

Reindeer

P O R O





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## THE REINDEER HERDERS' ASSOCIATION

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# REINDEER

(*Rangifer tarandus tarandus*)

- Weight: females 60–100 kg, males 90–180 kg, newborn calf 4–6 kg.
- Length: 150–210 cm from the tail to the tip of the muzzle.
- Height at the withers: 90–120 cm.
- Tail length: 10–15 cm.
- Ear: 9–12 cm.
- Foreleg: 55–56 cm.
- Life expectancy: 18–20 years.

Coarse outer guard hairs with heat-insulating air pockets. Extremely dense under fur. Copes in freezing temperatures of  $-50^{\circ}\text{C}$  and heatwaves of  $+40^{\circ}\text{C}$ .

Reacts quickly to sound due to its keen hearing.

Solid bone antlers, which are replaced annually. An antler can grow as much as 2 cm in a day. Males use their antlers to battle for females. The size and number of tines increase until the reindeer grows old.



Reindeer in a 'kiekerö' or a hole where lichen is dug out.

## A REINDEER PASSED THIS WAY



Droppings



Wolverines, bears, wolves, lynxes and eagles prey on reindeer.



Extra toes that the reindeer can spread to ease movement in soft snow and marshes.

Four toes.

Hoof marks.

Females use their antlers to defend their calves and their digging sites.



A reindeer's diet consists of more than 300 plant species. It eats green plants, grasses, mushrooms, lichen and beard moss.

**SEMI-DOMESTICATED** herd animal: herded in the wild, some are fed on farms or in the forest in winter; they graze freely in summer. A ruminant. Roams over long distances and is constantly on the move in search of food.

**MANY NAMES** depending on the colour of the fur – a dark-coloured reindeer is a 'musikki', a light-coloured one a 'suivakko', and a pure white one a 'valkko'.

An earmark to indicate the owner.

A gland that emits a strong odour and helps reindeer find each other and warn of danger.

The most important sense is the sense of smell, which works in the harshest cold temperatures; it sniffs out lichen through thick snow.

♀

**A FEMALE OR A CASTRATED** male that will not stray might wear a bell round its neck; the herd follows the sound of the bell, and herders put this to good use when rounding up reindeer.



Efficient blood circulation in the legs to keep them warm. Oleic acid in the bone marrow acts in the same way as an anti-freeze agent.

A gland with brush-like hairs; the reindeer lubricates the tips of its growing antlers with the hairs.



Valkko



Musikki



Suivakko





## Reindeer husbandry in a nutshell

*The reindeer husbandry area covers 122, 936 sq kilometres, 36 % of Finland's total area.*

**THE REINDEER HUSBANDRY AREA** is a legally demarcated area for reindeer husbandry. Reindeer may graze freely in the area regardless of landownership.

In 1898, the State authorities required reindeer owners to establish herding cooperatives with geographically defined borders. Each reindeer herder is a shareholder in a herding cooperative, and the Reindeer Husbandry Act determines the rights and obligations of herders towards their herding cooperative.

- 🔊 Around 200,000 livestock reindeer remain in the husbandry area after the round ups that select animals for slaughter.
- 🔊 Around 100,000 reindeer are slaughtered each year.
- 🔊 120,000–130,000 calves are born each spring.







High fences prevent reindeer from wandering over national borders or into another herding cooperative.



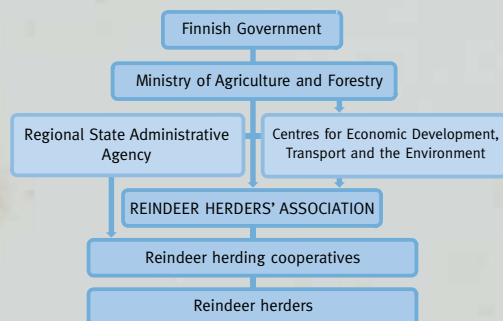
# The system of reindeer herding cooperatives

The reindeer husbandry area in Finland comprises the whole of the Province of Lapland (excepting Kemi, Tornio and Keminmaa) as well as a large area of the Province of Oulu. The reindeer husbandry area is divided into 56 herding cooperatives.

EACH HERDING AREA has its own administrative system headed by a Chief of District with a Vice-chief of District, a Treasurer and a four-member council. All the cooperatives belong to the Reindeer Herders' Association

and each exercises its voting rights, based on the number of reindeer in each cooperative, through the Chiefs of District at Association meetings.

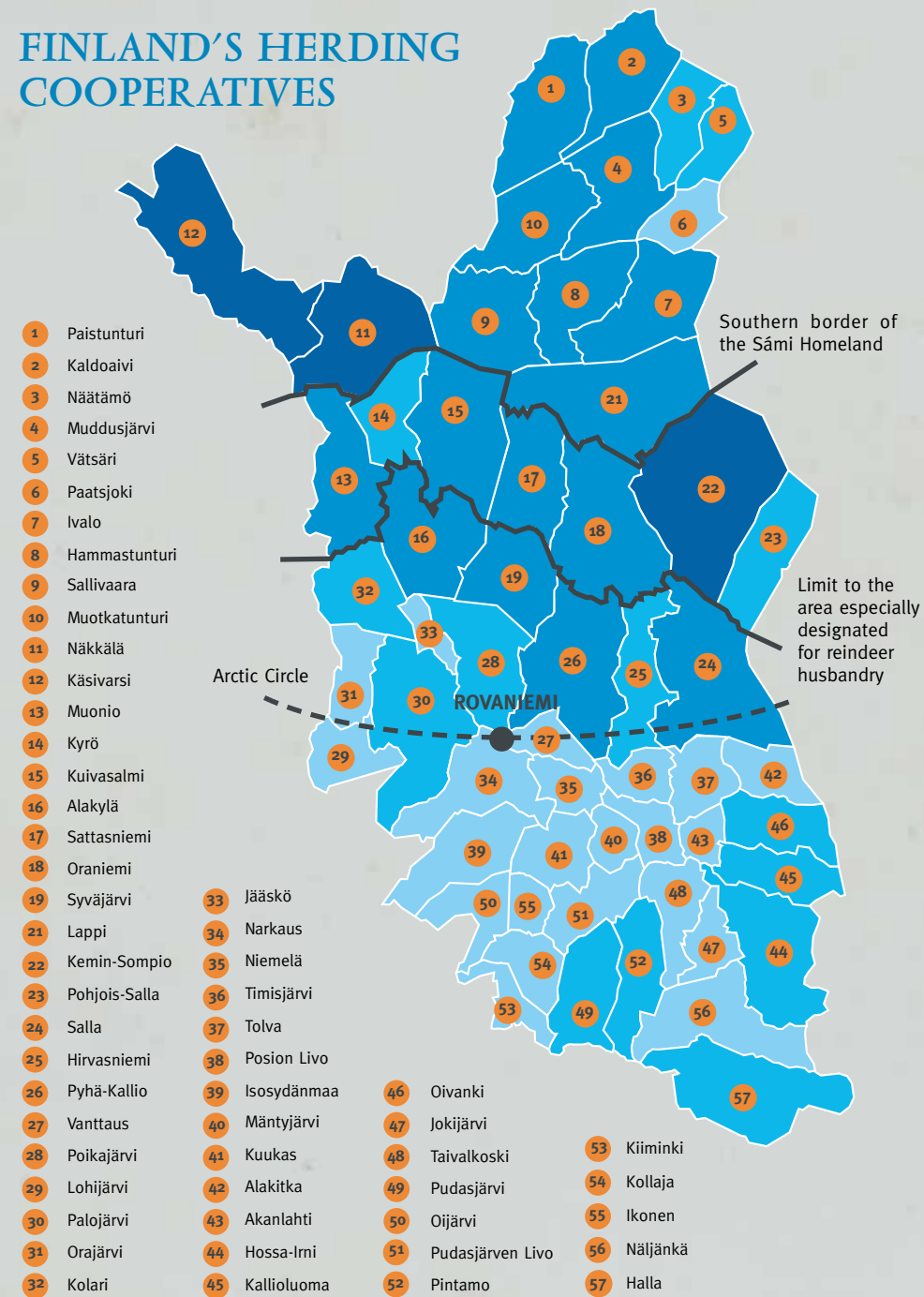
## ORGANIZATION OF REINDEER HUSBANDRY



## 56 HERDING COOPERATIVES

- Regional and administrative reindeer husbandry units that vary in size and numbers of reindeer.
- They tend their own reindeer, prevent them from doing damage and from straying into other herding cooperatives.
- The herding cooperative is headed by a Chief of District.
- The Reindeer Herders' Association acts as a link between the cooperatives.

## FINLAND'S HERDING COOPERATIVES



Maximum permitted number of livestock reindeer in herding co-operatives





# Reindeer Herders' Association

*The Reindeer Herders' Association is the steering, advisory and expert organisation for reindeer husbandry.*

**THE REINDEER HERDERS' ASSOCIATION** promotes reindeer husbandry and related research, provides advice on the reindeer industry, makes initiatives advancing the development of reindeer husbandry and the related industry, handles reindeer husbandry relations with society, maintains reindeer fences along national borders, and maintains a register of earmarks and approves new ones. The Association is funded through the State budget.

## THE REINDEER PARLIAMENT, THE ANNUAL GENERAL MEETING OF REPRESENTATIVES, IS THE HIGHEST DECISION-MAKING BODY

- ❧ A general meeting that comprises the Chiefs of District.
- ❧ Handles the Association's annual reports.
- ❧ Elects a 14-member Administrative Board for a three-year term to direct the Association's activities and safeguard the interests of reindeer husbandry. The Ministry of Agriculture and Forestry and the Sámi Parliament also appoint one representative each to the Board.

## ACTIVITIES IN THE EARLY 2000s FOCUS ON

- ❧ Developing an animal subsidy and investment aid system.
- ❧ Reducing damage caused by large predators and improving the system of compensation.
- ❧ Making reindeer husbandry more efficient to reduce costs.
- ❧ Developing reindeer husbandry through projects.
- ❧ Increasing the understanding of other land users with regard to reindeer grazing and the availability of nutrition.
- ❧ Attracting young people into the livelihood and improving the economic profitability of reindeer husbandry will be huge challenges in the years ahead.



## A UNIQUE EXPERIMENTAL REINDEER STATION

The Reindeer Husbandry Act specifies that the Association's primary tasks include the research of reindeer husbandry and the advancement of experimental activities. Theses, doctoral dissertations and international scientific publications are produced about reindeer and reindeer husbandry. The Association maintains the Kuttuharju Experimental Reindeer Station (unique in the world) in Kaamanen, Inari, where researchers from different countries conduct research on 140-190 reindeer.



*A calf with a radio telemetry collar.*





*Constructing and maintaining reindeer fences in areas of fragmented loose rock is hard work.*

## RESPONSIBILITY FOR REINDEER FENCES

Reindeer husbandry shares about 2,000 km of national borders with three countries in the Calotte region. The Reindeer Herders' Association is responsible for maintaining a reindeer fence along national borders. As specified by international treaties, this comprises a 1,200 km reindeer fence along the borders with Norway and Russia. About 50 reindeer herders in the area of 20 herding cooperatives maintain and replace sections of the fence every year. The fence has to be replaced every 20 years.



*Small-scale reindeer meat processing is a modern industry.*



*The world's longest reindeer caravan in Rovaniemi in February 2008. There were 58 reindeer in the caravan.*

## REINDEER HERDERS KEENLY DEVELOP THEIR LIVELIHOOD

Of all the primary production sectors, reindeer husbandry is the most socially sustainable livelihood; it provides a living for large numbers of people in the harsh North. Despite the active use of modern technology, reindeer husbandry still involves 1,850 man-years. In many villages, reindeer husbandry is hi-tech and the number one employer as well as a safety net; there would be no life without it.

A wide variety of development projects have enabled reindeer herders to start small businesses to process and market reindeer meat, offer programme services, make wide use of IT, work to a high standard and attend courses. The EU and the Reindeer Herders' Association and its partners support this development.

Reindeer husbandry is characterised by diversity – it can be combined with food-stuffs, nature, experiences and culture. Time and again, visitors say that snow, the fells and reindeer are what they know about the North. The reindeer is here to stay – from a fantasy in people's minds through to reality.





The lasso is a symbol of the reindeer herder; it is an important aid for catching reindeer.



## Reindeer herding is based on traditional knowledge and skill

*The reindeer herder's profession involves adapting to the environment and a rhythm of life set by the reindeer in harmony with the seasons, weather and grazing grounds. The children in a herder's family get their own earmarks and reindeer while they are still small.*

**REINDEER MAY ONLY BE OWNED** by citizens of the countries belonging to the European Economic Area who have permanent residence in the reindeer herding area, reindeer herding co-operatives and the Reindeer Herders' Association.

products and services. The number of reindeer a herder owns is a very personal matter. When asked, you may get a vague reply of "one mire full" or "on both sides of the tree."



Reindeer herders earn most of their income from sales of reindeer meat and they get additional income from sales of other reindeer

- Reindeer owners are permitted to own a maximum of 300 reindeer in the southern part of the reindeer husbandry area and 500 in the north.
- There are almost 5,000 reindeer owners in Finland, about 1,000 of them are Sámi.

## Reindeer husbandry originates from deer hunting

**THE FINNISH REINDEER** was tamed from the wild Scandinavian mountain deer. Reindeer were used as lure animals for hunting deer and beasts of burden and draught animals. The reindeer provided meat and milk, and raw materials for clothes and tools, which has enabled people to live in the northernmost parts of Finland since the 1600s.

Large-scale reindeer herding originated in the fells of Sweden and Norway in the late Middle Ages. The Sámi started to herd reindeer and they travelled nomadically with their herds in

rhythm with the seasons. From Sweden and Norway, large-scale reindeer herding gradually spread to Finnish Lapland: first to Enontekiö and Utsjoki and later down to Inari. The Finnish settlers and peasants were quick to adopt reindeer herding from the Sámi or "Lapps" who were living in the forests of South-Western Lapland with their few reindeer. The Finns also started to develop the livelihood further to make it more suitable for their own needs.



# The reindeer and the herder's year

*Reindeer herders have always followed the natural northern rhythm when tending their reindeer. By far the busiest times are earmarking the calves in June-July and the round ups from the end of September to January.*

## MARKING THE CALVES IN SUMMER

The reindeer husbandry year starts at the beginning of June when the herders repair fences and clean up the round up areas. In summer, they prepare hay, foliage and animal feed for the reindeer ready for winter.

Reindeer wander freely in summer, grazing and avoiding hordes of blood-sucking insects. Their fur moults to become thinner and they grow new antlers. Their winter fur starts to grow again in August.



Around midsummer, swarms of blood-sucking insects drive the reindeer in herds to the fells and marshes, and herders take advantage of this when rounding up their reindeer ready to earmark the calves.

Herders round up their reindeer on foot and using ATVs in forested areas whereas they use all-terrain motorcycles, small helicopters and planes on the fells. They keep in contact with each other on mobile and VHF phones.

Earmarking the calves usually starts at night when it is cooler because the reindeer tire easily in the summer heat. It is not always possible to mark all the calves in summer so the rest are earmarked at the autumn round up.

*Winter fur moults and the reindeer gets a thinner summer coat. Antlers grow fast and the reindeer lubricates the tips.*



*Besides being earmarked, some reindeer are marked with a plastic tag to make identification easier.*



## STAGES IN EARMARKING THE CALVES

- “ Calves are caught in the corral by hand, with a lasso or a rod with a noose on the end.
- “ Numbers are placed round their necks. The calves are released to find their mothers, and the reindeer herders make note of which female each calf follows.
- “ The calves are caught again and the same earmark as their mothers' is cut into the tip and sides of their ears with a sharp hunting knife.

**ALL HERDERS** have their own earmark for their reindeer. There are 21 different 'deeds' or cuts and close on 12,000 earmarks currently in use. New earmarks are devised when needed and old earmarks may change owners. When looking from behind, describing an earmark starts from the tip of the right ear. The dominant 'deeds' are described first followed by the smaller 'deeds'.

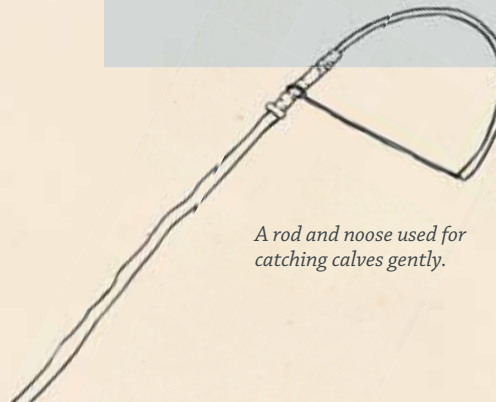


Right: 'pistel' above, 'hanka' below. Left: with a 'haara', a 'hanka' above and into the 'hanka'.



Two earmarks and their cuts (many words exist to describe the different cuts).

Right: 'linnunvarvas' (bird's toe). Left: 'terotus', 'pykälä' above, 'vastahanka' below.



A rod and noose used for catching calves gently.





# Autumn round ups



*Autumn is the rutting season and the reindeer form mating parties. Battles between males and the clash of antlers arouse the females' sexual receptivity and result in the spring calving. The male sheds his antlers after the rutting season.*

**BIG MALES**, older than three years, compete in the autumn battles for the females, each forming a harem and jealously guarding it by keeping the females together. This helps herders when gathering the reindeer for the round up.

Reindeer dogs help the herders to gather and herd the reindeer. Gathering the reindeer for the round up starts mainly in September-October and can take weeks in large cooperatives; there can be more than 2,000 reindeer at a round up at the same time.

The round ups are the herders' harvest time as well as a social get together, and they also attract tourists.



*At summer's end and in autumn, reindeer eat mushrooms before the snow comes.*



*Testosterone makes the neck muscles of a male older than three years strengthen within a few days as the rutting season approaches. The male is at his most handsome and ready for battle.*

## WHAT HAPPENS AT THE ROUND UP?

- ❧ The reindeer are driven in small batches into the 'churn' where the animals for slaughter are separated from the livestock by hand or with a lasso into different 'offices' or pens.
- ❧ Some of the males are castrated.
- ❧ Reindeer from other herding cooperatives that have strayed into the area are returned to their own cooperatives.
- ❧ The reindeer for slaughter are listed and marked with a metal slaughter tag on the ear.
- ❧ The livestock are 'read' and in almost all cooperatives, treated for parasites. 'Reading' means counting and registering the reindeer, which is a legal requirement. The reindeer are caught and their earmarks are identified and reported to the 'reader' who records them and their owners in the reindeer register; finally, visible markings are cut in the fur over their ribs with a hunting knife to show they have been 'read'.



*The markings in its fur show that this reindeer has been recorded in the reindeer register.*



# Herding reindeer in winter

*Reindeer are well adapted to cold snowy conditions. The structure of their hooves enables them to move across the snow, and their efficient blood circulation and oleic acid, which works like an anti-freezing agent, stop their legs from freezing.*

**THEIR WINTER FUR** is extremely dense and they cope in temperatures of  $-50^{\circ}\text{C}$ . In a strong wind, reindeer turn their backs to the wind to protect their heads, which have a thinner covering of fur.

Reindeer are the only large herbivore that are able to eat lichen and they dig it out from under snow a metre thick; they also eat hay and beard moss in winter. During the course of the winter, reindeer may lose as much as 20% of their autumn body mass.

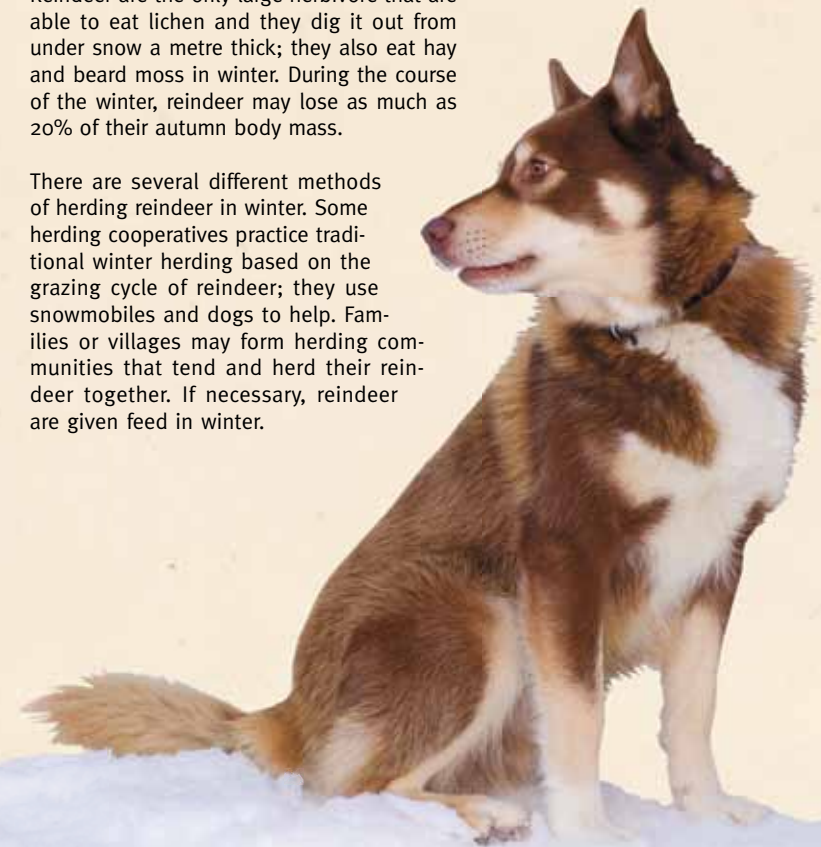
There are several different methods of herding reindeer in winter. Some herding cooperatives practice traditional winter herding based on the grazing cycle of reindeer; they use snowmobiles and dogs to help. Families or villages may form herding communities that tend and herd their reindeer together. If necessary, reindeer are given feed in winter.



*Herding reindeer.*



*The reindeer dog keeps the herd together.*





# Spring – a calf on the snow on May Day

*In spring, reindeer search for beard moss in the forests and walk on the hard icy snow. A female gives birth to a calf in May to June. As the calving season approaches, some herders gather their females into large calving enclosures whereas others let them out into the forest to calve. Calves born and earmarked on a farm are released with their mothers in early June at the latest.*



*Reindeer meat drying in the traditional way. This method only works in northern climatic conditions.*



*A new born calf.*



**AFTER IT IS BORN**, a calf depends on its mother's milk. Brown fat cells and dense fur help the young calf to survive its first weeks of life. The calf's birth weight doubles in the first month, and its antlers start to grow in these early weeks. Females shed their antlers after calving.

In spring, herders dry reindeer meat, a speciality of Lapland. They hang salted meat in an airy place by a wall or from a roof to mature in the spring sun and freezing temperatures. The meat is protected by netting in accordance with regulations. Dried meat preserves well and makes excellent provisions.



# Reindeer for food



**BESIDES ITS MEAT**, the reindeer's heart, liver, kidneys, tongue, fat, blood and milk are extremely nutritious. Reindeer meat is fine fibred, which makes it tender, quick to cook and easy to digest. The fat that accumulates under the skin of the reindeer's back is called 'spoke'. It is used in cooking.

Thick creamy reindeer milk is used in several ways as a source of nutrition; it contains 2–3 times more energy than cow's milk. People drink it as is, dilute it with water or drink the whey. It is used for making cheese and butter. Reindeer milk is also a valuable ingredient in cosmetics.

Most slaughtered reindeer are calves that have lived their whole lives on a natural diet. Reindeer meat comes from abattoirs and meat processing plants that comply with EU directives. You can also buy rein-

deer meat directly from herders at round up corrals and farms. Around 500-1,000 g of reindeer meat per inhabitant is produced annually in Finland.

## Reindeer meat is HEALTHY

- 🔊 Low fat content
- 🔊 Good fatty acid composition
- 🔊 Rich in proteins
- 🔊 Plenty of vitamins, minerals and trace elements



*Reindeer races.*

# Reindeer for experiences

**THE REINDEER IS A POPULAR** tourist attraction and one of Lapland's best-known 'brands'. Tourism offers many opportunities as a supplementary livelihood to reindeer husbandry. Many herders earn extra income by making and selling souvenirs and handicrafts, providing accommodation and programme and leisure services such as reindeer rides, visits to a reindeer farm and introducing visitors to reindeer husbandry.

Reindeer races have long traditions. The racing season is from mid February to the beginning of April. Training the racers starts when the weather gets milder well before the season begins and demands a lot of time and patience. The season culminates with the Inari Reindeer Cup Championships arranged by the Reindeer Herders' Association.





The rock drawings found in Alta, Northern Norway, date back around 3,000 years and show reindeer or deer in hunting enclosures.

# Reindeer for warmth

*The reindeer keeps the herder warm. Herders today still wear clothes made from reindeer.*

**REINDEER FUR** is different on different parts of the animal thus making it highly versatile. For instance, the skin from the leg is used for making footwear because its fur withstands wear and tear.

A hide is hung on a wall to dry and its fat dries on the surface to form a waterproof coating. Hides are good to lie on and they are traditionally used by herders to sleep on in a lean-to shelter or a 'kota'. Willow and birch are used to tan reindeer skin naturally and free of toxins – this kind of skin is called 'sisna'.

*'Shoe' straw is used inside fur boots.*

## A WIDE RANGE OF HANDICRAFT MATERIALS

- Leg skins for fur boots, headwear, mittens and gaiters
- Fur boots from the skin of a reindeer skull
- 'Sisna' for anoraks, trousers, backpacks and bags
- Sinew sewing thread for leather work
- Hoof tips and bone for jewellery
- Antlers for lasso toggles and for decorating the handles of 'puukko' hunting knives and 'kuksa' Lappish wooden cups



Mittens.

Sinew thread and reindeer leather thimbles.

# Reindeer a source of culture

*Reindeer husbandry is a modern livelihood that is passed down from generation to generation. It is in tune with the cycle of nature and can be the sole source of income or practiced alongside other livelihoods. It is very much a way of life for the herder.*

**REINDEER HUSBANDRY** is the most important livelihood that keeps the Sámi language and culture alive. Sámi has an extensive vocabulary when it comes to reindeer and natural conditions.

Reindeer husbandry words are used in everyday speech, and different areas have different words for the same thing. The reindeer appears in several sayings. You often

hear the word 'poronkusema' (reindeer peeing), which is used to measure the length of a journey, i.e. how far a reindeer can run before it has to stop and urinate. "The reindeer teaches" expresses how life does not always flow the way people plan.

Throughout the ages, northern artists have used the reindeer as a material or theme in their works. The oldest rock drawings of reindeer date back more than 3,000 years.







A herd.



Fur boots.



Castrated male reindeer carrying a load.



'Kalppinokka', a white muzzled reindeer.



'Konttorit', 'offices' or side pens at a round up corral.

## REINDEER GLOSSARY

**Elo** reindeer livestock

**Etto, ettoaminen** gathering reindeer for the round-up

**Hirvas** a male over three years old

**Härkä** a castrated male

**Jotos, rannio** a track trodden by reindeer in thick, hard-crusting snow

**Jutaa** to travel or move

**Kallokas** a fur boot made from the skin of a reindeer skull

**Kalppinokka** a reindeer with a white muzzle

**Keloa** the rub the skin off new antlers

**Kesukka** a tame reindeer

**Kirnu** 'churn', the round section of the round-up corral where reindeer livestock are separated from reindeer for slaughter

**Konttori** 'office', a side pen of a round up corral

**Kopara** a reindeer's hoof

**Kulvakko** a male reindeer over three years of age exhausted by the rutting season

**Luostakka** a white-sided reindeer

**Maanija** a timid reindeer that avoids people

**Mutsikki, musikki** a dark (coloured) reindeer

**Naamasarvet** growing antlers covered in skin

**Nulkata** to run slowly

**Nulppo** a reindeer without antlers

**Nutukas, siepakka** a fur boot made from the leg skin of a reindeer

**Pailakka** an untamed, untrained reindeer

**Paliskunta** a reindeer herding cooperative

**Palkia** to wander in summer pastures

**Parttio** a small herd of reindeer

**Peura, peurakorva** a reindeer without an earmark

**Raavas** a fully-grown reindeer

**Raito** a harnessed caravan of reindeer

**Roukua** a sound made by reindeer

**Rusakka, rusakko** a brownish-yellowish reindeer

**Rykimä** the rutting season

**Räkkä** a plague of blood-sucking flying insects that torment the reindeer

**Säpikäs** reindeer skin gaiters or leggings

**Taamoa** to train, to tame

**Takkahärkä** a castrated male reindeer that carries a load

**Tokka** a large herd of reindeer

**Tolvata** to run

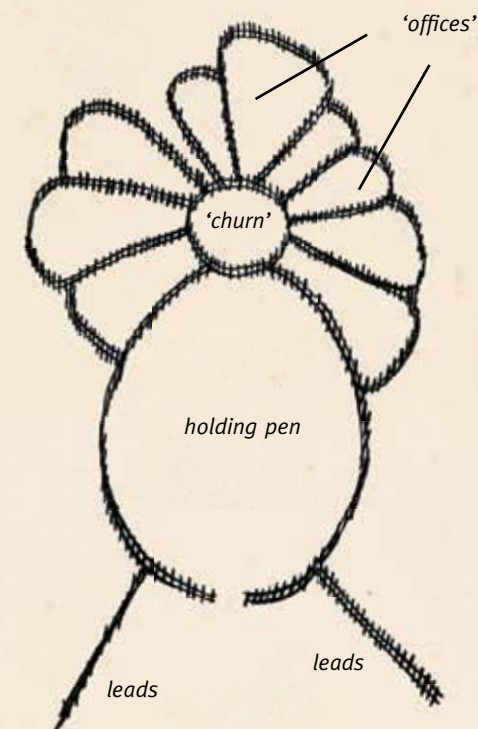
**Vaadin** a female over three years old

**Valkko** a white reindeer

**Veiti** reindeer scattered about

**Vuonelo** a female in its second year

**Vuotturaippa** a pulling strap for a boat sledge



The leads help direct the movement of the reindeer when they are driven into the holding pen. The picture shows the different parts of a round up corral.



