

Ramsar Sites Information Service

Annotated List of Wetlands of International Importance

Hungary

29 Ramsar Site(s) covering 260,677 ha

Baradla Cave System and related wetlands

Site number: 1,092 | Country: Hungary | Administrative region: Borsod-Abaúj-Zemplén Area: 2,056 ha | Coordinates: 48°28'04"N 20°30'47"E | Designation dates: 14-08-2001 View Site details in RSIS

The Baradla Cave System is the Hungarian part of the 25-kilometre-long Baradla-Domica Cave System, the largest subterranean hydrological system of the karst plateau in Hungary and Slovakia. The Site is characterized by a permanent subterranean stream, ponds, rich dripstone formations, and diverse species representative of subsurface fauna as well as rich archaeological remains. The extended underground world of the Aggtelek and Slovak Karst provides a habitat for more than 500 species of troglobite, troglophile and trogloxene animals, including endemic species such as the beetle Duvalius hungaricus and earthworm Allolobophora mozsaryorum. The Site also includes habitats of community interest such as wet meadows and humid grasslands, which support a number of threatened species of plants and animals. The sediment of the cave system plays an important role in the filtration of heavy metal pollution. The most important archaeological sites are the settlements of Bükk culture both inside and in front of the cave entrance, with charcoal drawings unique in Central Europe. More than 100,000 tourists visit the Site annually, for whom tours and study trails, as well as hotels and campsites, are available. Threats affecting the ecological character of the Site relate to forestry and pollution from wastewater and domestic waste.

Béda-Karapancsa

Site number: 901 | Country: Hungary | Administrative region: Barany
Area: 8,668.9 ha | Coordinates: 45°56'43"N 18°46'15"E | Designation dates: 30-04-1997
<u>View Site details in RSIS</u>

The Site is formed by freshwater tree-dominated wetlands, river branches, oxbow lakes, marshland, meadows and reedbeds, located on the active floodplain of the southernmost part of the River Danube, adjacent to Ramsar Sites in Serbia and Croatia. The river is characterized by its high biodiversity, providing shelter to threatened species of mammals, amphibians, reptiles and molluscs including the thick shelled river mussel, as well as many protected waterbird species such as the Eurasian bittern (Botaurus stellaris), black stork (Ciconia nigra) and corn crake (Crex crex). The Site also supports threatened breeding birds such as the little egret (Egretta garzetta) and the black-crowned night heron (Nycticorax nycticorax). The floodplain plays an important role in sediment trapping. The water level is artificially regulated by a sluice system, allowing fish to spawn in the retained flooded area. Human activities include fishing, forestry and hunting. There is a nature education centre in the area. Potential threats to the ecological character of the Site are colonization by invasive tree species such as maple ash, poplar and eastern black walnut, and overgrazing by wild animals such as red deer and wild boar. In the surrounding area, the deepening of the riverbed due to former river regulation has caused water levels to fall.

Biharugra Fishponds

Site number: 903 | Country: Hungary | Administrative region: Békés County

Area: 2,791 ha | Coordinates: 46°56'18"N 21°35'21"E | Designation dates: 26-05-1997

View Site details in RSIS

The Site consists of the second-largest Hungarian fishpond system, surrounded by meadows, characteristic salt grasslands, fragmented forests and arable lands. Ancient marshes are connected to the fishponds, of which the Ugrai-rét and the Sző-rét marshes are the biggest and most remarkable within the Site. The wetland system is closely connected with the fishponds of Cefa and the Radvani forest in neighbouring Romania. The Site maintains plant communities typical of the region, which support a rich botanical landscape, with relict species typical of loess steppes and species typical of bogs and woodlands. The area provides resting, breeding, feeding and staging areas for numerous endangered and protected waterbirds and waders, including the globally vulnerable lesser white-fronted goose Anser erythropus and the red-breasted goose Branta ruficollis. Threatened species of mammals include the European otter Lutra lutra and the steppe polecat Mustela eversmannii. Human activities include intensive fishing, cattle and sheep breeding, farming and reed harvesting. "Kunhalom", a hill probably used for burial purposes 1,100 years ago, has important archeological value. There is a visitor centre near Sző-rét, and the fishponds can be visited with a permit. Potential threats include inflow of polluted water from the River Sebes-Körös, and herbicides and pesticides sprayed on the surounding agricultural land. A habitat restoration plan has been carried out in Ugrai-rét.

Bodrogzug

Site number: 422 | Country: Hungary | Administrative region: Borsod-Abaúj-Zemplén County Area: 4,220 ha | Coordinates: 48°10'52"N 21°24'53"E | Designation dates: 17-03-1989 View Site details in RSIS

The Site is characterized by grassland, marshland, reedbeds and areas of woodland. It supports hygrophilous communities important for maintaining biological diversity within the Pannonic biogeographic region. It is one of the best-preserved floodplains in the country, and includes several lakes at the confluence of the rivers Tisza and Bodrog. More than 250 bird species use the Site for nesting and as a resting ground during migration. The Site supports threatened species of birds such as the greater white-fronted goose and mammals including the European otter, and is an important spawning ground for fish such as the spined loach. Moreover, the Site plays an important role in flood control and local climate regulation, favouring the local production of the renowned Tokaji wine. Human activities include mowing, angling and livestock grazing. The Rákóczi Castle is situated at the mouth of the river Bodrog and adds historical value to the Site. The main threats are posed by invasive species of flora and the inflow of cyanide-polluted waters from the rivers Szamos and Tisza, caused by a gold mine spill near Baia Mare, Romania in 2000.

Borsodi-Mezöség

Site number: 1,745 | Country: Hungary | Administrative region: Borsod-Abaúj-Zemplén County and North-Hungary NUTS Region.

Borsodi-Mezöség is the largest alkaline marshland complex on the right bank of the River Tisza. The main wetland types, still preserved in good, natural conditions, are permanent and intermittent marshes, hayfields and wet meadows which form a mosaic vegetation pattern with arid vegetation habitats (such as steppe grasslands on loess and sandy soil). The Site provides important staging habitats and water bodies for migratory birds including the common crane (Grus grus), while a large number of threatened waterbirds nest there. Endangered mammals such as the Eurasian beaver (Castor fiber) and the otter (Lutra lutra) can be found. The undisturbed grasslands constitute the only known current habitat of the southern birch mouse (Sicista subtilis) in Hungary. Traditionally, extensive animal husbandry has been practiced, and other activities include hay and reed harvesting and fishing. The ecological character of the Site is threatened by the regulation of the River Tisza and the spread of invasive species such as desert false indigo (Amorpha fruticosa) and boxelder (Acer negundo). Conservation projects have been carried out under the EU's LIFE programme.

Csongrád-Bokrosi Sóstó sodic-alkaline pans

Site number: 1,409 | Country: Hungary | Administrative region: Bács-Kiskun County (southern part belongs to Csongrád County

Area: 865 ha | Coordinates: 46°44'28"N 19°58'02"E | Designation dates: 04-12-2004

View Site details in RSIS

The Site is composed of two seasonal saline lakes, Nagy-Sóstó of 100 hectares and Kis-Sóstó of 10 ha, sodic-alkaline pans, steppes, a mosaic of temporarily flooded sodic marshes and meadows of the Danube-Tisza Interfluve area. As it is part of the migration route along the Tisza river valley, the Site supports over 20,000 waterfowl, playing an important role as a resting, feeding and breeding site for the globally endangered saker falcon (Falco cherrug) and regionally threatened species including pied avocet (Recurvirostra avosetta) and black-winged stilt (Himantopus himantopus). It hosts several noteworthy plant species and communities, including the regionally endemic Aster tripolium ssp. pannonicus. Wildfowl hunting has been restricted. Land use is mainly dedicated to agriculture, and a potential threat is the acceleration of the eutrophication process caused by nutrients coming from the arable lands. The wetland plays a significant role in the hydrology of the region through the storage of inland water and the regulation of the groundwater level. However, past melioration measures in the catchment area decreased the extent of wetlands as they lowered the water table.

Fishponds and Marshlands south of Lake Balaton

Site number: 1,963 | Country: Hungary | Administrative region: Somogy Area: 9,483 ha | Coordinates: 46°42'35"N 17°36'49"E | Designation dates: 09-06-2011 View Site details in RSIS

The Site consists of several sub-sites south of Lake Balaton, the largest freshwater lake in Central Europe and also a Ramsar Site (Site no. 421). It mainly consists of natural or near-natural marshland, meadows and fishponds including many habitat types listed under the EU Habitats Directive. The Site supports globally and regionally threatened fish species such as the European mudminnow *Umbra krameri*, several breeding bird species such as the Eurasian bittern *Botaurus stellaris stellaris* as well as mammal species such as the otter *Lutra lutra*. The Site is also an important staging area during migration and wintering season for more than 20,000 waterbirds, including about 12,000 greater white-fronted geese *Anser albifrons* and 9,000 greylag geese *Anser anser*. The Site also hosts more than 1% of the population of the root vole *Microtus oeconomus*, which is endemic to the Carpathian Basin (Ramsar Criterion 9). Human uses of the Site includes fish farming, fishing, reed harvesting, hunting, forestry, and tourism. The Balaton Catchment Area Water Management Plan was completed in 2010 under the guidelines of the EU Water Framework Directive.

Gemenc

Site number: 900 | Country: Hungary | Administrative region: Tolna and Bács Kiskun Area: 19,770 ha | Coordinates: 46°13'16"N 18°51'18"E | Designation dates: 30-04-1997 View Site details in RSIS

The Site consists of various floodplain habitats alongside the River Danube. The undisturbed forests, tributaries and oxbow lakes support a high diversity and density of endangered species. The Site supports various threatened ecological communities and two protected mammals: the common otter (Lutra lutra) and Eurasian beaver (Castor fiber). Large numbers of migrating and wintering waterbirds regularly use the Site, and it is an important spawning and nursery ground for different fish species such as the globally threatened sterlet (Acipenser ruthenus). The groundwater regime of the floodplain depends directly on the water levels of the Danube. The Site plays an important role in sediment trapping and flood regulation. Human activities include forestry, hunting, fishing and recreation such as water sports and nature-based tourism: there are visitor centres, observation towers and nature trails within the Site. The main threats to its ecological character derive from intensive forest management, overfishing and navigation.

Hortobágy

Site number: 189 | Country: Hungary | Administrative region: (1) County of Hajdú-Bihar, (2) Middle Part of Kisköre Reservoir and Northern Part of Kisköre Reservoir are located in County of Jász-Nagykun-Szolnok, (3) Most of Kunkápolnás Marsh is also located in County of Jász-Nagykun-Szolnok Area: 32,037 ha | Coordinates: 47°32'33"N 20°57'30"E | Designation dates: 11-04-1979 View Site details in RSIS

The Site is composed of four separate sectors of the extensive Hortobágy Steppe which include an alkaline wetland complex formed by artificial fishponds, a reconstructed swamp system, part of a dam, islands, woodland and mudflats, extensive grassland, and marshland areas. All the sectors support extensive reed and Nymphaea beds. The plant communities preserve remnant populations of formerly widespread species such as Phlomis tuberosa, a characteristic species of loess grasslands, and Plantago schwarzenbergiana, which is endemic to alkaline steppes in the eastern half of Carpathian Basin. The area is important for the breeding, wintering and staging of many migratory waterbird species, including the globally threatened lesser white-fronted goose Anser erythropus. It is also an important freshwater reservoir and plays an important role in flood regulation. Human activities include large-scale intensive fish production and reed harvesting. A field research station and several observation hides are available for birdwatching, though public access is strictly controlled. The main threats to the Site are posed by the intensive fish farming and the fluctuations in the water level due to artificial water management.

Ipoly Valley

Site number: 1,093 | Country: Hungary | Administrative region: Nógrád county

Area: 2,303.7 ha | Coordinates: 48°03'37"N 19°06'50"E | Designation dates: 14-08-2001

<u>View Site details in RSIS</u>

lpoly valley is a long, flat and narrow valley featuring oxbow lakes, permanent freshwater marshes with reedbeds and peat swamp willow gallery forests. The river floodplain is a valuable habitat for migratory birds. Frequently more than 20,000 waterbirds including lesser white-fronted goose (Anser erythropus) and red-breasted goose (Branta ruficollis) use the marshes and wet meadows in early spring as resting and feeding ground, contributing to the biological diversity of the Pannonian biogeographic region. The floodplain plays an important role in flood regulation, sediment and nutrient retention, water purification and groundwater replenishment. The seasonally flooded meadows are partly grazed and mown. Other human activities include wine production, fishing, forestry, hunting and cattle-breeding. The ethnographic and cultural character of the Slovak-Hungarian ethnic border area is unique, as the two peoples have been living there together for centuries. Potential threats derive from sewage pollution and artificial water regulation. A management plan is being prepared.

Kis-Balaton

Site number: 185 | Country: Hungary | Administrative region: Zala & Somogy Counties Area: 14,659 ha | Coordinates: 46°38'20"N 17°11'55"E | Designation dates: 11-04-1979 View Site details in RSIS

Kis-Balaton consists of the former westernmost bay of Lake Balaton, which is located in the River Zala delta. The Site is an extensive marshland in two main parts: Phase I is characterized by open water surfaces with relatively narrow reedbelts along the dikes, while Phase II contains vast reedbeds and sedgy marshes. The Site supports an outstanding biodiversity within the Pannonic biogeographic region. The shallow waters are an important spawning ground for fish, and the marshy meadows and the reedbeds provide breeding and migratory refuge for many threatened species of waterbirds. The aquatic vegetation filters nutrients and plays an important role in sediment trapping. Human activities include controlled reed harvesting, forestry, fishing, and hunting. The Balaton Uplands National Park Directorate organizes guided eco-tours on the strictly protected area of the Kis-Balaton. Potential threats to the Site are posed by illegal fishing, eutrophication caused by the intensive use of artificial fertilizers on the surrounding farmland, and the expansion of the water protection system.

Lake Balaton

Site number: 421 | Country: Hungary | Administrative region: Zala, Somogy, Veszprém Area: 59,800 ha | Coordinates: 46°51'34"N 17°45'10"E | Designation dates: 17-03-1989 View Site details in RSIS

Lake Balaton is the largest freshwater lake in Central Europe, with marshy meadows and extensive reed beds present along the shoreline. The lake supports large populations of plant and animal species which are important for maintaining the biological diversity of the Pannonian biogeographic region. During migration and wintering seasons, the Site is an important staging area for over 30,000 ducks, geese and coots, among them over 1% of the European wintering populations of several species. Balaton waters support approximately 2,000 species of algae and provide important spawning and nursery grounds for fish. The Site is the only South-East European refuge for the aquatic leaf beetle Macroplea mutica. Traditional human activities include fishing and reed harvesting, and the lake also constitutes a popular recreation area in Central Europe. There are 12 information centres and more than 20 nature trails around the lake. The main threats affecting the ecological character of the Site relate to unsustainable reed harvesting, the construction of sailing ports and fishing stages, the practice of motor sports and eutrophication caused by the use of fertilizers. The water quality of the lake has improved during the last 20 years as the rate of eutrophication has significantly declined. The Balaton Catchment Area Water Management Plan was approved in 2010.

Lake Fehér at Kardoskút

Site number: 184 | Country: Hungary | Administrative region: Békés County

Area: 492 ha | Coordinates: 46°28'22"N 20°37'29"E | Designation dates: 11-04-1979

<u>View Site details in RSIS</u>

The Site is an alkaline steppe lake in south-east Hungary, and a former branch of the River Maros. The lake dries out completely during the summer and a gradual salt accumulation has resulted in fauna and flora associations typical of the Pannonian steppe, including grasslands and reedbeds. The wetland is one of the most fragile and valuable nature reserves in Hungary, and also hosts several archaeological sites. Lake Fehér is of international importance for thousands of migratory birds in eastern Hungary, and supports several endemic plants important for maintaining the biological diversity in the Pannonic biogeographic region. The wetland area is important for groundwater recharge. Human activities include reed harvesting. The draining of the former extensive wetland system has had a negative impact on the Site, but restoration measures have been implemented. An ornithological field station, a museum and birdwatching towers can be found at the Site.

Lake Fertö

Site number: 420 | Country: Hungary | Administrative region: Györ-Moson-Sopron county Area: 8,432 ha | Coordinates: 47°40'43"N 16°44'16"E | Designation dates: 17-03-1989 View Site details in RSIS

The Site comprises a portion of the Lake Fertö alkaline steppe and the Herlakni and Oberlakni lake areas. Both sectors support extensive reedbeds, saline grassland, marshland and open waters. The area is important for the breeding, wintering and staging of several species of internationally endangered waterbirds such as lesser white-fronted goose (Anser erythropus) and red-breasted goose (Branta ruficollis). The Site also supports endemic plant and invertebrate species which are important for maintaining the biological diversity of the Pannonic biogeographic region. The lake plays an important role in sediment trapping and climate modification but is in a state of advanced eutrophication. Human activities include traditional fishing, reed harvesting and recreation. There are two visitor centers, nature trails and bird watching towers. In the surrounding area outstanding castles and classical Roman era sites such as a temple to Mithras give a particular cultural value to the Site.

Lake Kolon at Izsák

Site number: 902 | Country: Hungary | Administrative region: Bács-Kiskun county

Area: 3,059 ha | Coordinates: 46°45'26"N 19°20'55"E | Designation dates: 30-04-1997

View Site details in RSIS

The Site is an artificially regulated lake supporting an extensive area of freshwater fen and marsh characterized by reedbeds, wet meadows, patches of willow, and small open water bodies in a former river branch of the Danube floodplain. It hosts a regionally large population of a vulnerable indigenous fish species, the European mudminnow (Umbra krameri). Moreover, it is an important wintering and breeding ground for large numbers of herons and waterfowl such as the ferruginous duck (Aythya nyroca) and moustached warbler (Acrocephalus melanopogon). The Site plays an important role in water retention, groundwater recharge and discharge, and climate modification at local level. Human activities include reed harvesting, mowing, forestry and agriculture. A habitat restoration project implemented from 2010 to 2013 excavated a section in the middle of the lake to create a new 48 ha open water body for birds and fish. Potential threats to the Site's ecological character are overfishing, vegetation succession and overgrowth caused by drainage, decrease of groundwater level, expansion of exotic species and eutrophication.

Lakes by Tata

Site number: 419 | Country: Hungary | Administrative region: Komárom-Esztergom county Area: 1,897 ha | Coordinates: 47°40'55"N 18°17'36"E | Designation dates: 17-03-1989 View Site details in RSIS

Located near the Duna River by the border with Slovakia, the Site is composed of a mosaic of habitats including meadows, pastures, spring bogs, remnants of former extensive fen and bog areas, reedbeds, agricultural land, fishponds, streams and a lake. Öreg-tó ("old lake"), an artificial lake created in the centre of the town of Tata during the middle ages, collects water from the Által-ér stream and is important for maintaining the biological diversity of the region. The Site is an important habitat for migratory birds, supporting up to 80,000 waterfowl, especially geese, and supports the globally threatened lesser white fronted goose Anser erythropus and red-breasted goose Branta ruficollis. It is wedged between urban and industrial regions as well as the agglomeration of Tata. Human activities are concentrated around agriculture and fishing. A number of educational activities and excursions are organized on the Site, and an annual wild geese festival takes place in the town. The main threats to the ecological character of the Site are organic and oil pollution of the streams and creeks that flow into the lake, and the expansion of private land ownership and building activities in the surrounding area. Marshland restoration projects have been carried out. Local restrictions on hunting help to preserve the natural values of the Site. The Site was significantly extended in 2006 and renamed "Lakes by Tata", from "Tata, Öreg-tó (Old Lake)".

Mártély

Site number: 186 | Country: Hungary | Administrative region: Csongrád-Csanád county Area: 2,247 ha | Coordinates: 46°26'15"N 20°12'43"E | Designation dates: 11-04-1979 View Site details in RSIS

Mártély covers a section of the River Tisza floodplain featuring oxbow lakes, wet meadows, arable land, scrub and woodland. It is an important breeding area for various waterbirds which are protected under Annex I of the European Union's Birds Directive, such as the Eurasian bittern (*Botaurus stellaris*) and Eurasian spoonbill (*Platalea leucorodia*). The Site is also an important spawning and nursery ground for many fish species such as the threatened sterlet (*Acipenser ruthenus*), and supports a large population of European otter (*Lutra lutra*). The floodplain plays an important role in flood control, sediment trapping and nutrient retention. Human activities include agriculture, forestry, commercial fisheries and recreation. The main threats to the Site's ecological character are posed by the colonization of invasive tree species; planting of artificial hybrid poplar species is pushing the native black poplar (*Populus nigra*) to the verge of extinction in the region. A habitat restoration project has been ongoing since 2009 to restore wet meadows and eliminate exotic species, and a national biodiversity monitoring system for habitats and birds is in place.

Montág-puszta

Site number: 1,746 | Country: Hungary | Administrative region: Békés, Csongrád Counties Area: 2,203 ha | Coordinates: 46°20'57"N 20°39'29"E | Designation dates: 20-02-2008 View Site details in RSIS

The Site is a low-lying, basin-like area located on the Hungarian Great Plain, which consists of Pannonic salt steppes and salt marshes. The steppe of the Pannonian Region is characterized by a rich microrelief landscape with salt berms, former riverbeds and pits. The diverse habitat types ensure ideal conditions for rare species of flora and fauna, supporting threatened species of mammals such as the stoat Mustela erminea and birds including the red-breasted goose Branta ruficollis. Due to its closeness to the migration flyway along the River Tisza, the Site constitutes an important nesting ground for birds as well as a roosting and feeding place during their migration. The Site also ensures excellent conditions for the reproduction of important amphibian species such as the European fire-bellied toad Bombina bombina and crested newt Triturus dobrogicus. The water bodies play an important role in groundwater replenishment and water retention. Land use is dedicated to farming, grazing and mowing activities. Invasive plant species including the Virginia silkweed Asclepias syriaca could threaten the ecological character of the Site. Due to restoration works (closing of canals, building of dykes) carried out since 1997, water conditions are once again closer to their natural state.

Nyirkai-Hany

Site number: 1,644 | Country: Hungary | Administrative region: Györ-Moson-Sopron county Area: 419 ha | Coordinates: 47°42'06"N 17°10'58"E | Designation dates: 06-10-2006 View Site details in RSIS

The Site is in the Hanság peat lowland, which was a vast wetland complex regularly flooded by tributaries of the Danube and Rába until it was drained for agricultural purposes in the 19th century. In 2001, a wetland restoration project was started with Dutch support to create open water surfaces, reedbeds and tall grass-dominated plant communities in the agricultural polders. Within a short time the area gained great importance as a habitat for raptors such as the globally threatened greater spotted eagle *Aquila clanga* and saker falcon *Falco cherrug*, as well as a nesting and feeding place for waterbirds such as the Eurasian coot *Fulica atra* and ferruginous duck *Aythya nyroca*. The Site is also an important wintering site for many migratory birds: it supports over 20,000 waterbirds including over 1% of the biogeographic population of the greater white-fronted goose *Anser albifrons* and greylag goose *Anser anser*. The shallow waters constitute an important spawning ground for fish. The European otter *Lutra lutra* and the Eurasian beaver *Castor fiber* have bred in the area since its restoration. The Site plays an important role in groundwater recharge and flood control. In the surrounding areas, intensive agricultural and recreational activities as well as peat extraction have adverse effects on its ecological character. The Fertö-Hanság National Park carries out ecological monitoring to ensure long-term conservation management.

Ócsai Turjános

Site number: 418 | Country: Hungary | Administrative region: Pest County

Area: 1,145.8 ha | Coordinates: 47°15'45"N 19°14'04"E | Designation dates: 17-03-1989

View Site details in RSIS

Ócsai Turjános Ramsar Site is an area of peatland located in the Great Hungarian Plain. It supports reed and Scirpus beds, bogs, pools, grassland, arable land, and woodland. The area is important for several rare and protected species of plants and animal species including a number of breeding waterbirds. The internationally protected great bustard (Otis tarda) appears in winter and spring. The Site supports several endemic species of Lepidoptera, the European pond turtle (Emys orbicularis), the otter (Lutra lutra) and several notable plant species. During the spring, Ócsai Turjános also provides refuge for the European mudwinnow (Umbra krameri) and several amphibian species. The Site helps to maintain the hydrological balance of the region and plays an important role in groundwater recharge. The surrounding villages are rich in architectural and other cultural values. Land use is mainly dedicated to agriculture. An ornithological field station is located at the site. The main threats are posed by lowering of water levels due to artificial water management and over-exploitation of the aquifers, communal sewage pollution and colonization by invasive fish and plant species. A wetland restoration project was carried out in 2012.

Pacsmag Fishponds Nature Conservation Area

Site number: 904 | Country: Hungary | Administrative region: Tolna

Area: 439.4 ha | Coordinates: 46°37'03"N 18°21'58"E | Designation dates: 30-04-1997

View Site details in RSIS

Situated in the valley of the Koppány stream, the Site consists of fishponds established by damming the watercourse. The large waterbodies, marshlands, meadows and reedbeds support thousands of migrating waterbirds and are considered one of the most significant waterfowl resting and feeding Sites in western Hungary. The area provides excellent nesting habitat for several protected and endangered bird species such as black-crowned night heron (Nycticorax nycticorax), ferruginous duck (Aythya nyroca) and Eurasian bittern (Botaurus stellaris), as well as breeding areas for the strictly protected otter (Lutra lutra). The fishponds are important for trapping sediment, regulating water quality and recharging groundwater. Human activities include intensive fishing, cattle grazing, mowing and farming. There is a permanent bird ringing station for research on migratory species at the Site. The increasing population of mute swan (Cygnus olor) has negatively affected other species.

Pusztaszer

Site number: 188 | Country: Hungary | Administrative region: County Csongrád-Csanád Area: 5,086 ha | Coordinates: 46°27'15"N 20°05'E | Designation dates: 11-04-1979 View Site details in RSIS

Pusztaszer is composed of four separate areas, including tree-dominated floodplains and oxbow lakes of the river Tisza, fishponds, temporarily flooded sodic marshes and sodic-alkaline pans. Located along an important bird migration route in the Tisza river valley, the Site supports over 20,000 waterbirds, as a resting, feeding and breeding site. Internationally threatened waterbirds and other species can be found including the red-breasted goose (*Branta ruficollis*), the saker falcon (*Falco cherrug*) and the European ground squirrel (*Spermophilus citellus*). The Site plays an important role in the retention and storage of inland water and regulation of groundwater levels. Nonetheless there are major seasonal and annual fluctuations in water levels, which dictate the prevalence of the sodic-alkaline wetland habitat structures. Land use is mainly dedicated to grassland agriculture, forestry and fish farming, and increased nutrient inflows from this agriculture and aquaculture are the biggest threats, along with river regulation and invasion by alien species including the Russian olive (*Eleagnus angustifolia*). There is a biodiversity research and bird monitoring programme.

Rába valley

Site number: 1,645 | Country: Hungary | Administrative region: Vas Area: 9,552.3 ha | Coordinates: 47°05'26"N 16°45'27"E | Designation dates: 06-10-2006 View Site details in RSIS

The Site follows a section of the River Rába from the Austrian border downstream to Győr-Moson-Sopron County. In this section, the river meanders freely and yearly floods maintain the natural dynamic of oxbows, shifting riverbeds and typical riverside vegetation. The new boundaries of the Ramsar Site follow recently changed property boundaries and the shoreline of the water body more accurately. Typical habitat types are floodplain meadows, softwood riparian forests, willow bushes and hardwood riverside forests. The banks support nesting birds such as the European bee-eater Merops apiaster, kingfisher Alcedo atthis and sand martin Riparia riparia. The meandering sections of the Rába, the oxbows and the abandoned man-made pits play an important role in the reproduction of fish species and aquatic insects and provide important habitats for their survival during summer droughts. The Site supports high percentages of the Hungarian populations of threatened species such as the Ukrainian brook lamprey (Eudontomyzon mariae) and Zingel zingel. The Site plays an important role in flood control, and in maintaining relatively high groundwater levels which enhance the productivity of surrounding agricultural land. Uncontrolled tourism, fishing activities, intensive forestry, and the discharge of treated sewage water pollution inflow from upstream Austria all have a negative impact. The Rába River Basin Management Plan has recently been finalized and will be implemented with support of EU funds.

Rétszilas Fishponds Nature Conservation Area

Site number: 899 | Country: Hungary | Administrative region: Fejér
Area: 1,494 ha | Coordinates: 46°50'18"N 18°34'37"E | Designation dates: 30-04-1997
View Site details in RSIS

The Site is a complex of numerous fishponds and the remnants of marshy river beds created at the turn of the 20th century in place of the regulated "Őssárvíz" marshland. The characteristic vegetation includes reedbeds, sedge communities, and sodic pastures. The Site is one of the most significant waterbird habitats in Western Hungary, with its large interwoven reeds providing optimal nesting habitat for several protected and endangered species and also a large number of heron species. 113 bird species use the Site, 84 of them protected; the few hundred hectares of water surface are essential during the birds' migration. The Site also supports numerous endangered and protected plants, notably a significant orchid community. Human activities include a fishery, cattle grazing, mowing and farming. The bird life at the Site is monitored and a Site management plan is in preparation.

Szaporca

Site number: 182 | Country: Hungary | Administrative region: County of Baranya Area: 289.5 ha | Coordinates: 45°47'12"N 18°05'22"E | Designation dates: 11-04-1979 View Site details in RSIS

Szaporca Ramsar Site is an oxbow lake that developed naturally from the River Dráva, which supports gallery forests, wet meadows, reedbeds, agricultural land and marshes. The Site is important for numerous species of breeding waterbirds such as the ferruginous duck (Aythya nyroca) and the Eurasian bittern (Botaurus stellaris). It also supports diverse floating vegetation communities such as Lemno-Utricularietum and Nuphareto-Castalietum. River regulation works in the late 1980s had a negative impact on the Site, creating a permanent separation between the river and its former riverbed. Since then, water supply has been managed through sluices connected to the River Dráva. The wetland area plays an important role in groundwater recharge and the maintenance of the hydrological balance. Human activities include agriculture and tourism. The main threats are overfishing and colonization by exotic invasive plant species such as the Canada goldenrod (Solidago canadensis) and the Judas tree (Cercis siliquastrum).

Upper Kiskunság Alkaline Lakes

Site number: 187 | Country: Hungary | Administrative region: Bács-Kiskun county
Area: 7,393.8 ha | Coordinates: 46°48'36"N 19°10'18"E | Designation dates: 11-04-1979
View Site details in RSIS

Located between the Danube and Tisza rivers, the Site includes four shallow open water sodic-alkaline pans, three major sodic-alkaline reedbeds and an associated mosaic of saline marshes, meadows, aquaculture ponds and irrigated land. It is the largest and most important area of saline lakes and flats between the Danube and Tisza rivers in the Great Hungarian Plain. The Site supports notable species of breeding, migrating, wintering and resident birds, including the great bustard (Otis tarda), pied avocet (Recurvirostra avosetta), Eurasian bittern (Botaurus stellaris) and red-breasted goose (Branta ruficollis). It hosts several noteworthy plant species and communities endemic to the Pannonic biogeographic region, including Aster tripolium ssp. pannonicus. The lakes play an important role in the retention and storage of water and the regulation of the groundwater level in the surrounding area. Currently the Site is mainly used as extensive grassland, and for reed harvesting and other agricultural activities. The main threats to the Site's ecological character are agricultural pollution and the loss of groundwater due to the overexploitation of the aquifers and severe droughts.

Upper Kiskunság alkaline steppes

Site number: 1,646 | Country: Hungary | Administrative region: Bács-Kiskun, Pest counties Area: 13,177 ha | Coordinates: 47°04'15"N 19°09'E | Designation dates: 06-10-2006 View Site details in RSIS

The Site is in central Hungary in the Danube river basin. Its continental saline ecosystems – marshes, grazing lands, sodic-alkaline meadows and terraces – and salt-resistant vegetation are characteristic and unique to the Pannonic biogeographic region. The Site is important for birds as a nesting, feeding and roosting ground and supports more than 20,000 geese, ducks and waders during migration periods. It hosts several plant and animal species endemic to the Carpathian Basin, which are important for maintaining the biological diversity of the region, and it constitutes one of the Hungarian strongholds for the great bustard Otis tarda and black-winged stilt Himantopus himantopus. The wetland plays an important role in the retention and storage of inland water and the regulation of groundwater levels. Land use is dedicated to traditional extensive farming and in particular domestic semi-nomadic animal grazing. The main threats derive from agricultural pollution and water regulation followed by falling groundwater levels. Wetland restoration programmes have been carried out.

Upper Tisza (Felsö-Tisza)

Site number: 1,410 | Country: Hungary | Administrative region: Szabolcs-Szatmár-Bereg County Area: 26,871 ha | Coordinates: 48°10'42"N 21°56'14"E | Designation dates: 10-01-2004 View Site details in RSIS

The Site covers the entire active floodplain along a 215-kilometre section of the River Tisza in north-eastern Hungary, adjacent to the Bodrogzug Ramsar Site; it meets the Ukrainian and Slovakian borders to the east and north, and the catchment is also shared with Romania. Felsö-Tisza is a typical floodplain with dikes constructed in the late 19th and early 20th centuries. The natural and near-natural habitats consist of large softwood and hardwood riverside forests, oxbow lakes and filled-in meanders with rich natural flora and fauna, extensively managed or abandoned orchards, and farmland. The Site supports many globally threatened species and ecological communities; it offers habitat to 57 different orchids and is especially important as a migration path to many fish species, some of which are endemic to the Danube river system. The Site fulfills numerous important functions such as flood control and habitat connectivity and provides numerous social and economic services including irrigation for agricultural land, fishing, recreation and education. Threats include uncontrolled tourism and fishing, intensification of forestry and eutrophication.

Velence and Dinnyés Nature Conservation Area

Site number: 183 | Country: Hungary | Administrative region: Fejér county

Area: 1,354.5 ha | Coordinates: 47°11'07"N 18°33'13"E | Designation dates: 11-04-1979

View Site details in RSIS

The Site is formed by a part of Lake Velence, the second biggest lake in the country, and Dinnyési-fertő, an alkaline marshland with surrounding meadows supporting extensive reed and Scirpus beds. The floating marshes are among the most important habitats of the lake: they provide good conditions for plant species such as the orchid Liparis loeselii and Sphagnum mosses, as well as animal species including the weatherfish Misgurnus fossilis, which has a stable population in the area. The Site is an important breeding, wintering and staging area for numerous species of endangered waterbirds, such as the red-breasted goose Branta ruficollis, the marsh harrier Circus aeruginosus and the little bittern lxobrychus minutus. It regularly supports an average of 25,000 to 30,000 waterfowls per year, and more than 1% of the individuals of the population of greater white-fronted goose Anser albifrons and greylag goose Anser anser. The wetland area plays an important role in water purification and climate regulation. Human activities include reed harvesting on the lake, grazing and mowing of the meadows in Dinnyés, and ecotourism. There is a visitor centre, a birdwatching tower and a research facility at the Site. The main threat is posed by illegal fishing.