

SHORT PAPERS AND NOTES

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SHARKSUCKER (*ECHENEIS NAUCRATES*) ON A BOTTLENOSE DOLPHIN (*TURSIOPS TRUNCATUS*) FROM SARASOTA BAY, FLORIDA, WITH COMMENTS ON REMORA–CETACEAN ASSOCIATIONS IN THE GULF OF MEXICO.—The whalesucker's (*Remora australis*) preference for attaching to whales and dolphins (cetaceans) has led to a common assumption that any remora found on a cetacean belongs to this species (see Fertl and Landry, 1999, 2002 for a discussion). It has been demonstrated, however, that other remora species associate with cetaceans; for example, a remora collected from a live-stranded bottlenose dolphin (*Tursiops truncatus*) in Galveston, TX, was identified as a sharksucker, *Echeneis naucrates* (Fertl and Landry, 1999). We provide additional evidence that the sharksucker may attach to nearshore cetaceans more often than originally considered.

A 266-mm (standard length) sharksucker was found attached to a 277-cm-long male bottlenose dolphin stranded dead in Little Sarasota Bay on the central west coast of Florida (27°11'15"N 82°29'54"W) on 13 June 2001. This dolphin was seen in the same general area—a few days before stranding—and appeared to be swimming with difficulty. No remoras were directly observed on the dolphin at that time or when its carcass was later towed to shore. A remora was noticed when the dolphin's body was moved onto a stretcher for transport. The duration of the remora's attachment to the dolphin is not known. A long-term study on the behavior and social structure of bottlenose dolphins (see Scott et al., 1990 for a review) had repeatedly observed this dolphin in the coastal waters of Sarasota Bay and adjacent barrier islands since 1975.

The remora was identified (Lachner, 1966; Hoese and Moore, 1977; Lachner in Fischer, 1978; Murdy, 1983; Lachner in Whitehead, 1986) as a sharksucker on the basis of the following characteristics: elongate body, depth 14.3% of standard length; 20 disc lamellae; disc length 26.3% of standard length; 32 dorsal and 29 anal rays; caudal fin rounded with middle rays slightly produced; white border on dorsal, anal, and caudal fins; pectoral fin pointed; some semblance of a dark longitudinal band on the anterior trunk; and lower jaw with fleshy flap. This specimen represents the sec-

ond published record of a sharksucker–cetacean association for the Gulf of Mexico as well as globally.

Sightings of cetaceans with remoras in the Gulf of Mexico include coastal and offshore bottlenose dolphins (e.g., Shane, 1978; Fertl and Landry, 1999; D. Fertl, pers. obs.), Atlantic spotted dolphins (*Stenella frontalis*) (e.g., Mahnken and Gilmore, 1960; D. Fertl, pers. obs.), Clymene dolphins (*S. clymene*) (K. D. Mullin, NMFS-SEFSC, Pascagoula, MS, pers. comm.), pantropical spotted dolphins (*S. attenuata*) (D. Fertl, pers. obs.), striped dolphins (*S. coeruleoalba*) (K. D. Mullin, pers. comm.), spinner dolphins (*S. longirostris*) (D. Fertl, pers. obs.), rough-toothed dolphins (*Steno bredanensis*) (K. D. Mullin, pers. comm.), and sperm whales (*Physeter macrocephalus*) (Peterson and Hoggard, 1996). Remoras observed (photodocumentation is available for some observations) on cetaceans in offshore Gulf waters have been large and fleshy bodied, whereas those found on coastal bottlenose dolphins are smaller and more slender bodied (D. Fertl, pers. obs.). The only published accounts of remoras collected from cetaceans in the Gulf of Mexico include a sharksucker on a bottlenose dolphin that stranded in Galveston, TX (Fertl and Landry, 1999) and a whalesucker on a stranded sperm whale in Mississippi (Peterson and Hoggard, 1996).

Shane (1978) published the first account of a remora, tentatively identified as a whalesucker, associated with a cetacean in the coastal waters of Texas. She did note, however, that the remora was more slender bodied than the "typical" whalesucker and perhaps belonged to a different species. We suggest, on the basis of this note, the work by Fertl and Landry (1999), and personal observations by the senior author of cetacean-remora associations in various locales in the Gulf of Mexico, that sightings of small, slender-bodied remoras on bottlenose dolphins in bays may be of the nearshore-occurring sharksucker, whereas associations occurring in offshore waters are more likely to involve the fleshy-bodied, pelagic whalesucker. Sharksuckers also have been collected from the West Indian manatee (*Trichechus manatus*), a coastal species (E. H. Williams, University of Puerto Rico, pers. comm.). Although the aforementioned observations may suggest definitive nearshore or offshore distributions for some remora species or their life

stages (or both), confirmation of their distribution is possible only with further studies that can provide us with a better understanding of remora ecology, including any role of "host affinity." As such, we recommend continued collection of remoras from stranded cetaceans and photographs of their associations with live counterparts to assess this suggestion.

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LITERATURE CITED

- FERTL, D., AND A. M. LANDRY JR. 1999. Sharksucker (*Echeneis naucrates*) on a bottlenose dolphin (*Tursiops truncatus*) and a review of other cetacean-remora associations. *Mar. Mamm. Sci.* 15:859–863.
- , AND ———. 2002. Remoras, p. 1013–1015. *In: Encyclopedia of marine mammals.* W. F. Perrin, B. Würsig, and J. G. M. Thewissen (eds.). Academic Press, San Diego, CA.
- FISCHER, W. 1978. FAO species identification sheets for fishery purposes. Western Central Atlantic (Fishing Area 31). Vol. II. FAO, Rome.
- HOESE, H. D., AND R. H. MOORE. 1977. Fishes of the Gulf of Mexico. Texas A&M Univ. Press, College Station, TX.
- LACHNER, E. A. 1966. Order Echeineida, Family Echeineidae: diskfishes, p. 74–80. *In: Fishes of the Marshall and Marianas islands.* L. P. Schultz (ed.). United States National Museum Bulletin 202.
- MAHNKEN, T., AND R. M. GILMORE. 1960. Suckerfish on porpoise. *J. Mammal.* 41:134.
- MURDY, E. O. 1983. Saltwater fishes of Texas—a dichotomous key. Texas A&M Univ. Sea Grant College Program, TAMU-SG-83-607.
- PETERSON, J. C., AND W. HOGGARD. 1996. First sperm whale (*Physeter macrocephalus*) record in Mississippi. *Gulf Res. Rep.* 9:215–217.
- SCOTT, M. D., R. S. WELLS, AND A. B. IRVINE. 1990. A long-term study of bottlenose dolphins on the west coast of Florida, p. 235–244. *In: The bottlenose dolphin.* S. Leatherwood and R. R. Reeves (eds.). Academic Press, San Diego, CA.
- SHANE, S. H. 1978. Suckerfish attached to a bottlenose dolphin in Texas. *J. Mammal.* 59:439–440.
- WHITEHEAD, P. J. P. 1986. Fishes of the north-eastern Atlantic and the Mediterranean. Vol. 3. FAO, Rome.
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