



SAIMAA RINGED SEAL

Pusa hispida saimensis

INFORMATION ABOUT THE SPECIES

- Saimaa ringed seal is a subspecies of seal
- One of the world's most endangered seals [EN]
- Population roughly 430–440 individuals (in 2022)
- Some 120 fertile females (in 2021)

DISTINGUISHING FEATURES

- Unique ring pattern
 - remains the same throughout the seal's life
- Grey, brown, or almost black in colour
- Average length 130–145 cm, average weight 50–90 kg
- A new-born seal pup weighs 4–5 kg
- Seal pups are born light grey, without the ring pattern

STRUCTURE

- Front flippers and nails: for digging ice holes and nests
- Strong back flippers and a short tail: for swimming
- Sharp and relatively small teeth: for grabbing fish
- Subcutaneous fat layer: serves as insulation in winter

SENSES

- Whiskers sense the movements of water and fish
- Excellent (night) vision in water
 - short-sighted outside water
- Excellent hearing, no earlobes
- Excellent sense of smell
 - male seals smell similar to petrol

PROTECTION OF THE SAIMAA RINGED SEAL

Goals and actions of The Finnish Association for Nature Conservation

- **Achieving a favourable level of protection**
 - the current population needs to be multiplied
- **Stopping the fishing gear related deaths of seals**
 - promoting seal-safe fishing, e.g. providing instructions and distributing seal-safe "Saimaa" fish traps
- **Preparing for the threats caused by the climate change**
 - making man-made snow drifts in mild winters with little snow, artificial nests
- **Preventing disturbance caused by humans**
 - dedicating own shoreline areas as conservation areas
- **Awareness promotion and environmental education**
 - public events, communication, lessons on seals
- **Cooperation with researchers and experts**
 - e.g. taking part in working groups



Take part in the protection of the saimaa ringed seal

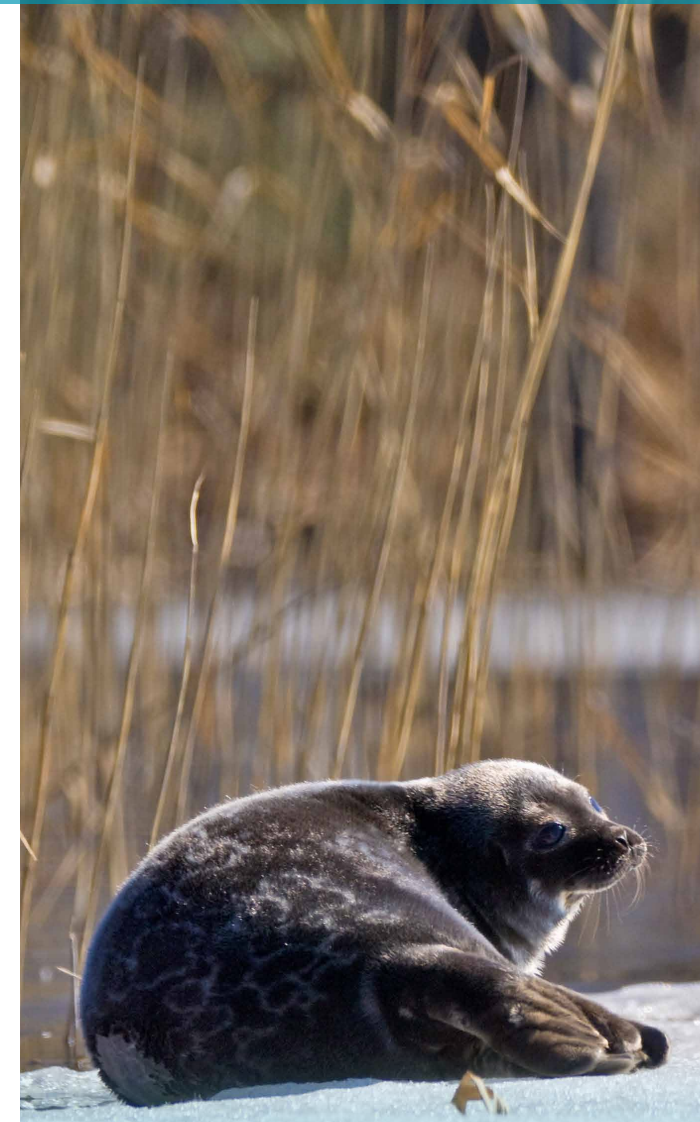
- ➡ **Only use fishing gear that is safe for seals**
(lure, traditional hook and line, and ice-fishing, and fishing traps that have a narrow opening)
- ➡ **Only buy fish caught by using seal-safe methods**
(a drag-net, trawl, seal-safe fyke net, fish trap with a narrow opening)
- ➡ **Avoid moving in areas inhabited by seals** in winter and allow the seals to moult in peace in the spring
- ➡ **Take a stand, distribute information**
- ➡ **Do voluntary work** to protect the seals
- ➡ **Prevent the climate change** through your choices
- ➡ **Protect Lake Saimaa**
- ➡ **Donate funds** for the protection of seals



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The endangered SAIMAA RINGED SEAL



MODES OF LIFE OF THE SAIMAA RINGED SEAL

- Only found in Lake Saimaa
- Sub-populations in various parts of the lake
- Digs a nest in the same area every year
- Especially young seals can travel long distances
- Spends roughly 60–80% of its time underwater
- Can remain submerged for up to 20 minutes
- Average lifespan 20 years
- Mature seals moult once a year in the spring
- Becomes fertile at the age of 4–6 years
- Females give birth to one seal pup in February–March in a snow nest
- Feed on small school fish (e.g. perch, roach, vendace)

DISTRIBUTION AREA OF THE SAIMAA RINGED SEAL

- The key nesting areas of the Saimaa ringed seal*
- Areas of Saimaa where seal nests have not been found in recent years



*Annual net fishing restrictions, established to protect the seal pups, apply in the area from 15 April to 30 June (nets used for catching vendace from 15 April to 20 June), and the prohibition to use other dangerous fishing gear applies in the area throughout the year.



THREATS TO THE SAIMAA RINGED SEAL



FISHING GEAR

Fishing gear, especially fishing nets and fish traps with a wide opening (over 15 cm), are a significant threat. All kinds of nets are dangerous to the Saimaa ringed seal, regardless of the time of the year and the age of the seals. The current fishing restrictions to protect the Saimaa ringed seals are not sufficient to secure the stable growth of the population.



CLIMATE CHANGE

The nesting of the seals depends on snow and ice. Mild winters and a lack of snow drifts can result in the loss of pups, as small seal pups are best protected against the cold and predators in a nest. Nests can collapse prematurely if the weather warms up too early.



VARYING WATER LEVEL

If the water level in Lake Saimaa varies greatly during the period the lake is frozen, the breeding of the seal can become endangered. When the water level increases significantly, water floods the nests, and when the water level decreases, the nests can collapse prematurely.



DISTURBANCE CAUSED BY HUMANS

Shoreline construction narrows the areas suitable for the seals' nesting, and movement in seal areas causes disturbance. Seals are wary and easily scared during nesting and moulting. When the female flees from the nest, the feeding of the pup is disrupted and, at worst, the pup can die. Fleeing from the rock during moulting causes the moulting to disrupt.



SMALL AND SCATTERED POPULATION

Seals live in small, genetically differentiated sub-populations in various parts of Lake Saimaa. The same individuals breed in the same area every year. The genetic diversity of Saimaa ringed seals is constantly decreasing, and inbreeding is a significant threat.



CHANCE

Unexpected disease outbreaks can pose a threat to the small seal population. On the other hand, the simultaneous occurrence of several threats, such as deaths caused by fishing gear and unsuccessful nesting, can have serious consequences on the seal population.