

Letters to the Editor

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The Whale Shark in the Waters Around Ceylon

FROM time to time since 1862, whale sharks have been reported from the waters around Ceylon. In addition a number of incidental accounts based on erroneous identifications have been published. In the progress of an article on the geographical distribution of this great fish, these references have been looked up and it now seems a good opportunity to set forth the accurate accounts and designate those which are erroneous.

The earliest reference of all is that by Capt. James Stuart in 1862¹. In writing of the pearl fishery, he noted that sharks were common and specifically stated that "... on two occasions my attention has been called to spotted ones of such monstrous size as to make the common ones at their sides appear like pilot-fish".

In 1883, and again in 1884, Haley² recorded the capture, at Moratuwa near Colombo, of a comparatively small specimen (23 ft. 9 in. long). This was mounted and is on exhibit in the Colombo Museum; for a figure of this see Gudger³, 1931, pl. xxx. Haley² also recorded (1890) the capture in 1889 of an 18-ft. specimen at Ngombo, on the western shore just north of Colombo. The skin was sent to the British Museum and mounted; for figures of it, see Günther⁴ (1889) and Gudger (1931, pl. xxxi). Lastly, Thurston⁵ (1894) stated that in April, 1890, another small fish (14.5 ft.) was taken off Bambalapitya. I have been unable to identify this locality, but it is interesting to note that the other two specimens came from the west coast, and that all three were relatively small fish.

These are the substantiated records for Ceylonese waters. Other specimens of the whale shark have been taken off the Indian peninsula not far away. They will be noted in the paper on the distribution of the fish, but in the present article two indefinite and, in my judgment, erroneous references to the presence of this shark in Ceylonese waters must be cleared up.

The first of these is in A. E. Shipley and James Hornell's "Further Report on Parasites Found in Connection with the Pearl Oyster Fishery at Ceylon" (in W. A. Herdman's Report to the Government of Ceylon on the Pearl Oyster Fishery of the Gulf of Manaar, 1905, vol. 3, pp. 53 and 54). On page 53, they listed a trematode "from either a species of *Carcharias* or *Rhinodon typicus*, the 'basking shark' of tropical waters". Here already doubt was expressed and in a footnote the authors showed further doubt as to what is meant by the "basking shark". Herdman's recollection was that "the term was applied by the sea-going men to a *Carcharias*". Now, the form and coloration of the whale shark are so remarkable that no one who has seen even a good figure of it could ever mistake another shark for it. Moreover, the note further stated that such a "basking shark" caught on the pearl banks was sent to Boulenger who identified it as *Stegostoma tigrinum*, a shark somewhat similarly marked.

On page 54, Shipley and Hornell described a

Distomum "taken from the perivisceral cavity of *Rhinodon typicus*". Here again I doubt the identification of the shark. On this point it should be noted that James Johnstone⁶, in his report on the fishes taken by Herdman and Hornell, made no reference to such a shark—the capture of which would have been a notable matter. Further negative evidence will now be submitted.

Thomas Southwell⁷, in his "Notes on the Food of Certain Marine Fishes of Ceylon" on page E 49, wrote: "*Rhinodon typicus*. March 14, 1910. One specimen. Stomach empty." Again, in his "Notes on the Fauna of the Ceylon Pearl Banks",⁷ on page E 44, under date of March 18, 1910, of trawling in Dutch Bay, he wrote thus: "*Rhinodon typicus*. Stomach empty, but six huge cestodes in gut. Very ripe ovary. Oviduct full of eggs, 16 cases counted, same form as in dog-fish."

These statements interested me because they apparently gave two other records for *Rhineodon* off Ceylon, and particularly because one account indicated the method of reproduction in this rare shark. To verify and clear this matter up, I carried on an extensive correspondence with Mr. Southwell and with Dr. Joseph Pearson, director of the Colombo Museum. Southwell thought that the egg-cases were preserved in the Colombo Museum, but an exhaustive search by Pearson failed to reveal them. Then I turned to the question of identity of the shark. Pearson stated that in long years of trawling with literally thousands of hauls, neither he nor any of his men had ever seen a *Rhineodon*, which he knew well but thought a very rare fish around Ceylon. He suggested that Southwell's shark might be a *Stegostoma*, as Herdman indicated for a similar case above referred to. Southwell replied that he knew *Stegostoma* well and that it was not his fish, that he thought that his identification was correct since it was made from Day's "Fishes of India" (1889, vol. 2, p. 29), but that he might have been mistaken. Now the description of *Rhineodon* on the page cited in Day is so indefinite that it might be applied to almost any of several large barred and spotted sharks. My conjecture is that Southwell's shark might have been a *Galeocerdo tigrinum*. I think that it could not have been a whale shark. Had he seen this shark, its great size and extraordinary markings would most surely have fixed themselves in his mind.

I think that both these references to *Rhineodon* may safely be set down as due to mistaken identifications, and hence may be disregarded in this faunal survey. However, there are left the records of three specimens seen by scientific men, and in addition, Stuart's short account of his encounters with great spotted sharks, which were undoubtedly *Rhineodons*.

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¹ Stuart, James, "Notes on Ceylon", etc. London, 1862. (Whale Shark, p. 156.)

² Haley, A., "On the Occurrence of *Rhinodon typicus* Smith on the West Coast of Ceylon". *Ann. Mag. Nat. Hist.*, 5 ser., 12, 48-49; 1883. "On *Rhinodon typicus*". Rept. Director Colombo Mus. for 1883, in Ceylon Administr. Repts. for 1883, pp. 129D-130D; 1884. "On *Rhinodon typicus*". Rept. Director Colombo Mus. for 1889, in Ceylon Administr. Repts. for 1889, p. 14; 1890.

³ Gudger, E. W., "The Fourth Florida Whale Shark, *Rhineodon typus*, and the American Museum Model Based on It". *Bull. Amer. Mus. Nat. Hist.*, 61, 613-637, 10 pls., 4 text-figs.; 1931.

⁴ Günther, A. C. L., "The Basking Shark [*Rhinodon typus*] of the Indo-Pacific Region". *Graphic*, London, p. 310, text-fig.; 1889.

⁵ Thurston, Edgar, "Inspection of Ceylon Pearl Banks". *Bull. Madras Govt. Mus.* No. 1 (Whale Shark, pp. 36-38, pl. IIIA); 1894.

⁶ Johnstone, James, Rept. Govt. Ceylon Pearl Oyster Fishery Gulf of Manaar, vol. 2, 201-222, 2 pls., 2 text-figs.; 1904.

⁷ Southwell, Thos., Marine Biology, in Ceylon Administr. Repts. 1912-13, Pt. IV—Education, Science, Art.