

# **Special Report on Marine Turtle Activity Along Oahu's South Shore and in the Waikiki Area<sup>1</sup>**

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The Marine Turtle Research Program (MTRP) of the Pacific Islands Fisheries Science Center has been collecting data on marine turtle activity (captures, strandings, nesting, and basking) in the Hawaiian Islands since the 1970s. The Threatened Hawaiian green turtle population has been steadily increasing since the mid-1980s (Balazs and Chaloupka 2006, Chaloupka and Balazs 2007, Chaloupka et al. 2008) and is now well on the road to recovery. A result of the continuing recovery of the population is the common occurrence of resident green turtles in most of the coastal waters throughout the Main Hawaiian Islands. Green turtles forage on algae and sea grass and rest underwater in near shore reef and hard bottom habitats. The less commonly occurring and Endangered hawksbill turtle also utilizes these same habitats.

For the purpose of this report, the north shore is defined as Kaena Point to Kahuku Point, the east shore as Kahuku Point to Makapuu Point, the south shore as Makapuu Point to Barbers Point, and the west shore as Barbers Point to Kaena Point. The Waikiki area is defined as the area between the Ala Wai Yacht Harbor and Diamond Head.

## **Captures**

The MTRP conducted field captures of marine turtles in the Waikiki area of Oahu (Miya and Balazs 1993, Balazs et al. 1994) on 41 occasions from 1990 to 1996. A total of 60 individual green turtles were captured on 83 occasions. Even though field captures were not continued at this site, it is likely the abundance of green turtles in this area has increased as the population has recovered. The MTRP has not conducted captures at other sites along Oahu's south shore.

## **Strandings**

The MTRP documented 764 marine turtle strandings (755 greens, 8 hawksbills, 1 olive ridley) along the south shore of Oahu from 1982 through 2008. Of these, 105 (104 greens, 1 hawksbill) occurred in the Waikiki area (Figures 1 & 2).

## **Nesting**

No green turtle nesting activity was documented on the south shore of Oahu during the 2008 nesting season. However, green turtle nesting was confirmed on the east and north shores of Oahu in 2008. Even though no nesting has been documented on the south shore

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of Oahu, reports of green and hawksbill nesting events in the Main Hawaiian Islands are increasing and south shore beaches provide suitable habitat for marine turtle nesting. Nesting primarily occurs from May through August and hatching continues through November. Beaches should be monitored for nesting/hatching activity during this time period if any beach construction activities are in progress.

### **Basking**

Basking has been documented on the north (Mokuleia to Waialua, Puena Point to Waimea Bay, and Kawela Bay), east (Kahuku) and west (Aki's Cove and Koolina) shores of Oahu. No basking activity has been documented on Oahu's south shore and any marine turtle seen on the beach or shore in this area should be considered stranded and reported to the MTRP at (808) 983-5730.

### **References:**

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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

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Figure 1. Summary of marine turtle strandings along the south shore of Oahu 1982-2008 (755 greens, 8 hawksbills, 1 olive ridley).

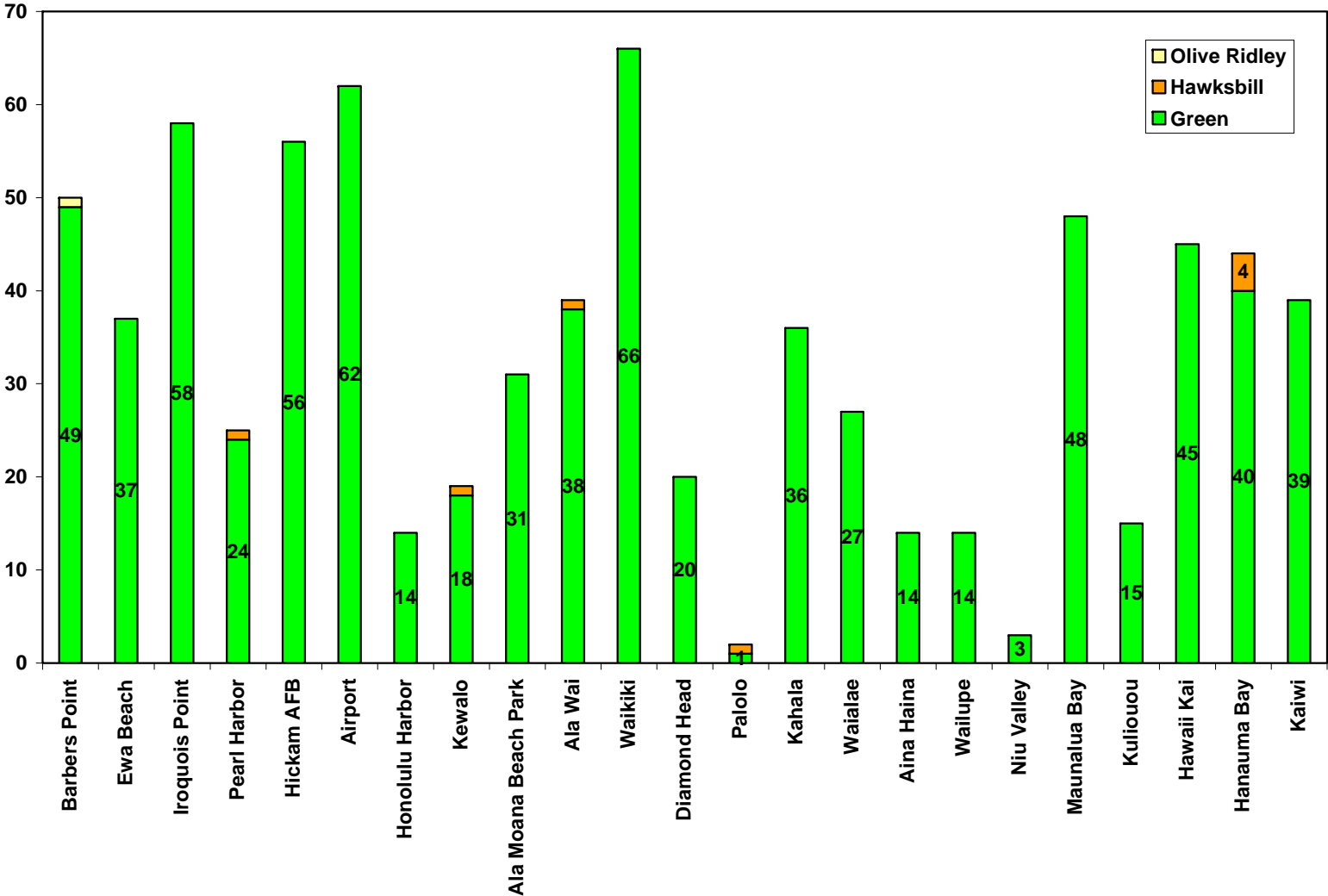


Figure 2. Locations and number of marine turtle strandings by species for the south shore of Oahu and the Waikiki Area (1982-2008).

