sea watch FOUNDATION

SPECIES FACT SHEET –

Melon-headed Whale
(Peponocephala electra)

Photo © Robert L. Pitman

Measurements

Length

Newborn: 1.1 m
Full grown: 2.3-2.8 m
(males 6-10 cm larger than females)

Weight

Newborn: 10-15 kg
Full grown: 160-275 kg

Identification

At Sea

Difficult to identify at sea, often confused with pygmy killer whale. Very dark, almost black. Triangular head with rounded forehead, white lips and dark mask-like eye patch. Centrally placed large recurved dorsal fin.

On Land

Skull resembles *Lagenorhynchus* but with a more rounded cranium, large antorbital notches and a shorter tooth row. Total tooth count: 36-52/36-52 teeth (upper/lower jaw). High tooth count makes it distinguishable from other beakless small whales.

Description

Head

The head is triangular with a rounded forehead and underslung jaw (particularly in adult males) presenting a very indistinct beak. Younger animals have a more sloping forehead. There is a pale streaked blowhole stripe, which widens towards tip of upper jaw. There are up to around fifty sharply pointed teeth in each jaw (though number reduces with age). The mouth angles slightly upwards towards the eyes. The lips and tips of lower jaw are white, grey or pink. A dark eye patch broadens as it extends from eye to beak tip. The skull is typically delphinid in shape with a broad rostrum and deep antorbital notches.

Body, Fin & Markings

The body of the melon-headed whale is robust in the front half, tapering into a slender, torpedo shape. The colouration is charcoal to dark grey but with a paler belly, particularly around the anus and genital region. The young are a lighter grey. An anchor shaped lighter throat patch may show. The cape is narrow over the head and thorax and the anterior half of tail but dips near the dorsal fin to form a dark triangular mask, particularly in larger animals. They have long (>52cm), dark, narrow flippers, sickle-shaped generally with pointed tips. The tall (>30cm) recurved dorsal fin is placed centrally on back. Males are significantly larger than females, have more bulbous melons, taller dorsal fins, longer flippers and their tail stocks have a pronounced post-anal hump or keel.

Distribution

Global Distribution

Poorly known but the species appears to occur globally in deep offshore tropical and subtropical waters (mainly between 40°N and 35°S). In the North Atlantic, they are most frequently reported from east coast USA, Gulf of Mexico and Caribbean. There have been a few sightings from the eastern North Atlantic, including strandings from Senegal and sightings off Sierra Leone and Cape Verde Islands, West Africa.

European Waters

Records are assumed to be extra limital. Two live strandings in France, near La Rochelle, August 2003, and a third stranded in the same area in 2008, are the only records from mainland Europe.

UK & Ireland

The sIngle record is a stranding near Charlestown, Cornwall, September 1949 (originally identified as white-beaked dolphin).

Abundance

Poorly known. Systematic line transect surveys estimated the abundance at 45,000 for the eastern Pacific, 3,451 in the northern Gulf of Mexico, 821 in the Phillipines, 921 in the eastern Sulu Sea, and 1,383 in Tañon Strait between Cebu and Negros. There are no abundance estimates available in the Atlantic.

Habitat

Melon-headed whales occur mostly in deep warm waters (>1,000 m in depth), seaward of the edge of continental shelves.

Diet

They take small fish, larger ommastrephid squid (e.g.*Dasidicus gigas*), and shrimps.

Behaviour

Not well known. They are highly social, and groups observed are often very large, with 100-1,000 individuals. They form highly packed schools with rapid travel and frequent course changes. They have been observed bow riding slow moving vessels, and sometimes breaching. Sometimes they spyhop and are occasionally seen swimming on the surface with their dorsal fins exposed. The social structure is unknown. Accoustic and behavioural observation suggest that this species forage at night (to depths of 150-400 m), rest during the morning, and socialise in the afternoon. Several mass strandings have been reported.

Life History

The maximum life span recorded is 47 years old. Females reach sexual maturity at 7-8 years and males 12-15 years. The calving interval is c. 3-4 years. The gestation period is c. 12 months; the lactation period unknown.

Conservation Threats

Melon-headed whales have been captured and moved to aquariums, but this species does not thrive in captivity, and can be aggressive. Off Japan they are taken opporunistically in cetacean drive fisheries, and elsewhere in harpoon fisheries and as bycatch in driftnet fisheries in various parts of the world, including the Philippines, Indonesia, Malaysia, West Africa, off Sri Lanka and St Vincent (eastern Caribbean). They appear to be susceptible to disturbance from mid-frequency sonar as used in naval exercises. The species is legally protected in European, British and Irish waters.

IUCN status: Least Concern.

References

Evans, P.G.H. (2008) Melon-headed whale *Peponocephala electra*. Pp. 733-735. In: *Mammals of the British Isles*. (Eds. S. Harris and D.W. Yalden). Handbook. 4th Edition. The Mammal Society, Southampton. 800pp.

Evans, P.G.H. (2020) Melon-headed whale *Peponocephala electra*. P. 103. In: *European Whales, Dolphins and Porpoises.* Marine Mammal Conservation in Practice. Academic Press, London & San Diego. 306pp.

Evans, P.G.H. and Waggitt, J.J. (2020) Melon-headed whale *Peponocephala electra*. P. 184. In: *Atlas of the Mammals of Great Britain and Northern Ireland* (D. Crawley, F. Coomber, L. Kubasiewicz, C. Harrower, P. Evans, J. Waggitt, B. Smith, and F. Mathews, Eds). Published for The Mammal Society by Pelagic Publishing, Exeter. 205pp.

Jefferson, T.A., Webber, M.A., and Pitman, R.L. (2015) Melon-headed whale *Peponocephala electra*. Pp. 207-209. In: *Marine Mammals of the World.* A Comprehensive Guide to their Identification. Academic Press, London & San Diego. 608pp.

Perryman, W.L. and Danil, K. (2018). Melon-headed whale *Peponocephala electra.* Pp. 593-595. In: *Encyclopedia of Marine Mammals* (B. Würsig, J.G.M. Thewissen, and K.M. Kovacs, Eds). Academic Press, London & San Diego. 1,157pp.