

SHORT NOTE

Dorsal Pigment Pattern in Living Heaviside's Dolphin, *Cephalorhynchus heavisidii*

by

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Heaviside's Dolphin (*Cephalorhynchus heavisidii*) was described from a long-dead specimen (Gray, 1828). This original description stated that the animal's dorsal pigment was uniformly black, and this is the pattern described in most recent literature (eg. Barnard, 1954; Leatherwood & Reeves, 1983; Morzer Bruyns, 1971; Smithers, 1983; Walker et al, 1975; Watson, 1981). Deviating from this description but not sufficiently, Cuvier (1836) mentions a slate-coloured head, and Arvy (1977), and Van Beneden (1873) illustrate dark grey capes. A thorough review of all museum specimens and early illustrations is given by Best (in press).

Our recent observations on freeranging animals sighted from boats and shore as well as freshly killed animals indicate that these descriptions are all misleading to some degree. Although the species is readily identifiable by the shape of the dorsal fin and snout, its size, and so-called "Cross of Lorraine" (Van Beneden, 1873; Rice and Saayman, 1984) this misinformation on the dorsal pattern could confuse casual observers who view these animals from ship or shore.

Bowriding animals observed in the inshore areas between Mercury Island (25° 43'S & 14° 50'E) and Sinclair island (27° 40'S & 15° 31'E) during November and December 1985 had the following distinguishing dorsal pattern: a light grey pigment beginning in contact with the ventral white markings, spreading dorsally and anteriorly to the point of leaving only a narrow black saddle between the dorsal fin and the forehead (plate 1).

In life, and under some circumstances, this light grey cape appears very light, appearing to nearly match the white of the venter. However it is readily distinguishable, as when animals are seen bowriding in an inverted position. In a normal upright position and depending on the light and the observer's position, the dorsal and lateral grey cape may appear off-white (plate 2).

Dolphins were frequently seen leaping out of the water (just barely clearing the surface), allowing the observers lateral views at distances of less than 10 m. The dorso-lateral grey cape was clearly distinguishable from the dorsal black, as well as the ventral white, but the cape appeared darker than when viewed from above. Observations from shore on a group of three Heaviside's Dolphins at Hottentots Bay (26°08'S & 28°12'E) at a distance of three m (rocky shore with steep drop off) confirms this observation. This suggests that the angle of observation has some influence on the appearance of the dorsal cape.

Rice (in litt. 4 September 1986) states that on 16 August 1986 a group of Heaviside's dolphins made contact with a yacht near the Mouille Point/Granger Bay sewage outfall in Table Bay (33°54'S & 18°27'E). The observations of those on board and the photographs taken corroborates our observations. Rice states further that with hardly an exception, observers who spot for Dolphin Action & Protection Group's DOLPHIN



PLATE 1: Two day old carcass on northern Namibia coast. Dorsal grey cape beginning to fade.



PLATE 2: Dorsal grey cape appears very light. Bowriding animals near Hottentots bay, 26°08'S & 28°12'E.

WHALE WATCH RSA program, describe the pattern of Heaviside's dolphins as black/gray with a white underside.

This grey area changes to black very soon after death which explains the inaccuracy of the early descriptions and subsequent confusion in the literature. The animal in plate 1 is estimated to have been dead for less than 2 days. Our observations on carcasses which frequently wash up on the Northern Namib coast suggest that the grey turns to black within 4 days. The white venter changes to offwhite and then to cream, but never becomes dark. Within about 2 weeks the pigmented epidermal layer begins to slough, at which time the entire pattern may be totally lost, leaving a uniformly yellow-cream coloured carcass.

We noticed some variation in the shape and size of the anterior-dorsal black saddle (primarily the degree and shape of the constriction), and all live animals had the light grey dorsal and lateral pigment (N=48). Although close observations have previously been made on living animals (Rice & Saayman, 1984; Watkins, Schevill, & Best, 1977) contradictions to the early descriptions have not been published. Best (in press) gives illustrations and descriptions corroborating our observations.

Heaviside's Dolphins are the cetaceans most frequently seen from the Namibian coast, followed by Dusky Dolphins (*Lagenorhynchus obscurus*). Bottlenose Dolphins (*Tursiops truncatus*) however seem to be most common in the Walvis Bay (23° 00'S & 14° 12'E) and Swakopmund (22° 19'S & 14° 15'E) areas. Heaviside's dolphins readily enter bays and inlets, usually in groups of 2-5. They often approach and bowride yachts, ski boats and trawlers, and they range to approximately 30 km. offshore (P. Best, pers. comm.).

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