Special Report on Marine Turtle Activity in the Maunalua Bay Area, Oahu¹

Stacy Hargrove (stacy.hargrove@noaa.gov) Marine Turtle Research Program Pacific Islands Fisheries Science Center

The Marine Turtle Research Program (MTRP) of the Pacific Islands Fisheries Science Center has been collecting data on marine turtle activity (captures, strandings, and nesting) in the Hawaiian Islands since the 1970s. The Hawaiian green turtle population has been steadily increasing since the mid-1980s (Balazs and Chaloupka 2006, Chaloupka and Balazs 2007, Chaloupka et al. 2008). The MTRP has not conducted any ocean capture research in Maunalua Bay; however, due to the calm nature of this bay and its suitable habitat for marine turtles, it is commonly used by MTRP as a release location for rehabilitated turtles being released back to the wild. Local dive operators work at several sites in the bay and report that sightings of green turtles are common. One such site is named "Turtle Canyon" because green turtles can reliably be seen there. Strandings of 173 green turtles have been documented by the MTRP in the Maunalua Bay area since 1982, indicating that the habitat is used as a foraging and resting area by green turtles (Figures 1 and 2). Strandings have been recorded during all months of the year with fewer being reported in the fall and winter months than in the spring and summer months (Figure 3). No hawksbills or other marine turtle species have been reported stranded in this area. Basking by green turtles has not been documented in the Maunalua Bay area and any turtle seen on the beach or shore should be considered stranded and reported to the MTRP at 983-5730. Limited nesting by green and hawksbill turtles has been documented in the main Hawaiian Islands during the summer months; however no nesting has been documented in the Maunalua Bay area.

References:

- Balazs G.H. and M. Chaloupka. 2006. Recovery trend over 32 years at the Hawaiian green sea turtle rookery of French Frigate Shoals. Atoll Res. Bull. 543: 147-158
- Chaloupka M. and G. Balazs. 2007. Using Bayesian state-space modeling to assess the recovery and harvest potential of the Hawaiian green sea turtle stock. Ecol. Model. 205(1-2): 93-109
- Chaloupka M., K.A. Bjorndal, G.H. Balazs, A.B. Bolten, L.M. Ehrhart, C.J. Limpus, H. Suganuma, S. Troeng, M. Yamaguchi. 2008. Encouraging outlook for recovery of a once severely exploited marine megaherbivore. Global Ecol. Biogeogr. 17(2): 297-304

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Figure 1. Green turtle strandings by year in the Maunalua Bay area (1982-2008).

Figure 2. Locations and numbers of green turtle strandings in Maunalua Bay (1982-2008).





Figure 3. Green turtle strandings by month in the Maunalua Bay area (1982-2008).