

# Ramsar Sites Information Service

## Annotated List of Wetlands of International Importance

17 Ramsar Site(s) covering 306,481 ha

#### Vilsandi

Vilsandi is a wetland complex on the western coast of the island of Saaremaa in the Baltic Sea. It comprises shallow marine waters, coastal brackish lagoons, reedbeds and seasonally flooded coastal meadows. It includes 160 small reefs and islands, the biggest one being the island of Vilsandi. It is a very important wintering area for waterbirds, and specifically for the globally threatened Steller's eider (*Polysticta stelleri*), which is found in internationally significant numbers with over 2,000 individuals recorded wintering in the Site. A total of 247 bird species have been recorded, of which 114 breed in the wetland. Several nationally threatened plants are also present in great numbers, many of which are rarely found elsewhere in the country. A visitor centre on Saaremaa provides guided tours, while a biological research station on Vilsandi provides facilities for visiting schools and scientists.

#### Leidissoo

Site number: 1998 | Country: Estonia | Administrative region: Lääne

Area: 8,178 ha | Coordinates: 50°32'14"N 06°07'38"E | Designation dates: 27-01-2010

View Site details in RSIS

Part of an extensive wilderness area in north-western Estonia, Leidissoo consists of a variety of mire types and habitats of Europe-wide interest, and plays a significant role in the hydrological balance of the region. Open fens are prominent, while in the western area of the Site bog communities can also be found. Leidissoo is one of the few such habitats in Estonia that are maintained in their natural state rather than being drained, and so the wetland supports plants and animals which are important for the biogeographical region. These include many bird species listed under the European Birds Directive Annex I, including the black stork (*Ciconia nigra*), corncrake (*Crex crex*) and black grouse (*Lyrurus tetrix*), while the Site provides breeding grounds for other species such as the common snipe (*Gallinago gallinago*), of which 200 pairs have been recorded. Traditional berry and mushroom picking, as well as small-scale hunting, are practiced. Threats include the intensification of forestry and the drainage of surrounding areas.

#### Muraka

Site number: 909 | Country: Estonia | Administrative region: Ida-Viru County

Area: 13,980 ha | Coordinates: 59°08'36"N 27°07'30"E | Designation dates: 05-06-1997

View Site details in RSIS

This wetland complex in the north-east of Estonia consists of raised bogs, swamp forests, fens, primaeval forests, bog-pools and ephemeral streams. It is located in the catchment areas of the Tagajõgi, Pungerja, and Purtse rivers, and is especially important for the maintenance of their hydrological regimes. Its biodiversity is one of the richest in Estonian mires, and some species found in the wetland such as the ghost orchid (*Epipogium aphyllum*) and the peregrine falcon (*Falco peregrinus*) are rarely seen in other parts of the country. It is also one of the few breeding places for the jack snipe (*Lymnocryptes minimus*). Nationally threatened species can also be found, including the southern dunlin (*Calidris alpina schinzii*) and willow grouse (*Lagopus lagopus*). Pollution from nearby power stations has been reduced but still poses a threat to the wetland, along with intensifying forestry and increasing pressures from tourism.

#### Lihula

Site number: 1997 | Country: Estonia | Administrative region: Lääne and Pärnu County Area: 6,620 ha | Coordinates: 58°39'34"N 23°56'33"E | Designation dates: 27-01-2010 View Site details in RSIS

Lihula consists of a large bog plateau surrounded by open and wooded fens. It is a representative wetland of the country; it is important for maintaining the hydrological balance and water quality of the region and provides important wetland habitats for rare and endangered plant and animal species, such as northern lapwing (*Vanellus vanellus*), black-tailed godwit (*Limosa limosa*) and golden eagle (*Aquila chrysaetos*). The wetland is also one of the most important breeding grounds in Estonia for Montagu's harrier (*Circus pygargus*) and golden plover (*Pluvialis apricaria*), and is a key staging site for migrating cranes and geese. In addition, the area is also a refuge for large mammals such as wolf (*Canis lupus*), lynx (*Lynx lynx*), brown bear (*Ursus arctos*) and elk (*Alces alces*). Threats to the Site include the intensification of forestry, the drainage of surrounding areas, and the abandonment of semi-natural meadows. The area is also locally used for traditional berry and mushroom picking as well as small-scale hunting. A management plan has been implemented since 2016.

#### Agusalu

Site number: 1999 | Country: Estonia | Administrative region: Ida-Viru

Area: 11,000 ha | Coordinates: 42°27'11"N 27°27'46"E | Designation dates: 27-01-2010

View Site details in RSIS

Part of Estonia's largest mire system Agusalu-Puhatu, the wetland consists of bogs, transition mires and fens surrounded by coniferous and alluvial forest. The wetland has a characteristic striped landscape as it contains several strips of sandy hills, locally named "kriivas", which form forest and bog islands that stand out from the mire. Agusalu is important for maintaining the biodiversity of the biogeographical region thanks to its varied habitats. The area provides important breeding grounds for several threatened bird species, such as Eurasian black grouse (*Lyrurus tetrix*), willow grouse (*Lagopus lagopus*) and Arctic loon (*Gavia arctica*). It is also an important refuge for species with large habitat requirements such as brown bear (*Ursus arctos*), grey wolf (*Canis lupus*), moose (*Alces alces*), Eurasian otter (*Lutra lutra*) and Eurasian lynx (*Lynx lynx*). Due to its management and protection regime the area is not frequented, but intensification of forestry and drainage activities in the surrounding areas present threats.

## Alam-Pedja

Site number: 905 | Country: Estonia | Administrative region: Tartu, Jögeva, Viljandi Counties Area: 34,220 ha | Coordinates: 58°28'46"N 26°11'48"E | Designation dates: 05-06-1997 View Site details in RSIS

Alam-Pedja is a large flat wilderness in central Estonia. It is comprised of several mires separated by rivers, floodplain meadows and alluvial forests. Due to its flatness, the wetland is regularly flooded during rainy periods. It provides important spawning grounds for fish species such as Aral bream (*Abramis brama*), northern pike (*Esox lucius*) and Mesopotamian asp (*Leuciscus aspius*), and is the most important breeding Site in the Baltic states for great snipe (*Gallinago media*). In addition, several nationally threatened species can also be found breeding in the wetland. Until 1991 a part of the wetland was used as a bombing range, and remains the only area significantly affected by human activities. The main threats are the overgrowth of vegetation and uncontrolled leisure activities. As of 2020, two bog areas were being restored to their natural hydrological conditions. A management plan was being progressively implemented, with a visitor centre and two nature trails having opened in 2008.

#### Matsalu

Site number: 104 | Country: Estonia | Administrative region: Lääne County
Area: 48,610 ha | Coordinates: 58°45'27"N 23°34'58"E | Designation dates: 29-03-1994
View Site details in RSIS

The Site includes a part of the Väinameri sea, the brackish Matsalu Bay and its 50 or so islands and islets, reed beds, coastal meadows and the lower floodplain of the Kasari River. Matsalu provides significant support to the biodiversity of the entire Boreal region, as it hosts more than 780 species of vascular plants, 280 bird species, 49 fish and 40 mammals. The populations of nesting and migrating waterbirds are especially noteworthy, with up to 230,000 individuals recorded including internationally important numbers of the vulnerable lesser white-fronted goose (*Anser erythropus*) and barnacle goose (*Branta leucopsis*), and of the nationally vulnerable tundra swan (*Cygnus columbianus*) among others. More than half of the fish species recorded in Estonia can be found within the Site. The floodplain meadows and the bay provide important spawning grounds for species such as pike (*Esox lucius*) and European perch (*Perca fluviatilis*). The main threats to the area include the invasive golden jackal (*Canis aureus*), and agricultural and drainage activities. The "Penijõe Manor" visitor centre provides conservation education activities and welcomes around 20,000 visitors annually.

## Sookuninga

Site number: 1748 | Country: Estonia | Administrative region: Pärnu County
Area: 5,869 ha | Coordinates: 58°00'14"N 24°49'31"E | Designation dates: 27-12-2007
<u>View Site details in RSIS</u>

Sookuninga covers the central part of the North Livonian transboundary wetland complex, which also comprises the Nigula and Ziemelu Purvi wetlands in Latvia. It is situated near the western end of the border with Latvia, and comprises six large raised bogs, hummock and hollow complexes, and numerous pools. The bogs found in the Site are among the oldest and largest in the region and play an important role in regulating groundwater discharge and maintaining the water levels of the area. Several important rivers have their sources here, including the Reiu, Rannametsa and Ura. Several rare and endangered bird species use the wetland for breeding and as a stopover in their migration, such as black stork (*Ciconia nigra*), golden eagle (*Aquila chrysaetos*), lesser-spotted eagle (*Clanga pomarina*), great-spotted eagle (*Clanga clanga*) and willow grouse (*Lagopus lagopus*). Due to its remote location, the area is sparsely inhabited, and the main uses are tied to forestry, berry and mushroom picking, and small-scale hunting, all at comparatively low intensities.

## Laidevahe

Site number: 1271 | Country: Estonia | Administrative region: Saare County, Saaremaa Island Area: 2,424 ha | Coordinates: 58°18'54"N 22°51'53"E | Designation dates: 24-03-2003 View Site details in RSIS

Laidevahe is a wetland complex on the southern coast of Saaremaa Island in the Baltic Sea. It features a broad diversity of coastal and aquatic habitats including lagoons, shallow coastal lakes, more than 40 small islands, coastal meadows, saltmarshes and extensive reed beds. The wetland has a rich plant biodiversity, hosting 541 different species, 31 of which are nationally protected. The complex is important for a number of bird species that use it for breeding and as a migration stopover. These include internationally vulnerable species such as the velvet scoter (Melanitta fusca) and horned grebe (Podiceps auritus), and also nationally endangered species such as the dunlin (Calidris alpina schinzii) and ruddy turnstone (Arenaria interpres). The wetland is also an important source of food, shelter and spawning grounds for several fish species, most notably the critically endangered European eel (Anguilla anguilla). Overgrowing of reeds is a threat to the coastal meadows, and can potentially reduce their biodiversity. Commercial activities such as overfishing, forestry and recreation activities in the area and its surroundings also present a potential threat to the wetland.

## Haapsalu-Noarootsi

Site number: 2022 | Country: Estonia | Administrative region: Lääne County Area: 27,450 ha | Coordinates: 14°49'17"N 120°36'24"E | Designation dates: 08-02-2011 View Site details in RSIS

Haapsalu-Noarootsi is a large coastal wetland complex situated along the north-western coast of Estonia. The Site presents a coastal seascape with lagoons, coastal meadows, reefs, reedbeds and intertidal mudflats and sandflats. Osmussaare Island, at the entry to the Gulf of Finland, is mainly covered by typical calcareous alvar grasslands, small lakes, swamp meadows and rich fens. Appropriate management of the semi-natural grasslands through cutting and grazing is essential to uphold the biodiversity and habitats for animals and plants. Fifteen species of orchids have been recorded, including the protected fen orchid (Liparis loeselii). The coastal meadows are an important breeding habitat of coastal waders (Calidris alpina schinzii, Limosa limosa and Tringa totanus) and a spawning ground for the natterjack toad (Bufo calamita). Thousands of waterbirds such as the long-tailed duck (Clangula hyemalis) and the tundra swan (Cygnus columbianus) rest at the Site during their migration. The biggest threats to the Site are pollution from urban wastewater and agricultural effluents, the increase in invasive alien species and the potential risk of oil pollution, which is one of the greatest dangers for seabirds. Plans to construct offshore wind farms near the Site also present a potential threat.

#### Luitemaa

Site number: 1962 | Country: Estonia | Administrative region: Pärnu County

Area: 11,240 ha | Coordinates: 58°09'49"N 24°31'48"E | Designation dates: 27-01-2010

View Site details in RSIS

This wetland complex on the south-western coast of Estonia consists of diverse coastal and inland habitats including shallow sea, capes and islands, coastal meadows and reed-beds. Dunes, bogs and dry and wet forest stands are also characteristic of the Site, and many of its habitat types are listed under the EU Habitats Directive. Some of the bog areas cover up to 200 or 300 hectares; they are among the largest of their type in Estonia and Europe. Due to the various habitats, the wetland is very biodiverse, containing more than 250 plant species and hosting 64,500 birds annually. Many of these are internationally or nationally threatened, such as the globally vulnerable lesser white-fronted goose (Anser erythropus), the great snipe (Gallinago media) and the horned grebe (Podiceps auritus). The Site is important for ecotourism, especially for birdwatching, and the nature trail in Tolkuse Bog is one of the most visited in Estonia. Old ditches, overgrowth of reeds and shrubs and tourism activities are among the most notable threats. As of 2018, a management plan was in place for the Site.

#### Soomaa

Site number: 912 | Country: Estonia | Administrative region: Pärnu, Viljandi Counties Area: 39,639 ha | Coordinates: 58°26'26"N 25°06'28"E | Designation dates: 05-06-1997

View Site details in RSIS

Soomaa is an extensive area comprising four large bog complexes separated by rivers, floodplain meadows and alluvial forests, and surrounded by swamp and carrs. The area is the most important wetland in the south-west of Estonia: it supports high biodiversity values, contains one of the two best preserved bogs in Estonia and has a very significant role in regulating the groundwater levels of the region. The wetland also provides nesting and stopover grounds to several nationally threatened species, such as the golden eagle (*Aquila chrysaetos*), black stork (*Ciconia nigra*) and northern lapwing (*Vanellus vanellus*), and hosts an internationally important number of Bewick's swan (*Cygnus columbianus bewickii*). Overgrowth of scrub in floodplain meadows and the impacts of logging and increasing tourism are among the main threats to the wetland. A visitor's centre maintains ten different educational trails equipped with viewing towers, platforms and boardwalks. As of 2020, a management plan is in place, which includes restoration and amelioration activities.

## **Endla**

Site number: 907 | Country: Estonia | Administrative region: Jögeva, Järva, Lääne-Viru Counties Area: 10,110 ha | Coordinates: 58°52'20"N 26°08'31"E | Designation dates: 05-06-1997 <u>View Site details in RSIS</u>

Endla is a freshwater complex of peat bogs, swamp forests, lakes and rivers in central Estonia. The rivers, strips of forest and Lake Endla divide the site into eight bog areas. These were formed by post-glacial paludification processes of significant scientific interest. The Site is the best-preserved mire system in the area, and supports a rich variety of species, many of which are nationally or internationally threatened; it is especially important for maintaining the geographic range of plant species and communities common to raised bogs. Numerous nationally threatened bird species, such as golden eagle (*Aquila chrysaetos*), osprey (*Pandion haliaetus*) and northern lapwing (*Vanellus vanellus*) use the area for breeding. Human activities include agriculture and sport fishing, while the main threats to the Site are the impacts of old drainage systems, wastewater and agricultural pollution. The Site is an important area for water supply, conservation education, and scientific research. Educational facilities include a visitor centre, nature trails and birdwatching towers.

#### Nigula

Site number: 910 | Country: Estonia | Administrative region: Pärnu

Area: 6,431 ha | Coordinates: 58°00'43"N 24°40'26"E | Designation dates: 05-06-1997

View Site details in RSIS

Situated adjacent to the border with Latvia, Nigula is comprised of mires, forests, and a peatland area which covers 37% of the total area of the wetland. Active raised bogs, transition mires, quaking bogs, bog woodland and 370 bog pools of different sizes are among the rare and protected habitats found in the Site. These play a substantial hydrological and biological role in the region, and support several endangered plant and animal species, such as the fern *Botrychium virginianum*, the *Siberian flying squirrel Pteromys Volans and the lesser spotted eagle Aquila pomarina*. The wetland is important for birds, hosting more than 30,000 individuals annually, mainly geese, cranes and swans. Animal species with large habitat requirements, such as brown bear (*Ursus arctos*), grey wolf (*Canis lupus*), moose (*Alces alces*), Eurasian otter (*Lutra lutra*) and Eurasian lynx (*Lynx lynx*) use the Site as a refuge. As of 2020, a restoration plan is in place, which is designed to restore wooded pastures around the peatland area.

## Puhtu-Laelatu-Nehatu Wetland Complex

Site number: 911 | Country: Estonia | Administrative region: Läänemaa Area: 4,640 ha | Coordinates: 58°34'N 23°33'E | Designation dates: 05-06-1997

View Site details in RSIS

Puhto-Laelatu-Nehatu Wetland Complex. 17/06/97; Läänemaa County; 4,640 ha; 58°34'N 023°33'E. Nature Reserve, Botanical-Zoological Reserve, IBA. A wetland consisting of a chain of lagoons, and a mire with shallow lakes and bogs, bordered by species-rich alvar, wooded meadow, and forest communities. The coastal area is a stopover for internationally important numbers of migrating waterfowl and provides roosting areas for geese and common crane. Human activities include scientific research, fishing, sheep and cattle grazing, agriculture, forestry, and limited tourism. Nutrient-enrichment is problematic. Ramsar site no. 911. Most recent RIS information: 1997.

## Hiiumaa Islets and Käina Bay

Site number: 908 | Country: Estonia | Administrative region: Hiiu County, Hiiumaa Island Area: 17,700 ha | Coordinates: 58°48'N 22°57'59"E | Designation dates: 05-06-1997 View Site details in RSIS

Hiiumaa Islets and Käina Bay. 17/06/97; Hiiu Country, Hiiumaa Island; 17,700 ha; 58°48'N 022°58'E. Landscape Reserve, Ornithological Reserve, Biosphere Reserve, IBA. Shallow watershelf sea with small islets, mudflats and bays. Vegetation includes coastal meadow, saltmarshes, reedbeds, juniper and Alnus glutinosa and Pinus sylvestris coppices. The site supports endangered orchid-rich communities and a unique and endangered broad-leaved forest (Quercus-Tilia-Acer community) and is an important spawning area for several fish species. Numerous species of waterbirds breed, and internationally important numbers of migrating birds stop over at the site. Human activities include tourism, environmental education, agriculture, fishing, and extensive cattle grazing. Ramsar site no. 908. Most recent RIS information: 1997.

#### Peipsiveere

Site number: 906 | Country: Estonia | Administrative region: Tartu County

Area: 34,610 ha | Coordinates: 58°23'17"N 27°17'40"E | Designation dates: 05-06-1997

View Site details in RSIS

This Site is composed of the vast Emajõe Suursoo mire complex, parts of Lake Peipsi and its largest island, Piirissaar. It features fens, swamps, mixed forests, peat bogs, reedbeds and agricultural areas. Two moss species listed in Annex II of the EU's Habitats Directive are present, *Dicranum viride* and *Hamatocaulis vernicosus*. The Site is an important spawning area for fish such as the endangered wels catfish (*Silurus glanis*) and the endemic peipus whitefish (*Coregonus lavaretus maraenoides*). The Site is frequented by large numbers of waterbirds for moulting and staging, and is also the most important breeding area in Estonia for the white-tailed eagle (*Haliaeetus albicilla*), the jack snipe (*Lymnocryptes minimus*) and the black grouse (*Tetrao tetrix*). The Site is extremely important for the hydrology of Lake Peipsi, and frequent monitoring programmes are carried out. Human activities include fishing, farming, hunting, berry picking, and boating.