

DEPARTMENT OF LAND & NATURAL RESOURCES  
DIVISION OF AQUATIC RESOURCES - MAUI  
70 South High Street, Room #201  
Wailuku, Hawaii 96793  
Phone # (808) 244-2072

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To: Paul Kawamoto, Program Manager  
Through: Randy Honebrink, Education Coordinator  
From: Brooks Tamaye, Information Specialist - Maui  
Subject: Turtle Nest at Maalaea Bay Beach

Attached, is a summary regarding the discovery of a hawksbill turtle nest at Maalaea Bay Beach. The accompanying slides are reprints for your files.

c: George Balazs, NMFS  
(incl. slide reprints)

**Hawskbill Sea Turtle (Eretmochelys imbricata)**  
**Nesting on Maui**

On 7/30/91 at about (0900) Ms. Mary Valley, (879-2678) her daughter, and Ms. Gloriann McDowell (879-4734 work) were walking on Maalaea Bay Beach (Kale'ia). They saw three sea turtle hatchlings making their way to the ocean. They observed the hatchlings for 15-30 minutes. The hatchlings eventually were able to make their way through the shorebreak and swim away.

On 7/31/91 at about (0830) Ms. Valley called and notified me about the event. She and Ms. McDowell described the approximate area where they saw the hatchlings. They also described a sand structure in the vicinity which possibly could have been the nest. However, the structure was partially eroded from wave action and appeared more manmade.

At about (1000) I inspected the area. I found the sand structure which was described, it didn't appear likely that this was the nest. Higher up on the beach and just behind this structure though, was a mound of sand that was relatively undisturbed. It was situated above the mean high tide mark (slide 1). No hatchlings, tracks or any other evidence to indicate the exact location of the nest was observed. I did observe vehicle tire tracks, human footprints, and dog tracks on the beach (slide 2). George Balazs of NMFS was notified.

At about (1830) that evening I returned to the area. The sand mound suspected as being a possible nest was still intact and undisturbed. I conducted another inspection of the area. About fifty feet east (toward Kihei) from this mound I found two dead turtle hatchlings. They were both high on the shoreline above the mean high tide mark. One was fully exposed facing toward the ocean (slide 3&4). The other had only it's head and front flippers exposed (slide 5). Both were dehydrated and probably died from prolonged exposure to the sun. The two specimens were collected for identification. The location was marked and observed till about (2000), no activity was observed.

On 8/1/91 at about (1030) in the morning and again at about (1700) in the afternoon, I inspected the nest site. There were no signs to indicate that more hatchlings had emerged.

There was a concern that humans and animals (mainly dogs and mongoose) may disturb the nest site (slide 6). With the consensus of George Balazs, the nest was excavated on 8/2/91 at (0745) by Skippy Hau, Randy Honebrink, and myself.

Recovered from the nest were 11 live hatchlings averaging 39.3 mm in straight carapace length and 28.1 mm in straight carapace width. These were released successfully. (slide 7)

Nine hatchlings were found out of their shells but dead. These averaged 37.4 mm in straight carapace length and 26.7 mm in straight carapace width. They averaged 13.9 grams.

Eight hatchlings died while emerging from their shells. (slide 8)

Also collected were 87 unhatched eggs, and 86 egg casings (empty shells).

To summarize the data, there were 181 eggs deposited. Eighty-seven (48%) of these did not develop. Eight (4%) died before completely hatching. Nine (5%) died after hatching. Two (1%) died as they exited the nest. Eleven (6%) live hatchlings still buried in the nest were released. We can calculate and assume that 64 (35%) successfully hatched and made it to the surface on their own.

The eleven live hatchlings were found at approximately the same depth as the clutch of eggs. Because of their low number and the compactness of the sand they would probably not have been able to make it to the surface without our assistance.

Two dried hatchlings, two dead hatchlings, two unhatched eggs, and one partially hatched egg were retained for reference and educational purposes. The rest of the specimens were shipped to the NMFS. They were positively identified by George Balazs as being Hawksbill sea turtles (Eretmochelys imbricata).

The area was inspected periodically for about two weeks. No signs of additional nests were observed. About six weeks later the sand mound first suspected as being a nest was excavated. No eggs or remains were found indicating this was not a nest site. There were also no additional reports of nesting activity or sightings to our office.

#### Description of the nesting site:

The area is known by several names, most maps describe it as Maalaea Bay Beach or Kale'ia. The beach extends from the Maalaea Condominiums to the Sugar Beach condos (Kihei). The nest site was located directly across of Kealia Pond and approximately 3/4 of a mile west of the Kealia Condominium in Kihei. It was within about 30 feet of N. Kihei Rd.. The shoreline in this area between Maalaea and Kihei is presently undeveloped. (see map)

Beach material is a soil-sand mixture. The nest was dug high on the beach against a wave-cut, soil-sand bench. (During the highest tides it appears this area may receive some water.) The first eggs were found approximately 18 inches below the surface. The sand was moist and warm compared to the surface sand. The nest extended to a depth of about 29 inches down to an area of compacted soil. (slides 9&10)

WATERBIRD HABITAT

2-0-8-0  
K E A L I A

ALEXANDER & SALDWIN, INC.

NORTH KULE RO.

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A 88

PALALAU



PROTECTIVE SUBZONE  
DLNR 313-1

Maalasa ←

Approximate Area of Nest Highlighted

Kihei →



MAP 52  
KEĀLIA

