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Two Occurrences of False Killer Whales, and a Summary of American Records

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The false killer whale, *Pseudorca crassidens* (Owen), was known from North American waters only as long ago as 1920 (Miller), from skeletal material found on the shore of Biscayne Bay near Princeton, Florida, of a number of individuals evidently stranded there. This material, together with some reported (Miller, 1920) from the Aves Islands in the Caribbean Sea off Venezuela, suggested the possibility of the occurrence of this species of whale in the Gulf of Mexico. Gunter's (1954) list of the marine mammals of the Gulf of Mexico revealed that it was not yet known from the Gulf. Appearing concurrently, however, Aguayo's (1954) "Notas sobre cetáceos de aguas Cubanas" reports a skeleton of this species found at Cojímar, a few miles east of Havana, Cuba, which might be regarded as inside the Gulf of Mexico.

On April 30, 1955, while aboard the exploratory fishing vessel "Oregon" of the United States Fish and Wildlife Service near the middle of the Gulf of Mexico, the first author observed two false killer whales at latitude 26° 30' N., longitude 89° 15' W. At about 1 P.M. we were occupied at hauling in several miles of tuna long-line fishing gear when the two whales appeared alongside the vessel. One of them passed leisurely behind the stern several times. This individual was estimated to be 15 feet long. Both then disappeared. About 30 minutes later the long-line brought into view what presumably was one of these two individuals. Its tail was entangled in the long-line. Five rifle shots were necessary to subdue the whale before it could be drawn up to the vessel. It was hoisted aboard, measurements (straight line) were taken, and the head was removed and refrigerated. The head was subsequently

deposited in the American Museum of Natural History (A.M.N.H. No. 169488).

Our measurements of this female false killer in table 1 compare

TABLE 1
MEASUREMENTS (IN MILLIMETERS) OF FEMALE FALSE KILLER WHALE FROM
GULF OF MEXICO AND OF THREE FEMALES OF APPROXIMATELY
THE SAME LENGTH STRANDED IN SCOTLAND

| | Gulf | Scotland | | |
|---|------|----------|------|------|
| Length (snout tip to tail notch) | 4210 | 4265 | 4290 | 4315 |
| Snout to posterior margin of blowhole | 437 | 482 | 457 | 482 |
| Snout to eye | 401 | 457 | 381 | 457 |
| Snout to angle of gape | 391 | 381 | 381 | 330 |
| Snout to dorsal fin insertion | 1618 | 1695 | 1644 | 1877 |
| Snout to flipper insertion | 680 | 737 | 711 | 737 |
| Snout to anus | 2622 | — | — | — |
| Center of eye to ear aperture | 131 | — | — | — |
| Flipper insertion to anus | 1970 | — | — | — |
| Horizontal diameter of eye | 33 | — | — | — |
| Gape length | 344 | — | — | — |
| Dorsal fin base length | 481 | 618 | 618 | 720 |
| Dorsal fin length to tip | 489 | — | — | — |
| Dorsal fin height (vertical) | 298 | 330 | 305 | 254 |
| Flipper length | 524 | 648 | 507 | 559 |
| Flipper width at origin | 209 | 229 | 178 | 254 |
| Flukes, total width | 913 | — | — | 1017 |
| Breadth of blowhole | 55 | — | — | — |
| Least width of caudal peduncle | 69 | — | — | — |
| Center of eye to angle of gape | 46 | — | — | — |
| Head depth at blowhole | 360 | — | — | — |
| Body depth at dorsal fin insertion | 684 | — | — | — |
| Body depth at anus | 451 | — | — | — |
| Body depth 75 cm. from caudal notch | 332 | — | — | — |

moderately well with those available for the three females of this species reported by Peacock *et al.* (1936, p. 96), which are nearest ours in size and exceed its total length only by 2, 3, and 4 inches, respectively. The only measurement in which it compares badly is that of the base length of the dorsal fin, which is at best a most unsatisfactory measurement for intra-generic comparison because different investigators inevitably must judge differently where it begins and ends and because, as Peacock *et al.* (1936, p. 104) show us, the fin varies greatly in shape.

The specimen was neither lactating nor apparently pregnant, but

judging from the worn condition of its teeth, it was an adult. Data published by Peacock *et al.* (1936, p. 98) indicate that of their 27 female specimens the smallest pregnant one was just 2 inches longer than ours. Their females reached lengths as great as 15 feet, 7 inches. The color of the Gulf of Mexico false killer was a uniform satiny black. When it was first taken from the water, its skin showed a large number of blotches with wrinkled markings that appeared to be scars; however, these had completely disappeared within an hour. Its stomach contained three pairs of large squid beaks and several pieces of partially digested squid. Judging from the size of these fragments, the estimated weight of a whole squid of the kind eaten would have been 15 to 20 pounds.

Although false killers have blundered into shallow waters and stranded to die on the shores of a number of parts of the world, records of this animal's being seen alive in American waters, stranded or free swimming, are quite rare. Another such occurrence may be reported here. The second author has examined a life-size model cast from a 12-foot female false killer which Al Pflueger of North Miami, Florida, had made some years ago and which still hangs in his garage. Pflueger explained that charterboatman Stirling Stuart of Miami Beach had harpooned this *Pseudorca* as it swam in a school of larger individuals over a place known to sport fishermen as Amberjack Hole, about one-half a mile out in the ocean from Miami Beach, Florida. Pflueger stated that it had "two and one-half amberjacks" (*Seriola lalandi*) in its stomach. He would make no guess even at the year that this took place, but it must certainly have been in the 1930's. Report of this occurrence was overlooked in an earlier paper by Moore (1953).

Our table 2 reveals that while the 15 American occurrences of *Pseudorca crassidens* are spread over 84 degrees of latitude, eight of them lie between latitudes 23° N. and 27° N. These 4 degrees of latitude need not, however, be thought to be inhabited more densely or visited more frequently by the false killer whale than the next 40 degrees or more to the south. In that vast part of this hemisphere there have been few resident biologists to examine and publish reports upon cetaceans which strand. Nor do there appear to be published local lists of marine mammals except for Cuba and Jamaica. It is to the north of latitude 27° N. that the contrast indicates a greater scarcity of occurrence of *Pseudorca*. There for many years strandings of other kinds of whales have been investigated and reported upon. The evidence suggests that it is no longer quite accurate to give the range of this animal indiscriminately as "all seas" or "cosmopolitan." Instead of considering its

TABLE 2
AMERICAN RECORDS OF *Pseudorca crassidens*

| Locality | Latitude | Evidence | Discovered | Reported | Authority |
|--|-------------------------|------------------|---------------|------------|--------------------|
| Puget Sound, Washington | 48° 25' N. ^a | Skull, etc. | May 16, 1937 | 1948 | Scheffer and Slipp |
| Hatteras Village, North Carolina | 35° 10' N. | Skull, etc. | July 5, 1935 | 1937 | Brimley |
| San Nicolas Is., California | 33° 15' N. | 4 skulls | 1949 | 1951 | Stager and Reeder |
| Jupiter Light, Florida | 26° 57' N. | Photographs | Mar. 15, 1936 | 1937 | Donnelley |
| Gulf of Mexico | 26° 30' N. | Head | Apr. 30, 1955 | This paper | |
| Deerfield, Florida | 26° 15' N. | — | 1922 | 1937 | Brimley |
| Miami Beach, Florida | 25° 45' N. | Model | — | This paper | |
| Miami Beach, Florida | 25° 44' N. | Skull | — | 1953 | Moore |
| Princeton, Florida | 25° 33' N. | Skull, etc. | 1918 | 1920 | Miller |
| Pichilingue Bay, Baja California | 24° 05' N. | Skull, etc. | 1888 | 1920 | Miller |
| Cofimar, Cuba | 23° 08' N. | Skeleton | — | 1954 | Aguayo |
| Acapulco, Mexico | 16° 45' N. | Photograph | Apr. 1, 1934 | 1936 | Lönnberg |
| Aves Is., Venezuela | 12° 05' N. | Skull, etc. | 1883 | 1920 | Miller |
| Paita, Peru | 05° 00' S. | Rostrum and jaws | — | 1866 | Cope |
| Samborombon Bay, Argentina | 36° 00' S. | Skull | — | 1869 | Burmmeister |

^a Although found in southern Puget Sound at about latitude 47° 02' N., the animal must have entered the Sound at the more northern latitude.

occasional appearance in continental shelf waters of the northern temperate zone to be only invasions from a preferred habitat on the deep sea, it appears, we should regard them as occasional invasions from tropical or subtropical waters. Even so, it does not seem likely that *Pseudorca* will be found to be a commonly seen inhabitant or visitor in the Gulf of Mexico. During the past five years the first author has participated in 21 cruises of the "Oregon" to all parts of the Gulf in all seasons, entailing over 450 days at sea, without observing this species.

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