

## Protection

The Saimaa ringed seal and its lair as well as the rocks where it lolls are protected under the Nature Conservation Act. In addition, in national parks and other conservation areas, restrictions on landing on shores as well as other restrictions on access have been imposed. The habitat requirements of the seal are also taken into consideration in land-use planning, and forms of fishing that threaten the seals have been restricted. In order to protect the seals from extinction it is essential to prevent them from getting entangled in fishing tackle and to safeguard peace in their breeding grounds between December and April.

The protection and the monitoring of the population of Saimaa ringed seals, classified as an endangered species, is managed by Metsähallitus in cooperation with the Regional Environment Centres, the University of Joensuu, the regional Employment and Economic Development Centres and the WWF. Moreover, the Saimaa ringed seal is the emblem of the Finnish Association for Nature Conservation. The protection of the seal is supervised by the Ministry of the Environment. The target is to increase the population of ringed seals in the Saimaa district to 400 individuals by the year 2020.

## Monitoring of the population

Because of its endangered status, the population of Saimaa ringed seals need to be closely monitored and investigated.

The annual monitoring procedures include:

- monitoring the breeding conditions and birth rate
- determining causes of death
- monitoring the natural state of the breeding grounds

Protective measures are being further developed through the investigation of the ringed seal's habitat requirements and the effects of various disturbances to its breeding.

## Report dead seals

It is essential for the protection of the Saimaa ringed seal that all dead seals are examined. The age and sex of the animal can be determined even from a partly decomposed carcass, and a sample of hair can be obtained for the analysis of possible environmental toxins. Often the examination also reveals the cause of death, which is valuable information with regard to protection.

Mortality surveys are part of the 'census' of the seal population. According to the law, all dead seals remain state property.

If you come across a dead seal, make sure that it will not be washed away by waves. Inform Metsähallitus in Savonlinna about your find. Researchers will fetch the carcass and send it on for further examination.

### Further information and feedback

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Conservation



# Saimaa Ringed Seal

*Phoca hispida saimensis*

The most endangered seal  
in the world?



## The endangered seal

The Saimaa ringed seal became an entirely lake-bound species at the end of the last Ice Age some 8,000 years ago when the lakes of eastern Finland were cut off from what is nowadays the Baltic Sea.

The Saimaa ringed seal is Finland's only endemic mammal and it is only found in the Saimaa lake district. Its main habitats include the lake areas of the national parks of Linnansaari and Kolovesi as well as Lake Joutenvesi and Lake Pihlajavesi.

In the early 20th century, Saimaa ringed seals were regarded as pests. From 1882 until 1948, a bounty was paid for killing them. In 1955, the Saimaa ringed seal was protected from hunting by law because its population had become too sparse.

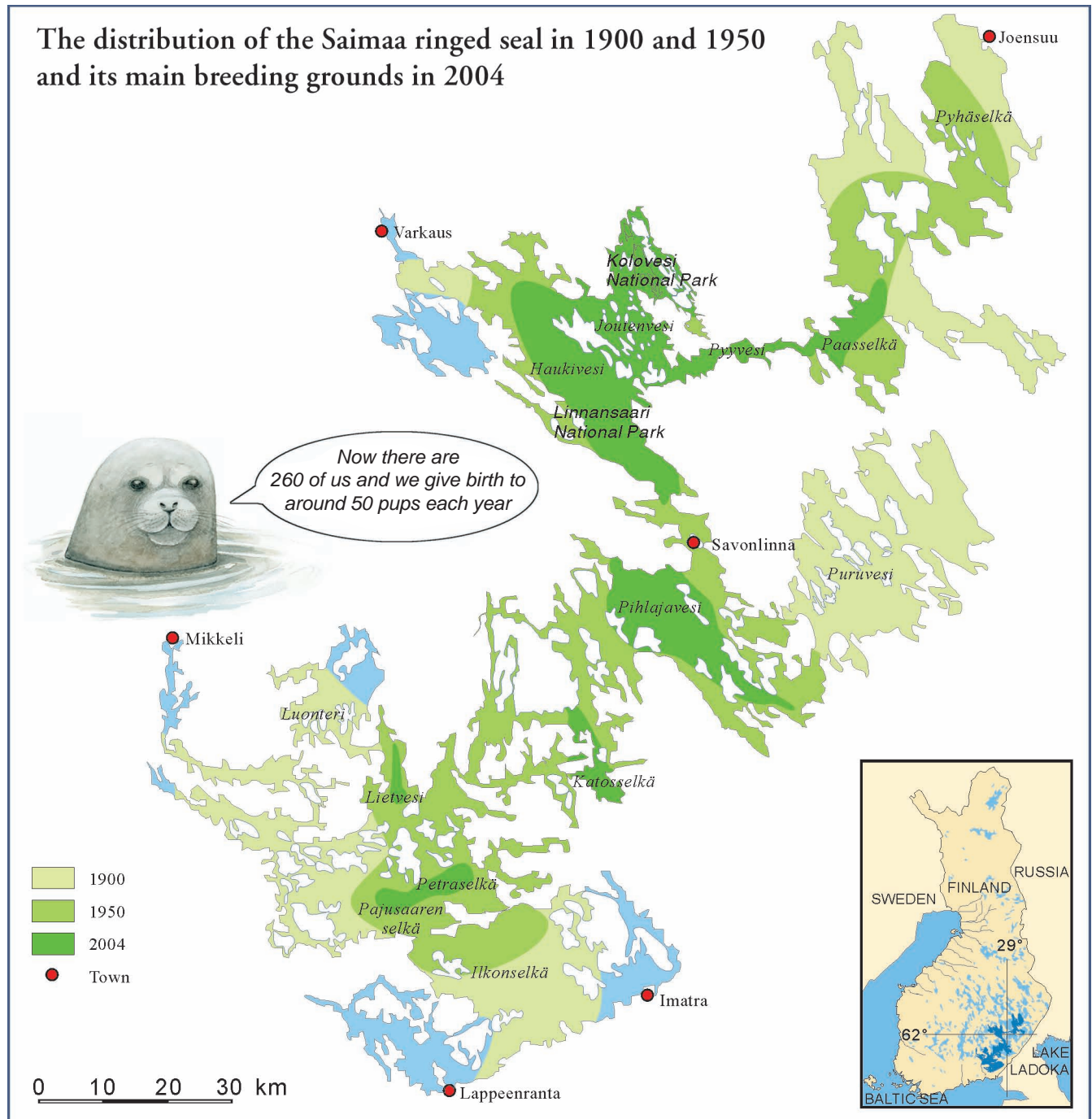
The seal population continued declining until the early 1980s when there were an estimated 180 seals in the Saimaa lake district. Thanks to the protection measures introduced at that time, the size of the population has slightly grown and the prospects for the survival of pups have improved. However, the habitats of the Saimaa ringed seal are continuously being infringed on by human activity. Today, the greatest threats to the seal are net fishing and disturbance to its breeding.

## Summer, Saimaa and seals

The most likely time to actually see seal is towards the end of May when it moults and hauls out on the lakeshore rocks to dry its fur. Often the seals have their own favourite spots where they return to loll year after year.

When underwater, the ringed seal is not frightened by boats; on the contrary, this original fisher of Saimaa may be happy to follow in the wake of a boat travelling at a leisurely speed. Generally, boating in the Saimaa district is not restricted apart from a few exceptions; for example access for motor boats is restricted in Kolovesi National Park.

The distribution of the Saimaa ringed seal in 1900 and 1950 and its main breeding grounds in 2004





## Biology of the Saimaa ringed seal

Towards the end of February, the Saimaa ringed seal gives birth in its lair dug into a snowdrift to a five-kilo pup covered with woolly hair. The seal mother suckles the pup, and by the end of April the pup weighs around 20 kilos. The pup is weaned at the time when the ice thaws in lakes, and it learns to fish for its own food.

The seal reaches sexual maturity at the age of 4-5 years. It is only capable of giving birth to one pup a year, though this does not necessarily happen every year. Thus the population of seals grows slowly, even though no other animal preys on it.

While the oldest Saimaa ringed seals have lived to an age of over 30 years, their average life expectancy is something over 20 years. A grown-up seal weighs 50-90 kilos, depending on the time of the year, and is about 140 cm long.

The Saimaa ringed seal is a mammal that has adapted well to living in water. It can remain under the water for over 20 minutes, though submersion usually lasts only 3-8 minutes. All in all, it spends 60-80 per cent of its life underwater.

In winter when it is dark and the visibility under the ice is poor, the seal finds the route to its winter lair as well as the breathing holes that it keeps open in the ice by means of its whiskers. The sense of touch, transmitted through the whiskers, is the most critical sense for the seal when swimming and pursuing fish in the dark waters of the Saimaa lake district.

Saimaa ringed seals are extremely home-loving creatures. Adult seals spend year after year within the same area. Their longest recorded excursions take them only a few dozen kilometres away from their own area.



### Do not disturb the lairs

Ringed seals are today only found in certain parts of the Saimaa lake district. The remaining breeding grounds are located peaceful islands and islets. The seal makes its lair in a lakeshore snowdrift. The snow cave is invisible from outside, and the only entrance to it is from the water. The pup of the seal depends on the shelter of the lair. If the mother is disturbed by humans, she may leave the lair to seek shelter in the water, and thus the suckling of the pup is interrupted.

The water level of the Saimaa district was lowered by increasing the outflow through the River Vuoksi in several winters during the 1980s as a precaution against flooding. Due to the exceptional drop in the water level, the ice cover close to the shores gave way and many seal nests built on the ice collapsed. This resulted in a high death rate among seal pups in a number of years. Today the excess water is discharged from Saimaa during the time when the lakes are ice-free in order not to cause disturbance to the breeding of the seals.

### Stay away from the breeding grounds

Please do not disturb the ringed seal when moving about in the Saimaa district. During their breeding season seals are extremely sensitive to disturbance. Inconsiderate snowmobiling can be particularly harmful. It is easy enough to avoid islets and snow-covered spits in winter. If you are considering building a holiday home, remember that lakeshore building is nowadays prohibited in the vulnerable habitats of the Saimaa ringed seal.

### Catch fish, not seals

Fishing tackle is the most serious threat to the population of Saimaa ringed seals. Especially young, inexperienced pups, which are weaned at the time when the lake ice thaws, easily get entangled in fishing nets. Therefore in a number of breeding grounds, local fishing associations have prohibited net fishing between April 15 and June 30. Grown-up seals may also get trapped in strong trammel nets or caught on fish-baited hooks.

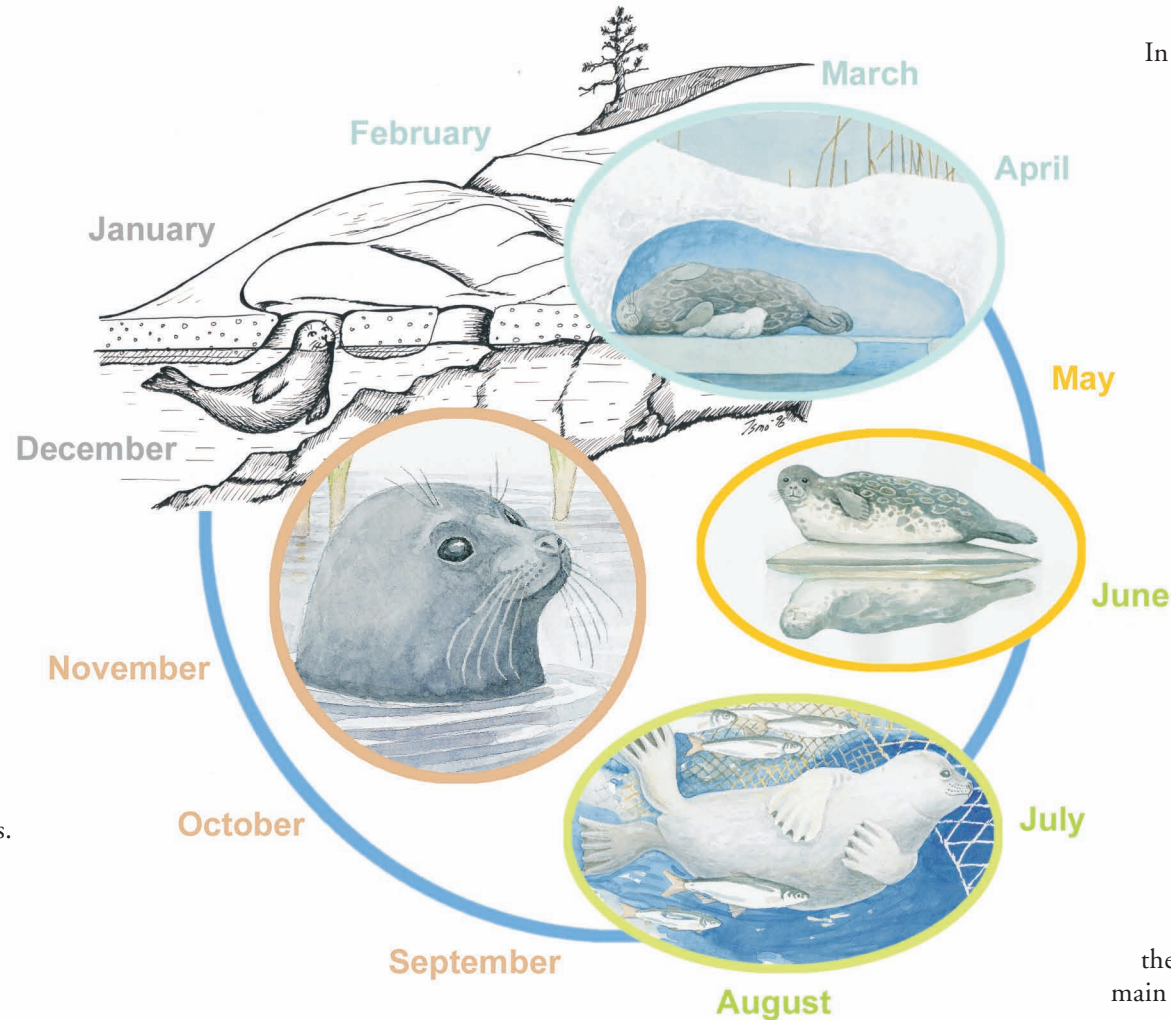
# THE YEAR OF THE SAIMAA RINGED SEAL

## The winter lair in the snow gives shelter

In the middle of the winter the Saimaa ringed seal remains hidden from the human eye. It keeps a few breathing holes open in the lake ice and occasionally takes a rest in the cave it has dug into a lakeshore snowdrift.

## The ringed seal gains weight in autumn

In autumn, the ringed seal eats a lot of fish in order to build up the blubber under its skin. It feeds on small fish that move about in shoals. Its favourite fish are vendace, roach, smelt and perch. It requires on average 2-3 kilos of food per day.



## The pup is born

In late February, the seal mother gives birth to a pup in the lair dug into the drift of snow. At that time the mother and the pup need peace for suckling and are most vulnerable to disturbance.

## The ringed seal moults

The end of May is the moulting season for grown-up ringed seals. That is when they can be spotted lolling on lakeshore rocks. Do not disturb a seal drying its fur.

## The newly-weaned pup encounters threats

The seal mother weans her pup at around the time when the lakes become free of ice. When learning to live independently, the pup is in great danger of getting entangled in a fishing net. In order to safeguard the pups, restrictions on fishing in the seals' main breeding grounds have been introduced.