

DISTRIBUTION & ABUNDANCE OF GREATER FLAMINGO (*Phoenicopterus roseus*) IN ABU DHABI, UNITED ARAB EMIRATES

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INTRODUCTION

The greater flamingo (*Phoenicopterus roseus*) has a wide distribution, ranging from the western Mediterranean, where it occurs in Spain, southern France as well as in north and west Africa (Tunisia, Algeria and Morocco). The range also extends eastward to Iran, the former USSR, India and Sri Lanka (Ogilvie 1986). Greater Flamingos are classified as a widespread and abundant species in the 2010 IUCN Red List of threatened species. The breeding population in SW & Southern Asia is 180,000 pairs. (Aspinall 2010). In the Arabian Peninsula, the first breeding record of greater flamingos was documented in 1922 (Ticehurst 1926) when the species bred in Kuwait. The UAE's flamingo population originates from breeding colonies in Iran, Turkey and Central Asian countries. Flamingos successfully bred for the first time at Al Wathba wetland reserve in 1993, leading to the site being declared as a protected area in 1998 (Aspinall and Hellyer 1999). Our article summarizes the distribution and abundance of greater flamingo in 2009 in different wetlands in Abu Dhabi Emirate.

METHODS

We used fixed monitoring points from wild bird and avian influenza monitoring in the Emirate, to extract data on flamingo numbers. Sites for wild bird monitoring were established by dividing the entire coastline of the Emirate into a 25x25 km grid and using the midpoint for routine monitoring. Moreover, flamingos were recorded on different islands of Abu Dhabi Emirate while collecting data on winter and summer breeding birds. Three inland wetlands (Al Wathba, Shahama & Zakhir Pools) were also monitored along with coastal sites. Bird data were recorded on a pre-designed data sheet and maximum number of birds recorded was used for analysis. The sites were monitored twice a month.

Results and Discussion

During the entire year 28 sites (Fig. 1) were monitored to observe the distribution and abundance of Greater Flamingo. Out of 28 sites, 12 were coastal, 13 Islands and three inland wetlands. The highest numbers of 18,855 flamingos were recorded from Bu Al Syayeeef, an inter-tidal mudflat and salt marsh area to the west of the Musaffah channel. The area also recorded breeding of flamingo in April 2009 where 800 chicks and more than 1000 un-hatched eggs were recorded, making it one of the largest successful nesting of flamingos in the UAE (Javed et al, 2009).

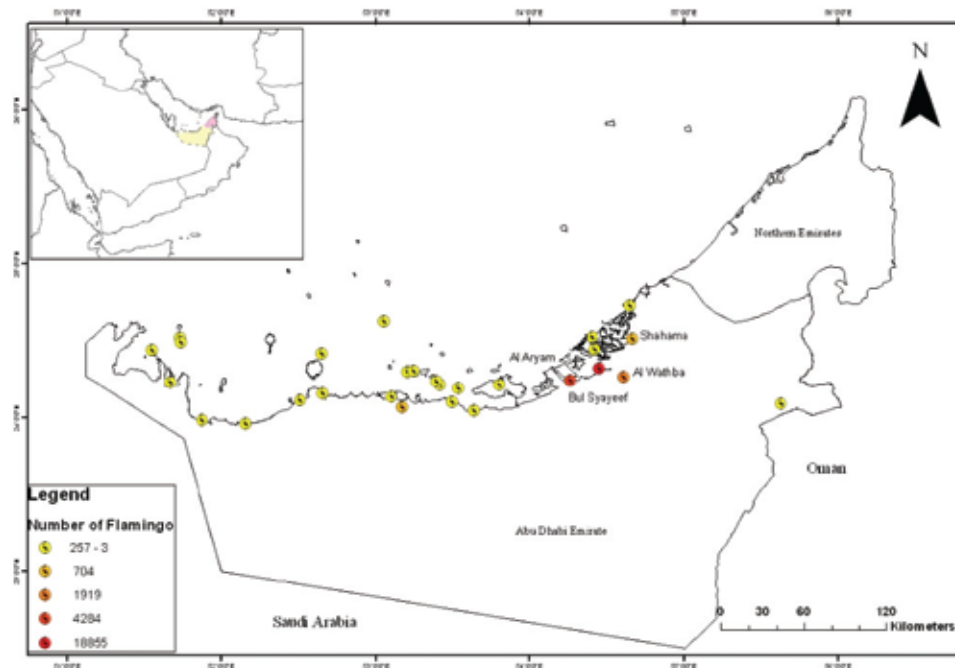


Fig. 1: Map Showing number of sites monitored and highest numbers of Greater flamingo recorded in Abu Dhabi Emirate.



Fig. 2: Greater flamingo in Abu Dhabi (©Ahmed).

The second highest numbers of 4,284 flamingo were recorded from Al Aryam in April 2009 followed by Al Wathba Wetland Reserve with 1,919 and Shahama, a privately owned inland wetland near the east coast of Abu Dhabi. Furthermore, out of 13 islands that were surveyed the highest numbers were recorded from Butinah Island (257 flamingos) followed by Jenana (120) and Abu Al Abyad (81). Thus Greater Flamingos were found consistently distributed year around in different areas of Abu Dhabi Emirate and their occurrence was recorded regularly on the western coastline although in lower numbers. One of the major threats to the breeding population is human disturbance. Greater flamingos are highly vulnerable to disturbance, particularly at breeding times and human disturbance can lead to desertion of the nesting site and lower breeding success. Protection of Bu Al Syayeeef from human disturbance and proper management of habitat in Al Wathba Wetland Reserve is essential to retain and increase the number of breeding flamingos in Abu Dhabi Emirate.

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References:

- Aspinall, S. and Hellyer, P. 1999. The history and development of Al Wathba Lake, Abu Dhabi. *Tribulus*, 9: 22-25.
- Aspinall, S. 2010. Breeding birds of the United Arab Emirates , 56-57 pp.
- Javed, S., Khan, S., Ahmed, S., Hammadi, A and Hammadi, E. 2009. Discovery of a new breeding colony of Greater Flamingo in coastal Abu Dhabi. Unpublished Report. Environment Agency – Abu Dhabi.
- Ogilvie, M.A. & Ogilvie, C. 1986. Relationship and evolution of flamingos. *Flamingos*, Alan Sutton, Gloucester, England, 121 pp.
- Ticehurst, C.B. 1926. Additional notes on the avifauna of Iraq. *Journal Bombay Natural History Society*. 31:110.