

PATVINSUO NATIONAL PARK

Location: 63° 10' N, 30° 40' E.
The area is situated in the province of Eastern Finland, in the municipality of Ilomantsi and the city of Lieksa.

Area: 12 727 ha, comprising about 7 000 ha of mires and about 1 000 ha of water.

Protection status: The area is owned by the state. Patvinsuo National Park covers 10 040 ha and the mire protection area of Kissansuo-Raanisuo-Tohlinsuo about 1 500 ha. Patvinsuo National Park is included in the Project Telma protection programme and it is an important part of the protected core zone of the Northern Carelia Biosphere Reserve. The Suomujärvi-Patvinsuo area is already included in the Ramsar Convention sites and the whole area in the Natura 2000 network of protected areas.

Site description: The area is situated at the edge of active raised bog and aapa mire zones. In Patvinsuo both mire complex types are encountered together with transitional forms of various types. The largest mires are watery flark fens, among which the largest are Patvinsuo Mire and Lahnasuo Mire. The mire types are ombrotrophic and at the best mesotrophic. Between the mires there are old coniferous forests. In addition to the larger lakes like Suomujärvi, Hietajärvi and Nälämäjärvi there are also numerous smaller lakes, ponds and streams in the area. Most of the lakes and ponds are naturally dystrophic. The rivers of Nälämänjoki and Suomunjoki are in natural condition.

International and national importance:

The area of Patvinsuo is an extremely diverse and extensive mire complex in the transition zone where the dominating mire types are aapa mires of Northern Karelia complemented by sloping aapa mires of Inland-Finland zone. Because of the wilderness character and large size of Patvinsuo its fauna is very special.

The wader fauna of the mires is abundant. In the Patvinsuo National Park 14 species of waders breed totalling about 800 pairs. The most common species are the Whimbrel (*Numenius phaeopus*) with 120 pairs, Wood Sandpiper (*Tringa glareola*) 100 pairs, Common Snipe (*Gallinago gallinago*) 90 pairs and Lapwing (*Vanellus vanellus*) 65 pairs. The wader fauna also includes some northbound species like Broad-billed Sandpiper (*Limicola falcinellus*) with 20 pairs, Jack Snipe (*Lymnocyptes minimus*) 5 pairs and Spotted Redshank (*Tringa erythropus*). Cranes (*Grus grus*), Bean Geese (*Anser fabalis*) and Whooper Swans (*Cygnus cygnus*) are numerous in the area. The most common passerines of the mires are the Meadow

Pipit (*Anthus pratensis*) with 600 pairs and Yellow Wagtail (*Motacilla flava*) 400 pairs.

At the lakes of Patvinsuo area bird species characteristic of oligotrophic lakes breed, e.g. the Black-throated Diver (*Gavia arctica*), Red-throated Diver (*G. stellata*) and Osprey (*Pandion haliaetus*). Extensive, peaceful mire areas are also important during migration period as feeding and resting areas.

The Canadian Beaver (*Castor canadensis*) is common in the area. Also several big predatory mammals such as Bears (*Ursus arctos*), Wolves (*Canis lupus*) and Wolverines (*Gulo gulo*) are regularly encountered in the National Park.

Protection criteria: 1b, 2b and 3b.

Changes in ecological character:

About 230 ha of the mires were drained before the National Park was established. Some of the forests in the area are young due to earlier logging. The dams of the Canadian Beaver have considerably changed the shores of the small lakes and brooks.

Management measures:

A good network of trails has been built in Patvinsuo National Park to channel hiking and to diminish the wear on vegetation. Management measures to be implemented in the area have been included in detail into the management plan prepared by the Finnish Forest and Park Service for Patvinsuo National Park. In 1989 two small forest areas in the middle of the mire were burned to simulate a natural forest fire. There are two bird-watching towers in the area.

Possible threats: The recreational use of the National Park is strongly increasing. During berry picking time thousands of people visit the area.

Research: A detailed vegetation mapping has been carried out in the mires of the area. There have also been surveys of the bird fauna of Patvinsuo National Park. The hydrology and fish fauna of Suomujärvi has been studied by e.g. the University of Joensuu. Surveys on e.g. beetles and polyporuses have been carried out in the old natural forests. In Hietajärvi an Area of Integrated Monitoring has been established. The impact of air quality is being studied on this small drainage area.

References: Kinnunen 1981, 1982, Committee Memorandum 1976, 1977a, 1989, Leivo et al. 1984, Meriläinen 1974, 1978, Finnish Forest and Park Service 1986, 1993b, Paasivirta 1976, Rajasärkkä 1987, Rajasärkkä et al. 1987, Simola 1988, Tahvanainen et al. 1975, Toivonen & Lappalainen 1980, Vickholm 1986.