

1. Lake Bardawil

Geographical Coordinates 31°05'N 33°05'E

Area 60,400ha

Location About 3km north of the town of Mistag, on the north coast of Sinai, north-east Egypt.

Date of Ramsar Designation 9 September 1988.

Other International Designations None.

National Designations Protected Area^P (Zaranik, 14,700ha).

Principal Features Two interconnected hypersaline lagoons (Bardawil, 59,500ha; Zaranik, 900ha). Together, the lagoons measure about 85km in length, have a maximum width of 22km, and range in depth from 0.3m to 3m. They are separated from the Mediterranean Sea along most of their length by a long, narrow sand bar. However, there are four channels connecting the lagoons with the sea, two of which are artificial. There are a number of islands and peninsulas within the lagoons, particularly in the east. The dune slopes support the plants *Thymlalaea hirsuta*, *Artemisia monosperma*, *Retana raetam* and *Moltkea callosa*, while the dune slacks support *Juncus subulatus*, *Nitrania tridentata*, *Lycium arabicum*, *Phragmites australis* and *Cynodon dactylon*. Extensive mud flats are exposed frequently, particularly in the eastern section. The lagoons are an important spawning area for fish and support commercially important populations of *Sparus aurata*, *Mugil cephalus*, *Dicentrarchus labrax*, *Argyrosomus regium*, *Solea solea* and *Epinephalus aeneus*. The site is also an important wintering and staging area for birds, including* *Podiceps cristatus* (455), *Phalacrocorax carbo* (5,024), *Egretta alba* (50), *Phoenicopterus ruber roseus* (13,131), *Circus cyaneus* (3), *Charadrius alexandrinus* (370), *Calidris alpina* (800) and *Larus genei* (908). A total of about 500,000 birds use the site as a staging area each autumn. (1a,2b,2c,3a,3b)

*Figures refer to 1989/90 winter; information provided by the Egyptian authorities.

Conservation Issues Protection laws and their enforcement require strengthening, although since 1990 the environmental officers of El Arish have successfully enforced a ban on bird catching (mainly trapping of *Coturnix coturnix*) within the Protected Area. Fishing is regulated, (there is a closed season) and there are proposals to prohibit fishing in Zaranik Lagoon. An extensive salt production system has been constructed in the eastern part of the site, which in recent years has been extended, causing considerable ecological change. Constantly shifting sand bars have caused the frequent closure of the channels connecting the lagoons with the sea, posing the risk of desiccation. It is the responsibility of the government saltworks to keep the channels open by artificial means, but this responsibility is practised infrequently. The North Sinai Agricultural Development Project includes plans to divert water from the River Nile through a tunnel under the Suez canal to irrigate land converted for agriculture south of Lake Bardawil. This could result in up to 300,000 people settling in the area. Most of the industrial, domestic and agricultural run-off waters draining from the eastern section of this development would probably flow into the Bardawil Lagoon. A comprehensive Environmental Impact Assessment is currently being carried out by the Dutch consultancy firm Euroconsult. In view of information contained within the 1990 Egyptian National Report, Lake Bardawil was added to the Record of sites likely to undergo change in ecological character. A preliminary application of the Ramsar Monitoring Procedure was carried out in October 1991.