

Marine Turtle Newsletter

Juvenile Leatherback Turtle Caught by Longline Fishing in American Samoa

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The distribution of the highly pelagic leatherback turtle (*Dermochelys coriacea*) at sea, especially the juveniles, is largely unknown (e.g., Pritchard and Trebbau, 1984). Small leatherbacks (19 cm SCL, 11.5 cm SCL, and 29 cm CCL) have stranded in the Caribbean region in recent years (Horrocks, 1987; Johnson, 1989; Sparks, 1993), but only two specimens have been documented for the Pacific Ocean. One (69.4 cm) was photographed and tagged near Satawal, Yap District, Micronesia (McCoy, 1974; Pritchard, 1977) and the other (15.6 cm) was collected off Acapulco, Mexico (Brongersma, 1970). In this note I describe a small leatherback recovered from a longline fishing operation in the waters of American Samoa.

At 0930 hr on 17 August 1993, Captain Paul Pedro and the crew of the F/V *Sausauimoana* pulled up a freshly dead leatherback about 5.6 km south of Swains Island (11°7.9'S, 171°04.0'W), American Samoa. Water depth in this area is about 1400 m. The turtle weighed 7 kg and measured 42.7 cm curved carapace length (CCL) and 39.3 cm straight carapace length (SCL). When the turtle was hauled out on the deck, four remoras (probably *Echeneis* sp.) detached themselves. The turtle was placed on ice and frozen upon arrival in Pago Pago three days later.

The turtle had been caught by a longline hook on the dorsal surface of its left front flipper, near the carpal bones. The hook was baited with sama (*Cololabias saira*). The longline was in the water for about 12 hours during the night before the turtle was discovered. Hooks used in this fishing operation measured 70 mm long and 36 mm wide. The 31 km longline contained 347 hooks and 168 light-sticks (on every other hook). The clear monofilament leader was 2 mm in diameter and 23 m long. Because the leader was attached some distance from the nearest float, the turtle may have been hooked as much as 40 m below the surface.

Leatherbacks have not been previously reported from American Samoa. This is the first leatherback seen by Captain Pedro in 32 years of fishing in the waters of American Samoa. Even though the Solomon Islands is the nearest known leatherback nesting area to Samoa (SPREP, 1993), the prevailing wind and currents are from the southeast. This leatherback may therefore have come from one of the major nesting beaches on the Pacific coast of Mexico or Costa Rica. Leatherbacks are the most pelagic of all turtles

(Pritchard and Trebbau, 1984), and little is known about their distribution once the hatchlings depart from natal beaches.

Longline fisheries are known to catch leatherbacks in the northeastern Caribbean (Chambers and Lima, 1990; Tobias, 1991; Fuller et al., 1992), the southeastern Pacific (Frazier and Brito Montero, 1990), and near Hawaii (Skillman and Balazs, 1992). Incidental capture of sea turtles by longlining is of increasing concern to researchers and conservationists worldwide. In our case, the frozen turtle was transferred to the Marine Turtle Research Program of the U. S. National Marine Fisheries Service (NMFS) in Honolulu. An array of studies, including molding and casting, will be carried out to utilize this rare specimen to the fullest extent possible. I thank George Balazs (NMFS, Honolulu) for providing many helpful suggestions to improve this manuscript and for supplying copies of the pertinent literature on leatherbacks. I also thank Peter Craig (DMWR, Pago Pago) for reviewing an earlier draft of this manuscript.

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