

THE ROUGH-TOOTHED PORPOISE, *STENO BREDANENSIS*, IN THE
EASTERN TROPICAL PACIFIC

The rough-toothed porpoise, *Steno bredanensis* (Lesson), is common in Hawaiian waters (Tomich, 1969; Norris, 1974), but has only been recorded twice from the eastern Pacific. A weathered skull was collected on the beach in Marin County, California, in 1946 (Orr, 1951), and a skull with mandible, 12 vertebrae, and one rib were found on Isla Santa Cruz, Archipiélago de Colon (Galapagos Islands) in 1964 (Orr, 1965). The purpose of this note is to report four additional records, all based on captures, that firmly establish the species as a member of the tropical fauna of the eastern Pacific.

On 4 May 1971, a tuna seiner captured a 212-centimeter female in a net set on a mixed herd of spotted porpoise, *Stenella attenuata* (Gray), and spinner porpoise, *S. longirostris*

(Gray), at 7°12' N latitude, 90°11' W longitude. Kenneth Brumley, chief engineer of the vessel, had previously been asked by one of us (Walker) to collect uncommon cetaceans that he encountered in the tuna fishery. He measured the specimen and collected and froze the head, one flipper and the flukes. The prepared skull and flipper and photographs and external measurements of the head, flipper, and flukes have been deposited in the U.S. National Museum, Washington, D.C. (USNM 504,113). The statement by Leatherwood *et al* (1972) that "several [rough-toothed porpoise] were recently collected near Clipperton Island" refers to this previously unpublished record.

On 10 February 1974, at 14°36' N latitude, 104°19' W longitude, three to four rough-toothed porpoise together with about 300 spotted porpoise were captured by a purse seiner. Gordon M. Armstrong, a National Marine Fisheries Service observer on the vessel, identified the animals in the water from the diagnostic large eyes and flippers and lack of demarcation between the long beak and the melon. They remained in a tight group, diving and circling in the net together with the spotted porpoise. They were released from the seine unharmed during the porpoise-rescue maneuver called "backing down" (operation described in Perrin, 1968). Armstrong assisted one individual over the corkline and thus got a close look at it. Fifteen tons of yellowfin tuna, *Thunnus albacares* Bonnaterre, were captured. The sea surface temperature was 27° C.

The same vessel subsequently encountered *Steno* again on the same cruise, at 14°22' N latitude, 102°40' W longitude on 22 February 1974. The net was set on approximately 400 spotted porpoise and 40 bottlenose porpoise (*Tursiops* sp.). One rough-toothed porpoise is known to have died in the net and was retrieved. No others were positively identified in the water, although some of the animals released alive from the net and thought to be *Tursiops* may have been *Steno*. Twenty-five tons of yellowfin tuna were captured. The sea surface temperature was 28° C. The specimen, a 216-centimeter male (length measured from tip of upper jaw to base of notch in flukes) weighing 114 kilograms, was frozen in the vessel's fish hold and subsequently shipped frozen to the U.S. National Museum, where it was photographed, measured, and preserved entire (USNM 504,092) after the testes and stomach had been removed. The left and right testes measured 37.0 by 10.0 by 7.5 and 39.0 by 11.0 by 7.5 centimeters, respectively. The stomach contained remains of molluscs and fish, which were preserved for later identification.

On 15 February 1974, at 10°13' N latitude, 91°30' W longitude, another tuna seiner captured approximately 10 rough-toothed porpoise with about 1800 spinner porpoise and 200 spotted porpoise. A National Marine Fisheries Service observer aboard, Thomas Duffy, collected the head and stomach of a 189-centimeter male that died in the set. Ninety tons of yellowfin tuna were captured in the set. The sea surface temperature was 27° C. The frozen *Steno* head was forwarded to the U.S. National Museum, where the skull was prepared and placed in the collection (USNM 504,089). The stomach contents have not yet been examined.

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