it is cut and sewn into garments.

Different parts of the hide are used for making clothes. The younger the reindeer, the better the quality of the hide, as the skin from younger reindeer is not as likely to be filled with holes left by the warble fly. The hides of yearlings could be used to make most clothing, especially the clothing used for everyday. The Komi use the hide from the legs of the reindeer to make winter boots, which is thought to be the most durable and ideally suited for this purpose.

Generally, light-coloured or white hides are used to make women's boots and darker hides are used to make boots for men. Among the Komi, the boots are worn in combination with the reindeer-hide leggings that rise up above the knees. Hides are also used to make full-length parkas – the *malitsa* – that are worn by the Komi. This parka is pulled over the head, and it drops below the knees. The fur is on the inside of the *malitsa*, with the exception of the hood, which has the fur on the outside. The *malitsa* worn by men and women are identical, except that the women's hood are white and the men's hood are dark. These parkas have a set of mittens that are attached to the sleeves. Men often wear an apron on the inside of the *malitsa*, with pockets for storing goods, and a belt to which is attached a knife. When something is required, a man pulls his arm out of the *malitsa* sleeve and then pulls what is needed out of the apron without having to get undressed in the cold. When temperatures drop, a second parka, this one with the fur on the outside, is worn over the *malitsa*. Additionally, a woven belt is worn on the outside of the parka. In cases of need, the two layers of parka serve as an impromptu sleeping bag: lying in the snow, the bottom of the two layers of the parka is tied with the belt, and a reindeer herder could spend a night outside protected by the two layers of parka.

In early spring (that is, March or April), the Komi, as well as the Sami, begin their trek northwards or westwards towards the spring and summer pastures. The Komi travel incredible distances over the course of the year – more than 1000 kilometres following the same trails north every year. Two reindeer roads run parallel to the White Sea which means that two herds could be driven to the same territory, yet movements are timed in such a manner that they would never meet, thus ensuring that both herds have an adequate supply of foliage while moving north. The movement north is a long trek that requires the constant setting up and tearing down of the chum. The reindeer are moved during the day and stop for the night under the constant supervision of the herders. This journey also requires a number of different types of sleds, some designed for humans, others for transporting goods. On certain sleds, large, wooden containers are placed; with only small openings at the top, the containers ensuring that the goods will not spill if the sled overturns. Such containers are especially useful for packing a variety of food supplies.

Given the distance the Komi have to travel to reach their summer range, it is not surprising that they have both spring and summer pastures. The Komi have calving grounds where they stop with their herds while the cows give birth. Calving grounds are chosen based on a

number of characteristics: ideally, the terrain is flat, without high bushes, rich in lichen and other foliage, and with a small hill nearby to give herders a good vantage point from which to observe their herds. Once the calving is finished, the herders continue north to the sea to spend the rest of the summer in the northern tundra before returning south.

Meat is obviously an important part of the reindeer herders' diet. In the late summer, however, berries are gathered both in the tundra and the marshlands of the boreal forest. One berry especially prized by the Komi is the cloudberry: a delicate, yellow berry, which can be preserved over many years in its own juices. A number of other berries and mushrooms are gathered to supplement the diet and to provide both useful sources of vitamins and variety into meals.

In September and October, preparations begin to return the herd to their winter ranges. It is a challenging time; there is a tendency for the herd to stray, as reindeer will range far looking for mushrooms. It is in this period that the reindeer herd will begin their rutting season. Being herd animals and belonging to the deer family, reindeer bucks will seek to gather a number of females and to drive away other contenders. It is a strenuous time for the males; they risk injury and lose much of the fat they stored over the summer. Limiting the number of fertile males in the herd minimizes this competition for females. Among the Komi, large numbers of male reindeer are castrated and used for pulling sleds. Since the herders have a number of sleds and each reindeer is not used on a daily basis, the number of castrated reindeer could be more than 100. Most of the reindeer in the herd are, however, cows and their calves. The bulls and castrated males represent less than 20 per cent of the total herd.

The Komi, Sami, and many other reindeer herders use corrals to gather their reindeer in the late fall or early winter to separate the animals that are to be killed from those that are to be taken directed to their winter ranges. The corrals are quite similar to those used by the Dene and the Inuit who hunted caribou. The reindeer are funnelled into the corral by two "wings" that squeeze the herd into the circular enclosure. The corral itself does not have to be very strong: the reindeer begin instinctively to circle inside the corral in a counter-clockwise direction. In such corrals the herd can be culled, and in recent years such corrals are used to gather reindeer velvet and to have veterinarians inspect the herds for signs of sickness.

Once the rutting season and the cull are over, the remaining reindeer are herded to their winter ranges. For the Komi, this means returning close to the villages of the Izhma region. During the winter months, reindeer do not wander far. The Izhma Komi use skis to patrol the herds in the winter, and circling around the herd to ensure it is safe from predators and that snow conditions permit the reindeer to dig for forage. In cases of wolf attacks, fires are set. Herders take great care to frighten away wolves that could kill large numbers of reindeer if left unchecked. The more modern Sami are now mainly herding using snowmobiles.

Reindeer herding in the Russian Far East

The Tungusic-speaking Evenki share much in common with the reindeer herders in the north-western part of Russia, though significant differences exist. They are, however, the most widespread population of indigenous reindeer herders. Their territory stretches from Siberia all the way to the Kamchatka Peninsula and even into northern China. The traditional Evenki reindeer herders are famous for relying on their reindeer while not killing them for their meat, as they relied – and continue to rely – to a great extent on hunting and gathering as opposed to killing reindeer for meat. They hunt for their meat, but milk their reindeer for a sweet but low-fat beverage. A female reindeer can give up to a litre of milk per day. As for the Komi discussed in the previous section, the territory of the Evenki's consisted of forest (taiga) and the treeless tundra. Although the Evenki were known for their nomadic life-style, Soviet policy in the 1950s and 1960s forced them to live in settlements.

The traditional activities of the Evenki besides reindeer herding were hunting and trapping. Their prey included wild reindeer, deer, moose, elk, bear, wolf, boar, and mountain sheep. Smaller animals are hunted and trapped for their furs, including squirrel, fox, and sable; the pelts were used for trade and barter with Russian merchants and traders. Although reindeer herding is their major economic activity, hunting continues to be vital to reindeer herders of the Russian Far East. The herds of the Evenki tended to be smaller than those of the Sami, Komi, and others in northern Russia such as the Chukchi people. An Even or Evenki family might have 200-400 reindeer, enough to support a family of six. A Komi herd could easily number 1,500 reindeer or more.

Unlike the reindeer herders of the far north, many Evenki cannot move their reindeer to the tundra to escape the mosquitoes and other biting insects. Under some circumstances, the Evenki build smoky fires around their herds to drive away insects during the day. Such fires allow the reindeer to survive in the taiga, an area that has swarms of biting insects that can otherwise leave the reindeer emaciated and even on the verge of death.

As with other northern reindeer herders, the Evenki use reindeer for transportation, but in the thickly forested and marshy taiga, sleds are not typically used. Instead, the Evenki fashion saddles and ride their reindeer, often with reindeer as pack animals in tow. This is still a common form of transportation as a reindeer can carry a load of close to 80 kilograms and can easily travel 100 kilometres in a day. This allows the hunters to range great distances in their hunting expeditions.

The basic economic unit in traditional Evenki society is the tent household of the nuclear family. Traditionally, the husband, the wife, the children, and a surviving older parent worked together to ensure the survival of the family. As with other reindeer peoples, tasks were assigned according to gender. The traditional winter tent of the Evenki was smaller than a chum, usually with enough space to sleep two or three adults and a few children. Typically, individuals lay in the tent instead of sitting, as the space closer to the ground is free of smoke. In the cold continental winters, the tent is kept tightly closed in order to keep the heat of the fire inside. In the summer, the traditional residence was a conical birch bark lodge. Today, tarp tents have replaced the traditional habitations, but the main feature remains: these tents can be easily and quickly dismantled and can be easily transported by reindeer over long distances. Similar features define the Komi chum.

Traditionally, women could prepare the hides, make clothing and tent covers, milk the reindeer, prepare food, and take care of the children. When the men were away hunting, women could take care of the reindeer. Men hunted and defended the herds against dangerous animals, loaded pack animals, killed and skinned animals, chopped firewood, and manufactured a number of implements. These divisions of labour, however, were not strictly maintained; in fact, men and women often helped one another with their assigned tasks.

Though the basic economic unit was the nuclear family, the reindeer were not the property of the family, but were rather under the control of larger units – clans. Because the size of herds

could fluctuate drastically, owing to predation or epidemics, reindeer were redistributed within the clan to ensure the survival of everyone. Likewise, the clan had a traditional territory over which intermarrying families migrated through the course of the year. The families congregated in the summer, at which time a clan council oversaw the redistribution of reindeer. The ideal marriage partner was a cross-cousin; for example, a man could marry his mother's brother's daughter. Since the clans were patrilineal, a cross-cousin would belong to another clan and would therefore be a suitable marriage partner. Quite often, two clans intermarried with each other over the generations, solidifying the alliance between two clans. Unfortunately, the Soviet collectivization of reindeer herders brought about forced social change: rather than being centred on the clan, social organization and leadership in the Soviet era was centred on the collective or state farm according to CPSU (Communist party of the Soviet Union) policy. Traditional social structures had to accommodate the change imposed by the party state. After the collapse of the Soviet Union, the collective farms remained for a while but gradually collapsed too mainly due to a lack of financial support from the state.

As is the case almost everywhere in the circumpolar North, the Evenki were highly egalitarian, with no differences between individuals in terms of wealth. The Evenki had storehouses where they could cache food and goods. These storehouses were small structures, raised on platforms to discourage animals from raiding the stores. However, it was expected that any relative or clan member who came upon the storehouse would help him – or herself to whatever was needed. It was simply understood that this individual would likely return the favour at some future point. This egalitarian ethos continues to mark much of Evenki society and social relations today.

Although the Sami and the Komi were Christianized at relatively early periods, the reindeer herders of Northern Europe, Northwest Russia and the Russian Far East all maintained traditional religious practices; often described as shamanism, or – in case of the Evenki – samanil. The shaman (called *noajde* in Sami) was an important individual in the lives of peoples across the Arctic because he – or she – could enter into communication with the spirits of, for instance, the taiga. The term *shaman* itself is derived from Tungusic languages, and one of the translations of the term is “he who knows.” Generally, the main duties of a shaman were to cure sick people and to prevent catastrophes. The shaman had a special knowledge of the spirits that had the potential to harm humans. The shaman's soul could also travel to the lower world to accomplish important tasks, including locating the spirits of living

individuals who were sick. It was believed that one of the causes of sickness was losing one's soul. The shaman could carry out a cure by retrieving a soul and bringing it back to the middle world. Both men and women could be shamans, but women were generally considered to be more powerful.

Shamans made use of a shamanic drum in their ritual ceremonies. Dressed in elaborate and highly symbolic clothing, and rhythmically beating on the drum, the shaman could enter into a state of ecstasy at which time a spirit would possess him. In such a trance, the shaman's soul could travel to the other worlds. When an individual died, a shaman could be called upon to help a soul travel to the lower world. The shaman played an essential role in maintaining equilibrium in the larger spiritual universe in which humans lived. In Scandinavia shamanism mostly came to an end after the Christianization of the Sami in the eighteenth century, while it lived longer in the east. Though many shamans were killed in the Soviet war against religion, and traditional shamanistic practices were discouraged at that time, shamanism continues to play a central role in the religious belief of the Evenki and a number of contemporary shamans still exist in these societies.

Another important group of reindeer herders in the Russian Far East are the Chukchi and the Sakha, known as Yakut's of the Republic of Sakha (Yakutia). Not all of the Chukchi are reindeer herders, though, as some live on the coast and share much in common with their Yupiit neighbours (see the previous module 'The People of the Coast'). The coastal peoples and the peoples of the reindeer often traded with each other, as the coastal peoples would often travel to the inland Chukchi in order to trade for reindeer hides. The Chukchi keep large herds – larger than those of the Even and Evenki, and more as a source of meat. They do not usually milk the reindeer, as the Even and Evenki do, nor do the Chukchi ride their reindeer the way the Even and Evenki do. Instead, the Chukchi harness reindeer to sleds for transportation. The coastal Chukchi also have dogs, which they use to pull sleds over the ice, whereas the reindeer Chukchi do not use their dogs for either herding reindeer or for guarding the herds. The Chukchi people were already discussed in detail in Module 3).

The territory of the Republic of Sakha, known for being one of the coldest regions of the northern hemisphere and its tremendous mineral resources such as diamonds and antimony, is characterized by its tundra landscape in the north and primarily taiga vegetation in the south. The Yakuts are thought to have migrated northwards in the 13th and 14th centuries, and

brought with them a livelihood which was based on horse and reindeer breeding, and a nomadic way of law – moving between their winter and summer camps. Even today, traditional livelihoods such as reindeer and cattle herding accounts for more than 85% of the gross agricultural product, although hunting and fishing – in line with the neighbouring Chukchi and several other populations of the Far North – remains a significant activity.

Suggested reading

The Red Book of the Peoples of the Russian Empire. Information on the Chukchi, the Evens, Evenki, Nenets and Chukchi people. Retrieved on February 3rd 2014 from: <http://www.eki.ee/books/redbook>

The Sámi of Far Northern Europe. Information on the Sami people. Retrieved on February 3rd 2014 from: <http://arcticcircle.uconn.edu/HistoryCulture>

Glossary of terms

chum	a conical structure that serves as the primary dwelling for reindeer herders of northern Russia.
clan	kinship groups that are the primary social structure in many societies. Membership of a clan is socially defined in terms of actual or purported descent from a common ancestor. This descent is unilineal; i.e., derived only through the male (patriclan) or the female (matriclan). Normally, but not always, clans are exogamous, and marriage within the clan is usually forbidden and regarded as incest. Clans may be divided into subclans or lineages.
cross-cousin	a first cousin who is the child of a mother's brother or a father's sister (see Parallel cousin).
encroach	1. intrude, especially on another's territory or rights. 2. advance gradually beyond due limits.
foraging	a subsistence pattern that relies on finding naturally occurring

	food sources.
genus rangifer	reindeer or caribou. The genus <i>Rangifer</i> includes a number of closely related subspecies including reindeer and caribou. Both reindeer and caribou are grouped into one common species: <i>Ranger tarandus</i> . Some of the main species/subspecies are as follows: <ul style="list-style-type: none"> • <i>Rangifer tarandus pearyi</i> (Peary caribou) • <i>Rangifer tarandus fennicus</i> (wild reindeer of Finland) • <i>Rangifer tarandus pearsoni</i> (wild reindeer of the Russian Novaya Zemlya) • <i>Rangifer tarandus caribou</i> (woodland caribou) • <i>Rangifer tarandus groenlandicus</i> (barren ground caribou) • <i>Rangifer tarandus playrhynchus</i> (Svalbard reindeer)
graze	1 (of reindeer, cattle, sheep, etc.) eat growing grass. 2. feed animals on growing grass.
lichen	symbiotic organisms composed of members of as many as three kingdoms, including fungi, algae, and blue-green algae. Lichen fungi cultivate partners that manufacture food by photosynthesis.
nomadism and semi-nomadism	a cyclical or periodic movement; based on temporary habitation sites (the chum, for example) that are established and which depend on the availability of a food supply and the technology for exploiting it. The term <i>nomad</i> encompasses three general types: nomadic hunters and gatherers, pastoral nomads, and tinker or trader nomads who exist in industrial societies.
parallel cousin	a first cousin who is the child of a mother's sister or a father's brother (see Cross-cousin).
pastoral	1 of, relating to, or associated with shepherds or flocks and herds. 2 of or pertaining to the country; rural. 3 (of land) used for pasture.
shamanism	a religious phenomenon centred on the shaman, who is believed to have power to heal the sick and to communicate with the world beyond. Shamanism usually implies a spiritual world view in which the universe is seen as divided into a number of worlds,

	each of which is inhabited by spirits and spiritual forces. These spirits inhabit not only living beings (humans and animals), but also a number of inanimate entities (e.g., fire, lakes, mountains).
transhumance	transhumance involves the cyclical movement between two very distinct environments: for example, for much of southern Europe, mountain pastures in the summer and valleys in the winter. For reindeer herders, transhumance usually involves the movement from forested zones in the winter to the High Arctic tundra zones in the summer.
Tungus	a term used to refer to the Even and Evenki of the Russian Far East and northern Russia. Today, the term is used to refer to a language family that includes the Even and the Evenki languages.

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