

## Obake Turtles of Hawaii

MARC R. RICE<sup>1</sup> AND GEORGE H. BALAZS<sup>2</sup>

<sup>1</sup>Hawaii Preparatory Academy, 65-1692 Kohala Mt. Road, Kamuela, Hawaii 96743, USA

<sup>2</sup>NMFS, Southwest Fisheries Science Center, Honolulu Lab., 2570 Dole St., Honolulu, Hawaii 96822-2396, USA

Green turtles (*Chelonia mydas*) in the Hawaiian Islands exhibit some interesting and unusual behaviors (Whittow and Balazs 1982; Balazs 1996; Rice *et al.* 2000). Digital video was used to capture two of these activities in real time. Juvenile green turtles are seen colored bone-white from silt on their carapace as they bask motionless on lava rock shores at Kiholo Bay on the Island of Hawaii. At Midway Atoll, 2000 km away at the opposite end of the Hawaiian chain, green turtles are pictured as they rest underwater at night beneath a cargo pier in a surrealistic setting of rusting crossed girders and cement debris. We gave the turtles found in these two areas the name "Obake", the Japanese word for ghost. Our 11 minute video presentation shows the eerie and strangely attractive contrasting images of the obake turtles resting in murky waters late at night and basking on black rocks in the bright midday sun.

### Literature Cited

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## Seasonality and Capture Location Relationships for Sea Turtles in New York State

VANESSA SAARI<sup>1</sup>, BRETT PURINTON<sup>1</sup>, SAM S. SADOVE<sup>2,3</sup>, AND SANDRA E. SHUMWAY<sup>1,3</sup>

<sup>1</sup>Natural Science Division, Southampton College of Long Island Univ., Southampton, New York 11968, USA

<sup>2</sup>Puffin Consulting, 126 Green Street, Jamesport, New York 11947, USA

<sup>3</sup>Coastal Research and Education Society of Long Island, Box 1760, Southampton College, Southampton, New York 11968, USA

This study represents the 18<sup>th</sup> year of a continuing study (Sadove *et al.* 1998) of the temporal occurrence of sea turtles caught in pound nets around the eastern end of Long Island, New York. Long Island is 120 miles long and roughly oriented in an east-west plane divided into two fork-like peninsulas on its eastern end.

A reward system was established with local fishermen to provide an incentive to report and hold the turtles after capture. Reports to a 24 hr pager system by the fishermen ensured that the sea turtles incidentally caught in pound nets were immediately recovered. Pound net locations were the same as those obtained during the 1997 study using a global positioning system. Pound nets are fixed gear nets consisting of a vertical net running perpendicular to the shore, the "leader", which leads into a box or hexagonal net on its seaward end. Fish migrating along the beach are directed by the "leader" into the trap. Sea turtles swimming near shore are periodically caught in these nets.

Standard morphometrics were taken on the sea turtles caught in the pound nets. Turtles were transported to Southampton College where they were held in flowing seawater tanks for a brief period. Maximum holding time before turtles were tagged and released was forty-eight hours. Whenever possible, turtles were released at or near the original location of capture.

Data collected during 1998 were compared to similar studies conducted over the last seventeen years. These data consist of 519 captures including 101 green, 298

loggerhead, and 120 Kemp's ridley. All turtles captured during this study were juveniles. Mean carapace lengths and standard deviations were greens: 33.04±5.05, loggerheads: 45.52±17.98, and Kemp's ridleys: 2.34±3.53. Arrival of sea turtles into the study area varied by species and date. The earliest and latest captures for greens, loggerheads, and Kemp's ridleys were June 30, 1994, June 24, 1991, and July 9, 1991 respectively.

Using this data set, a trend between capture locations for sea turtles and time of year was observed. **Figure 1** illustrates captures made during the first third of the season (June 1–July 31). A clear concentration around the south shore of the north fork is demonstrated. Captures made during the middle third of the season (Aug. 1–Sept. 30) are shown in **Figure 2**. During this time period, the captures were more generally dispersed throughout the waters of eastern Long Island. Captures made during the last third of the season (Oct. 1–Nov. 30) are shown in **Figure 3**. During this period the turtles tend to be more prevalent around the north shore of the south fork. These figures collectively demonstrate a temporal distribution of sea turtles around the eastern end of Long Island.

Distribution of sea turtles in the waters of eastern Long Island during 1998 was similar to that observed during the previous seventeen years. At the start of the season, sea turtles are probably still moving in a northerly direction and move close to shore to feed, resulting in a majority of incidental captures along the south side of the north fork of



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Compilers:

Heather Kalb  
Thane Wibbels

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