

1999 Survey of Green Sea Turtles. Chelonia mydas, Kawāloa Bay, Moomomi, Molokai

What follows is a day by day log of Dr. Richard Langer's and my survey of Kawāloa Bay, Moomomi, Molokai during the 1999 summer season. It is intended to show that no period of time was left out when there might have been lays or hatches that we could have missed. Since the adult turtle tracks almost always remain visible for a week to a month, barring a very strong wind storm, our first walks were approximately every other day. After time for hatching began, we tried to cover every morning since baby turtle tracks are quickly obliterated by drifting sand. Though no adult turtles were seen, as they came in irregularly and at night, it is certain that all the hatchlings seen were green sea turtles.

In 1997 twenty-nine turtles came in, the first, April 29, the last September 1. Of these, 10 failed to dig pits - aborted tracks. There were 6 hatches, the first, July 14, the last Sept. 30. During the 1998 season no turtles came in.

In 1999, thirty two turtles came in, May 18 (?) through August 28. Of these, six were false crawls with no holes being dug. Once the hatches began July 24, eleven nests hatched, the last one being October 21. There was an unusual hatch pattern from several of the hatches. Wandering babies. Babies emerging up to a week after the original hatch. Babies dribbling out over several nights.

The highlights of the summer were the large number of turtles nesting and the large number of hatches. A close second was the presence of monk seals on the beach on five occasions and the nesting of a shear-water just west of Kaiehu Point.

Notdoubt the disturbance made by unusual numbers of campers at the pavilion around Labor Day kept the monk seals from returning more often.

My complete field notes include data on moon phases, weather, fishermen on the beach, state of tides, roughness of water, sand comings and goings, and much about the enormous amount of trash on the beach this year.

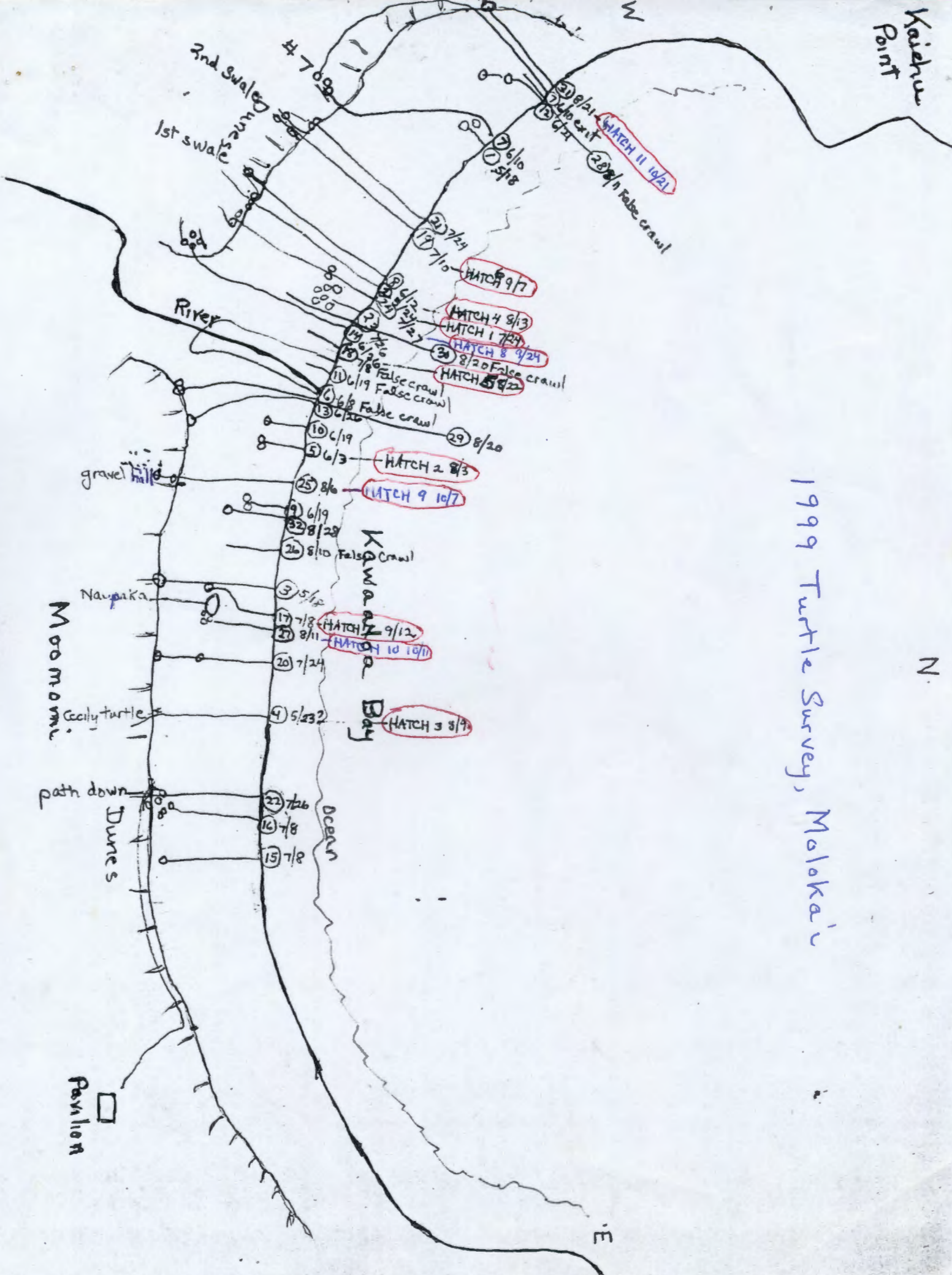
Joan Aidem, 12/1/99

Copy to: *The Nature Conservancy, Molokai*

Kaishan Point

1999 Turtle Survey, Malokai

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Excerpts from Field Notes

Kawa'aloa Bay, Mo'omomi  
Moloka'i

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- May 25 Hatch 1 7/24 ① Two pits just above hi tide line. About a week old?  
 Hatch 3 8/9 ② Fresh tracks to dunes. Three pits. 150' W of river mouth  
 Hatch 3 8/9 ③ Very dim tracks up beach W of Naupaka ending in small dent on dune  
 Hatch 3 8/9 ④ Old tracks up beach by Cecily Turtle, over the dune & disappear  
 Davianna Mc Gregor saw tracks on this beach May 22
- IT=No/New Tracks May 27 NNT  
 May 29 NNT  
 June 1 NNT  
 June 3 Langer reports NNT
- Hatch 2 8/2 June 5 ⑤ Old tracks from hi tide mark to half way up beach. Two holes, one 20' to W, one 20' to E. This must have been made 6/3.  
 June 7 NNT  
 June 9 Langer reports false crawl ⑥ up E side of river, across, and back out W side. Also false crawl far W of Kaehu Pt. near Cappy Somers adz makers site
- June 11 ⑦ Turtle has gone inland probably night of June 9, next to ①, mounted dune, hole near top, hole just over top, 3rd hole part way down back side of dune, went down into rocky ditch behind dune, wandered around, went W & up a NS dune, over the top, down grassy side, onto sand to ocean. (unusual behavior)
- Hatch 4 8/13 June 13 ⑧ Langer reports new tracks going in W of 2 W of river. Hole in top of dune.  
 June 15 NNT  
 June 17 NNT  
 June 19 Langer reports NNT
- June 21 ⑨ Between ③ & ⑤ two pits dug a very short way up beach. Very windy stinging sand. Hard to see. Probably dug the 19th.  
 ⑩ Another short track with possible hole not far above hi tide line  
 ⑪ Short track, false crawl on other side of river opening
- June 23 ⑫ Langer reports one new track on W end of beach, E of where ⑦ went back into ocean. Part way across sand beach. Two pits. Dick thinks this was night of June 21

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June 25 NNT

June 27 (13) Langer reports turtle came in probably night of 25th. Crossed sand to foot of gravel dune, made 1 pit, returned to sea.

Hatch 5 8/22

(14) Turtle came in on W side of river, Langer reports, went up swale & on ocean side of dunes, dug 4 holes & returned to sea.

June 30 NNT

July 2 NNT Langer reports

July 4 NNT

July 5 Langer reports NNT

July 6 NNT

July 7 NNT

July 9 (15) Langer reports new track, 1 hole about 1/4 way W of parikan to river

(16) " " turtle track below "path down", 3 holes

Hatch 7 9/12

(17) " " Track at Naupaka. 1/2 way up beach, 1 hole

(18) " " False crawl about 2/3 way across river

Hatch 6 9/7 July 11 (19) Turtle has walked onto dune at 2nd swale W of river, dug 3 holes

July 13 NNT Langer reports

July 15 NNT

July 17 NNT

July 19 NNT Langer reports

July 21 NNT " "

July 23 NNT

July 25 (20) Track goes 1/2 way up beach halfway between Cecily Turtle & Naupaka, one hole; a second hole upon dune side.

(21) Turtle has come in & dug 2 pits just below vegetation on side of dune W of 2nd swale past river mouth

Hatch 1 Strange hatch. About 36 babies only reached the ocean judging from the tracks. One dead baby with throat torn out & mud plastered plastron at foot of dunes. One live baby harassed by crab on dry sand above hi tide. Other tracks wandering in circles & up into dunes disappearing into Kigwe & Ipomea. Many lost babies. This is tracks @ 5/24 edge of dune 150' W of river mouth

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July 26 NNT

July 27 Langer reports (22) near last path down to beach before Cecily Turtle three holes in bank. Turtle had to scabble up steep 8' bank from ocean to get onto beach.

(23) West edge of river mouth. Six pits where sand levels to form beach

Hatch 8 9/24 July 28 (24) Tracks W of river mouth. Two holes on flat of beach at level of (23). Then turtle dug two more holes at base of dunes.

July 30 NNT Langer reports

Aug 1 NNT

Aug 3 Langer reports HATCH 2. Three baby turtle tracks coming from track (5) 6/3. Two baby turtles at surface in bright sunshine. Dick escorted them to the ocean so they wouldn't dry up. Later in the afternoon he found a 6th baby at the surface. Escorted to ocean.

At 7 PM I found the nest + waited. Just after dark at 7:40 PM

I observed 9 babies emerge + go to the ocean. No more after that.

Aug 4 NNT No more activity at hatch 2. That's only 15 babies there.

Aug 6 Langer reports 14 more baby tracks from hatch 2. One dead baby in sand.

Hatch 9 10/7 Aug 7 At least one more turtle right at surface of hatch 2. Inva flying low overhead.

(25) New track up to gravel dune, up E side of dune, pit dug above bone area, another pit near bottom of dune

Aug 8 Five more babies from Hatch 2 have come out overnight. One dead baby on the surface. I erased all tracks.

Aug 9 Langer reports 7 new tracks from Hatch 2

Aug 10 Hatch 3 Just W of Cecily Turtle 18 babies hatched last night. More just under the surface. Which lay this is questionable.

It must be (4) of 5/23. It's certainly no later than that. That's 78 days. One more turtle from Hatch 2 - confused, circled mawka, dead on sand.

Aug 11 Langer reports 12 more babies from Hatch 3 and one more from Hatch 2. That's 30 altogether from Hatch 3 and 45 altogether from Hatch 2

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Aug 11 (continued) (26) Abortive crawl half way to dunes & back between naupaka + (25)

Hatch 10 10/11 Aug 12 Langer + Aidem (27) Track just E of naupaka going right up to it; 3 holes. (28) Abortive crawl just W of (12) near Kaiehu Pt

Aug 13 Langer reports NNT

Aug 14 Hatch 4 from 2nd swale low on the dune. This is track (8) from 6/12. About 60 babies to the water. One went astray, Perhaps crabs. Some sort of commotion on the track but no foot prints

Aug 15 NNT Iwa flying over W end of beach

Aug 16 NNT Langer reports

Aug 17 Eight to 13 new baby tracks at (8) from Hatch 4

Aug 18 Langer reports 2 more babies from Hatch 4

Aug 19 NNT

Aug 20 NNT

Aug 21 (29) New track up river opening to foot of dune at E river entrance. Two pits.

(30) False crawl up into river mouth, looped & went back out.

Hatch 11 10/11 Aug 22 (31) Track came in about 150' E of Kaiehu Pt, crossed beach, climbed bank onto grass edge, dug huge hole, went back out to sea skirting pit (12)

Aug 23 Hatch 5 Langer reports. This is from track (14) laid June 26. Dick counted tracks of 44 babies.

Aug 24 Eight to 10 new tracks from Hatch 5. One as far W as 1st swale, many wandering before arriving at ocean, one ending in what appears to be a struggle with crabs

Aug 25 NNT Langer reports

Aug 26 NNT " " A Camarce girl says there was a large hatch in Halawa last weekend.

Aug 27 NNT but a small monk seal on W end of beach directly makai of (7) Either a female or a young. Very shy. Saw me coming & slid off into water when I was 150' away.

Aug 28 NNT Langer reports.

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Aug 29 (32) New track E of gravel dune. She came up about 50' above hi tide, dug a large pit + went back out to sea.

Aug 30 NNT

Aug 31 NNT Langer reports

Sept. 1 NNT

Sept 2 NNT Langer reports

Sept. 3 NNT

Sept. 4 NNT Langer reports

Sept 5 NNT 6 trucks + their occupants camped in front of pavilion.

Sept. 6 NNT Langer reports

Sept 7 NNT A small monk seal has come in about 100 yds E of Kaiehu Pt. Left a track + 3 gouges in the sand. Probably left when it saw me coming.

Sept. 8 Hatch 6 Langer reports. This is from (19) laid 7/10 in the second swale. Tracks of 80+ babies toward the ocean. Large monk seal

~~Sept 9~~ at edge of water below Cecily Turtle. An hour later when they came back she was still there.

Sept. 9 NNT Big fat ♀ monk seal sleeping at water's edge below pavilion. Watched her for an hour. Mostly dormant. Returning fishermen said she had been there at 7AM, an hour before I came. She is untagged with a scar 1/2 way down her side. I feel certain that this is the same seal that gave birth at Kalapapa the last three summers. The fishermen had seen her here yesterday + reported her to DLNR. She looked up a few times. Stuck her head in the sand once + pushed along til her head was completely covered. Stayed that way 15 seconds, raised head + went on sleeping. A couple of times water washed up + covered her head but she didn't move. Once a crab came up + probed her nose. With a mighty snuffk she blew it afoot away. The crab did not approach again.

Sept. 10 NNT Langer reports. The seal this AM is a little farther W.

Sept. 11 NNT " " No seal. Lots of campers in front of pavilion.

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- Sept. 12 Two new baby tracks from Hatch 6. Many campers in front of pavilion.
- Sept. 13 Hatch 7 Langer reports a massive hatch W. of naupaka & higher up the beach. This is lay 17 of 7/8. Impossible to count tracks.
- Sept. 14 NNT
- Sept. 15 NNT Langer reports
- Sept. 16 NNT
- Sept. 17 NNT
- Sept. 18 NNT Langer reports
- Sept. 19 NNT
- Sept. 20 NNT Langer reports
- Sept. 21 NNT
- Sept. 22 NNT Langer reports
- Sept. 23 NNT
- Sept. 24 NNT
- Sept. 25 Hatch 8 Langer reports lay (24) has hatched. This was laid 7/27. He counted 65 + or - tracks & one baby that resident fishermen had found tangled in a cargo net on the sand & released in the ocean.
- Sept. 26 NNT Arlene Dibben on a nature walk found & marked a shearwater nest W of Kaiehu Pt. This is the first shearwater nest anyone can remember at Moomomi. Notified Nature Conservancy.
- Sept. 27 Two new baby tracks from Hatch 8. Evidence of a monk seal on the beach near Cecily Turtle. Probably last night.
- Sept. 28 NNT Langer reports
- Sept. 29 One more baby track from Hatch 8
- Sept. 30 NNT Langer reports.
- Oct. 1 NNT
- Oct. 2 NNT Langer reports
- Oct. 3 NNT
- Oct. 4 NNT Langer reports
- Oct. 5 NNT " "
- Oct. 6 NNT " "



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Oct. 7 No observations — broken car.

Oct. 8 Hatch 9 Lay (25) of 8/6 on gravel hill, Langer reports, 70+ tracks

Oct. 9 NNT Langer reports

Oct. 10 Skipped

Oct. 11 NNT Maha Forbes reports

Oct. 12 Hatch 10 Langer reports at lay (27) 8/11 by the naupaka. Large hatch but too close to water to differentiate & count tracks.

Oct. 13 NNT Langer reports

Oct. 14 NNT " "

Oct. 15 NNT " "

Oct. 16 NNT " "

Oct. 17 Skipped

Oct. 18 NNT Langer reports

Oct. 19 NNT " "

Oct. 20 NNT " "

Oct. 21 NNT

Oct. 22 Hatch 11 at lay (31) at W end of beach, the pit up in the edge of the grass laid 8/21. I could only count 45 baby turtle tracks for sure.

Oct. 23 NNT Langer reports

Oct. 24 NNT

Oct. 25 NNT Langer reports

Oct. 26 NNT

Oct. 27 NNT

Oct. 28 NNT Langer reports

Oct. 29 NNT " "

Oct. 30 NNT " "

Closing survey.