

# Greater Flamingo *Phoenicopterus roseus*

Compiled by Iqbal Hussain

## Distribution and population

This species is regularly seen from West Africa eastward throughout the Mediterranean to South West and South Asia, and throughout sub-Saharan Africa. The Palearctic population (including West Africa, Iran and Kazakhstan) is estimated to number between 205,000 and 320,000, the South West and South Asian populations combined at 240,000, and the sub-Saharan African populations between 100,000 and 120,000.



Picture by Iqbal in Kuwait

## Ecology / Behavior

Juveniles, and to a lesser extent adults, are prone to irregular nomadic or partially migratory movements throughout the species's range in response to water-level changes or food availability. Members of the Palearctic population are partially migratory and regularly travel to warmer regions in the winter via favored stop-over sites (non-breeders may be present all year round in the wintering areas).

In the Mediterranean and West Africa, breeding colonies appear to be linked by a significant frequency of juvenile and adult dispersal and are thus considered to belong to a single metapopulation. Members of the Asian populations move from their breeding sites at inland lakes to coastal wetlands during non-breeding periods, and when not breeding the sub-Saharan African population tends to disperse among the alkaline-saline lakes and wetlands of eastern and southern Africa. The Palearctic population breeds regularly from March to June in large dense single-species colonies of up to 20,000 pairs (occasionally up to 200,000 pairs) and in some regions may undergo a post-breeding flightless moult period where adults gather in flocks on inaccessible waters.

The Asian and sub-Saharan populations breed irregularly following the rains, often in large mixed colonies with Lesser Flamingo. The species is gregarious and commonly occurs in flocks of 100 or more outside of the breeding season, with thousands often flocking together in areas rich in food or at freshwater inlets of saline or alkaline lakes to drink and bathe. In sub-Saharan Africa, the species may also join large flocks of non-breeding Lesser Flamingo. The species is a bottom feeder and forages both by day and night, feeding by filtering particles through tiny platelets in the bill. It also often roosts at night in large flocks.

## Habitat

The species inhabits shallow (c.1 m deep over a large area) eutrophic water bodies such as saline lagoons, salt pans and large saline or alkaline lakes up to pH 11. It will also frequent sewage treatment pans, inland dams, estuaries and coastal waters, seldom alighting on freshwater but

commonly bathing and drinking from freshwater inlets entering alkaline or saline lakes. It nests and roosts on sandbanks, mudflats, islands or boggy, open shores.

### **Diet**

Its diet consists of crustaceans (especially brine shrimp *Artemia salina*), molluscs, annelid worms, larval aquatic insects, small fish, adult terrestrial insects (e.g. water beetles, ants), the seeds or stolon's of marsh grasses, algae, diatoms and decaying leaves. It may also ingest mud in order to extract organic matter (e.g. bacteria).

### **Breeding site**

The species nests in large dense colonies on mudflats or islands of large water bodies, occasionally also on bare rocky islands, with a distance between neighbouring nests of between 20 and 50 cm. The nest is usually an inverted cone of hardened mud with a shallow depression on the top (alternatively it may be a small pile of stones and debris when mud is not available).

### **Threats**

The species suffers from low reproductive success if exposed to disturbance at breeding colonies (e.g. from tourists, low-flying aircraft and especially all-terrain vehicles), or if water-levels surrounding nest-sites lower (resulting in increased access to and therefore predation from ground predators such as foxes and feral dogs). The lowering of water levels in lakes can also lead to hyper-salinity which may affect food resources. Other threats to the species's habitat include effluents from soda-ash mining, pollution from sewage and heavy metal effluents from industries. The species also suffers mortality from lead poisoning (lead shot ingestion), collisions with fences and power lines, and from diseases such as tuberculosis, septicemia and avian botulism.

### **Utilization**

In Egypt large numbers of adults are shot or captured to be sold in markets, and egg collecting from colonies occurs in some areas (this may become a threat).

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