## Habbaniya Lake (AN1) (IBA016)



Surveyed in winter and summer 2009-2010 and in summer and autumn 2011 Admin Area: Anbar KBA Criteria: V

Coordinates: N 33° 11' 48" E4 3° 27' 38"

Area: 45,390 ha

KBA Criteria: V IBA Criteria: A1 IPA Criteria: Not assessed Status: Unprotected Ecoregion: Arabian desert and East Sahero-Arabian xeric shrublands (PA1303) and Mesopotamian shrub desert (1320)

Altitude: 35 m

Directional information: The site is located south of Ramadi and it can be accessed via Falluja to the tourism city of Habbaniya, or from south of Ramadi via the road toward Al-Angoor village.





The southern edge of Habbaniya Lake (photo by Omar F. Al-Sheikhly, 2010)



**Site Description:** Habbaniya Lake is located southeast of Ramadi, the capital of Anbar Governorate, and west of Baghdad. It is one of the largest water reservoirs in Iraq constructed in 1982 and Evans (1994) included it in the original list of Important Bird Areas (IBA016). It receives excess floodwaters from the Euphrates in the summer through a small canal near Ramadi called Sin Al-Dhuban. The canal passes through Al-Saglawiya and the calcareous Al-Guss hills, which separate the canal from Habbaniya. The excess flood water drains out on the southern edge of the lake through the narrow Al-Majarah Canal, which drains to Bahar Al-Milih and the northern part of Razzaza Lake (KBA XXX) in Karbala Governorate.

The main habitat is the lake itself and its wide, muddy shoreline. There is a small elevation gain near the southern edge of the lake, and semi-desert forms the eastern and southwestern front of the lake with xeric and halophytic desert vegetation. The shore is widely exposed during the winter time when the water levels are reduced to their minimum level. A few wetlands with submerged aquatic vegetation were observed near the Al-Majarah water regulation canal, including a limited number of reed beds. The village of Al-Angoor is located on the southwestern edge of Habbaniya and contains a few people who mainly practice fishing. The Habbaniyah tourism village is one of the most significant landmarks, located on the southeast edge of the lake. The habitat around this area features some dense shrubs and thickets.

Key Biodiversity Area Criteria	Notes	
V. Vulnerability Criteria: Presence of Critically Endangered and Endangered species - presence of		
a single individual or Vulnerable species – 30 individuals or 10 pairs.		
Rafetus euphraticus	Euphrates Softshell Turtle was reported by local fishermen at the lake.	
Important Bird Area Criteria		
A1. Globally threatened species		
	Breeding	Wintering/ Passage
Marbeld Duck		60 (2009)
Marmaronetta angustirostris		
(Resident, winter visitor)		

Additional Important Bird Observations: During the surveys a total of 49 species was recorded. The site also held breeding populations of four Sahara-Sindian Desert biome-restricted species (Table xx) but these did not trigger inclusion under criterion A3.

**Other Important Fauna:** One adult Sand Fox *Vulpes rueppelli* was observed crossing the road that leads to the site near Al-Angoor Village. Egyptian Spiny-tailed Lizard *Uromastics aegyptia*, Desert Cobra *Walterinnesia aegyptia* were observed.

*Fish:* Surveys were only conducted in the winter of 2009. High winds during the survey did not allow fishermen to go out to fish and information was collected through interviews with fishermen. There were about 100 boats on the lake with an estimated average daily catch of 20 kg/boat-day using floating gill nets with mesh sizes of 1–5cm and no electro-fishing was practiced on the lake. Four fish species of economic importance, according to Coad (2010), appeared in the sample catch: *Acanthobrama marmaid* (20% of the catch), *Alburnus mossulensis* (10%), *Carasobarbus luteus* (20% and a species of additional conservation concern) *Liza abu* (50%). But interview with fishermen indicated that *Aspius vorax* and *Luciobarbus xanthopterus* (both species of economic importance and conservation concern) also appear from time to time in the catch.

Plants & Habitats: No botanical survey was conducted at the site but species of *Phragmites* sp., *Typha* sp, *Achillea* sp, *Artemeisia* sp, *Acacia* sp and *Alhagi* sp were the most widely distributed plants.

**Conservation Issues:** It appeared that water shortages are causing an increase in salinity. Water stagnation and quality appears also to be an issue in some parts of the lake, so increasing water flow may be important. The Habbaniya tourism village is considered to be the main human factor that highly impacts the environment especially as the survey team witnessed new efforts at rehabilitation of the area by the Anbar authorities during 2011. Summer sees the highest number of visitors and the most serious impact to the site, with large quantities of solid waste such as cans, plastic containers and bags left behind, which spread rapidly throughout the site and are carried by water currents to the lake edges. Several small villages on the southern and eastern edges of the lake deposit sewage and other waste into the lake. Hunting and trapping of wildlife especially for the large mammals, game birds, and raptors such as Saker Falcon and Peregrine Falcon during winter is another high threat (Al-Sheikhly, 2012).

Land near Habbaniya is also used as an air force base. The frequent training flights result in widespread noise pollution and other environmental impacts sufficient to disturb and harm both resident and migrant species.

Agricultural expansion represented by small annual crop farms is limited and restricted to the northern and northwestern edge of the site, but was evaluated as a medium threat. A few villages and urban areas at the western edge of the site near Al-Angoor were also considered a medium threat. Other impacts such as energy production, mining, transportation and service corridors were rated as low threats.

**Recommendations**: Water quality studies are essential to determine the lake's viability for supporting human and animal life. Surveys with a focus on non-avian species are highly recommended. More strict and modern methods for the control and management of solid waste and sewage are urgently needed. Enforcing Iraq's current hunting laws and raising the scientific awareness among local hunters and fishermen in cooperation with local hunting groups or association in Anbar should reduce the potential for declines in the wintering raptors and other wildlife. Additional fisheries surveys are also needed.

## References

Al-Sheikhly, O.F. (2012). *The hunting of endangered mammals in Iraq*. Wildlife Middle East. (6): 2&3: 10. Coad, B.W. (2010). *Freshwater Fishes of Iraq*. PENSOFT Publishers, Sofia-Moscow. No. 93.