



# Ramsar Sites Information Service

## Annotated List of Wetlands of International Importance

# Morocco

**38 Ramsar Site(s) covering 316,086 ha**

### **Aguelmams Sidi Ali - Tifounassine**

Site number: 1,468 | Country: Morocco | Administrative region: Ifrane

Area: 600 ha | Coordinates: 33°07'N 05°03'W | Designation dates: 15-01-2005

[View Site details in RSIS](#)

Aguelmams Sidi Ali - Tifounassine. 15/01/05; Ifrane, Khénifra; 600 ha; 33°07'N 005°03'W. Biological and Ecological Reserve, Permanent Hunting Reserve. A complex of three mountain wetlands at 1900-2100m that are fed by snowmelt and springs - they are among the most southernmost representatives of the lacustrine mountain ecosystems of the temperate paleo-arctic bioregion. The wetlands are important wintering sites for migratory birds such as the Ruddy Shelduck (*Tadorna ferruginea*) and the Crested Coot (*Fulica cristata*), as well as important sites for the maintenance of invertebrate endemism in the area. Other roles of the site, which is underlain by a karstique system, include its recharge of the groundwater table and provision of a drinking hole for local mammals such as the genet, jackal and Red fox. Activities around the area mainly include livestock raising, followed by tourism, rainbow trout aquaculture and sports fishing, especially in summer. The main threats are water extraction, overgrazing and organic pollution by animal and human use. Different NGOs have undertaken awareness programmes on the ecological, especially ornithological values of the site. Ramsar site no. 1468. Most recent RIS information: 2005.

### **Archipel et dunes d'Essawira**

Site number: 1,469 | Country: Morocco | Administrative region: Essawira

Area: 4,000 ha | Coordinates: 31°30'N 09°48'W | Designation dates: 15-01-2005

[View Site details in RSIS](#)

Archipel et dunes d'Essawira. 15/01/05; Essawira; 4,000 ha; 31°30'N 009°48'W. Site of Biological and Ecological Interest, Permanent Biological Reserve, Hunting Reserve. A coastal site composed of sand dunes, the biggest archipelago on Morocco's Atlantic coast, sandy beaches and rocky outcrops. It hosts a number of Macaronesian endemic species, such as the plants *Chenolea tomentosa*, *Polycarphaea nivea* and *Helianthemum canariense*, as well as other rare North African species, including seven endemic reptiles and amphibians. The archipelago constitutes an important stop for migratory species and a nesting site for Eleonora's Falcon, which is represented by 3.5% to 10% of its world population. Thanks to the upwelling, artisanal and professional fishing are very productive activities along the coast. Tourism is also developing, posing potential threats to the site in the future, in addition to poaching and over-fishing. The archipelago is also of archaeological importance due to the presence of Greek, Phoenician and Roman remnants, as well as more recent Portuguese bastions dating to the 17th and 18th centuries. A management plan is currently being developed, together with the set-up of an Environmental Education Centre to act as a biodiversity observatory. Ramsar site no. 1469. Most recent RIS information: 2005.

## Assif Mgoun

Site number: 2,376 | Country: Morocco | Administrative region: Région de Drâa-Tafilalet

Area: 1,400 ha | Coordinates: 31°33'21"N 06°13'51"W | Designation dates: 16-04-2019

[View Site details in RSIS](#)

The Mgoun river in the High Atlas is a tributary of Oued Dr'a, the largest river to emerge from the mountain range's southern slope. The Site consists of the permanent central stretch of the river and its temporary upstream extension, as well as four small permanent tributaries. Its diverse habitats, at the southern limit of the Palearctic ecozone, support a rich biodiversity and many endemic species. It hosts more than 100 species of aquatic arthropod, including ten endemic species; and rare or endemic vertebrates including three fish species, one reptile, one bird and three mammals. The hydrologically-stable high-altitude cold springs and brooks provide ideal conditions for the reproduction of endemic fish such as Draa trout (*Salmo multipunctata*) and Draa barbel (*Luciobarbus lepineyi*) and about 20 aquatic or semi-aquatic plant species. The riverbank vegetation is composed of water plants such as buttercups, Phragmites and Typha, and trees and shrubs such as laurel, tamarisk and willow. This vegetation and the neighbouring orchards and cliffs attract some 40 bird species, of which about 15 breed there. The traditional irrigation practices of local communities add social and cultural values to this wetland and enhance hydrological processes. The Site is part of a large mountainous territory that has received the UNESCO Geopark status.

## Assifs Ahançal-Melloul

Site number: 2,378 | Country: Morocco | Administrative region: Région de Beni Mellal-Khénifra (Province d'Azilal)

Area: 1,385 ha | Coordinates: 31°59'55"N 06°07'54"W | Designation dates: 22-05-2019

[View Site details in RSIS](#)

The Site comprises the rivers (wadis) of Ahançal and Melloul, between 800 and 2,000 metres altitude in the the Central High Altas. The wadis have dug very deep valleys, overlooked by mountains of up to 4,000 metres in height. The Ramsar Site follows the course of these wadis and the adjacent rocky escarpments covered by forest or scrub. Beyond lie flatter orchards and fields, irrigated in a traditional way. The rivers are fed by several temporary tributaries and spring waters, and snowmelt in early spring, and so enjoy permanent flow which is relatively unaffected by droughts or hydraulic developments. The Site is thus one of the few remaining near-natural free-flowing mountain river ecosystems in the Maghreb. It contributes to the preservation of at least two endemic or threatened species, the Atlas barbel (*Luciobarbus ksibi*) and the Barbary macaque (*Macaca sylvanus*). The Site also hosts wintering ground birds such as the meadow pipit (*Anthus pratensis*). In addition to their ecological value, these habitats offer landscapes of great rarity in North Africa. Local communities have developed traditional knowledge related to the management of this wetland. The wadis are slightly impacted by livestock watering; other human activities, such as agriculture, tourism, and fisheries, could affect the ecological character of the Site. A development and management plan, which includes some conservation measures, is being implemented.

## Assifs Réghaya-Aït Mizane

Site number: 2,371 | Country: Morocco | Administrative region: Région Marrakech

Area: 830 ha | Coordinates: 31°09'39"N 07°56'15"W | Designation dates: 16-04-2019

[View Site details in RSIS](#)

The Site is located on the northern slope of Jbel Toubkal, the highest mountain in North Africa. It includes a permanent river, Oued Réghaya, and further upstream a fresh and fast-flowing mountain stream, Assif n'Aït Mizane, each classified among the Sites of Biological and Ecological Interest of Morocco. The land cover varies as it descends, from woody steppe on mountain schist to a dense forest and Mediterranean shrublands overlooking the lower stretch. The rocky course of the river features water- and riverbank plants, innumerable cultivated terraces and orchards. This permanent river ecosystem, very rare in North Africa, is rich in wildlife. There are at least 42 aquatic or semi-aquatic plant species; 70 aquatic invertebrates, of which at least 20 are endemic to the locality; 90 species of riparian invertebrates, and at least 15 species of regionally rare vertebrates, such as the endemic threatened fish *Luciobarbus issenensis*. The social and cultural importance of the Site relates to local practices including a traditional irrigation management model. The Site is threatened by the presence of invasive species as well as by water abstraction and recreational and tourism activities. A monitoring plan is proposed for water quality, birds and other animal species.

## Baie d'Ad-Dakhla

Site number: 1,470 | Country: Morocco | Administrative region: Ad-Dakhla  
Area: 40,000 ha | Coordinates: 23°45'N 15°49'59"W | Designation dates: 15-01-2005  
[View Site details in RSIS](#)

Baie d'Ad-Dakhla; 15/01/05; Ad-Dakhla; 40,000 ha; 23°45'N 015°50'W. A 37km-long bay separated from the ocean by a system of dunes, with a mosaic of habitat types including intertidal seagrass beds, algal plains and salt/sand pans. The site has high botanical diversity, hosting several species which are rare, vulnerable or Macaronesian, Moroccan or Saharan endemics, including the vulnerable dwarf eelgrass *Zostera noltii*. These form the habitat for more than 120 mollusk species, among which are an endemic crustacean, *Cerapopsis takamado*, and 41 fish species. This is also the northernmost limit of the Atlantic humpbacked dolphins' distribution and the second most important migratory waterbird wintering site in Morocco, having hosted an average of close to 60,000 birds between 1995 and 2000; among the best-represented species are the Caspian tern, the Lesser Black-backed Gull, and the Great Ringed Plover. Fishing and tourism are important activities, which may pose threats in the future, especially in terms of pollution, if left to develop indiscriminately. A harbour which is being built at 12km from the site may also affect the hydrological and sedimentary balance of the area. No management plan exists as yet, but plans are envisaged to create different exploitation zones in the site, for both conservation and aquaculture purposes. Ramsar site no. 1470. Most recent RIS information: 2005.

## Baie de Khnifiss

Site number: 209 | Country: Morocco | Administrative region: Tan Tan  
Area: 20,000 ha | Coordinates: 28°03'N 12°15'W | Designation dates: 20-06-1980  
[View Site details in RSIS](#)

Baie de Khnifiss. 20/06/80; Tan Tan; 20,000 ha; 28°03'N 012°15'W. Biological Reserve. Located on the East Atlantic Flyway, a shallow tidal lagoon of open water, mud, sandflats and saltmarsh giving way to sand inundated cliffs and rocky desert. Upwelled nutrient-rich cold water enters the lagoon and plays a major role in its ecology. Abundant invertebrate, fish fauna, and *Zostera* beds support internationally important numbers of staging, wintering and nesting birds. Human activities include livestock grazing by nomads and traditional fishing. Significantly expanded as of 15/01/05. Ramsar site no. 209. Most recent RIS information: 2005.

## Barrage Al Massira

Site number: 1,471 | Country: Morocco | Administrative region: Qal'at Essraghna  
Area: 14,000 ha | Coordinates: 32°28'N 07°34'W | Designation dates: 15-01-2005  
[View Site details in RSIS](#)

Barrage Al Massira. 15/01/05; Qal'at Essraghna; 14,000 ha; 32°28'N 007°34'W. Site of Biological and Ecological Interest, Permanent Hunting Reserve. The second biggest reservoir in Morocco, it hosts the vulnerable Marbled Teal and constitutes an important wintering site for coots, ducks and geese especially in dry years. In the summer, it also provides refuge to approximately 20 waterbird species, of which 15 build their nests. The reservoir is said to be the only nesting site of the Common Black-headed Gull in Africa, with the presence of 20 breeding pairs. It is considered the most important inland fishing site in Morocco, with seven commonly fished species and catches amounting to 90 tonnes per year. The number of fishing permits is limited to 12 per year. It plays an important role in irrigation of agricultural land and the supply of drinking water, as well as flood control. Its releases during the summer also allow hydropower production further downstream. The main threats to the site are illegal fishing, pollution and disturbance to birds and eggs during the nesting season. Ramsar site no. 1471. Most recent RIS information: 2005.

## Barrage Mohammed V

Site number: 1,472 | Country: Morocco | Administrative region: Nador

Area: 5,000 ha | Coordinates: 34°40'59"N 02°57'W | Designation dates: 15-01-2005

[View Site details in RSIS](#)

Barrage Mohammed V. 15/01/05; Nador; 5,000 ha; 34°41'N 002°57'W. Site of Biological and Ecological Interest. The site consists of a reservoir from a dam that was built in 1967 on the Moulouya River, situated in an arid valley with several gorges, where the most common plant type is tamarisk, while on the upstream side eucalyptus abounds. The site constitutes an important refuge area for waterfowl in both summer, when members of *Fulica atra* and *Tadorna casarca* nest in the area, and winter, when 40 species frequent the site, with an average of more than 25,000 individuals. The reservoir also hosts the east Moroccan endemic barb, *Barbus moulouyensis*. The site provides the city of Nadur with potable water and allows the irrigation of 60,000 ha of land in the areas of Bou Areg and Triffa. The dam also contributes to hydropower generation and is a fishing site. No significant factors threaten the site. Ramsar site no. 1472. Most recent RIS information: 2005.

## Cap des Trois Fourches

Site number: 1,473 | Country: Morocco | Administrative region: Nador

Area: 5,000 ha | Coordinates: 35°25'59"N 02°58'59"W | Designation dates: 15-01-2005

[View Site details in RSIS](#)

Cap des Trois Fourches. 15/01/05; Nador, 5,000 ha; 35°26'N 002°59'W. Site of Biological and Ecological Interest. A very beautiful site situated at the end of a rocky peninsula in the Mediterranean, composed of cliffs, caves and gravelly beaches, with clear water underlain by a sandy bottom and seagrass beds. The site hosts a number of rare and threatened species, including the monk seal, two species of limpets (*Patella ferruginea* and *Patella nigra*), the Loggerhead turtle, the Fin whale and two species of dolphin (*Tursiops truncatus* and *Delphinus delphis*). The water quality is very good thanks to a particular phenomenon of sea currents which ensures that pollution from the nearby cities is transported away from the promontory. The main activities taking place in the area are fishing and tourism, which also constitute, although still at a small scale, the main threats to the site, including construction of tourism facilities, dynamite fishing, pollution by solid waste, and disturbance of local fauna. There are plans to declare the area a permanent biological reserve for the monk seal. The MedWetCoast programme has also proposed some conservation and management measures which still need to be implemented. Ramsar site no. 1473. Most recent RIS information: 2005.

## Cap Ghir-Imsouane

Site number: 2,373 | Country: Morocco | Administrative region: Région Souss-Massa

Area: 6,800 ha | Coordinates: 30°42'33"N 09°50'19"W | Designation dates: 16-04-2019

[View Site details in RSIS](#)

The Site comprises a coastal strip at the foot of the High Atlas mountain range, with two areas of biological and ecological interest: Cape Ghir and Tamri. It covers a wide range of marine, estuarine and terrestrial habitats influenced by the Atlantic Ocean and also the Mediterranean Sea and the Sahara, with an exceptionally rich biodiversity and a high rate of endemism. The wetland lies on the East Atlantic flyway, and provides a nesting and wintering site for many migrant Palearctic birds. The globally endangered northern bald ibis (*Geronticus eremita*) nests there, and more than 20% of its global population is divided between this Site and the National Park of Souss-Massa. At least four species endemic to the Maghreb are also well represented. The Site hosts at least 40 reptile and amphibian species, including about ten endemic west Saharan species including the toad *Bufo brongersmai* and the gecko *Quedenfeldtia moerens*. Many of the plants are endemic, and the rate of endemism exceeds 30% in some of the terrestrial habitats (coastal cliffs, euphorbia and argan formations). Drought, the main threat, leads to scarcity of food and water resources. The Site is located in the coastal zone of the Arganeraie Biosphere Reserve, and in addition to its conservation importance, it has educational and ecotourism potential.

## Complexe de Sidi Moussa-Walidia

Site number: 1,474 | Country: Morocco | Administrative region: Al Jadida

Area: 10,000 ha | Coordinates: 32°54'N 08°49'W | Designation dates: 15-01-2005

[View Site details in RSIS](#)

Complexe de Sidi Moussa-Walidia. 15/01/05; Al Jadida; 10,000 ha, 32°54'N 008°49'W. Site of Biological and Ecological Interest, Permanent Hunting Reserve, Zones d'Intérêt pour la Conservation des Oiseaux au Maroc. The site consists of two lagoons, four swamps, salines and salt marshes that are separated from the sea and a sandy beach by a system of sand dunes. Most waterbird species that migrate the east-Atlantic route pass this site and more than 3% of birds that winter in Morocco choose this wetland complex, including the two endangered species Marbled Teal and Eurasian spoonbill. This area also forms the southern distribution limit of an endemic Moroccan amphibian, *Pelobates varaldii*. The main human activities include agriculture and livestock raising, but salt is also exploited and the Japanese oyster is cultivated in one of the lagoons. Excessive use of pesticides and fertilizers is causing groundwater contamination, while water extraction for irrigation has caused the wetlands' surface area to decrease by 21% between 1957 and 1991. The transformation of wetlands into saltworks, although benefiting the waders, has reduced flora and fauna biodiversity, especially of invertebrates. Disturbance to birds by different anthropogenic factors is also a cause of concern. A management plan is proposed for the future. Ramsar site no. 1474. Most recent RIS information: 2005.

## Complexe du bas Loukkos

Site number: 1,475 | Country: Morocco | Administrative region: Larache

Area: 3,600 ha | Coordinates: 35°07'N 06°00'W | Designation dates: 15-01-2005

[View Site details in RSIS](#)

Complexe du bas Loukkos. 15/01/05; Larache; 3,600 ha; 35°07'N 006°00'W. Site of Biological and Ecological Interest, Zones d'Intérêt pour la Conservation des Oiseaux au Maroc. A unique complex of wetland types on Morocco's Atlantic coastline, including estuarine waters, shallow marine waters, salt steppes, freshwater swamps and floodplains, in addition to rice paddies in drained areas and a number of abandoned salines. It hosts a number of vulnerable or near-threatened species at the international scale, such as the Marbled Teal (*Marmaronetta angustirostris*) and the Ferruginous duck (*Aythya nyroca*), as well as at the national scale, including among others the Squacco and Purple Herons, the Red-crested Pochard and the Marsh Owl. The site also presents large water lily and *Salix* expanses, rare for Morocco, and plays an important role in groundwater recharge and flood control. The main activities around the site are agriculture, livestock raising, salt production, and tourism. These are also the main causes of eutrophication, water diversion upstream, and dredging of some areas for further agricultural development. The "Déclaration de Larache 2002" is a project in the pipeline which involves eight governmental and non-governmental partners in contributing to the conservation and sustainable development of this site. Ramsar site no. 1475. Most recent RIS information: 2005.

## Complexe du bas Tahaddart

Site number: 1,476 | Country: Morocco | Administrative region: Tanger-Assilah

Area: 11,000 ha | Coordinates: 35°34'N 06°00'W | Designation dates: 15-01-2005

[View Site details in RSIS](#)

Complexe du bas Tahaddart. 15/01/05; Tanger; 11,000 ha; 35°34'N 006°00'W. Site of Biological and Ecological Interest. A complex of wetland types (including brackish and freshwater marshes and pools, subtidal aquatic beds, sand dunes, etc.) which are fed by the tides and precipitation. Especially during particularly wet years, they are an important stop for migratory species such as the Greater flamingo and Common crane, as the wetlands constitute the last feeding stop before the Gibraltar Strait, on the way to and from Europe. The complex also hosts the vulnerable Great Bustard (*Otis tarda*), whose population is localized and threatened and said to be the only one present in Africa. The area's hydrology and landscape has been negatively affected by developments including roads and railway lines, abandoned salt works, but especially the radio station "The Voice of America" and its access roads, which have replaced a large salt steppe and a part of the lake of Wlad Khallouf. The soils in the area are very fertile thanks to the sediments deposited by floods, but they are today becoming over-exploited, as sediments in floodwaters have decreased due to trapping by upstream dams. Thus agriculture is common, as well as livestock raising, tourism, tuna fishing and sand extraction for construction purposes. An archaeological site has recently been discovered, which is expected to increase the site's cultural value. Ramsar site no. 1476. Most recent RIS information: 2005.

## Côte Aftissate-Boujdour

Site number: 2,377 | Country: Morocco | Administrative region: Laâyoune-Sakia El Hamra (Province de Boujdour, Commune de Jraifia)

Area: 11,700 ha | Coordinates: 25°48'10"N 14°35'59"W | Designation dates: 16-04-2019

[View Site details in RSIS](#)

The Site covers some 50 kilometres of coastline to the south of the town of Boujdour. A 70-metre-high sea cliff overlooks a continuous low-lying furrow separated from the ocean by a beach and mobile dunes. It is at the southern limit of the Palearctic ecozone, while coastal upwelling shapes its hydrological and sedimentary dynamics, its productivity and its climate. The wetland provides a stopover point for Palearctic seabirds, waders and land migrants, especially passerines. In winter, species such as the lesser black-backed gull (*Larus fuscus*) are present in populations greater than 1% of their biogeographic populations. The dry areas of the Site, strongly influenced by the ocean, are home to several endemic and rare species such as the endemic gecko *Saurodactylus brosetti*. The Site features relatively densely-vegetated steppes featuring endemic or rare plant species including *Anacyclus maroccanus*, *Bupleurum dumosum* and *Pallenis teknensis*. The Site's marine resources provide sustainable income for the local communities; conservation measures are proposed to minimize the potential threats and also to ensure local livelihoods.

## Côte des Bokkoyas

Site number: 2,379 | Country: Morocco | Administrative region: Région de Tanger-Tetouan-Al Hoceima, Province d'Al Hoceima

Area: 5,530 ha | Coordinates: 35°12'36"N 04°07'29"W | Designation dates: 16-04-2019

[View Site details in RSIS](#)

The Site, located on the Mediterranean at the Eastern end of the central Rif mountain range, is composed of a long series of sea cliffs interrupted by valleys, and the adjacent marine waters. In an arid region, the cliffs are home to a fairly well-preserved rock plant community rich in endemic, rare and threatened species. The shallow and clear coastal waters are very conducive to the development of coral reefs; this coastline is known for its red coral (*Corallium rubrum*). It is also home to rare invertebrate species including anthozoa, echinoderms, molluscs and crustaceans. Côte des Bokkoyas also hosts populations of breeding birds such as osprey (*Pandion haliaetus*), whose colony is one of the largest in the Mediterranean with a dozen pairs. The Ramsar Site shelters a large number of threatened species, both terrestrial and marine, such as the dusky grouper *Epinephelus marginatus* and the loggerhead turtle *Caretta caretta*. With its ecological value, the Bokkoyas massif was classified as a National Park (Al Hoceima National Park), including the coastal marine margin. The Site has a management plan and a monitoring plan for animal and plant communities.

## Embouchure de la Moulouya

Site number: 1,478 | Country: Morocco | Administrative region: Berkane

Area: 3,000 ha | Coordinates: 35°04'N 02°22'59"W | Designation dates: 15-01-2005

[View Site details in RSIS](#)

Embouchure de la Moulouya. 15/01/05; Berkane; 3,000 ha; 35°04'N 002°23'W. The most significant estuary and floodplain complex of Maghreb's biggest Mediterranean river, this site comprises five systems: marine, estuarine, lacustrine, riverine and palustrine, in addition to the coastal dunes. It is a compulsory stop, given the surroundings' aridity, for European migrants that find refuge in the Tamarix vegetation system. These include Moussier's Redstart (*Phoenicurus moussieri*), the Marbled Teal (*Marmaronetta angustirostris*), and Audouin's Gull (*Larus audouinii*). Some endemic and rare fish can also be found in the wetlands, which are utilized as spawning and growing grounds during migrations. The site is also important in its storage of floodwaters, which contribute to lowering the groundwater's salinity levels. This area has a high aesthetic value and ecotourism potential. An area of the estuary is dedicated to the culture of juvenile eels, while there are abandoned agricultural fields and pastoral activities taking place in some parts of the estuary. The main threats include wetland habitat loss (by sand and gravel quarries, which have destroyed riverbanks and the Tamarix habitat); transformation of natural habitats into aquaculture ponds; modifications of the hydrological balance and water quality due to agriculture, aquaculture, solid waste and decrease in flood flows; loss of biodiversity and aesthetic value. Ramsar site no. 1478. Most recent RIS information: 2005.

## Embouchure de l'oued Dr'a

Site number: 1,477 | Country: Morocco | Administrative region: Guelmim  
Area: 10,000 ha | Coordinates: 28°34'N 10°58'W | Designation dates: 15-01-2005  
[View Site details in RSIS](#)

Embouchure de l'oued Dr'a. 15/01/05; Guelmim; 10,000 ha; 28°34'N 10°58'W. Site of Biological and Ecological Interest. The estuary of the Dr'a River, which is situated on the northern limit of the Sahara and runs among bushy dunes until it reaches the sea through a gorge. The landscape is composed of three main vegetation types, the Tamarix amplexicaule complex, Phragmites stands, and a salt steppe with Sarcocornia perennis, which serve as a refuge for many European migratory bird species, including the Marbled Teal (Marmaronetta angustirostris), flamingoes (Phoenicopterus ruber) and the North African Cormorant (Phalacrocorax carbo maroccanus). Different endemic and relict species are found at the site, such as a tropical fish relict, Tilapia zillii, different reptile species, an amphibian (Bufo brongersmai), and two mammals (Tarfaya shrew and the Occidental gerbil). Fishing is common at the site, as well as raising of sheep, camels and goats, and limited barley agriculture. The main threats include rife poaching (despite the fact that hunting is prohibited), waste from the fishing camps, and disturbance to the environment by 4x4 vehicles. There are plans to create a national park in the area. Ramsar site no. 1477. Most recent RIS information: 2005.

## Embouchures des oueds Chbeyka-Al Wa'er

Site number: 1,479 | Country: Morocco | Administrative region: Tantan  
Area: 8,000 ha | Coordinates: 28°13'59"N 11°42'W | Designation dates: 15-01-2005  
[View Site details in RSIS](#)

Embouchures des oueds Chbeyka-Al Wa'er. 15/01/05; Tan Tan; 8,000 ha; 28°14'N 11°42'W. The estuaries of three temporary rivers that arise in the Moyen Atlas mountain range and run through deep gorges before reaching the coast, where one can find sandy beaches, cliffs and dunes. Salt steppes with the endangered Sarcocornia perennis plant species in the upstream area of the site, where the rivers are wider, act as an important refuge for migratory birds, among which the most significant are the Lesser Black-backed Gull (Larus fuscus), Audouin's Gull (Larus audouinii), and the Common Scoter (Melanitta nigra). Fishing camps are common in the area, as the waters are rich thanks to upwelling, while tourism is also on the increase due to the area's beauty. Both activities are a cause of disturbance to the birds and of solid waste pollution. The area has been proposed as a Site of Biological and Ecological Interest. Ramsar site no. 1479. Most recent RIS information: 2005.

## Haut Oued Lakhdar

Site number: 2,372 | Country: Morocco | Administrative region: Région de Beni Mellal-Khénifra (Province d'Azilal)  
Area: 2,200 ha | Coordinates: 31°39'29"N 06°26'15"W | Designation dates: 16-04-2019  
[View Site details in RSIS](#)

The Site includes Aït Bou Guemmaz and Aït Boualli Aïfsir, two upper tributaries of the Lakhdar wadi on the northern slopes of the Central High Atlas, at or above 1,350 metres in altitude. It includes the main streams of the wadis and their springs, as well as the steep valley sides covered with forest or pre-forest vegetation. It is one of the rare permanent mountain river ecosystems in North Africa that is still in a natural or semi-natural state. The sustained water flow in summer makes the Site a biodiversity and conservation hotspot, with many species endemic to the local area or to North Africa. The valleys are marked by manually irrigated orchards and fields of cereals which rise to the upper limit of permanent water. The Site is rich with fish, reptiles, and mammals; there are endemic species such as the Atlas dwarf viper (*Vipera monticola*) and threatened species such as the globally vulnerable Atlas barbel (*Luciobarbus ksibi*) and the endangered Barbary macaque (*Macaca sylvanus*). The local communities have built up traditional knowledge related to water management and agro-pastoral practices. Various stakeholders manage the Site and its flood zones. It is also a Site of Biological and Ecological Interest, and almost the whole Site is integrated into the M'Goun UNESCO Global Geopark.

## Lac d'Afennourir

Site number: 208 | Country: Morocco | Administrative region: Ifrane

Area: 800 ha | Coordinates: 33°16'59"N 05°16'W | Designation dates: 20-06-1980

[View Site details in RSIS](#)

Lac d'Afennourir. 20/06/80; Ifrane; 800 ha; 33°17'N 005°16'W. Permanent Hunting Reserve. A mountain lake at 1800m altitude, important for wintering regionally rare species of waterbirds and also used by breeding and migrating birds. Human activities include tourism and recreational use. Ramsar site no. 208. Most recent RIS information: 2005.

## Lacs d'Imouzzer du Kandar

Site number: 2,374 | Country: Morocco | Administrative region: Province administrative : Province d'Ifrane Centre administratif proche : Imouzzer du Kandar, Commune de Dayet 'Awwa

Area: 512 ha | Coordinates: 33°35'23"N 04°59'02"W | Designation dates: 16-04-2019

[View Site details in RSIS](#)

This Site consists of three karst lakes, 'Awwa, Ifrah and Hachlaf, near the town of Imouzzer Kandar in the Middle Atlas. They are among the most southerly lakes of the Western Palearctic ecozone. They combine a wide range of habitats which support a great diversity of flora and fauna. The 50 or more bird species include 33 wintering waterbirds, some of them threatened including the common pochard (*Aythya ferina*) and the white-headed duck (*Oxyura leucocephala*). The wetland is a particularly important wintering place for this latter species, which finds refuge in these lakes when its other breeding sites on the plain of Saïss are insufficiently submerged. A forest cover dominated by Atlas cedar (*Cedrus atlantica*) and holm oak (*Quercus rotundifolia*) protects against soil erosion. The lakes replenish and are fed by the underlying aquifer, although these exchanges have declined due to droughts over the last three decades. Site management lies with different authorities depending on ownership status and the type of resource (forest area, marine area). A management plan is being prepared as of 2019. A cultural festival promotes the traditional values of the Site and the surrounding region.

## Lacs Isly-Tislite

Site number: 1,480 | Country: Morocco | Administrative region: Errachidia

Area: 800 ha | Coordinates: 32°13'N 05°34'59"W | Designation dates: 15-01-2005

[View Site details in RSIS](#)

Lacs Isly-Tislite. 15/01/05; Errachidia; 800 ha; 32°13'N 005°35'W. Parc National du Haut Atlas Oriental, Site of Biological and Ecological Interest. Lakes Isly and Tislite are the second and third highest lakes in North Africa, at 2270m and 2225m respectively, situated in the Haute Atlas mountain range. They are unique because of their great depth; the fact they are two of only three Moroccan lakes that are not eutrophic; their karstic or pseudo-karstic origin; and their situation at the southern limit of the paleo-arctic region. They also host an autochthonous phenotype of brown trout *Salmo trutta macrostigma*. The vegetation in the area is steppic and snowmelt feeds the lakes. The lakes are important for recharging the groundwater table, while in their surroundings animal grazing is common, as well as sport fishing during summer. The main threats include illegal fishing, overgrazing and organic pollution by livestock and by using the lakes for washing purposes. In order to increase awareness on the ecological values of the site, a local association, ADRAR, is currently undertaking a research and information-sharing project financed by GEF, which is aimed at preserving biodiversity and the wise use of the natural resources in the area. Ramsar site no. 1480. Most recent RIS information: 2005.

## Lagune et barrage de Smir

Site number: 2,380 | Country: Morocco | Administrative region: Région de Tanger-Tétouan-Al Hoceima

Area: 837 ha | Coordinates: 35°41'48"N 05°22'02"W | Designation dates: 22-05-2019

[View Site details in RSIS](#)

The Site consists of a coastal marshy lagoon on the small coastal alluvial plain of the Smir wadi (river), and a reservoir less than ten kilometres upstream. The lagoon is a Mediterranean estuarine ecosystem, which is rare in Morocco. The Site is home to diverse plant and animal life, as evidenced by the presence of 13 algal species and nearly 90 vascular plants and some 165 vertebrate species, including eight amphibians, 22 reptiles, 35 mammals and about 100 migratory waterbirds. There are threatened species such as the common pochard (*Aythya ferina*) and the North African fire salamander (*Salamandra algira*). The Site lies on the East Atlantic flyway, and is a key stop for about 60 species of Western Palearctic waterbirds during their passage and also over the winter. Its three main wetland types (marine and coastal, continental and human-made) provide a wide range of ecosystem services for surrounding populations. Despite the few threats to its ecological character, measures are being implemented to improve water quality and monitor birds.

## Littoral de Jbel Moussa

Site number: 2,381 | Country: Morocco | Administrative region: Tanger-Tétouan-Al Hoceima

Area: 500 ha | Coordinates: 35°54'37"N 05°26'W | Designation dates: 16-04-2019

[View Site details in RSIS](#)

The Site consists of a stretch of coastline with two mountains separated by a valley (Oued El Marsa) on the southern shore of the Strait of Gibraltar, where the Atlantic meets the Mediterranean. The wetland's marine and coastal cliff ecosystems are rich in fauna (at least 175 taxa) and flora. It is an important area for the passage of sea turtles, birds (raptors and passerines) and mammals, and as a spawning ground for several fish species. It is home to some 24 rare or notable fish, and threatened species of anthozoa such as *Corallium rubrum* or *Ellisella paraplexauroides*. Notable terrestrial mammals include the endangered Barbary macaque (*Macaca sylvanus*). Subjected to strong winds, the cliffs are sparsely vegetated, by plants including endemics such as *Stauracanthus boivinii* and *Rupicapnos africana*. The coastline also has great landscape value, and cultural value in the agglomeration of Belyounech, which still retains vestiges of a prosperous medieval town. The Site is also a UNESCO Biosphere Reserve.

## Marais et côte du Plateau de Rmel

Site number: 1,481 | Country: Morocco | Administrative region: Kénitra, Larache

Area: 1,300 ha | Coordinates: 35°01'59"N 06°13'59"W | Designation dates: 15-01-2005

[View Site details in RSIS](#)

Marais et côte du Plateau de Rmel. 15/01/05; Kénitra, Larache, 1,300 ha; 35°02'N 006°14'W. Zones d'importance pour la Conservation des Oiseaux, Site of Biological and Ecological Interest. A complex of three freshwater coastal lakes, the adjacent sandy beach and coastline, inter-dunal marshes, and irrigated areas. It hosts a number of endangered species such as the Marbled Teal (*Marmaronetta angustirostris*), Audouin's Gull (*Larus audouinii*), the Ferruginous Duck (*Aythya nyroca*) and the Common Otter (*Lutra lutra*), in addition to three endemic reptiles and an endemic amphibian. It is also an important wintering site for the Lesser Black-backed Gull, hosting on average more than 1% of its biogeographical population. The site has a high agricultural potential, due to the soil's fertility and availability of irrigation facilities, and fishing potential, especially of eels (*Anguilla anguilla*) and elvers. Birdwatching trips and hunting take place in the area as well. The main problems and threats are related to agriculture, ranging from lowering of the groundwater table to reduction in river flows, eutrophication, and pollution due to pesticide and fertilizer use. Ramsar site no. 1481. Most recent RIS information: 2005.

## Merja de Fouwarate

Site number: 2,324 | Country: Morocco | Administrative region: Région Rabat-Salé-Kénitra

Area: 502 ha | Coordinates: 34°14'51"N 06°31'33"W | Designation dates: 12-01-2018

[View Site details in RSIS](#)

The Site is a shallow swamp, which is believed to be a remnant of a large wetland complex that once covered the Gharb plain of northwestern Morocco. It provides nesting, staging and wintering habitat for about 60 species of waterbird, whose numbers may exceed 20,000 during wintering and passage periods. Its hydrology has greatly improved since the beginning of the 21st century, leading to the expansion of aquatic plants which now occupy up to 30% of the Site area and provide shelter for many waterbirds to nest. Tamarix, acacia and eucalyptus trees also attract breeders. Among the birds are several rare species including the endangered white-headed duck *Oxyura leucocephala*, the vulnerable marbled teal *Marmaronetta angustirostris* and the near-threatened ferruginous duck *Aythya nyroca*, black-tailed godwit *Limosa limosa* and Eurasian curlew *Numenius arquata*. The peri-urban location of the Site, and the associated drainage, backfilling and urbanization, and urban and agricultural pollution, have caused long-term losses in its area.

## Merja Sidi Boughaba

Site number: 207 | Country: Morocco | Administrative region: Kénitra

Area: 650 ha | Coordinates: 34°15'N 06°40'W | Designation dates: 20-06-1980

[View Site details in RSIS](#)

Merja Sidi Boughaba. 20/06/80; Kénitra; 650 ha; 34°15'N 06°40'W. Biological Reserve. A permanent, brackish/freshwater coastal lagoon, fringed by emergent vegetation, fed by groundwater, and separated from the sea by a stabilized dune system covered by Mediterranean scrub. The lagoon supports a rich phytoplankton, algal flora and traditional fishing. An important area for breeding waterbirds, both globally threatened and regionally rare, and for staging migrant birds. An ecomuseum plays an important role in conservation education. Ramsar site no. 207. Most recent RIS information: 2005.

## Merja Zerga

Site number: 206 | Country: Morocco | Administrative region: Kénitra

Area: 7,300 ha | Coordinates: 34°51'N 06°16'W | Designation dates: 20-06-1980

[View Site details in RSIS](#)

Merja Zerga. 20/06/80; Kénitra; 7,300 ha; 34°51'N 06°16'W. Biological Reserve, Permanent Hunting Reserve. A large, coastal lagoon of variable salinity with extensive intertidal mudflats, fringing marshes and reedbeds separated from the sea by a stabilized dune system. Important numbers and regionally rare or globally threatened species of staging, wintering and nesting waterbirds are supported, as are various fish, reptiles and invertebrates. Human activities include intensive summer tourism, fishing, grazing, and rush harvesting. Ramsar site no. 206. Most recent RIS information: 2005.

## Moyenne Dr'a

Site number: 1,482 | Country: Morocco | Administrative region: Ouarzazate  
Area: 45,000 ha | Coordinates: 30°28'59"N 06°21'W | Designation dates: 15-01-2005  
[View Site details in RSIS](#)

Moyenne Dr'a. 15/01/05; Ouarzazate, Zagora; 45,000 ha, 30°29'N 006°21'W. Site of Biological and Ecological Interest, Permanent Hunting Reserve. The site is composed of six units within two artificial habitats: the reservoir of the Al Mansour Ad-Dahbi dam, situated just downstream of the confluence of two rivers, and six oases with irrigated palm plantations along the course of the Dr'a River. More than 20 bird species winter or nest in the area of the dam, while about 100 other bird species rely on the oases' palm plantations. The site is an important refuge for migratory species, especially sparrows on the Trans-Saharan route, which utilize this site for resting before and after crossing the desert. Common mammals in the area, some of which are rare in Morocco, include the Fennec Fox, the North African striped weasel, African wildcat, the Common Genet and Common Otter. Several reptile species increase the area's biodiversity, together with the genetic resources associated with the date palms and other cultures in the area. The main services of the site fishing in the reservoir, hydropower, provision of drinking water supply, and water extraction for agriculture (palm and fruit trees, henna, cereals). The area has been deeply affected by the agricultural developments in the area and excessive water extraction, which have caused a fall in riparian biodiversity. Ramsar site no. 1482. Most recent RIS information: 2005.

## Oasis du Tafilalet

Site number: 1,483 | Country: Morocco | Administrative region: Errachidia, Goulmima  
Area: 65,000 ha | Coordinates: 31°16'59"N 04°15'W | Designation dates: 15-01-2005  
[View Site details in RSIS](#)

Oasis du Tafilalet. 15/01/05; Errachidia, Goulmima; 65,000 ha; 31°17'N 004°15'W. Part of UNESCO Biosphere Reserve, Site of Biological and Ecological Interest. This site comprises a series of oases, the reservoir of one of the oldest dams in Morocco (Hassan Ad-Dakhil), small rivers, irrigation channels, and lacustrine and marsh areas. It is an important wintering site for migratory birds, especially sparrows and two endangered waterbird species, Tadorna ferruginea and Marmaronetta angustirostris. It also hosts remarkable populations of Ruppell's Bat (*Pipistrellus rueppelli*) and of the Sand Cat (*Felis margarita*), in addition to an endemic fish (*Barbus figuiguensis*). Agriculture is a common activity, with the main cultivation being alfalfa, cereals, henna, date palms and fruit trees. Sheep raising is also common, with the D'man race showing the best productivity rates. The dam's control of downstream water releases has meant that many river channels downstream only have water during certain times of the year, a phenomenon which is worsened by excessive water abstraction for agriculture and human consumption and the droughts that have become more common during the past two decades. Soil salinisation has also become a problem in many areas, due to the high rates of evaporation. Ramsar site no. 1483. Most recent RIS information: 2005.

## Oued Assaquia Al Hamra à La'youne

Site number: 2,382 | Country: Morocco | Administrative region: La'youne-Assaqia Al Hamra  
Area: 9,500 ha | Coordinates: 27°08'07"N 13°12'27"W | Designation dates: 16-04-2019  
[View Site details in RSIS](#)

The Site covers the entire lower valley of Assaquia Al Hamra; it consists of four large areas, including a swamp and an estuary. A sandy dam keeps the wetland particularly close to its natural character, as it helps to recharge the aquifer of the Foum El Wad. The Site plays an important role in the life cycle of Western Palearctic water birds, as a migratory stopover and wintering area. It hosts threatened water birds such as the marbled teal (*Marmaronetta angustirostris*) and the common pochard (*Aythya ferina*). The wetland hosts up to 25 or more species of water birds in all, which often number a few thousand individuals; their number approached 15,000 in 2014 and exceeded 20,000 wintering individuals in 2008. The Site includes the three main Ramsar wetland types (marine and coastal, inland and human-made) and provides a wide range of ecosystem services for nature and surrounding populations. In addition to its ornithological importance, the Site hosts scientific and educational activities as well as leisure and tourism. It does not have a management plan; however bird species are monitored.

## Oued Tizguite

Site number: 2,375 | Country: Morocco | Administrative region: Région : Fès-Boulemane, Province d'Ifrane

Area: 606 ha | Coordinates: 33°31'13"N 05°05'28"W | Designation dates: 16-04-2019

[View Site details in RSIS](#)

The Site on the northern edge of the limestone plateau of the Middle Atlas features permanent fast-or slow-flowing freshwater habitats, including temporary and eurythermal streams, fresh springs, waterfalls and artificial irrigation canals. The rich riverbank and aquatic vegetation includes at least two threatened species: the Atlas daisy (*Anacyclus pyrethrum*) and the Atlas cedar (*Cedrus atlantica*). There are about 200 aquatic animal species, including endemic or rare insects such as the stonefly *Protonemura dakkii* and the caddisfly *Agapetus dolichopterus*. The Site is also marked by the significant presence of amphibians (the common toad *Bufo bufo*), reptiles (*Macroprotodon cucullatus*), birds (the common pochard *Aythya ferina*) and mammals (the common otter *Lutra lutra*). Oued Tizguit is accordingly considered a site of biological and ecological interest, and is included in the Ifrane National Park. The wetland is however affected by a reduction in low-water flow levels, due *inter alia* to water abstraction and upstream developments, and by the uncontrolled occupation of its bed during the summer. The management of the Ramsar Site is shared between private and public actors according to the applied land tenure system. Conservation and monitoring measures are being implemented, in particular on the hydrological regime, soil quality and birds.

## Sebkha Bou Areg

Site number: 1,484 | Country: Morocco | Administrative region: Nador

Area: 14,000 ha | Coordinates: 35°10'N 02°51'W | Designation dates: 15-01-2005

[View Site details in RSIS](#)

Sebkha Bou Areg. 15/01/05; Nador; 14,000 ha; 35°10'N 002°51'W. The largest lagoon on the Mediterranean southern shore, with a length of 24km and a width of 7.5km, separated by the sea by a system of sand dunes. It is a micro-tidal lagoon system with high biodiversity levels and acts as a wintering site for migratory birds, and as spawning and feeding ground for several fish species. Among the variety of life forms, one can find 13 fish species, nine mollusks, two cephalopods and two crustaceans. Bird species which nest here include the Water Rail, the Little Tern, the Pied Avocet and the Slender-billed Gull. Agriculture, fishing and salt production are the main activities to be found. Aquaculture is also practiced by the Moroccan Society for Ostreiculture (MAROST) and concentrates among others on the royal sea-bream, Japanese shrimp, and two oyster varieties. The main threats to the site are pollution by the activities taking place in the surroundings. Conservation measures are being proposed but none are in place thus far. Ramsar site no. 1484. Most recent RIS information: 2005.

## Sebkhat Imlili

Site number: 2,323 | Country: Morocco | Administrative region: Région de Dakhla-Oued Eddahab

Area: 1,774 ha | Coordinates: 23°14'54"N 15°55'32"W | Designation dates: 12-01-2018

[View Site details in RSIS](#)

The Site is a relic of an original Saharan aquatic system, which bears witness to the recent tropical past of the extreme south of Morocco. The sebkha (salt flat) is in an area of limited and irregular rainfall over ten kilometres from the Atlantic Ocean. In its northern part are more than 160 permanent water pockets. The water is salty or hypersaline, but the pockets are home to aquatic flora and fauna with origins in marine, stagnant freshwater and flowing freshwater environments. Notably, these include a locally endemic fish of the *Cichlidae* family, which is related to the Guinean tilapia *Coptodon guineensis*, and some rare plant species. About 50 species of birds visit the site more or less regularly, especially migrants attracted by its greenery and water-related features.

## Sebkha Zima

Site number: 1,485 | Country: Morocco | Administrative region: Safi  
Area: 760 ha | Coordinates: 32°04'59"N 08°40'W | Designation dates: 15-01-2005  
[View Site details in RSIS](#)

Sebkha Zima. 15/01/05; Safi; 760 ha; 32°05'N 008°40'W. An endorheic lake with saline water, which supports a number of organisms adapted to hypersaline conditions, including two rare endemic plant species (*Halopelis amplicauli* and *Spergularia tenuifolia*), 46 phytoplankton and 11 zooplankton species. It also has a high ornithological value, supporting a number of species during both winter and reproduction seasons. These include significant proportions of the biogeographical populations of *Marmaronetta angustirostris*, *Tadorna ferruginea* and *Phoenicopus ruber*. The site plays an important role in the recharge of the groundwater table. 30,000 tonnes of salt are produced annually from this area, supplying salt to the cities of Marrakech and Safi and providing employment to 50 people. However, salt extraction has transformed almost half of the wetland area into salt works and drainage channels and deeply modified the site's hydrology. Overgrazing, cutting of firewood, and disturbance to birds and nests are also a concern. No conservation measures exist at the moment, but some are being proposed for the future, such as preventing any further habitat transformation and closing certain areas during the bird reproduction period. Ramsar site no. 1485. Most recent RIS information: 2005.

## Zones humides de l'oued El Maleh

Site number: 1,486 | Country: Morocco | Administrative region: Mohammedia  
Area: 1,200 ha | Coordinates: 33°39'N 07°22'59"W | Designation dates: 15-01-2005  
[View Site details in RSIS](#)

Zones humides de l'oued El Maleh. 15/01/05; Mohammedia; 1,200 ha, 33°39'N 007°23'W. Site of Biological and Ecological Interest. A wetland complex made up of two separate systems: a littoral swamp and salt steppe which correspond to the estuary of the Al Maleh River, and a small reservoir situated 30km upstream. This site is an important refuge during migrations and for wintering for a variety of 80 bird species, ranging from waterbirds to sparrows and birds of prey. The dam has been crucial in promoting the development of agriculture and fishing in the region, which are the main activities carried out, in addition to playing an important role in the control of floods. Its water volume has been reduced, however, due to sedimentation and this, combined with the canalization in parts of the estuary of the river, has meant that many floods still have destructive effects. The estuary of the Al Maleh is also used for educational purposes for schoolchildren from the nearby city of Mohammedia in order to raise awareness of environmental protection. Pollution by several industries (chemical, mechanical and electrical) which surround the site poses the main threat, together with the construction of canals which have altered the site's hydrology. Ramsar site no. 1486. Most recent RIS information: 2005.

## Zones humides de Souss-Massa

Site number: 1,487 | Country: Morocco | Administrative region: Province de Chtouka Ait Baha  
Area: 1,000 ha | Coordinates: 30°13'N 09°37'W | Designation dates: 15-01-2005  
[View Site details in RSIS](#)

Zones humides de Souss-Massa. 15/01/05; Agadir; 1,000 ha; 30°13'N 009°37'W. Parc National de Souss-Massa, Permanent Hunting Reserve. Two two separate areas which are part of a national park that was initially designated to protect the critically endangered Northern Bald Ibis (*Geronticus eremita*), which is represented by 7% of its biogeographic population. Subsequently, it was found that more than 270 bird species occur in the area, with several finding refuge at the site during winter, including the Marbled Teal, the Greater Flamingo, the Caspian Tern and the Little Tern. The area comprises a variety of habitats, ranging from dunes to freshwater and brackish marshes, coastal waters, sandy beaches and rocky shores. The main activities taking place in the site are agricultural, with a large area dedicated to banana plantations and livestock raising, as well as ecotourism and tourism along the coast. Threats include urban pollution and disturbance to the fauna by locals and tourists. Ramsar site no. 1487. Most recent RIS information: 2005.