

Ramsar Sites Information Service

Annotated List of Wetlands of International Importance

50 Ramsar Site(s) covering 3,032,813 ha

La Réserve Naturelle du Lac des Oiseaux

Site number: 975 | Country: Algeria | Administrative region: El Tarf,

Area: 120 ha | Coordinates: 36°46'55"N 08°07'25"E | Designation dates: 22-03-1999

View Site details in RSIS

This shallow permanent freshwater lake in the north-east of the country shrinks to about half its size in the dry season. It is a representative and unique wetland type of the Mediterranean region – only the Ebro Delta in Spain and the Camargue in France are larger. The Site supports a surprising diversity of vegetation (some 200 species), birds, and insects. The endangered white-headed duck (*Oxyura leucocephala*) and the vulnerable marbled duck (*Marmaronetta angustirostris*) nest there; 164 individuals of the former were counted in January 1998, more than 2% of the world population. A 1996 study identified 31 plant species belonging to 16 botanical families including 70% helophytes and 30% hydrophytes. Around 8,000 people live nearby, and grazing of small numbers of livestock is practiced around the lake. The effects of population growth, uncontrolled extraction of water for irrigation, household sewage, poaching, and intense road traffic are all seen as potential threats. The lake is a well-used natural centre for environmental education.

Réserve Naturelle du Lac de Réghaïa

Site number: 1304 | Country: Algeria | Administrative region: Alger

Area: 842 ha | Coordinates: 36°47'06"N 03°20'34"E | Designation dates: 06-04-2003

View Site details in RSIS

The lake and marsh of Réghaïa are found at the estuary of the Réghaïa wadi (river), the mouth of which has been blocked by a sand ridge. 600 metres inland, an artificial barrier keeps water permanently in the marshes, sustaining its reeds and rushes. The marsh is the last vestige of the old Mitidja alluvial plain and is the only wetland near Algiers to survive the drainage works of the colonial era. It faces the Mediterranean, and includes a small island called Agueli or Bounettah which lies a kilometre offshore, and the surrounding waters. It is important for migratory birds arriving from the Mediterranean Sea and from the Sahara Desert. In spite of its declining size, the lake maintains a wealth and diversity of rare nesting birds as well as wintering migrants. It shelters more than 203 waterbird species, including the ferruginous duck *Aythya nyroca*, the marbled teal *Marmaronetta angustirostris* and the white-headed duck *Oxyura leucocephala*. The immediate surroundings consist of fallow fields and *maquis* featuring wild olive and mastic shrubs as well as a few eucalyptus groves. The lake provides irrigation for 1,200 hectares of arable land, and the beaches attract many visitors during summer. The *Centre Cynégétique de Réghaïa* organizes World Wetlands Day exhibitions.

Marais de la Mekhada

Site number: 1301 | Country: Algeria | Administrative region: El Tarf

Area: 8,900 ha | Coordinates: 36°47'05"N 08°00'27"E | Designation dates: 06-04-2003

View Site details in RSIS

A mostly freshwater marsh in an alluvial basin of the Mafragh plain, with a brackish downstream part where it meets the Mediterranean Sea through a narrow opening. The basin is from 50 centimetres to one metre deep, and emergent vegetation consisting of *Phragmites communis, Typha angustifolia* and *Glyceria fluitans* covers more than 80% of its surface. The area is important as a nesting and wintering site for ducks and coots; it serves as a nesting site for the endangered white-headed duck *Oxyura leucocephala* and the ferruginous duck *Aythya nyroca*. Four species are considered to surpass the 1% threshold: *Oxyura leucocephala*, the greylag goose *Anser anser*, the Eurasian wigeon *Anas penelope*, and the gadwall *Anas strepera*. In summer, cattle pass through the marsh; some of its banks are used for agriculture, and the Site is used for traditional fishing of eel and other fish. Overgrazing is seen as a potential threat, especially in times of drought.

Chott Sidi Slimane

Site number: 1417 | Country: Algeria | Administrative region: Ouargla

Area: 616 ha | Coordinates: 60°02'48"N 23°39'37"E | Designation dates: 12-12-2004

View Site details in RSIS

Chott Sidi Slimane in eastern Algeria is surrounded by palm trees and a dense bed of reeds (*Phragmites communis*) that provide an important refuge for migratory and sedentary waterbirds. The vegetation also features French tamarisk *Tamarix gallica* and date palm *Phoenix dactylifera*. The Site hosts more than 1% of the biogeographic population of the vulnerable marbled teal (*Marmaronetta angustirostris*), and the *Phragmites* beds provide a nesting site for species such as common coot (*Fulica atra*), common moorhen (*Gallinula chloropus*) and western swamphen (*Porphyrio porphyrio*). The water body is important for local people as it allows excess water to be drained from the palm plantations, which provide their main livelihood. The tourism opportunities of the area remain unexploited despite its spectacular natural scenery and its wealth of animal and plant life. The Site is threatened by increasing human pressures, including pollution, fragmentation of habitats, and intensive reed harvesting which causes changes in the quality of habitats and the water regime.

Grande Sebkha d'Oran

Site number: 1055 | Country: Algeria | Administrative region: Oran

Area: 56,870 ha | Coordinates: 35°31'29"N 00°47'12"W | Designation dates: 02-02-2001

View Site details in RSIS

The Site is a large endorheic depression of tectonic origin, with salt flats and a seasonal shallow saline lake fed by runoff from the watershed. The lake has no vegetation; the flats feature halophilic plants, and the wider watershed Aleppo pine, eucalyptus, cork oak and cedar. The Site hosts many migratory species and, in particular, flamingos and other waders, which frequent very shallow wetlands. It surpasses the 1% threshold for pink flamingos (*Phoenicopterus roseus*) and shelduck (*Tadorna tadorna*). The surrounding areas are used for agriculture: livestock farming and ranching, and water abstraction, are the main threats to the Site. The Site does not have a management plan but a specific bird-monitoring plan is being implemented.

Chott El Beïdha-Hammam Essoukhna

Site number: 1415 | Country: Algeria | Administrative region: Sétif et Batna

Area: 12,223 ha | Coordinates: 44°17'12"N 27°40'03"E | Designation dates: 12-12-2004

View Site details in RSIS

Chott El Beïdha-Hammam Essoukhna is a temporary brackish lake surrounded by a meadow composed of halophyte species; during the dry season, salt encrustations cover a large part of the Site. It is important for two wintering species, shelduck (*Tadorna tadorna*) and pink flamingo (*Phoenicopterus roseus*), which have been represented in relatively large numbers, though rarely exceeding the 1% threshold due to the nearby presence of several other wetlands. The lake plays a role in sediment retention and flood control during years of exceptional rains, and is an important grazing area for sheep that feed on the saltbush shrubs (*Atriplex halimus and Atriplex canescens*). It is also of archaeological interest thanks to the presence of shell middens, mounds up to 150 metres long and ten metres high which contain tools, bones, ash and snail shells dating back to the Caspian civilization of around 7,000 BCE. Around the Site are cereal and other cultivations, and some forestry activities further south. These agricultural practices, livestock farming, soil erosion and desertification are the main factors threatening the Site. There is not yet a management plan but some restoration actions are being implemented in order to protect the vegetation cover.

Lac du barrage de Boughezoul

Site number: 1960 | Country: Algeria | Administrative region: Médéa

Area: 9,058 ha | Coordinates: 60°33'27"N 27°13'52"E | Designation dates: 05-06-2011

View Site details in RSIS

The Site, the largest artificial reservoir in the *Hauts Plateaux* region, also includes permanent and seasonal rivers, streams and freshwater marshes. It is located 90 kilometres north of the city of Médéa, on the northern edge of the Sahara Desert. The Site has a semi-arid climate, characterized by halophilic herbaceous vegetation such as *phragmites* reeds. It provides a key stopover area for birds migrating across the Sahara: internationally important numbers of migrant and wintering waterbirds include two globally threatened species, marbled teal (*Marmaronetta angustirostris*) and white-headed duck (*Oxyura leucocephala*). It is also important as a water storage area for livestock. The main threats are related to livestock farming and ranching, and other human activities such as mining and quarrying. The Site hosts some research activities and also communication, education, participation and awareness (CEPA) activities.

La Vallée d'Iherir

Site number: 1057 | Country: Algeria | Administrative region: Tassili n'Ajjer

Area: 57,892 ha | Coordinates: 43°59'38"N 23°53'48"E | Designation dates: 02-02-2001

View Site details in RSIS

This Ramsar Site in the Tassili n'Ajjer region in south-east Algeria was extended from 6,500 hectares to almost 58,000 ha in 2018. La Vallée d'Iherir is a high valley (between 1,100 and 1,400 metres in altitude) in the centre of a limestone Saharan plateau characterized by intermittent streams, lakes, and marshes, freshwater springs, and subterranean karst hydrological systems. The isolated nature of the Site has led to remarkable evolutionary phenomena, particularly for species which have been able to adapt to the desertification of the area, such as lizards, snakes, and four species of fish. The Site also hosts threatened mammal species such as the vulnerable Barbary sheep *Ammotragus lervia* and Dorcas gazelle *Gazella dorcas*. The Tuareg communities on terraces above the valley floor culitvate date palms and figs, and vegetables in shaded areas. The rocky mountain walls bear rich pictorial evidence of some of the first human inhabitants of the Sahara; this has encouraged significant tourism, which is beginning to recover after being drastically reduced between 1992 and 2000.

Garaet Timerganine

Site number: 1894 | Country: Algeria | Administrative region: Oum El Bouaghi Area: 1,460 ha | Coordinates: 46°59'14"N 07°15'03"E | Designation dates: 18-12-2009 View Site details in RSIS

The Site is a temporary shallow freshwater body surrounded by a very large salt plain, which is in turn surrounded by halophytic vegetation and cereal cultivation. It is an important nesting area for the endangered white-headed duck *Oxyura leucocephala*, the vulnerable marbled teal *Marmaronetta angustirostris* and the ferruginous duck *Aythya nyroca*. Other species which depend on the wetlands include the wild boar *Sus scrofa*, the golden jackal *Canis aureus* and the Sahara frog *Rana saharica*. The local communities also rely on the Site for their livelihoods, for its water retention, flood control and sediment retention capacities. The area surrounding the Site is occupied by durum wheat crops, *Chenopodiaceae*-based pastures, and rangelands which are overgrazed and thus affected by reduced vegetation cover and biomass of perennials. There are research projects ongoing in the Site, but no Sitespecific management measures, although measures are in place to conserve the forests of the *wilaya* (province) of Oum El Bouaghi.

Les Salines d'Arzew

Site number: 1425 | Country: Algeria | Administrative region: Oran, Mascara Area: 5,778 ha | Coordinates: 35°41'25"N 00°19'22"W | Designation dates: 12-12-2004 View Site details in RSIS

A saline wetland forming part of western Algeria's wetland complex, which includes marshes and saltwater and brackish lakes. Located on the western route of the Mediterranean/Black Sea flyway, the *Salines* host 29 species during their autumn and spring migrations, and 37 wintering species including common and ruddy shelducks, greater flamingo and greylag goose. The birds take advantage of the open water, reeds and sandy habitats. The relatively halophilic vegetation includes *Chamaerops humilis* palm, *Juncus* reeds, *Suaeda* sea-blites and some *Tamarix* shrubs. The Site plays a role in groundwater recharge and sediment retention. Apart from human settlements and crop and livestock farming, no particular threat has been identified. The Ramsar Site does not have a management plan, but some key conservation measures and bird monitoring are being implemented. The area is used for awareness raising on occasions such as World Wetlands Day.

Les Gueltates d'Issakarassene

Site number: 1058 | Country: Algeria | Administrative region: Ideles

Area: 35,100 ha | Coordinates: 44°11'24"N 27°16'27"E | Designation dates: 02-02-2001

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

A "guelta" is a wetland type specific to the mountains of Haggar and Tassili, a type of rocky basin or "crater-hole" hollowed out of a riverbed. Either permanent or intermittent, gueltates are often found between 1,000 and 2,000 meters altitude, and their depth may vary between four and 15 metres. Permanent gueltates play a very important role in the lives of the region's Tuareg nomads and their livestock, and serve as stopovers for migratory birds crossing the Sahara. Issakarassene in the Haggar mountains is a permanent wetland fed by permanent underground sources and sometimes also by rainstorms. The Site supports a concentration of the last remaining examples of formerly thriving flora and fauna, of which several wetland-dependent species have adapted to survive the gradual aridification of the Sahara. They include fish species endemic to the desert, and the vulnerable cheetah *Acinonyx jubatus*, the dorcas gazelle *Gazella dorcas* and the Barbary sheep *Ammotragus lervia sahariensis*. Many of the plant species are endemic to the central Sahara: *Fagonia flamandii, Myrtus nivellei, Olea lapperini* and *Lavandula antinea*. The rocky, "lunar" landscape supports few human uses except as a source of water for nomads and their animals, and no significant threats are noted, except eventually a possible increase in tourism requiring regulation.

Complexe de zones humides de la plaine de Guerbes-Sanhadja

Site number: 1056 | Country: Algeria | Administrative region: Skikda, El Tarf

Area: 42,100 ha | Coordinates: 36°52'47"N 07°18'02"E | Designation dates: 02-02-2001

View Site details in RSIS

A large coastal plain between the hills of Skikda and the forested massif of Chetaïbi near Cap de Fer, which includes the delta of the Wadi El Kébir. Among the characteristic dunes can be found a multitude of depressions and valleys forming lakes and *garâas* (marshes) from a few to several dozen hectares in area, on a plain that is described as a "bioclimatic crossroads" as it includes sub-Saharan and European as well as Mediterranean characteristics. There are some 234 plant species representing 145 taxa, with 50 species of birds and 27 species of dragonflies and damselflies. The Site is important for migratory birds, especially as a nesting place for *Oxyura leucocephala* and *Aythya nyroca*, and fish including European eel *Anguilla anguilla*. Human uses include agriculture (especially cultivation of tomatoes and melons) and grazing; potential threats include unmanaged agricultural expansion, and runoff and wastewater from upstream villages. Since World Wetlands Day of 2016, the Site has included a public education and awareness centre.

Gueltates Afilal

Site number: 1298 | Country: Algeria | Administrative region: Tamanrasset

Area: 20,900 ha | Coordinates: 23°08'43"N 05°43'32"E | Designation dates: 06-04-2003

View Site details in RSIS

The *gueltates*, unique to this region, comprise small terraces, pools and cascades in which water runs permanently in this completely desert environment. The Site contains rich vegetation which is similar to that of the Gueltates d'Issakarassene (Ramsar Site no.1058), and the diverse fauna includes fish species such as the desert barbel. It is rich in perennial plant species, the majority of which are endemic, such as *Olea laperrinei, Rhus tripartita* and *Rumex simpliciflorus*. The Gueltates Afilal constitute the most significant streams of the Ahaggar mountains (which rise to 3,000 metres altitiude) and, with Issakarassene, are among the best-known gueltates due to their location as a stop-over along the tourist track to Mount Assekrem. The nomadic Touaregs of Tamanrasset also use the gueltates to store water for domestic needs and as a watering site for their herds. The 20,000 local and tourist visits per year might become a threat if not regulated.

Chott Ech Chergui

Site number: 1052 | Country: Algeria | Administrative region: Saïda

Area: 855,500 ha | Coordinates: 34°16'09"N 00°33'25"E | Designation dates: 02-02-2001

View Site details in RSIS

The second largest *chott* (salt lake) in North Africa, after the Chott Djerid in Tunisia, this vast Site is an extensive closed depression containing permanent and seasonal saline, brackish, and freshwater lakes and pools, as well as hot springs. Its diverse habitats are representative of the Mediterranean region, from steppe areas that are always green to the surroundings of the *chott* and the *sebkhas* (salt flats) which are completely without vegetation, as well as purely aquatic lake and marsh vegetation. The site includes wet forest that hosts ferruginous duck (*Aythya nyroca*) and marbled teal (*Marmaronetta angustirostris*) which are both vulnerable species. The Site also hosts the vulnerable Houbara bustard and mountain gazelle, and it is an important nesting and wintering site for several migratory waterbird species. Human uses include agriculture and raising of livestock, particularly sheep and camels; the thermal springs offer possibilities for tourism. Overgrazing, poaching, desertification, and deforestation for firewood are seen as potential threats.

Le Cirque de Aïn Ouarka

Site number: 1300 | Country: Algeria | Administrative region: Nâama

Area: 2,350 ha | Coordinates: 32°42'38"N 00°10'11"W | Designation dates: 06-04-2003

View Site details in RSIS

Known by geologists as a "cirque" or amphitheatre-like bowl, this geothermal wetland in the Ksour Mountains of the Sahara Atlas is a basin circumscribed by abrupt mountains rising to a height of 1,672 metres, featuring cold and hot springs. The water from the thermal sources is used as a curative spa, while the cold springs provide drinking water for the local population. The springs also feed two ponds whose water contains dissolved salts from the surrounding gypsosaline clay. This type of geothermal wetland is extremely rare in the Mediterranean area. The site is famous for ancient hydrotherapy practices and traditional salt exploitation, and it is an excellent biotope for at least two nationally protected plant species, *Pistacia atlantica* and *Helianthemum lippii*. Most remarkable is the presence of the dorcas gazelle (*Gazella dorcas*) and mountain gazelle (*Gazella gazella*), which are both classified as vulnerable in the IUCN Red List. A survey of the site's plants has shown that 23% are endemic, including 15 species which are geographically limited to south-western Algeria.

Lac Fetzara

Site number: 1299 | Country: Algeria | Administrative region: Wilaya d'Annaba

Area: 12,000 ha | Coordinates: 36°47'16"N 07°30'32"E | Designation dates: 04-06-2003

View Site details in RSIS

The Site consists of a freshwater lake of some 17 by 13 kilometres, surrounded by permanent and seasonal marshes and pools, and by irrigated and seasonally inundated agricultural land. The lake's surface area of some 5,800 hectares typically increases by an additional 4,000 ha as the land floods in the rainy winter season. The Site's great importance as a nesting and wintering place at the beginning of the 20th century was reduced by drainage works during the colonial era, and has not entirely been regained in recent years. Nonetheless, the Site hosts in the average winter more than 30,000 waterbirds. It is also a feeding area for *Anatidae* and coots, including greylag goose *Anser anser* and Eurasian wigeon *Anas Penelope*. Agriculture and pasturage are practiced in the Site, and the expansion of agricultural area is seen as a potential threat.

Réserve Naturelle du Lac de Béni-Bélaïd

Site number: 1303 | Country: Algeria | Administrative region: Wilaya de Jijel Area: 600 ha | Coordinates: 36°52'43"N 06°06'30"E | Designation dates: 04-06-2003 View Site details in RSIS

The Site is a small lake of ten hectares, surrounded by lake vegetation represented by *Ludwigia adscendens* and *Echinophora spinosa*, and hosting indigenous insects such as the dragonflies *Anaciaeshna isosceles* and *Sympetrum sanguineum*. Mammals are represented by the Eurasian otter *Lutra lutra*. The Site supports a rich and diverse bird life including several rare species such as *Aythya nyroca* and *Porphyrio porphyrio*, and small communities of *Alcedo atthis* and *Acrocephalus scirpaceus*. The lake, during periods of low rainfall, supplies the groundwater reserves. Threats to the Site include the excessive extraction of lake water in dry periods, the cultivation of cash crops and the expansion of agricultural land at the expense of natural areas supporting high biodiversity.

Vallée de l'oued Soummam

Site number: 1898 | Country: Algeria | Administrative region: Béjaïa

Area: 12,453 ha | Coordinates: 08°57'N 76°34'59"E | Designation dates: 18-12-2009

View Site details in RSIS

Situated in the north-east of the country, the Site covers the downstream 65-kilometre stretch of the Soummam river catchment. It is characterized by permanent rivers, temporary marshes in the elevated areas, and a coastal lagoon. It is of particular importance for recharging groundwater reserves and regulating the river's flow; the upstream sections limit the risk of flooding further downstream. The Site supports 119 species of birds, 38 species of mammal, amphibians and reptiles, and around 36% of fish species in Algerian inland waters. The estuary is a fish diversity hotspot, as a breeding and nursery area for many marine and brackish water species. The main land uses are agriculture (notably including olive plantations) and small village settlements. The principal threats relate to the unsustainable use of the Site's resources to support this agriculture.

Sebkhet El Melah

Site number: 1429 | Country: Algeria | Administrative region: Wilaya de Ghardaia Area: 18,947 ha | Coordinates: 30°30'20"N 02°55'34"E | Designation dates: 12-12-2004 View Site details in RSIS

The Site is an endorheic depression with saline soils featuring two bodies of water: the pond-like upper basin of moderate salinity, which is very rich in biological diversity, and a bare *sebkha* or salt lake with salt-encrusted banks. The Site is important for the conservation of Mediterranean and central Saharan biodiversity, thanks to its variety of habitats including tamarisk forest and dunes which cater to different species: it hosts various reptiles and amphibians, algae, phanerogams; fish, crustacean, bird species, and small mammals. The area's high productivity, caused by the high temperatures and consequently high decomposition rates, contributes to making it a significant breeding and nursery site for several waterbird species. It hosts more than 1% of the biogeographic populations of *Tadorna ferruginea* and *Aythya nyroca*. Ancient graves can be found in the area, while the cliffs have been found to contain marine paleontological remains. Limited agricultural activities take place in the Site, while around it are palm cultivations organized under cooperatives. Waste disposal, human expansion and poaching are the main threats to the Site. A management plan and classification as a nature reserve are foreseen.

Ile de Rachgoun

Site number: 1961 | Country: Algeria | Administrative region: Ain Témouchent Area: 66 ha | Coordinates: 35°19'17"N 01°28'46"W | Designation dates: 05-06-2011 View Site details in RSIS

The island of Rachgoun, off the coastline of the wilaya (province) of Aïn Témouchent in western Algeria, is the main wintering site for several bird species which rest and nest in very large numbers during their migration between Eurasia and Africa. Among these are several varieties of gulls such as *Larus ridibundus* and *Larus audouinii*. The Site is home to threatened bird species including Fratercula arctica and Numenius arquata. It also provides refuge for large cetaceans such as sperm whale *Physeter macrocephalus*. Mediterranean tapeweed (*Posidonia oceanica*), a key species for various other marine organisms, covers a large area around the island. Human interventions have degraded the ecological and physical integrity of the island and its fragile ecosystem. For example, the eastern area of the island was one of the last areas in the Western Mediterranean frequented by the globally-endangered Mediterranean monk seal (*Monachus monachus*), until abusive fishing resulted in the disappearance of the last individual in the early 2000s.

Oum Lâagareb

Site number: 1959 | Country: Algeria | Administrative region: El Tarf

Area: 729 ha | Coordinates: 36°49'21"N 08°11'52"E | Designation dates: 05-06-2011

View Site details in RSIS

The Site is one of the largest remaining floodplain peatlands in the region, and supports plant communities which are particularly rare in Algeria, notably the narrow-leafed ash (*Fraxinus angustifolia*) and common alder (*Alnus glutinosa*). The wetland's moderate acidity, richness of organic matter and water flows support a rich vegetation; about one third of the 120 plant species found are rare. The Site also hosts cattle egret, little egret, squacco heron and various forest passerines. It is an important area for research in ornithology, herpetology and botany. The Site is threatened by excessive water extraction for irrigation by the local community.

Oasis de Moghrar et de Tiout

Site number: 1302 | Country: Algeria | Administrative region: Nâama

Area: 195,500 ha | Coordinates: 32°41'53"N 00°24'09"W | Designation dates: 04-06-2003

View Site details in RSIS

The Site comprises the two oases of Moghrar (Foukani and Tahtani) and the oasis of Tiout, which are connected by the upper reaches of the Oued Namous. It lies at about 1,000m altitude, and is ringed by the southern flank of the Ksour mountains at about 1700m. With the Site's typically dry saharan climate, the oases support family agriculture, mainly the cultivation of date palms and vegetables; the "feggous" and "aghrass" date palms are of excellent quality and conservation interest. Moghrar is significant for birds including woodchat shrike (*Lanius senator*), western Orphean warbler (*Sylvia hortensis*), western Bonelli's warbler (*Phylloscopus bonelli*), Eurasian collared dove (*Streptopelia decaocto*) and Eurasian jay (*Garrulus glandarius*). The neighbouring region and the watershed are subject to overgrazing and consequently to widespread erosion. The area is known for its ancient rock art, a small prehistory museum, and its *Ksar* (fortress), which was formerly the stronghold of Cheikh Bouamama, a key figure in the country's fight against colonialism in the 19th century.

Lac de Télamine

Site number: 1423 | Country: Algeria | Administrative region: Oran

Area: 2,399 ha | Coordinates: 35°44'09"N 00°22'57"W | Designation dates: 12-12-2004

View Site details in RSIS

The Site is a brackish lake in a group of wetlands near Oran in western Algeria that form an important wintering and passage complex for migratory birds, especially *Anas* and *Tadorna* species. Greater flamingo (*Phoenicopterus roseus*) winter here in in significant numbers, as do common shelduck (*Tadorna tadorna*), with about 4,000 individuals found on this and neighbouring wetlands. The natural vegetation, composed of halophytes such as samphire (*Salicornia* spp.) is mixed across the different habitats. Several birds of prey are also found, which feed on rodents, birds and insects among the surrounding cultivations. Agriculture and grazing are the main land uses around the Site, which is also used for environmental celebrations such as World Wetlands Day and World Environment Day.

Chott Oum El Raneb

Site number: 1416 | Country: Algeria | Administrative region: Ouargla

Area: 7,155 ha | Coordinates: 32°02'21"N 05°23'32"E | Designation dates: 12-12-2004

View Site details in RSIS

The Site is a permanent water body fed by wastewater from five settlements and surrounded by sand dunes. It provides an important refuge for wintering and migratory waterbirds crossing the desert on the Eurasian-African routes. Greater flamingo *Phoenicopterus roseus* and black-winged stilt *Himantopus himantopus* breed here; Eurasian wigeon, ruddy shelduck, Eurasian coot, glossy ibis, pied avocet, grey heron and Kentish plover are also found. Pollution from wastewater is a concern for the future, and a study is being undertaken to look into the possibility of installing a purification plant.

Marais de la Macta

Site number: 1059 | Country: Algeria | Administrative region: Mascara, Oran et Mostaganem Area: 44,500 ha | Coordinates: 35°38'52"N 00°06'16"W | Designation dates: 02-02-2001 View Site details in RSIS

The Site is a triangular depression separated from the Gulf of Arzew near Oran by a dune cordon, a complex of open water, marsh and more or less humid steppe some nine miles inland, supplied by three permanent wadis. The Site is rare in North Africa in the diversity of habitats it contains, most notably sansouires or salt marshes which recall the Camargue in France. A rich biodiversity is found there, including a great variety of halophilic vegetation as well as numerous invertebrates and fish. The Site is also a nesting ground for waterbirds such as the marbled duck (*Marmaronetta angustirostris*) and ruddy shelduck (*Tadorna ferruginea*). The dunes are home to several rare plant species that deserve special protection, such as sea rocket (*Cakile maritima*) and sea grape (*Ephedra distachya*). The wetland is important for both local residents and nomads, particular during dry seasons, as pasturage for their cattle and their sheep respectively. The classification of the Site as Natural Reserve would allow the human activities to be regulated and help to maintain its rich ecological zones.

Sebkhet El Hamiet

Site number: 1428 | Country: Algeria | Administrative region: Sétif

Area: 2,509 ha | Coordinates: 35°54'57"N 05°33'32"E | Designation dates: 12-12-2004

View Site details in RSIS

The Site is a seasonally-flooded wetland composed of two main habitats: the shallow brackish lake or *sebkha*, and the *chott*, a peripheral zone with halophilic (salt-tolerant) vegetation. The wetland hosts 24 bird species, of which 11 are protected under national law. Sebkhet El Hamiet is important for wintering waterbirds such as the ruff (*Philomachus pugnax*), the black-winged stilt (*Himantopus himantopus*) and the European herring gull (*Larus argentatus*); the population of common shelduck (*Tadorna tadorna*) exceeds 1% of the population of the North African biogeographical region. Livestock raising is the main economic activity for the local population, while outside the Site cereals and vegetables are cultivated. Waste disposal and pollution from both domestic and industrial sources are among the main threats facing the Site. The Site does not have yet a management plan, but some conservation measures are being taken.

Chott Aïn El Beïda

Site number: 1414 | Country: Algeria | Administrative region: Ouargla

Area: 6,853 ha | Coordinates: 31°58'52"N 05°19'16"E | Designation dates: 12-12-2004

View Site details in RSIS

The Site is a saline depression surrounded by palm plantations, crossed by a number of canals that drain excess water from the plantations and the nearby town. Several bird species on the Eurasian-African pathway use the Site as a stopover; some of them stay during the winter, such as the ruddy shelduck (*Tadorna ferruginea*), while others nest there including the black-winged stilt (*Himantopus himantopus*) and the pied avocet (*Recurvirostra avosetta*). The mammals at the Site remain largely unstudied. The Saharo-Mediterranean vegetation belongs to 12 families; some of them such as *Chenopodiaceae* are known for their medicinal properties against gastric ailments and should benefit from special protection measures due to over-harvesting. Pollution from wastewater and unauthorized garbage dumps are the main threats to the birdlife of the Site. A management plan has been proposed, which aims to increase awareness through the construction of an eco-museum, a visitor centre, birdwatching towers and educational campaigns.

Oglat Ed Daïra

Site number: 1426 | Country: Algeria | Administrative region: Wilaya de Nâama Area: 23,430 ha | Coordinates: 33°18'07"N 00°54'02"W | Designation dates: 12-12-2004 View Site details in RSIS

The Site is a seasonal brackish lake fed by temporary rivers and located in the arid steppe zone which features limited and irregular rainfall. It features large tamarisk trees which allow European greenfinch *Carduelis chloris* and goldfinch *Carduelis carduelis* to nest. The lake's most widely represented species are the Eurasian coot *Fulica atra* with 150 individuals, and the ruddy shelduck *Tadorna ferruginea* with 50 apparently sedentary individuals. In spring and autumn the Site also hosts migratory wader species which winter in Sahelian Africa. Of the 52 species inventoried, 14 are migrants, 19 breeders and 20 wintering birds. The lake plays an important role in groundwater recharge and sediment trapping. It also has an important educational role, as many school groups as well as the general public visit the Site to learn about the importance and protection of wetlands in the steppe environment. Farming of livestock, especially of sheep, is the main occupation of the local population, but this is causing erosion, overabstraction of water, and deforestation. Some conservation projects have been initiated, such as dune fixation on 1,080 hectares, a forest green band on 60 hectares, fruit plantation on 105 hectares and windbreaks for the benefit of the local population.

Sebkhet Bazer

Site number: 1427 | Country: Algeria | Administrative region: Sétif Area: 4,379 ha | Coordinates: 36°02'58"N 05°41'03"E | Designation dates: 12-12-2004 View Site details in RSIS

The Site is a permanent endorheic saltwater depression, fed by rainwater and domestic and industrial wastewater carried by three tributaries from the nearby town of El Eulma. The Site consists of three areas; the flooded central part which is devoid of vegetation; its extension along Oued El Melah; and the peripheral belt with sparse vegetation on which cattle and sheep graze. *Typha* and *Juncus* reeds around the mouth of the Oued El Melah provide important habitat for a number of nationally threatened bird species, such as black-winged stilt, greylag goose, western marsh harrier, common crane and pied avocet. The Site also hosts more than 1% of the common shelduck's biogeographic population, showing the importance of saline conditions for some wintering species. The area is used for grazing animals and has potential for birdwatchers. Industrial wastewater could threaten the Site in future, and there are plans to build a purification plant to ensure the Site's integrity. School groups visit the Site on World Wetlands Day to learn about the environment and its protection.

Chott de Zehrez Gharbi

Site number: 1295 | Country: Algeria | Administrative region: Djelfa

Area: 52,200 ha | Coordinates: 34°56'N 02°48'06"E | Designation dates: 04-06-2003

View Site details in RSIS

Like the nearby Chott de Zehrez Chergui, the Site is an endorheic depression with numerous permanent and seasonal lakes and pools and shrub-dominated wetland, situated between the northern and southern ranges of the Atlas mountains. The *sebkha* (salt flat) around the *chott* (salt lake) supports vegetation characteristic of the high plains of the Maghreb steppe area. At least six regionally-rare sandand salt-loving plant species are found on the Site, including *Herniaria mauritanica, Cordylocarpus muricatus, Tetraena cornuta* and *Salicornia arabica*. Apart from traditional or modern salt production, which has always been practiced in the sebkha, the pastures of Zehrez Gharbi are particulary noted for the production of beef, veal, and the local "Ouled Djelal" sheep. The neighbouring area has a subsistence cereal crop and small areas of agricultural development financed by the state.

Oasis de Ouled Saïd

Site number: 1060 | Country: Algeria | Administrative region: Adrar

Area: 25,400 ha | Coordinates: 29°26'44"N 00°17'53"E | Designation dates: 02-02-2001

View Site details in RSIS

The Site is a rare human-made wetland created on the remains of a "fossil" wadi; over time, the diminution of the water in the wadi required the construction of a "fouggara" system for the capture and distribution of groundwater. The water, distributed in small open-air channels within the tradition of an ancestral social organization, is shared out equitably to individual gardens for the cultivation of date palms, cereals and other fruits. The Site also includes important remains of *ksars* (fortresses) from the 14th century. The Site attracts large numbers of migratory birds, and abundant gazelles. The fouggara method in use at Ouled Saïd is said to be an outstanding illustration of the Ramsar wise use principle, but because the oasis requires constant human maintenance and is slowly but surely being overtaken by the sand, Algerian authorities requested at the time of designation that the Site be placed on the Montreux Record.

Réserve Intégrale du Lac El Mellah

Site number: 1424 | Country: Algeria | Administrative region: Wilaya d'El Tarf Area: 2,257 ha | Coordinates: 36°53'44"N 08°19'27"E | Designation dates: 12-12-2004 View Site details in RSIS

This lagoon, linked by a 900-metre channel to the sea, is part of the El Kala complex of wetland depressions. The Site also comprises a small brackish delta with *Salicornia* and *Juncus* species, and a smaller temporary freshwater lake which is fed by precipitation and groundwater and surrounded by a complex of sand dunes. The double exchange of Lake Mellah with its watershed and with the sea through the channel has given a rich biodiversity to the lake. The Site is important for waterbirds that use it as a staging and resting site during their migration, to feed on the abundant supplies of fish, invertebrates and bivalves, or to nest. The 52 species recorded (of which 14 were migrants, 19 nesting and 20 wintering) include the great cormorant *Phalacrocorax carbo*, the great crested grebe *Podiceps cristatus* and the tufted duck *Aythya fuligula*. The salinity gradient and high productivity in the lagoon contribute to high phytoplankton, zooplankton and fish biodiversity, and it acts as a nursery and growing site, especially for eels before they travel to the Sargasso Sea. Thus its most important socio-economic role is the provision of employment for fishermen. Local people also grow peanuts and raise livestock, which has caused over-grazing in some areas. Along with the Ramsar Sites at Lac Oubeïra (Site no.280) and Lac Tonga (Site no.281), El Mellah is part of the El Kala Biosphere Reserve.

Tourbière du Lac Noir

Site number: 1305 | Country: Algeria | Administrative region: El Tarf

Area: 5 ha | Coordinates: 36°51'18"N 08°12'25"E | Designation dates: 06-04-2003

View Site details in RSIS

The Site is a former lake, which was accidentally drained by the drilling of a well for drinking water in 1990 and the building of the road connecting the towns of Annaba and El Kala. All that remains is the underlying peat bog. Analysis of pollen and grain spores shows the succession of vegetation over time, as the old and species-rich marsh surrounded by a dense forest was replaced by the peat bog, a rare type of natural wetland in the region. The Site is home to many rare animal and plant species, including the yellow water lily *Nuphar luteum*, which was present before the lake was drained. It is visited by Barbary red deer, European genet, Egyptian mongoose and spotted hyena. Frequent fires present a continuing threat. The site does not have a management plan but a restoration plan is being implemented, as well as monitoring of birds, plant species and the hydrological regime.

Garaet El Taref

Site number: 1421 | Country: Algeria | Administrative region: Wilaya d'Oum El Bouaghi Area: 33,460 ha | Coordinates: 35°40'55"N 07°07'56"E | Designation dates: 12-12-2004 View Site details in RSIS

The Site is a large basin which is three-quarters dry and salt-encrusted, with a mound dividing the open water area in two. It is an important wintering area for waterbirds, hosting a large percentage of the biogeographic populations of greater flamingo, common crane and common shelduck. Several *Anas* species, tufted duck and common coot also winter at the Site. The salt lake tempers the environment, and the surrounding *chott* area hosts herbaceous plants, mainly *Artemisia herba-alba*, *Atriplex halimus*, *Juncus acutus*, *Cyperus distachyos* and *Cyperus lacustris*. Agriculture and livestock farming are the main income generating activities in the area, and overgrazing and land clearing are threatening the wetlands in the absence of regulations on land use. It is hoped that, given the Site's importance for water birds and its designation as a Ramsar Site, new conservation measures will be applied and it will proceed to be classified as a natural ornithological reserve.

Réserve Intégrale du Lac Oubeïra

Site number: 280 | Country: Algeria | Administrative region: Wilaya d'El Tarf Area: 2,200 ha | Coordinates: 36°50'47"N 08°23'13"E | Designation dates: 04-11-1983 View Site details in RSIS

The Site is an extensive wetland complex, consisting of an endorheic freshwater lake and a major dune system. It is important for groundwater recharge. It supports an abundance of fish, and extensive plant life including species which are rare in Algeria. It is the only Algerian site of the water chestnut *Trapa natans* and the yellow water-lily *Nuphar luteum*. It is home to several avian species, including nesting, sedentary and wintering birds, including some globally threatened species. Sedentary species include the western swamphen *Porphyrio porphyrio* and the western osprey *Pandion haliaetus*; among the wintering birds are the white-headed duck *Oxyura leucocephala*, the greylag goose *Anser anser* and the great cormorant *Phalacrocorax carbo*; while the glossy ibis *Plegadis falcinellus* and the greater flamingo *Phoenicopterus roseus* are among the birds observed throughout the year. Mammals are represented by the otter *Lutra lutra*. The Site is important for human activities including water extraction for irrigation and domestic use. The surrounding area supports grazing and agriculture. The wetland was the subject of a Ramsar Advisory Mission and added to the Montreux Record in 1990; it was removed from the Record in 1997. In 2017, the ecological character of the Site was again reported as threatened due to the introduction of the alien fish species *Cyprinus carpio*.

Réserve Intégrale du Lac Tonga

Site number: 281 | Country: Algeria | Administrative region: El Tarf

Area: 2,700 ha | Coordinates: 36°51'22"N 08°30'02"E | Designation dates: 11-04-1983

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

The Site is an extensive wetland complex which includes a seasonal freshwater lake, wooded hills, wet forest, and a sand dune system, all located within El Kala National Park in the extreme north-east of the country. The lake is linked to the Mediterranean Sea and provides important habitat for aquatic plants. It is the most important nesting site in North Africa for a multitude of species including colonies of herons and egrets, western marsh harrier, and a wide range of waterbirds including rare and globally threatened species. Local communities engage in livestock grazing and seasonal cultivation. Management issues include the regulation of fishing and use of the lake water for irrigation, and restoration of the lake's natural hydrological functions. The Site was added to the Montreux Record in 1993 because the lake was covered by emergent aquatic plants, leaving little open water. A significant decrease in the water supply to the lake has led to changes in its ecological character.

Marais de Bourdim

Site number: 1895 | Country: Algeria | Administrative region: El Tarf

Area: 59 ha | Coordinates: 36°48'N 08°15'11"E | Designation dates: 18-12-2009

View Site details in RSIS

The Site, found within the National Park of El Kala in north-eastern Algeria, is one of the Mediterranean region's few freshwater swamps. It is a marsh surrounded by a more-or-less dense ring of trees, mainly narrow-leafed ash and common alder. It hosts the largest heron colony in the region; different species including cattle egret, common egret and squacco heron breed on islets of vegetation, and rest in the Site outside the breeding period. Even with insufficient studies, it is apparent that the Site is also significant for the golden jackal (*Canis aureus*), the Egyptian mongoose (*Herpestes ichneumon*), the common toad (*Bufo bufo*) and the Eurasian otter (*Lutra lutra*), which is noted to be rare in the region. The Site is used to irrigate the surrounding agricultural land and so it is of great value to the local communities. As the Site is within the National Park, it is protected by legislation and has a management plan in place. However, logging activities, the over-extraction of water for irrigation, and an invasion of Eucalyptus threaten its ecological character.

Chott de Zehrez Chergui

Site number: 1294 | Country: Algeria | Administrative region: Djelfa

Area: 50,985 ha | Coordinates: 35°12'59"N 03°31'58"E | Designation dates: 04-06-2003

View Site details in RSIS

A vast endorheic depression, part of an extensive system of large *chotts* (salt lakes) in the high steppes between the Tell Atlas and Saharan Atlas mountains, with numerous permanent and seasonal lakes and pools and shrub-dominated wetland. The Site's range of different soils and its steppe vegetation are representative of the area; however it is exceptional because of its surface area and catchment, and particularly because it is in an arid zone. It is extensively used for pasture and plays an important role in groundwater recharge and flood control. A number of rare and endemic plant species are found, including the herb *Herniaria mauritanica* and the glasswort *Salicornia arabica*. The marbled teal, listed as vulnerable in the IUCN Red List, is recorded in small groups, but insufficient research has been carried out on other species.

Lac Boulhilet

Site number: 1897 | Country: Algeria | Administrative region: Oum El Bouaghi Area: 856 ha | Coordinates: 35°43'54"N 06°46'12"E | Designation dates: 18-12-2009

View Site details in RSIS

The Site is part of a complex of wetlands in the semi-arid or arid Eastern Highlands. It comprises 13 freshwater, brackish and saltwater bodies including *chotts* (salt lakes) and *sebkhas* (salt flats). The Site was once a freshwater lake which fed over 15,000 hectares of cereal crops, but it was over-exploited from the 1970s to the 1990s. Lac Boulhilet has since been restored and once again supports a variety of activities including the cultivation of cereals. It is also once again an important site for wintering waterbirds and a resting point for migrating birds. Species of note include the endangered white-headed duck (*Oxyura leucocephala*) and the vulnerable marbled duck (*Marmaronetta angustirostris*). Also found within the Site are red fox (*Vulpes vulpes*), Cape hare (*Lepus capensis*) and common fire salamander (*Salamandra salamandra*). The principal current threats are poaching, disturbance of vegetation, and the potential over-abstraction of water.

Dayet El Ferd

Site number: 1419 | Country: Algeria | Administrative region: Tlemcen

Area: 3,323 ha | Coordinates: 34°29'55"N 01°14'23"W | Designation dates: 12-12-2004

View Site details in RSIS

Dayet El Ferd, on the high steppe plains of Tlemcen, is a permanent endorheic depression surrounded by pastures and cereal fields. The edges of the brackish *daya* (lake) are dominated by tamarisk shrubs and serve as refuge and nesting sites for various species. The open water area hosts a wide range of birds including greater flamingo *Phoenicopterus roseus*, common crane *Grus grus*, ruddy shelduck *Tadorna ferruginea*, common coot *Fulica atra*, raptors and waders. There are also some unidentified amphibians. The only local activity is agriculture, with some water being extracted from the lake. In the past, taxes were collected from passing caravans; today the Site hosts a weekly market, which makes it ideal for combining ecotourism with scientific and cultural research. There are plans to transform the Site into a nature reserve to be linked to Tlemcen National Park.

Chott Tinsilt

Site number: 1418 | Country: Algeria | Administrative region: Wilaya d'Oum El Bouaghi Area: 2,154 ha | Coordinates: 35°52'42"N 06°28'35"E | Designation dates: 12-12-2004 View Site details in RSIS

The Site, a shallow brackish lake fed by rainwater, water runoff and wastewater from the village of Souk Naâmane, is surrounded by tamarisk and *Salicornia* species. The area is an important wintering site for significant numbers of waterbirds, especially *Tadorna tadorna*, *Anas penelope* and greater flamingo *Phoenicopterus roseus*. Cereal and vegetable cultivation are practiced at subsistence and industrial levels outside the Site, as well as livestock farming: livestock pass through the Site. There is also potential for salt harvesting. The proximity of the village leads to uncontrolled hunting, pollution from wastewater, erosion and water diversion for irrigation. Some conservation measures have been partially implemented, such as catchment management initiatives and controls, re-vegetation, and improvements to water quality.

Grotte karstique de Ghar Boumâaza

Site number: 1297 | Country: Algeria | Administrative region: Tlemcen

Area: 20,000 ha | Coordinates: 34°40'56"N 01°22'25"W | Designation dates: 06-04-2003

View Site details in RSIS

The Site is a representative example of a continental wetland including a karstic subterranean hydrological system, a wetland type which is rare and under-represented in the Ramsar List. The Ghar Boumâaza caverns, the largest known underground cave network in Algeria and Africa, follow the river Tafna under the Tlemcen Mountains; some 15.5 km have been explored so far. The caverns boast spectacular corridors, high chambers, basins, stalactites and stalagmites. The Site hosts the endangered Egyptian vulture *Neophron percnopterus* and the peregrine falcon *Falco peregrinus*. The permanent presence of water has favoured the establishment of small villages and enabled irrigation and grazing despite the semi-arid climate. However, overgrazing and the uncontrolled uprooting of esparto grass *Stipa tenacissima* for plaiting into handicraft items have denuded the soil.

Chott El Hodna

Site number: 1053 | Country: Algeria | Administrative region: M'Sila, Batna

Area: 362,000 ha | Coordinates: 35°26'04"N 04°41'54"E | Designation dates: 02-02-2001

View Site details in RSIS

Chott El Hodna is part of a serie of *chotts* (salt lakes) fed by water from the Tell Atlas range to the north and the Saharan Atlas to the south. The landscape features vegetated Maghreb steppe with seasonal brackish and saline lakes and pools, marshes and freshwater springs. Around the *chott* are *wadis* (valleys) and oases, and a surrounding *sebkha* (salt flat) which is devoid of vegetation. The remarkable animal and plant population is important for the biodiversity of the Hodna region. There are 119 species of birds, 10 of reptiles and 20 of mammals such as the vulnerable Cuvier's gazelle (*Gazella cuvieri*) and African houbara (*Chlamydotis undulata*). Among the bird species found are the vulnerable marbled teal (*Marmaronetta angustirostris*); the collared pratincole (*Glareola pratincola*) and black-bellied sandgrouse (*Pterocles orientalis*) also nest here. The Site is home to Roman ruins and other archaeological remains. The main human activities are pastoralism and salt production. Potential threats include pollution from urban and industrial waste water; over-exploitation of water, salt, sand, and soil; over-grazing; and tree cutting for firewood.

Chott Merrouane et Oued Khrouf

Site number: 1054 | Country: Algeria | Administrative region: El Oued

Area: 337,700 ha | Coordinates: 33°53'29"N 06°10'33"E | Designation dates: 02-02-2001

View Site details in RSIS

Wetlands with saline and permanent water bodies fed by the Oued-Khrouf, excess irrigation water from palm groves and upstream groundwater used by and discharged from neighbouring villages. Located in an arid steppe region, the Site provides habitat for a remarkable range of sedentary and migratory birds, and fish including indigenous species which remain little known. In 1999, more than 28,000 birds were recorded including more than 14,000 greater flamingos. Western marsh harrier and migrating osprey have also been recorded. The distribution of plant species is conditioned by the hydrophilicity and salinity of the soil. This vegetation is grazed by herds, but used above all by local residents for roofing and for shade. Threats to the ecological character of the Site include pollution from untreated wastewater from irrigated palm groves, poorly regulated hunting, overgrazing and wind erosion.

Sebkhet Ezzmoul

Site number: 1896 | Country: Algeria | Administrative region: Oum El Bouaghi Area: 6,765 ha | Coordinates: 35°52'33"N 06°32'59"E | Designation dates: 18-12-2009 View Site details in RSIS

The Site is a seasonal *sebkha* (salt lake) located on the high plains of the region of Constantine in Eastern Algeria. It consists of a temporary, shallow water body which rarely reaches 40cm in depth. It is an important wintering and resting site during migration for several migratory waterbird species, including the greater flamingo (*Phoenicopterus roseus*), the common shelduck (*Tadorna tadorna*) and the white stork (*Ciconia ciconia*). It is also one of the most important breeding sites for greater flamingo in the Mediterranean basin. The waterbirds attract predators such as golden jackal and red fox. Rodents such as the Algerian mouse (*Mus spretus*) and Barbary striped grass mouse (*Lemniscomys barbarus*) are also attracted by the surrounding cereal cultivation. The principal threats facing the Site are erosion, overgrazing, poaching and collection of the waterbird eggs. While there is no management plan, other conservation measures regulate the exploitation of the surrounding forests of the wilaya (province) of Oum El Bouaghi.

Garaet Guellif

Site number: 1422 | Country: Algeria | Administrative region: Oum El Bouaghi

Area: 24,000 ha | Coordinates: 35°47'22"N 06°58'52"E | Designation dates: 12-12-2004

View Site details in RSIS

The Site is an endorheic depression with varying water levels, with salt-encrusted shores and meadows featuring *Salicornia* and other shrubs. The Site hosts several small mammal species and high plant diversity. It is an important wintering area for waterbirds, hosting more than 1% of the biogeographic populations of greater flamingo *Phoenicopterus roseus* and common shelduck *Tadorna tadorna* as well as smaller numbers of common crane and several duck species including vulnerable marbled teal. The lake plays an important role in flood control and absorption of sediments. Cereal cultivation and raising of sheep and cattle are the main economic activities, while poaching and overgrazing are the main threats. The graduate programme on wetlands of the Oum El Bouaghi University has undertaken research at the Site, while the area is also used for educational purposes and for celebrations such as World Wetlands Day.

Chott Melghir

Site number: 1296 | Country: Algeria | Administrative region: Wilaya d'El Oued, de Biskra et de

Area: 551,500 ha | Coordinates: 34°15'10"N 06°30'43"E | Designation dates: 04-06-2003

View Site details in RSIS

The Site is a large complex of seasonal salt lakes and pools and freshwater pools, representative of arid and hyper-arid saharan environments. It is a rare type of semi-permanent wetland in a steppe zone; it lies at one of the lowest points of the Sahara desert, at 35m below sea level. During the winter rainy season, the lake is filled by numerous *wadi* (periodically drying rivers), mostly from the north and northwest. A characteristic vegetated *chott* area, which surrounds the *sebkha* or salt lake, shelters vulnerable and threatened flora species, including 14 endemic species, the most notable of which are *Fagonia microphylla* and *Oudneya africana*, found only in Algeria, and *Ammosperma cinerea* which is endemic to southern Algeria. Some mammals frequent the Site, such as wild boars, golden jackals, hares and foxes, and it is also used for grazing.

Garaet Annk Djemel et El Merhsel

Site number: 1420 | Country: Algeria | Administrative region: Oum El Bouaghi Area: 18,140 ha | Coordinates: 35°47'37"N 06°48'26"E | Designation dates: 12-12-2004 View Site details in RSIS

The Site is made up of a *chott* and a *sebkha*, a salt lake surrounded by a belt of *Salicornia*, *Artemisia* and *Atriplex* vegetation, fed by temporary rivers, precipitation and runoff. During summer the high evaporation rates lead to the creation of salt encrustations, which are valuable habitats for some bird species. The Site hosts the vulnerable marbled teal *Marmaronetta angustirostris*, as well as over 12% of the biogeographic population of common shelduck *Tadorna tadorna* and over 2% of the population of greater flamingo *Phoenicopterus roseus*. It also plays an important role in flood control and sediment capture. The local population harvests salt and farms the surrounding areas. Erosion is caused by the characteristics of the rocks, torrential rains and the absence of vegetation which is worsened by permanent ovine and bovine overgrazing. There is no scientific, tourist or educational activity, but the Site could potentially support environmental awareness-raising.

Oasis de Tamantit et Sid Ahmed Timmi

Site number: 1061 | Country: Algeria | Administrative region: Adrar

Area: 95,700 ha | Coordinates: 27°45'30"N 00°19'38"W | Designation dates: 02-02-2001

View Site details in RSIS

A succession of oases, each overlooked by an ancient *ksar* (fortress) and associated village, with palm cultivation below. Residents practice the traditional *fouggara* method of distributing water for irrigation, using a hydraulic system said to have been introduced to the Maghreb during the Arab conquest of the 7th century. The oasis is a refuge for sedentary wildlife, providing shelter from wind and heat. The isolation of the Site and the hostile environmental conditions have favoured the evolution of a very interesting biodiversity. Precautionary measures are necessary to avoid any loss and genetic erosion of these breeds and local varieties. Depletion of groundwater reserves, caused in part by increasing use of modern agricultural pump irrigation and monoculture, is seen as a potential threat, as is the continuous advance of *ergs* or wind-driven sand dunes. There is some tourism, with pedestrian and camel-back tours of the *ksars* and *fouggara*, and local crafts are in considerable demand.

Aulnaie de Aïn Khiar

Site number: 1293 | Country: Algeria | Administrative region: El Tarf

Area: 180 ha | Coordinates: 36°47'57"N 08°18'59"E | Designation dates: 04-06-2003

View Site details in RSIS

A wetland type characteristic of the El Kala National Park but extremely rare elsewhere in Algeria. L'Aulnaie (alder grove) de Aïn Khiar shelters several tree species, represented by ash *Fraxinus* spp., alder *Alnus glutinosa* and poplar *Populus* spp., whose principal characteristic is its high water demand. Located between the littoral sand bar and the agricultural plain of El Tarf, the Site receives water during winter from the floodplains of the Oued El Kebir, which flows through the region and transforms it into a marshy zone. The forest environment supports the country's largest population of raptors and large bird species as well as herons and bitterns. Bird surveys have revealed about 41 species. Loss of trees and shrubs to illegal woodcutting and natural causes, as well as pressures from agricultural expansion including illegal water extraction, are seen as the chief potential threats.