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SECTION 2

CONTESTED AND COLONISED SPACES



Chapter 6

CULTURAL NATURE IN MID-LAPPISH REINDEER HERDING COMMUNITIES

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and Sari Stark*

Finnish Lapland has often been seen as a pure, clean and attractive tourism area, one of the most popular European skiing and winter holiday centres, where the rich people from the south have luxurious wooden villas. On the other hand, northernmost Arctic Lapland has been seen as a romantic home region of the Mountain Sámi herders, where the indigenous people live a traditional life. These two stereotypical images have overshadowed one part of Lapland, which has faced the greatest environmental changes during the last hundred years. That area is the forest zone located in the middle of Lapland between the Arctic Circle and Sápmi, the Sámi cultural home area (Map 1). Alongside environmental changes, the region has faced an ethnic transition during the eighteenth and nineteenth centuries in which the Forest Sámi people have become one with the Finnish settler population. In mainstream ethnic and sociocultural studies related to Finnish Lapland, the region has been seen as an uninteresting borderland. Nevertheless, the multidimensional historical changes during the last three hundred years have formed the region into a peculiar cultural area,¹ which we call here the *Mid-Lappish hybrid cultural region*.²

According to our research material, reindeer herders living in Mid-Lapland identify mostly as carriers of historical Forest Sámi traditions, especially when they talk about nature and their close to nature way of life. Reindeer

1. Lähteenmäki 2006a, pp. 60–79.

2. ‘Lappish’ means all the people living in the province of Lapland, not only the Sámi. The concept was accepted in the 1950s.

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herding itself is locally seen as a manifestation of the unbroken chain to the Forest Sámi ancestors.³

Our culture is based on inseparable connection with nature. We live out of nature, we respect nature, and we are part of nature. It is difficult to separate culture and way of life, they are intimately connected to each other. A lot is based on the old Forest Lapp culture. Reindeer herding itself is a culture of its own with its working methods and traditions. A lot of our cultural features have also survived until today.⁴

Research settings

Our research task is to present and analyse the features in the local human-nature and human-reindeer relations across the historical timespan of a century and in the context of cultural nature in the historical Forest Sámi area in Finnish Mid-Lapland. By the term *cultural nature* we refer to the different meanings and attributes groups and individuals give and have given to their surrounding natural environment with its fauna, flora and waterways. The question is viewed through environmental changes and the meanings connected to reindeer roundups (corrals) and roundup places as an example of human-nature interaction. The reindeer roundups have historically been important social meeting places among subarctic communities, and roundup events have been traditionally the highlight of the reindeer year. The events have been organised several times a year, usually during the early spring for sorting and counting reindeer calves, and larger events during the autumn-winter period for entire herd. An aspect related to the intergenerational nature of herding is the fact that the reindeer herding is based on private ownership, and the reindeer pass on in families through generations.

Nature is always a cultural construction that takes shape in people's minds, and humans process their place in the world in relation to the surrounding natural environment.⁵ The so-called wilderness is part of the human realm as well. The terms natural or natural landscape are used of things modified by humans,⁶ and reindeer herding with its corrals can be seen as one construction of the natural or ancient that is also cultural and relatively recent. Ideas concerning nature are inherited from previous generations, and they affect the

3. Cultural Nature Survey 2021: Respondent 1 (personal details not given).

4. Cultural Nature Survey 2021: Respondent 13, female, born 1987.

5. Richardson 2001, pp. 80–81.

6. Williams 1980, p. 79.

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personal, embodied relationship with the natural environment.⁷ Environmental historian Carolyn Merchant uses the concept of consciousness – that is, the ways in which a group collectively understands their surrounding nature. The community's collective consciousness is manifested in images of nature.⁸

Our research topic is framed by *environmental history*, and environmental humanities. The aim of this research field is to historicise the changing relationship and interaction between humans and nature, one which never had an ideal primordial state, as Melanie Arndt has argued. Nature and history are linked in a complex way, and environmental history is always also history of power.⁹ This is true also in our study. Environment is 'that which surrounds us' (orig. French *environ*); in an extended sense it signifies the circumstances and conditions that make up everyday life.¹⁰ The focus of environmental history research is the impact of human interaction with nature, both the intended and especially the unintended long-term consequences. In addition to the natural environment (the natural materials and living things researched by biologists and environmentalists), the sociocultural, the economic and the political (societal) environments – which we call here humanised environment – are everything around us. These kinds of environments are the conditions in which people live, work or spend time, and influence how they feel, behave or work. People's beliefs and actions depend on environments: by studying historical environments, one studies the interaction between humans and environments in the past and in recent history.¹¹

Reindeer husbandry has been an important part of the economic structure of communities in Lapland at least since the eighteenth century when the number of reindeer started to increase in Northern Fennoscandia. Before that, wild reindeer were hunted for their skins, antlers and meat. They were also used as beasts of burden and as bait animals when hunting wild deer.¹² Human-reindeer coexistence has deep historical roots in the process where reindeer as game developed to the semi-domesticated animals they are today. The reindeer husbandry organisation faced a dramatic turn in Finnish Lapland in 1898 when the state government, the Finnish Senate, took reindeer husbandry under its

7. Lähteenmäki et al. 2019; Laurén 2006; Smith 2006.

8. Merchant 1987, p. 272, *passim*.

9. Melanie Arndt, *Environmental History 2016*: https://docupedia.de/zg/Arndt_environmental_history_v3_en_2016 (accessed 16 June 2021).

10. E.g. Hughes 2008.

11. Hughes 2006; McNeill 2003; Isenberg 2014, *passim*.

12. Korttesalmi 2008, *passim*.

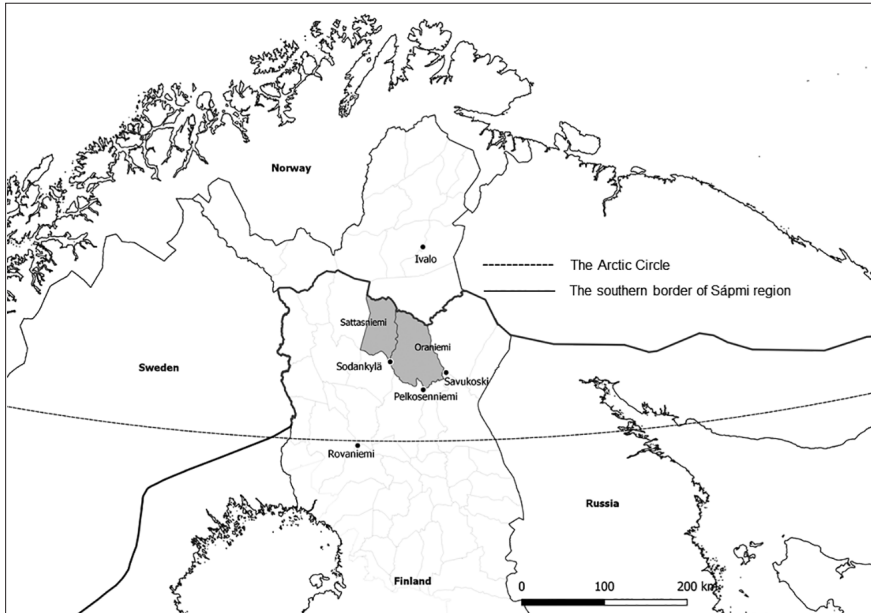
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control, and divided the northernmost region of Finland into reindeer herding districts – that is, cooperatives.¹³ The Finnish reindeer herding region in 2020 contained 54 cooperatives of which 31 were located beyond the Arctic Circle.¹⁴

Our empirical focus lies in two *reindeer herding cooperatives* (Finn. *paliskunta*), Sattasniemi and Oraniemi, geographically located in the middle of Finnish Lapland – mainly in Sodankylä, and partly in Savukoski and Pelkosenniemi municipalities ([Map 1](#)) – and the reindeer roundup processes in these cooperatives.¹⁵ Our key source data consists of archival material, such as the minutes and reports of the Reindeer Herders Association and Sattasniemi cooperative located in the Finnish National Archives. We have also utilised regional, local and occupational newspapers and magazines from the 1920s to the 2010s. In order to reach the voices of the contemporary herder communities we conducted a *Cultural Nature Survey* during the period from 22 February to 30 March 2021. We had fourteen respondents, of whom sixty per cent were male and forty per cent female. They were born between 1950 and 1987. Fifty-six per cent of the respondents work full time in reindeer herding and 36 per cent part time. Twelve respondents were from Sattasniemi and two from the Oraniemi cooperative. In this historical study, we have analysed the sources by using qualitative methods, close reading¹⁶ and survey analysis.

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13. The reindeer herding law was drafted in Finland first in 1932, remodified in 1948 and 1968. The latest law was enacted in 1990.
 14. Paliskunnat 2020. Paliskuntien yhdistys: <https://paliskunnat.fi/py/paliskunnat/paliskuntien-tiedot/> (accessed 15 Nov. 2022).
 15. The article is a part of the HISTECO project funded by the Academy of Finland, University of Lapland and University of Eastern Finland.
 16. Close reading as a method is the careful, sustained interpretation of historical texts which emphasises the single and the particular over the general; working with historical texts requires a specific kind of conversation between reader and text. This conversation begins with the previously discussed questions, which ask the reader to read ‘around’ the historical text, noting time, place, authorship and other information about the text’s origin and historical context. It continues with a close examination and conversation with the text itself. See, for instance, *Close Reading and Annotating Historical Sources*: <https://lessonresearch.net/content-resource/close-reading/> (accessed 16 June 2021).

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Map 1. The research area in the Middle of Finnish Lapland, beyond the Arctic Circle.

Sources: The map contains data from the Finnish Environmental Institute (TOKAT database), National Land Survey of Finland (Topographic database 2019), and Global Aviation Data Management (GADM database 2015). Drawing by Outi Manninen 2021.

In the middle can be seen the geographical and cultural research area. Our research area was originally a historical administrative region of the Large Sodankylä community, which existed until 1916, and formed a coherent cultural region. The geographical district is vast: the acreage of Sodankylä-Savukoski region alone is nearly 19,000 km², with a population density of 0.16–0.71 persons/km² ([Table 1](#)).¹⁷

17. In 2020 there were 8,300 inhabitants in Sodankylä, of whom 1.6% spoke Sámi; in Savukoski there were 1,010 inhabitants, of whom 0.4% spoke Sámi. The number of inhabitants in Pelkosenniemi was 930.

*Cultural Nature in Mid-Lappish Reindeer Herding Communities**Table 1. The research region in numbers.*

Cooperative	Municipality in Lapland	State-owned land %	Acreage km ²	Number of reindeer, max	Number of reindeer owners	Number of roundups, 2021	Nature protected areas (forests, swamps, peatlands, groves)	Mines	Artificial lakes
Sattasniemi	Sodankylä	94	2432	5300	162	14	Pomokaira, Kaarestunturi, Kaaresvuoma, Tenniöaapa, Ilmakkiapa	Pahtavaara	5
Oraniemi	Sodankylä 60%; Savukoski 25%; Pelkoseniemi 15%	75	3893	6000	130	35	Viankiaapa, Koitelainen, Kyläselkä, Ellitsa, Nivatunturi, Lämsänaapa-Sakkala, Luiro swamps, Leviäaapa-Sammalaapa	Kevitsa, Sakatti (planned)	
Total		85	6325	11,300	292			3	5

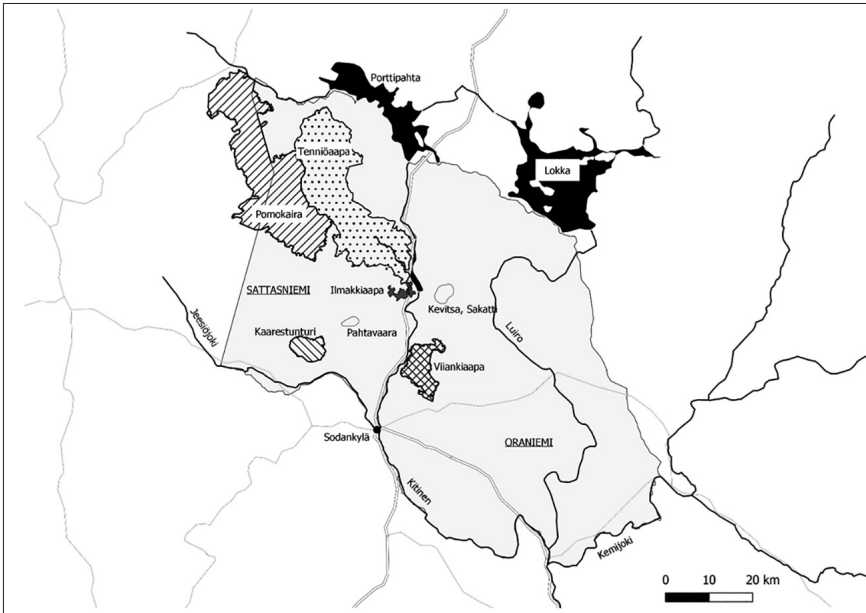
In the seventeenth century the Forest Sámi, who differed from the other Sámi groups in their language and culture, populated the Mid-Lapland region. Mainly due to influence of the Finnish administration and mixed marriages, the old Forest Sámi language died out in the nineteenth century, and the herders of these cooperatives no longer wear the traditional Sámi costumes in their everyday work. Typically, old photographs from the turn of the nineteenth and twentieth centuries presenting life in Mid-Lappish villages introduce only the few Sámi people who were originally Mountain Sámi and moved to Mid-Lapland from Northern Norway in the late nineteenth century.¹⁸

Regarding the historical ethnic adaption process, the borders of the Sámi area in Lapland were officially opened to settlers in 1673, and the Mid-Lappish

18. Photographs in the Finnish Heritage Agency's Database: keywords 'saamelaiset Sodankylä': <https://museovirasto.finna.fi/> (accessed 20 May 2021). On the hierarchy of Sámi people in Finnish Lapland, the lost Forest Sámi culture, and the daily life of the pioneer settlers in Sodankylä, see Lähteenmäki 2006b, pp. 191–212, 163–179.

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region became mixed Finnish-Forest Sámi during the next two centuries. Even today, however, reindeer herding is the main source of living for many families in our research area. Due to the cultural change, these families, who called themselves as *descendants of the Forest Sámi* have not been accepted on the Electoral list of the Sámi Parliament in Finland as ‘real’ Sámi people, unless they have documentary proof of adequate Sámi ancestors. During the last ten years, the cultural place and space of these so-called ‘non-status Sámi’, ‘people in between’ and ‘Finns who have Sámi roots’ – has been the subject of hot debate in ethnic and identity discourses and the revitalisation process of the Forest Sámi culture in Mid-Lapland.¹⁹ In spite of the cultural denial, the strong intergenerational link through the centuries still influences local living culture and reindeer husbandry processes in the reindeer cooperatives of this study.



Map 2. The environment of the Mid-Lappish region: Rivers (Kitinen, Luro, Kemijoki), artificial lakes (Porttipahta, Lokka), mires (Tenniöaapa, Ilmakkiaapa, Viiankiaapa), wilderness area (Pomokaira), mines (Pahtavaara, Kevitsa, and planned mine Sakatti), fell (Kaarestunturi) in the Sattasniemi and Oraniemi cooperatives.

Sources: The map contains data from the Finnish Environmental Institute database (TOKAT database and nature protected areas), National Land Survey of Finland (Topographic database 2019), and GADM (database 2015). Drawing Outi Manninen 2021.

19. E.g. Sarivaara and Uusiautti 2013.

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The concept *Forest Sámi* originates from dominantly forested nature of Mid-Lapland. In addition to forests, the local nature consists of mires, such as Pomokaira, Tenniöaapa and Viiankiaapa, and rivers. Kemijoki is the longest river in Finland, and its tributaries, Kitinen, Luiro and Jeesiöjoki, all run through our research area. Settlements, small villages, are located alongside the waterways. In the north, the cooperatives border two artificial lakes, Lokka and Porttipahta. Lokka is the largest artificial lake in Europe ([Map 2](#)). Large-scale forestry since the end of the nineteenth century, and energy production, the mining industry, motorisation, tourism and even nature conservation after World War Two have all affected and altered the local natural environment.

In our data there are several features that indicate an identification with the *Forest Sámi way of life*. The first identification argument of our respondents is related to the local livelihood itself. From the late seventeenth century,²⁰ Forest Sámi hunter-gatherer culture gradually merged with Finnish peasant culture, and the area became a hybrid cultural region; reindeer herding maintained an important part in this subarctic environment among the Forest Sámi, but also among the newcomers, Finnish cattle-raising farmer-settlers. They adopted small-scale reindeer herding from the Sámi. Since then, this combination of livelihoods has characterised the mixed economic system of the Mid-Lapland villages. In 1912, some 45 per cent of the population in Sodankylä owned reindeer, and over sixty per cent of the herders were landowning peasants.²¹

Another feature that connected them to their pastoral past was ‘timeless time perception’.²² This is one reason for the importance of the roundup events. It has been said that it is more natural to live according to nature than to the clock.²³ The descendants of the Forest Sámi still see the natural environment as an organic part of their work and culture, as a young reindeer herder woman puts it:

Reindeer tending work is based on the cycle of nature: calf markings, *etto* [gathering of animals], feeding the reindeer, transporting the reindeer, watch-

20. The settlers arrived in Sámi villages in Sodankylä-Savukoski after settlement legislation in 1675 and 1695, which opened the Lapland border to Finnish permanent settlers.

21. Heikel et al. 1914, pp. 190–91.

22. Female author, born in 1986: Instagram 11 Feb. 2020.

23. Interview with Iida Melamies. See: <https://yle.fi/aihe/artikkeli/2021/05/07/iida-melamies-haluaa-vaikuttaa-poronhoidon-tulevaisuuteen-ja-nyt-nuori-nainen> (accessed 27 May 2021).

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The border fence between reindeer herding cooperatives in Mid-Lapland. Photo: Maria Lähteenmäki 2021.

ing the reindeer, mending, circling, and building the corrals. All year around observing nature, exercising, hiking, fishing, picking berries and mushrooms.²⁴

A third connection between today's inhabitants and the past Forest Sámi, is the working sites and homes: 'We are living in the old dwelling places of the ancestors'.²⁵ A respondent from Oraniemi emphasised that his ancestors had herded reindeer in his village for at least 250 years, and still in the 1980s

24. Cultural Nature Survey 2021: Respondent 13, female, born 1987.

25. See Metsälappalaiset. Mitä on metsälappalaisuus? <https://www.metsalappalaiset.net/mita-on-metsalappalaisuus> (accessed 15 May 2021); Antikainen et al. 2019, pp. 33, 43.

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almost everyone owned reindeer.²⁶ A younger female herder from Sattasniemi described how she was born to her occupation; her family has worked with reindeer for hundreds of years, ‘so it’s almost like hereditary for us’.²⁷ Our survey illustrates the herders’ mental orientation towards the traditional Forest Sámi hunter-gatherer lifestyle.²⁸ Self-sufficiency, an outdoor lifestyle, berry picking, hunting and fishing are repeatedly brought up in the answers as cornerstones of both leisure time and livelihood.²⁹

The changing environment in Forest Lapland

When asked how local nature has changed, our survey respondents brought up visible transitions in the natural environment that are mostly due to the acts of ‘outsiders’, such as the national administration, especially the National Forest Service (Finn. *Metsähallitus*), private business companies or decision-makers in the ‘South’. The biggest problems perceived for reindeer herding were forest industry and logging (86%), artificial lakes (86%), and mining (71%).³⁰ The three eldest respondents, born in the 1950s and 1960s, emphasised the rise in the number of forest roads,³¹ and the decrease in untouched wilderness. The loss of peaceful, dense forests seems to be experienced as being just as painful as the disadvantages these industries have created for reindeer husbandry, which uses the same forests as pastures. According to the respondents, the scenery has been transformed from the 1960s onward because of mining, test drilling³² and wind turbines, also called ‘devil’s whisks’.³³ A certain dualism can be seen

26. Cultural Nature Survey 2021: Respondent 10, male, born 1965.

27. YouTube. #vaihtovuosisodankylässä vlog 28 Feb. 2020: <https://youtu.be/WHhW4Ok-hACA> (accessed 25 May 2021).

28. Cultural Nature Survey 2021: Respondent 6, male, born 1970; Respondent 7, female, born 1986; Respondent 12, female, born 1982.

29. Cultural Nature Survey 2021. When asked what the respondents do in nature, fishing is mentioned in 12/14 answers, hunting in 9, berry picking in 8 and mushroom picking in 1 answer. Working with reindeer in the forest is understood as part of this self-sufficient lifestyle.

30. Cultural Nature Survey 2021.

31. Cultural Nature Survey 2021: ‘Excessively dense forest road network’. Respondent 2, male, born 1953; ‘Forest roads’. Respondent 4, male, born 1950; ‘Roads built everywhere’. Respondent 5, male, born 1965.

32. Motorisation and technical utilities (71.4%) come only after the profound environmental changes. Cultural Nature Survey 2021.

33. Cultural Nature Survey 2021: Respondent 3, male, born 1953.

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in the respondents' descriptions of local nature: the ideal scenery is beautiful and nostalgic with ancient spruces, old forests, open swamp landscapes and wilderness. Pomokaira nature reserve was seen to form a contrast to the rest of the cooperative's area: clearcut commercial and ravaged forests.³⁴

Wish there were clean waters and uncut forests. Freely running clear water is the source of life, of which man should never give up... On our lives ... the harnessing of the river and building the artificial lakes has had an enormous effect. The Kitinen was a beautiful natural river with big and small rapids and steam pools. ... Now what is left is a dug-up hole, which doesn't freeze even for the winter because of the regulated running... The wilderness of my childhood has changed a lot.³⁵

The visible consequence of intensive forestry in Mid-Lapland has been the decrease of old trees with beard moss (Finn. *naava*), lichen growing in spruces, which is an important reserve nutrition for the reindeer in the winter.³⁶ Cutting the forest has brought other disadvantages, as Oraniemi cooperative reported in 1959: 'Winter pastures have diminished quite a bit due to the forest cutting carried out by the government. There is so much fallen wood on the ground that reindeer are not able to dig in the snow season.'³⁷ The consequences of forestry have been multidimensional: diminishing beard moss and lichen areas, moulding the terrain, fallen trees in the forests, hardening snow in open spaces, difficulties in moving, disturbances to the pasture rotation and scattering of the animals.³⁸

In the 2020s, the herding processes of both Oraniemi and Sattasniemi cooperatives are still based on widespread use of natural pastures. The summer pastures, such as mires and twig and grass pastures, provide enough nutrition for the animals, but the winter lichen pastures have diminished, and therefore supplemental feeding has become a necessity. Supplementary feeding started

34. Cultural Nature Survey 2021: Respondent 3, male, born 1953, and Respondent 8, female, born 1975: 'Everything is excavated, modified and cut.' Respondent 7, female, born 1986.

35. Female author, born in 1986, on Instagram 10 Aug. 2020. The citations have been translated by the authors.

36. See Paliskuntain yhdistys. Challenges in Reindeer herding: <https://paliskunnat.fi/poro/poronhoito/poronhoidon-haasteet/> (accessed 26 March 2021); Kumpula, Kurkilahti, Helle and Colpaert 2014.

37. Annual report of Oraniemi cooperative 1958–1959. Reindeer Breeding Association's Archives, Eb:3. NA-Oulu.

38. Kumpula and Nieminen 1987, p. 27.

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in the cooperatives in the 1960s, at first on a small scale.³⁹ Twenty years later, fifteen per cent of reindeer in the cooperatives were held in yards.⁴⁰

The most profound changes in the natural environment occurred after the Second World War, although expanded industrial forestry had altered the landscape from the late nineteenth century, when stock rafts began to be floated along the Kemijoki River and its tributaries to the paper and pulp mills in Kemi on the coast of the Gulf of Bothnia. Later, the construction of Lokka artificial lake (opened in 1969) for Finnish energy production had remarkable effects on the work of the reindeer herding cooperatives in Mid-Lapland ([Map 2](#)). As early as 1958, reindeer herders claimed that the first forest cutting to make way for the artificial lake had ruined most of the reindeer pastures, and its destructive influences on their livelihood were continuously referenced until the early 1970s. The lack of pasture had led to reindeer wandering to the neighbouring cooperatives, and they could no longer be herded in stocks (herds, Finn. *tokka*) in winter. The situation also affected the nutrition of reindeer and led to their deaths.⁴¹ One cooperative in the area lost some forty per cent of its summer pastures due to the Lokka lake, and century-old traditions of dock herding and leash calving came to a sudden end.⁴² Nature protectors also highlighted the loss of unique nature values, with irreplaceable damage being done to the local natural environment.⁴³

The Porttipahta artificial lake ([Map 2](#)) opened in 1970. In May 1964 the Sattasniemi cooperative raised the fact that the Kemijoki Company had already applied for a building permit to construct a new artificial lake. However, this fact did not generate much discussion, although a working group was founded to deal with the lake issue and demanded compensation for the damage.⁴⁴ It was stated in 1968 that there was a great need for a fence between Sattasniemi and Kuivasalmi in Kittilä cooperatives, because the Porttipahta cutting area had made the reindeer wander further from the cooperative's border, and run-

39. Sakatti Mining Company. Porotalousselvitys [Reindeer herding economy report] 25 Nov. 2020. The first references to supplementary feeding in Sattasniemi cooperative are found in 1966. See Sattasniemi cooperative meeting 30 Dec. 1966 §6 and §8. Sattasniemi cooperative archives, Ca:6. NA-Oulu.

40. Kumpula and Nieminen 1987, p. 29.

41. Annual reports of Lappi cooperative 1957–71. Reindeer Breeding Association Archives, Eb:3–Eb:6. NA-Oulu; Lappi cooperative is situated in Sodankylä as well, to the north of Oraniemi cooperative.

42. Pyhäjärvi 2011, pp. 32–33.

43. Rauno Ruuhijärvi, 'Hukkuvaa Sompion Lappia'. *Suomen Luonto* 3/1959, p. 677.

44. Sattasniemi cooperative Spring meeting 4 May 1964, §14–15. NA-Oulu.

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ning the water to the reservoir would make things even worse.⁴⁵ Sattasniemi cooperative had border fences and roundup corrals in the Porttipahta lake area, which it had to abandon,⁴⁶ and the regular running of water was predicted to cause reindeer deaths.⁴⁷ The lake has been said to ruin some of the best pastures in the area of the Sattasniemi cooperative.⁴⁸ The cooperatives were not satisfied with the one-off financial compensation from the national Hydropower Committee, and the legal process proceeded through all the courts.⁴⁹

In addition to the artificial lakes and their effects on the local environment, the Kelukoski hydropower plant built beside the Kitinen River in 2001 changed the surroundings.⁵⁰ In the 2000s, wind farms have been actively debated. Four herder women from Sattasniemi accused the council of Sodankylä municipality of pursuing a ‘fast buck’ and sacrificing the oldest livelihood and the most committed residents in the area: ‘The reindeer keep us here generation after generation and make the young people come back after their studies.’⁵¹ The former cooperative’s chair called the wind farm the environmental crime of the century.⁵² Locals emphasised that the vibrant work of the cooperative was based on natural pasture rotation, which yet another wind farm would jeopardise.⁵³ The planned windmills were seen to change the sense of place.⁵⁴

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45. Sattasniemi cooperative board meeting 16 Dec. 1968 §9. Sattasniemi cooperative archives, Ca:6. NA-Oulu.
 46. Sattasniemi cooperative general meeting 17 Sept. 1962 §21, and Sattasniemi cooperative meeting 19 May 1970 §12. Sattasniemi cooperative archives, Ca:6. NA-Oulu.
 47. Sattasniemi cooperative board meeting 8 Dec. 1973 §8. NA-Oulu.
 48. Annual report of Sattasniemi cooperative 1964–65. Reindeer Breeding Association Archives, Eb:5. NA-Oulu.
 49. Pyhäjärvi 2011, pp. 32–33; Reindeer Herders’ Association annual meeting 4–5 June 1974, §14. Finnish Reindeer Herders’ Association archives, Da:3. NA-Oulu; Sattasniemi cooperative board meeting 19 Aug. 1968 §3 and Sattasniemi cooperative general meeting 19 Sept. 1969 §9. Sattasniemi cooperative archives, Ca:6. NA-Oulu.
 50. Cultural Nature Survey 2021: Respondent 13, female, born 1987; The homepage of Sattanen village: https://sattanen.info/wordpress/?page_id=53 (accessed 27 May 2021).
 51. Kirsi Mäkitalo, Jenni Kaaretkoski, Iida Melamies and Viola Ukkola. ‘Pikavipillä pinteestä porollisten kustannuksella?’ *Lapin Kansa* 25 Feb. 2020.
 52. Auvo Autio, ‘Paikallisia on kuunneltava’. *Lapin Kansa* 12 March 2020.
 53. The letter was published in the local magazine *Sompio* 25 Feb. 2020.
 54. Cultural Nature Survey 2021: Respondent 13, female, born 1987.

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However, reindeer herding was even more disrupted in the Oraniemi cooperative, due to the Kevitsa mine and snowmobile routes.⁵⁵

The respondents to our survey claimed that the wind turbines, artificial lakes and mines have also altered the pasturing behavior of the animals. The building of the Pahtavaara gold mine from the 1980s onwards substantially decreased the use of the nearby Sattasvaara roundup corral, when reindeer started to avoid the area.⁵⁶ The Kevitsa mine also influences work in Oraniemi cooperative: reindeer have avoided this area too and changed their routes. The planned Sakatti mine would potentially jeopardise the whole livelihood in Oraniemi cooperative, causing damage comparable to the artificial lakes built in the 1960s and 1970s by overrunning and destroying a significant part of the pasturing lands.⁵⁷

The highly emotional talk about changes in the local environment tells us a lot about the local human-nature relationship. It has been argued that the most valuable assets of any traditional community are its lands and its culture.⁵⁸ This is true also in the Mid-Lappish communities. Emphasising the close interaction between nature and cultural codes is crucial, even if both nature and humans' way of life have changed. A young respondent to our survey missed the untouched forests, which have been lost, as she had heard about them from the older members of the community. The ideal of pure and free nature is placed in the past, when nature was not exploited so much, while nowadays traces of humans are too visible.⁵⁹ The relation between nature and humans has been, according to the locals, unbalanced.

Nature protectors?

There is also another side of the coin when debating the question of preservation and nature protection. The members of the reindeer herding communities have identified themselves as nature protectors, but at the same time want to

55. Sakatti Mining Company. Porotalousselvitys [Reindeer herding economy report] 25 Nov. 2020, pp. 73–74, 97, 137–138.

56. Anttonen Marja, 'Porotalous ja muu maankäyttö: käsittelyssä kaivokset', *Poromies* 3/2011, pp. 41–43.

57. Sakatti Mining Company. Porotalousselvitys [Reindeer herding economy report] 25 Nov. 2020, pp. 137–38.

58. See Pilgrim and Pretty 2010, p. 1.

59. Cultural Nature Survey 2021: Respondent 13, female, born 1987.

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distinguish between themselves and the green ‘daydreamers of the South’, who have no practical knowledge of living with nature (as became the perception as early as 1933 in terms of animal welfare).⁶⁰ At the meeting of the Reindeer Herders’ Association in June 1952, the attitude toward nature conservation was positive, because the areas were supposed to become sanctuaries for wild animals, such as reindeer. However, the herders emphasised that they must have the full right to stay in conservation areas, take firewood and other necessities from the forest, and be able to overnight in the state-owned wilderness cabins. In addition, they demanded that they should be allowed to eradicate predators from the area, and all the old usufructuary rights should stay as they were.⁶¹ Local autonomy in the use of the state-owned forest has been an important long-term issue when discussing nature protection in the Lappish communities. Nature conservation areas have been welcomed at least in principle, because they are good summer pastures for reindeer.⁶² The same distinction is still made today; a female herder in our survey considered herself a nature protector, but she did not support the same values as the ‘greens in the cities’.⁶³

However, attitudes can change. Forest cutting has brought income to the area, and the regulations concerning nature conservation might have been experienced as a threat, as we can see in the discussion related to the Pomokaira conservation area. In 1976 the board of Sattasniemi cooperative discussed the National Forest Service’s plan to clear cut the Pomokaira, and unanimously concluded that it could be done.⁶⁴ A couple of months later, the cooperative board decided to strongly object to the proposed protection of the entire Pomokaira wilderness, although protecting the swamps was supported.⁶⁵ Also, the general meeting of the cooperative ‘strongly and unanimously’ opposed the protection of the area.⁶⁶ The reasons for objecting were likely connected

60. ‘Eläinsuojelua koskeva lakiesitys eduskunnalle’, *Lapin Kansa* 12 Sept. 1933.

61. Reindeer Herders’ Association annual meeting 5–7 June 1952 §8 and §29. Finnish Reindeer Herders’ Association archives, Da:1. NA-Oulu.

62. See, for example, Reindeer Herders’ Association annual meeting 5–7 June 1952 §8 and Reindeer Herders’ Association general meeting 25–26 May 1972. Finnish Reindeer Herders’ Association archives, Da:1– Da:3. NA-Oulu.

63. Cultural Nature Survey 2021: Respondent 7, female, born 1986.

64. Sattasniemi board meeting 28 June 1976 §4. Sattasniemi cooperative archives, Ca:6. NA-Oulu.

65. Sattasniemi board meeting 10 Aug. 1976 §3. Sattasniemi cooperative archives, Ca:6. NA-Oulu.

66. Sattasniemi cooperative Autumn meeting 28 Sept. 1976 §2. Sattasniemi cooperative archives, Ca:6. NA-Oulu.

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to the question of carnivores, as we can conclude from an earlier Koilliskaira and Koitelaiskaira protection area plan, which was feared in the early 1970s would constitute a ‘beast pound’ right at the edge of the cooperative.⁶⁷ This encapsulates the complex relationship local herders have with nature protection. An anecdote from the Reindeer Herders’ Association meeting in 1975 related to nature reserves and the predator issue sums up the dilemma: ‘We reindeer men are nature protectors, but not by any means enthusiasts.’⁶⁸

One aspect of nature conservation is the damage reindeer do in the forests, an issue that has been discussed for over a century. Herding has conflicted with both agriculture and forestry because freely wandering animals are nowadays also seen as a threat to the environment. Earlier the focus was on economic losses for the forest industry and farmers and, from the 1970s, also increasingly on issues related to nature conservation.⁶⁹ This has led to strict quotas on reindeer numbers in each cooperative. Already in the early twentieth century, the ‘golden years’ of the Finnish timber industry, reindeer herding was opposed by the government and the professional forest industry, and reindeer were alleged to ruin state forests, for example by digging lichen and rubbing their antlers, a presumption reindeer herders claimed to be false.⁷⁰ The impact of herding on climate change today is also under discussion.⁷¹ Nature conservation and a pastoral lifestyle have been seen as an impossible match, but lately reindeer herders are being considered as potential producers of ecosystem services.⁷²

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67. Sattasniemi cooperative Spring meeting 12 May 1971 §21. Sattasniemi cooperative archives, Ca:6. NA-Oulu.
68. Reindeer Herders’ Association annual meetings 4–5 June 1974 §8 and 4–5 June 1975 §6. Finnish Reindeer Herders’ Association archives, Da:3. NA-Oulu.
69. Heikkinen 2012.
70. See for example Heikel et al. 1914, pp. 89–104; J.H. Herva, ‘Porotalouden perus, miten on rakennettava’. *Poromies* 1/1931, p. 3; Reindeer Herders’ Association annual meeting 5–7 June 1952 § 9, § 29 and 3–4 June 1959 § 12; Reindeer Herders’ Association annual meeting 5–7 June 5–7, 1952 §26. Reindeer Herders’ Association archives, Da:1, NA-Oulu.
71. Järvenpää Juha, Poro ja poronhoito talousmetsissä: Katsaus metsätalouden ja porotalouden yhteensovittamiseen Suomessa [Report: Reindeer and reindeer husbandry in household forests] 2018, pp. 33–34.
72. Heikkinen et al. 2012, *passim*; see also Koster et al. 2013 on vegetation damage in Oraniemi cooperative.

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Roundups as intergenerational human–nature interaction

Everything in reindeer husbandry in Mid-Lapland focuses on roundup corrals, where animals are gathered from the forests. Roundup sites are workplaces, social meeting sites and a cultural layer in the forest, where the work of the previous generations intertwines with the nature experiences of present-day herders:

To the big roundups in the twentieth century a crowd of thousands of reindeer was brought from many directions: finally, the leads were full of antlered animals: the clicking of hooves, the rattling of horns, and grunting filled the air. And when the reindeer hypnotically circled in the corral round, round, round, running, 10,000 reindeer at once, the noises were merged into one whoosh and mixed in the fuming air.⁷³

The oldest known corrals in our research area date back to the nineteenth century, but the same places might have been used in earlier centuries too. Many of the old roundup sites are still in use, and five traditional roundup corrals have been musealised, or partly protected as locally prominent cultural heritage. One of the museum corrals is Saarivaara roundup corral located in Oraniemi cooperative near the Luirojoki River. Massive roundups were still held in Saarivaara in the early twentieth century. The corral was musealised by the Finnish Heritage Agency (Finn. *Museovirasto*) in 1990–1992.



The preserved Saarivaara roundup in Oraniemi cooperative. Photos: Maria Lähtenmäki 2021.

In our survey, almost all old roundup corrals were found worthy of protection. Preservation of the corrals was justified for historical, cultural,

73. Strand 1994, p. 20.

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ecological and practical reasons. Roundup places are considered important because the locations have been selected based on knowledge of the weather, nature, terrain and pasturage circle of reindeer; and due to the usefulness of the sites over the centuries. Information from earlier generations, called traditional ecological knowledge,⁷⁴ has guided herders to build corrals in the best spots in relation to natural pasture rotation.⁷⁵ Because of this, the wooden constructions are an important part of local cultural nature: the roundup places are unique landmarks of human-nature interaction. In the old roundup corrals a special kind of vegetation has emerged, such as birch groves and specific ground vegetation, so it is not just the man-made corrals that are visible signs of human action. The corrals are also historical landmarks of reindeer herders' knowledge of their natural environment and animal behaviour.⁷⁶

In Mid-Lapland, many old corrals are still usable, and regularly repaired. The two respondents from Oraniemi cooperative mentioned four roundup sites that are important in terms of cultural nature.⁷⁷ Their main corral is Kyläselkä, located near the archaeological ruins of the last Sámi winter village (*siida*).⁷⁸ The other old corral, Routusvaara, is still in active use, and dates back to the nineteenth century, as can be observed from the tall old trees inside the area; outside the corral the vegetation is young coniferous pine forest.⁷⁹ Next to the Routusvaara corral are remains of the old roundup churn (Finn. *kirnu*).⁸⁰ Herders in Sattasniemi cooperative still use four historical roundup sites. The two oldest corrals, Kautoselkä and Salmuri, are mentioned in the survey as the most important sites in terms of cultural nature. The Salmuri corral⁸¹ is located

74. Native peoples possess an extensive and deep understanding of their local ecosystem, in ethnoecology and more specifically traditional ecological knowledge. See Gadgil et al. 1993, pp. 151–56.

75. Cultural Nature Survey 2021: Respondent 5, male, born 1965; Respondent 6, male, born 1970; Respondent 7, female, born 1986; Respondent 8, female, born 1975; Respondent 12, female, born 1982; Respondent 13, female, born 1987.

76. Stark et al. 2022, *passim*.

77. Nuolikuru, Palomaa, Routusvaara and Tulinenjärvi corrals. Cultural Nature Survey 2021: Respondent 9, male, born 1970; Respondent 10, male, born 1965.

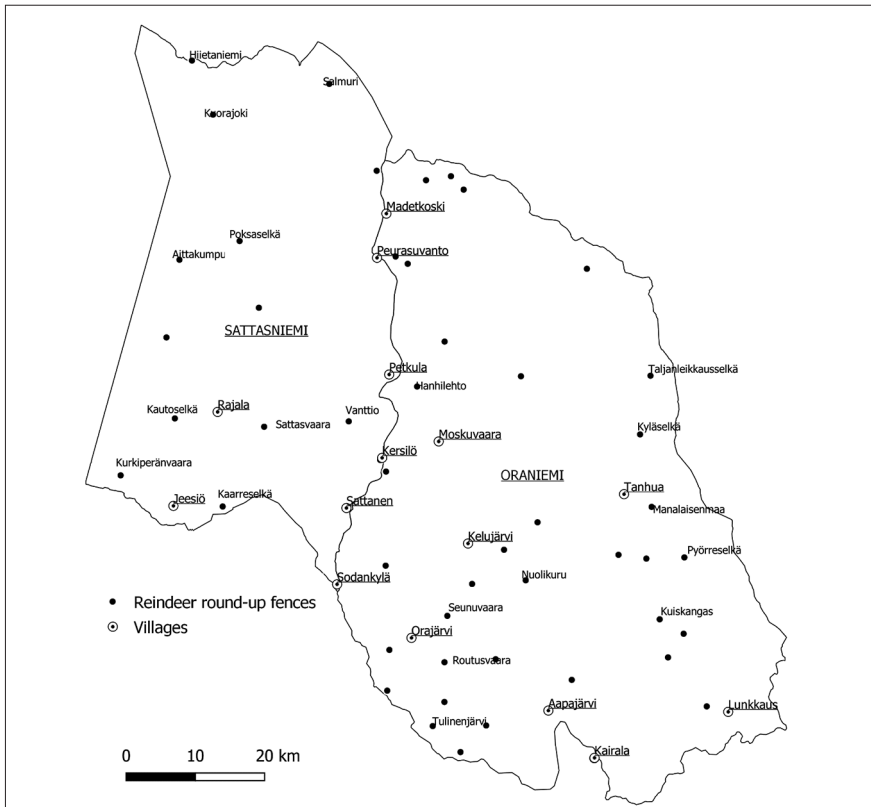
78. Piltz Martti, Selvitys Seitaniemen tien museoarvosta 2009: https://www.mobilia.fi/sites/default/files/seitajarvi_selvitys.pdf (accessed 7 March 2021).

79. Reindeer round-up in Orajärvi Routusvaara, 11 Oct. 2016. Mikko Maijala talks about the round-up in Routusvaara.

80. See metsa.fi: PAVE database, National Forest Service. PAVE is a geographical information system on structures, trails and archaeological sites.

81. Built in 1901 as a calf-marking corral. Sattasniemi cooperative general meeting 1 Oct. 1901 §18, NA-Oulu.

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Map 3. The villages and reindeer roundups in Sattasniemi and Oraniemi cooperatives.

Sources: The map contains data from the Finnish Environmental Institute database (TOKAT database), National Land Survey of Finland (Topographic database 2019), and GADM (database 2015). Drawing Outi Manninen 2021.

south of the Porttipahta artificial lake. It is one of the few remaining *perkka* corrals, which were built out of timber without nails by notching and joining the logs in the corners. A section of the Salmuri corral has been preserved as locally important cultural environment.⁸² In the late 1970s it was considered that it should no longer be repaired but be left to decay. However, the majority of the cooperative's members were in favour of mending the corral.⁸³ Kautoselkä

82. Lapin liitto 2008, Pohjois-Lapin maakuntakaavaselostus.

83. Sattasniemi cooperative general meeting 24 May 1978 §5. Sattasniemi cooperative archives, Ca:7. NA-Oulu. Salmuri round-up was repaired at least in 1909, 1913, 1915, 1950, 1962 and 1978.

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roundup site is the other main corral in Sattasniemi cooperative. In the 2010s the local windfarm affected the use of Kautoselkä roundup by disturbing the transportation of the reindeer docks. Forestry has also been said to decrease the opportunities for reindeer nutrition in the area.⁸⁴

The highlights of the reindeer year, roundups, happen in late autumn. The reindeer herders of the research area usually take part in dozens of roundups a year. Information about the place and time was in earlier times announced in the local church,⁸⁵ later in the newspaper⁸⁶ and nowadays for example by text message.⁸⁷ Reindeer owners, their families, buyers and interested locals arrive from all directions – earlier skiing or on reindeer sledges, nowadays with snowmobiles, quad bikes and all-terrain vehicles – and gather at the roundup sites ([Map 3](#)), stepping out of the routine of everyday village life.

Technical working tools such as snowmobiles as well as human interventions, such as forestry, mines, roads and snowmobile routes, have changed the logistics system of roundup sites. People travel to corrals with motorised vehicles, which changes the trade in reindeer meat and other products. The first snowmobile was adopted in Sattasniemi in 1964.⁸⁸ Both the Sattasniemi and Oraniemi cooperatives used snowmobiles at least from 1965 onwards to drive away carnivores.⁸⁹ The popularity of the new tool was not unanimous: in 1966, a member of Sattasniemi cooperative suggested that the use of snowmobiles in reindeer work should be banned, but the meeting decided that snowmobiles could be used when needed.⁹⁰ One reason for the dislike might have been the drastic change in the atmosphere and the soundscape snowmobiles caused to

84. See Metsähallitus: Kuolavaara–Keulakkopään tuulipuisto. Ympäristövaikutusten arviointiselostus 27 Jan. 2011.

85. See, for example, Kuulutukset (Public notes) 1919, Sattasniemi cooperative archives, Db:2. NA-Oulu.

86. See, for example, the cooperative's meetings on 25 Sept. 1948 §31 and 25 Sept. 1950 §22. Sattasniemi cooperative archives, Ca:5. NA-Oulu; Cooperative meeting 28 May 1983 §16. Sattasniemi cooperative archives, Ca:7. NA-Oulu.

87. Helle 2015, pp. 55, 79.

88. Sattasniemi spring meeting 4 May 1964 §5. Sattasniemi cooperative archives, NA-Oulu.

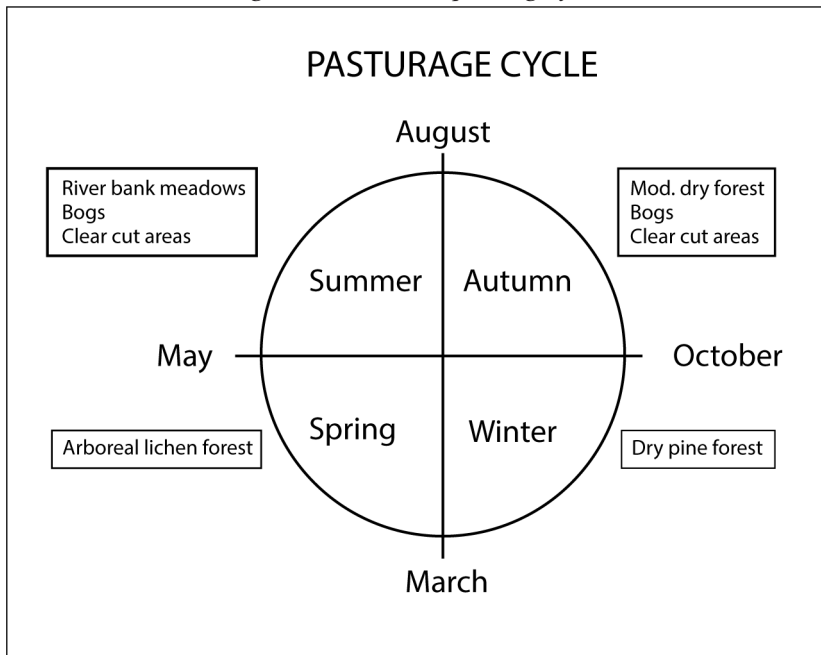
89. Reindeer tending season 1965–66, Sattasniemi and Oraniemi. Finnish Reindeer Herders' Association archives, Da:2. NA-Oulu.

90. Sattasniemi cooperative extraordinary meeting 30 Dec. 1966 §7. Sattasniemi cooperative archives, Ca:6. NA-Oulu.

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forest work, and the motorised vehicles were also said to disturb the reindeer.⁹¹ The old herding style ended in the 1960s due to snowmobiles and, as a result, the reindeer often wandered to neighbouring cooperatives.⁹² Radiotelephones were introduced in the area in 1966, when they were advertised as being light and enabling communication.⁹³ More recently, cellphones have been used to help with the *etto* work. Due to modern tools, reindeer are nowadays easier to locate: they may be tracked with GPS collars and monitored on an iPad.⁹⁴

Figure 1. The reindeer pasturage cycle.



Source: Colpaert et al. 1995, with permission.

91. Sattasniemi cooperative extraordinary meeting 6 May 1974 §1. Sattasniemi cooperative archives, Ca:6. NA-Oulu.
92. Kumpula and Nieminen 1987, pp. 26–27.
93. Reindeer Herders' Association general meeting 1–2 June 1966 §7–8. Finnish Reindeer Herders' Association archives, Da:2. NA-Oulu.
94. Video of Reindeer round-up in Routusvaara, Orajärvi. Seitäsäätiö. Mikko Majjala, a member of Oraniemi cooperative, commented on the round-up on 11 Oct. 2016. Nature of the North: Reindeer. See Visit Sodankylä.

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Despite the changes in the gathering due to the use of motorised and digital tools, such as GPS collars, helicopters and drones, the process is essentially similar to the one of decades ago. The timetable is still flexible: the period and place of each event depends on the number of animals, weather conditions and other uncontrollable circumstances. Slaughtering, for instance, was for a long time dependent on icy weather, because the animals were slaughtered at the corral: the frost was a natural refrigerator for reindeer meat.⁹⁵

The roundup process starts with gathering the animals in a process called *etto*. Each cooperative decides independently when to go to the forest. Until the mid-1960s, the *etto* took weeks, even months. Spending long periods in the wilderness on foot, on reindeer-sleighs or skiing gradually changed with the adoption of different motorised vehicles. The *etto* process is seen among the herding community as a testimony to the close human-nature relationship. Locals have been assumed to instinctively know how to survive in the wilderness. Moving in the wilderness has been based on traditional knowledge of nature, animal behaviour and weather.⁹⁶ Stories in the herders' magazine *Poromies* (Finn. *Reindeer Man*, meaning Herder) from the 1930s paint a romanticised picture of a time, where animals were tame and men skilful. The herders were expected to enjoy their time in nature, not to complain if they had to spend even their Christmas in the snowy halls of the wilderness.⁹⁷ The traditional hut (Finn. *kota*) was seen as the only correct way to overnight, and wooden lodges were described as unhealthy and untidy.⁹⁸ In a long, romanticised story about an old man visiting his summer pasture hut for the last time, this view can be seen particularly well: nomadic blood is said to run in the old man's veins, which is why he does not want to spend time indoors at all.⁹⁹

The sorting of reindeer gathers a large audience; the roundups have been compared to a trade fair¹⁰⁰ and a 'fiesta of the people of the wilderness'.¹⁰¹ Even though moving and transportation has become easier, some people still have

95. For example, in November 1936 many round-ups had to be cancelled because of the 'prevailing summer weather'. *Poromies* 5–6/1936, pp. 116–19.

96. Ruotsala 2002, p. 325.

97. 'Poromiesporinoita', *Poromies* 11–12/1936, p. 119.

98. 'Asumukset erotusaidoilla kotamaisiksi', *Poromies* 9/1937, pp. 73–74; K.J.H.(olster), 'Miten ja minkälaisille paikoille porojen kesäpaimennusta ja merkintää varten olisi porokaarteet eli aitaukset tehtävä?' *Poromies* 6/1931, p. 10.

99. K.J.H.(olster), 'Olli-vaarin mietteitä', *Poromies* 6/1935, p. 52

100. 'Poronhoito', *Poromies* 1/1936, p. 5.

101. T. Mäki, 'Teurastuskurssit Oulussa', *Poromies* 6/1939, pp. 102–04.

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to spend the night at the roundup sites. Most of the corrals have cabins built around them, and overnighing is still linked to roundups. In a description dating from 1912, the roundup process is said to be chaotic, but fascinating: ‘Everything is one big mess.’¹⁰²



Reindeer roundup in Sodankylä in 1962. Photo: Finland National Heritage Agency, public domain.

The roundups are both work and social interaction. Most of our respondents brought up the importance of social life at the corrals and found it essential to bring their families to the roundups to pass on the tradition: 86 per cent of our respondents said their family members participate in the roundup events.¹⁰³ One respondent underlined the importance of social interaction; the locals could exchange news, transmit culture from generation to generation and cherish traditions.¹⁰⁴ A modern herder woman normally brings infants to the roundups and forest in a carrier backpack, and the children are used to

102. Heikel et al. 1914, pp. 37–38.

103. Cultural Nature Survey 2021.

104. Cultural Nature Survey 2021: Respondent 11, female, born 1978.

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working in nature from an early age, as children of past Sámi families did.¹⁰⁵ The intergenerational aspect of the roundups is strong, which is seen in our survey. One male herder, born in the early 1950s, wrote that his most unforgettable roundup experience was when his grandfather lifted him onto the back of reindeer at the Ylivaara roundup corral when he was four years old.¹⁰⁶ The corral doesn't exist anymore, but it lives in local memories:

I attended my first roundup in 1956 as a 5-year-old. The same year I had gotten my grandmother's reindeer ear tag. The roundup was held in the Rajala village in Sodankylä at the Ylivaara corral. There were over a thousand reindeer. Many people were dressed in Lappish costumes. ... Today when I drive by the Ylivaara roundup corral I see the already partly decayed and fallen corrals. But memories are warm of the past times.¹⁰⁷

Strengthening of outside regulation

The current strong perception of our respondents is that, as a livelihood, reindeer herding is based on decades-old customs, tacit knowledge and the rhythm of nature, but it also has a growing dimension of regulation and standardisation. Over the last hundred years, big alterations have taken place in the reindeer husbandry. Alongside the transformation toward a more widespread production chain of reindeer meat, the number of reindeer has kept growing and the animals are not as tame as earlier. They have to be forced to the corrals, which has also altered the structure of the roundup corrals.¹⁰⁸

The communities in Sodankylä together defined the first guidelines for reindeer herding in 1881.¹⁰⁹ Sattasniemi cooperative collected its own guidelines for reindeer care in 1902.¹¹⁰ This was a sign of putting oral practices on paper and requiring a certain conformity in working habits. One of the writers of the guidelines was Otto Moberg, a reindeer tending adviser¹¹¹ and a spokesman of the Finnish Animal Welfare Association (founded in 1901). In winter

105. YouTube. #vaihtovuosisodankylässä vlog 28 Feb. 2020; Interview with Iida Melamies 7 May 2021. See Finnish public broadcasting company.

106. Cultural Nature Survey 2021: Respondent 2, male, born 1952.

107. Cultural Nature Survey 2021: Respondent 4, male, born 1950.

108. Korhonen 2008, p. 18; Kortessalmi 2008, p. 223.

109. Kumpula and Nieminen 1987, p. 26.

110. Sattasniemi cooperative meeting 13 July 1902 §2. Sattasniemi cooperative archives, Ca:2. NA-Oulu.

111. 'Maanviljelijä Otto Moberg 60-vuotias'. *Lapin Kansa*, 10 Sept. 1929.

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1913–1914, Moberg visited the roundups in all cooperatives in Sodankylä municipality. He criticised many old habits and stated that animal torture and inconsiderate treatment of the reindeer was still seen in roundups. As an example, he mentioned cases where reindeer were pulled to the corrals, and an untamed reindeer tied to the corral with a leash started to run around. As a result, it was often injured or even decapitated, and the people around might cheer and frighten the animal. Moberg also criticised poor and unhygienic food conditions, which partly led to the deaths of the weakest reindeer.¹¹²

By the early twentieth century, the structural changes in society and the difficulties of the industry pushed reindeer herders toward wider regulation and cooperation. One target of the reindeer refinement association (Finn. *Poronjalostusyhdistys*, est. in 1926), the predecessor of the Reindeer Herders Association (Finn. *Paliskuntain yhdistys*), was to root out harmful customs in order to improve profitability. According to its rules, the association aimed to promote ‘absolutely humane’ slaughtering customs and prevent reindeer deaths by bleeding and blood-poisoning from winter markings and castration performed by biting.¹¹³ First, ‘the reindeer herders should oblige themselves to handle the reindeer humanely before butchering, without inappropriate pulling and throwing’.¹¹⁴ More specifically, herders need to treat the animals as fellow mammals. All in all, the animals were to be treated calmly and silently, without unnecessary running, shouting and scaring the reindeer. The timid reindeer were said to fear the corrals and marking made the animals nervous.¹¹⁵ In 1958 these warning words were repeated; for many, reindeer herding had become an ancillary activity, so reindeer had grown wilder, had little experience of people and therefore were scared of them.¹¹⁶

Rapid changes in perceptions of animals has also created local resistance. It feels unchanging, but, in reality, humans’ relationship with other animals has always been in transition, and there has always been criticism of how we treat

112. Otto Moberg, ‘Kertomus allekirjoittaneen, Suomen eläinsuojelusyhdistyksen asiamiehen, toiminnasta poromailla Sodankylässä talvella vuonna 1913–1914’. *Eläinten ystävä* 10–11/1914, pp. 186–187.

113. Yrjö Alaruiikka, ‘Suomen Poronjalostusyhdistys 1926–1936’, *Poromies* 3/1937, p. 24.

114. Joh. Henr. Herva, ‘Porotalouden perus, miten on rakennettava’, *Poromies* 1/1931, p. 4.

115. K.J. Holster, ‘Sananen porojen kesämerkinnästä ja paimennuksesta sekä porojen kesyyntymisestä’, *Poromies* 1/1931, pp. 8–9.

116. Reindeer Herders’ Association annual meeting 9–10 June 1958 §14. Reindeer Herders’ Association archives, Da:1. NA-Oulu.

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other living creatures.¹¹⁷ An animal welfare adviser wrote from Sodankylä in the 1910s that local reindeer herders were willing to take his advice on treating the animals with mercy, but at the same time had a hard time ‘giving up the old deep-rooted habits’. As one the most glaring grievances, he mentioned the winter ear markings, because in cold weather the blood would not coagulate, leading sometimes to hemorrhage. He also hoped that the cooperatives would purchase firearms for slaughtering.¹¹⁸

The Finnish Animal Welfare Association was trying to get reindeer classified as a domesticated animal, so that their slaughtering would be controlled by law. This goal was achieved in the Animal Welfare Act in 1934, although local veterinarians interpreted based on the 1902 Slaughtering Act that reindeer were private property and should be considered as domesticated animals.¹¹⁹ Under the Act, the reindeer were supposed to be properly stunned before killing, but it took a long time for this to be done in practice; the reindeer did not necessarily lose consciousness by being hit in the neck.¹²⁰ The traditional method was to stab the reindeer in the heart while it was still conscious; the blood was thought to run out so that the meat would be clean.¹²¹ The new methods were encouraged by courses and competitions, for example in slaughtering,¹²² with prizes at the roundups for the ‘best slaughterers’.¹²³ Slaughtering at the corrals was evaluated as good, mediocre or bad.¹²⁴ There was interest in new slaughtering techniques among the herders, although the old ways were also

117. Latva and Lähdesmäki 2020, pp. 19–20; DeMello 2021, p. 19; Bourke 2011, pp. 5–6.

118. ‘Rovaniemen paikallisyhdistyksen ja pääyhdistyksen yhteinen poronhoidonneuvoja kirjoittaa Sodankylästä tammikuun 19 p:nä’, *Eläinten ystävä* 2/1913, p. 51.

119. They stated that the slaughtering regulations should be announced at churches and supervised by the police. ‘Porojen teurastus. Kiertokirje nimismiehille’. *Eläinsuojelus* 1 March 1912, pp. 41–42; Uutisia: Rovaniemeltä kirjoittaa meille K. Riihiaho seuraava. *Eläinsuojelus* 1 March 1912, p. 47.

120. T. Mäki, ‘Teurastuskurssit Oulussa’, *Poromies* 6/1939, p. 102.

121. Hilda Allén, ‘Mikä velvoittaa meitä työskentelemään heikkojen hyväksi’, *Eläinsuojelus* 1/1901, pp. 1–65; ‘Kauheaa eläinräkkäystä’, *Eläinten ystävä* 3/1907, pp. 49–50; Väinö Virtanen, ‘Enemmän inhimillisyyttä poronhoidossa’, *Eläinten ystävä* 1/1913, pp. 18–19; ‘Porojen teurastus’, *Eläinsuojelus* 1 March. 1912, p. 4; T. Mäki, ‘Teurastuskurssit Oulussa’, *Poromies* 6/1939, p. 102.

122. ‘Uutisia’, *Eläinten ystävä* 3/1909, p. 49.

123. ‘Luettelo hyvistä poronteurastajista’, *Poromies* 1/1937, pp. 15–16.

124. See, for example, ‘Teurastusneuvojain tiedonantoja marras-joulukuulta 1936’, *Poromies* 1/1937, pp. 6–8.

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defended.¹²⁵ The dislike of outside control is captured in a document about including reindeer in the regulations concerning domestic animal slaughtering. The writer finds it amusing that the legislators talk about ‘tame’ reindeer, and states that these southern animal welfare utopians have probably seen reindeer only in pictures.¹²⁶ Slaughtering at the corral where the other animals could see what was happening was found to be stressful for the animals.¹²⁷ In 1955 Sattasniemi cooperative decided to buy a slaughtering pistol after a talk from a reindeer herding adviser (also a member of the cooperative) on how to slaughter reindeer according to the law.¹²⁸ In a general meeting of herders in 1958 it was stated that the slaughtering place should be picked so that the other animals would not see the event, and the animal should be properly stunned before killing.¹²⁹

The number of reindeer has risen over the decades, leading to a rise in slaughtering numbers. The slaughtering of calves started in the late 1960s.¹³⁰ There is a strict percentage that each owner must mark for slaughter in the roundups, and the decisions are made on an economic basis. Emotions can, however, interfere with rational decision-making: sometimes reindeer owners decide to save a doe already marked for slaughter. This is called ‘getting angel’s eyes’. The saved individual is often a reindeer that has lived in a pound close to the owner.¹³¹ In the last fifty years, supplementary feeding and keeping the reindeer near the homes of herders have increased contact with the reindeer in the wintertime; herders see them more often, and they might start to resemble a domesticated animal. When an animal gets a name, it is personalised. For example, pulling and racing reindeer have always had names, and they have been seen as valuable individuals. Reindeer racing started in Finland in the

125. T. Mäki, ‘Teurastuskurssit Oulussa’, *Poromies* 6/1939, p. 103.

126. ‘Eläinsuojelua koskeva lakiesitys eduskunnalle’, *Lapin Kansan* 12 Sept. 1933.

127. ‘Mitä tekeillä olevassa porolaissa olisi otettava huomioon’, *Eläinten ystävä* 2/1923, p. 17; Frans K. Rantanen, ‘Poro, Lapin juhta’, *Eläinten ystävä* 5/1934, p. 88.

128. Sattasniemi cooperative meeting 30 April 1955 §15 and §16. Sattasniemi cooperative archives, Ca:5. NA-Oulu.

129. Yearly meeting of the Reindeer Herding Association 9–10 June 1958 §12. Reindeer Herders’ Association archives, Da:1. NA-Oulu.

130. Annual reports of Sattasniemi and Oraniemi cooperatives. Finnish Reindeer Herders’ Association archives NA-Oulu; Kumpula and Nieminen 1987, p. 29.

131. Helle 2015, pp. 71, 73.

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1920s, and the racers got names based on their appearance or skills, such as *Fire hoof*, *Ringed-eye*, *Black* or *Blaze*.¹³²

Roughness in roundups, especially in earlier times, might have been related to giving up the animals and hiding personal emotions, as the animals are very much part of the human culture, cultural nature and local self-understanding. In the roundups, some animals were slaughtered and others ran free. In a film of the Sattasvaara roundup in 2020, a female herder, who is also a mother, talks about the sadness she feels when the calves are taken to be slaughtered, and the cows cry for their calves and search for them for days. 'It is quite tough for a female herder', she says, but 'you have to sell the meat to make a living'.¹³³ Women have gradually been welcomed to participate at the roundup processes as equal reindeer handlers. Traditionally women have been a minority of reindeer herders and owners: in Oraniemi in mid-1980s some nine per cent of reindeer owners were women,¹³⁴ but their share has increased in recent decades.¹³⁵ This seems to have changed the roundup events to some extent. The change in roundups can be observed, for instance, from the videos filmed in Sodankylä in the 1980s and 2020s. In the older film, the churn is full of men socialising; talking and swearing; some of them are drunk.¹³⁶ In a roundup event filmed in 2020 the focus is on female herders. Women, men and children work together, there are far fewer people in the churn, and the atmosphere is structured and peaceful.¹³⁷

132. 'Kuusitoista vuotta porourheilua', *Poromies* 1/1938, pp. 7–8.

133. YouTube. #vaihtovuosisodankylässä vlog 28 Feb. 2020..

134. Kumpula and Nieminen 1987, p. 30.

135. A woman was first chosen to be leader of the roundup process in Sattasniemi in 1976 (Autumn meeting 28 Sept. 1976 §19. Sattasniemi cooperative archives, Ca:6. NA-Oulu); The same woman started as the cooperative's secretary in Autumn 1980, appearing for the first time in the board meeting of 12 Sept. 1980. The first woman to lead a cooperative was chosen in the Kaldoavi cooperative in Utsjoki in 2003 (see Siina Välimaa, 'Suomen poroisäntäkin nyt nainen', *Kaleva* 6 June 2003). The first female executive manager of the national Reindeer Herders' Association came in 2010. One implication of the increasing interest in professional herding among women is the increasing number of female students specialising in northern agriculture and reindeer herding: see Lapland University of Applied Sciences and The Sámi Education Institute.

136. Roundup in the Kommattivaara corral (Oraniemi) 1982; Roundup in Sodankylä 1988. In the latter, one individual woman can be seen in the churn.

137. YouTube. #vaihtovuosisodankylässä vlog 28 Feb. 2020.

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Another major question concerns protection of large carnivores and other predators, such as the wolf, wolverine, golden eagle, fox, lynx and bear.¹³⁸ For a long time, cooperatives granted rewards to those who managed to kill large carnivores.¹³⁹ When a law meant to protect bears during the wintertime was discussed in Sattasniemi in May 1964, it raised strong concerns among the herders.¹⁴⁰ In 1966, the chair of Oraniemi cooperative held a talk at the meeting of the Reindeer Herders' Association about bear sightings. The speech, suggesting that the bear protection law should be terminated, got the unanimous support of the participants. Oraniemi's chair complained that the bear had been labelled as an 'innocent herbivore', although it was known to kill reindeer calves. The need for the local circumstances to be acknowledged resonated in the remark that bears should be moved close to Helsinki, so that the people there would get to know the habits of 'the king of our forests'.¹⁴¹ In the national reindeer herding area, it is still permitted to kill wolves with special permission, but wolverines have been protected from the 1980s onwards.¹⁴²

Conclusions

In the course of the twentieth century, Mid-Lapland has faced enormous environmental change. Intensive forestry, energy production and the mining industry have physically altered the landscape and disturbed reindeer herding based on natural pasture rotation. Continuity of the livelihood and way of life is a worrying issue in the region. Local peoples' feelings of not being heard or understood affect their relationships with nature and reindeer.

Concern about losing the connection to nature and animals was first discussed a hundred years ago, when reindeer herding in Lapland was in transition due to the state-led regulations after 1898, and intensified forestry took space from reindeer herding as a livelihood. Definite modernisation and

138. Cultural Nature Survey 2021: Respondent 7, female, born 1986.

139. For example, in February 1905, it was decided to hand over a male calf for each killed wolf, and in 1909 a female calf for every killed wolf or wolverine. Cooperative meetings 7 March 1905 §19 and 13e Feb. 1909 §9. Sattasniemi cooperative archives, Ca:1. NA-Oulu.

140. Sattasniemi cooperative Spring meeting 4 May 1964, §14–15. Sattasniemi cooperative archives, Ca:6. NA-Oulu.

141. A statement by Aimo Maijala. Reindeer Herders' Association annual meeting, 1–2 June 1966 §11–12. Reindeer Herders' Association archives. Da:2. NA-Oulu.

142. Tuija Sorjanen, 'Porot pysäyttävät sudet Lappiin – "Poronhoitoalue on sudella läpikäymätön raja-aita"', *Lapin Kansa* 5 Jan. 2017.

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standardisation of reindeer herding began in the 1930s.¹⁴³ This led to a decline in old herding methods, such as shepherding, but also in old habits, such as spending long periods in the pastures and nature.

The more the surrounding natural and cultural environments have changed, the more the Mid-Lappish communities have tried to revitalise the 'original' nature-human-reindeer relationship with nostalgic stories about dense forests, free waterways and untouched wilderness. The locals emphasise their 'authentic' Lappish lifestyle at least in terms of reindeer herding. This endeavour can be regarded as a cultural use of nature. The reindeer corrals have an important role in this cultural survival process. The old corrals connect the participants to the mystical ancient roundup events, and current herders recall repeatedly that their ancestors have worked in the very same places and sites for centuries. According to locals, nature at the roundup corrals, with its tall trees and other vegetation, is constant proof of the long service the corrals have given their home community.

The handling of the animals has changed during the last century, at least in roundup events – becoming more controlled and structured. The phases of the process are essentially the same from *etto* to sorting, but transportation, communication, treatment and slaughtering have evolved. The animals are easier to locate and reach due to motorisation and internet connections, and the time spent in nature has continuously shortened, but still the work is done outdoors.

The way the animals' behaviour and the rhythm of nature are most visibly transferred into human culture is the reindeer year built on the cycles of nature (Figure 1). This feature is one of the major links to locals' so-called Forest Sámi way of life. Mid-Lappish herders have always moved a lot in nature even though they have permanent dwelling places. Natural pasture rotation remains the basis of work in the Sattasniemi and Oraniemi cooperatives.

Our last conclusion concerns gender: reindeer herding and its sub-events are nowadays less masculine, with female herders having gained a significant role in herding and events organised in reindeer corrals. This transition has happened during the last twenty years in the Mid-Lappish communities. While photos and text from the 1970s still mainly show male herders working in the roundups, today they present young female herders who actively post on their social media about reindeer herding, nature and local culture. Owing to these young women's presentation of their culture, reindeer herding sites nowadays are located not only in the physical environment, but in imaginary nature as well.

143. The Reindeer Breeding Association started to revive the livelihood, for example by education and counselling.

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