Green Sea Turtle Nesting Survey, Moloka'i, 2010

Participants

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2010 Green Sea Turtle Nesting Survey Kawa'aloa Bay, Moloka'i

This survey was done by a group of volunteers on behalf of Nature Conservancy of Hawaii Molokai, under direction of George Balazs of the National Marine Fisheries Service in Honolulu.

The 2010 Green Sea Turtle nesting survey was carried out from April 2 until Nov 26. From April 2 to May 12 the beach was checked two to three times a week. May 13 and forward observers walked the beach from East to West each morning, with the exception of 1 day in June, 2 days in July, 2 days in October and 4 days in November when volunteers were not available or access to the beach was not possible.

April 9th all location markers were refreshed. The procedures for identifying and recording the excavations are those that were used in 2009. Recording & identifying the last excavation of each nesting trip on shore was done by using landmarks and measurements, gps waypoints, and a stake marking the center of the body pit. A new procedure found to be helpful in identifying the nests, was to label each center stake with its nest number.

Of the 124 trips on shore, 81 were very short tracks found at the western end of the beach. 28 of the trips on shore produced excavations. Of these, 15 hatches were observed. These nests were dug up at least 3 days after the last hatchling had been observed to emerge.

	Nest	Successful Hatches	Undeveloped	Dead	Live	Total Eggs Laid
Hatch 1	2	67	3		3	70
Hatch 2	4	84	2			86
Hatch 3	5	76				76
Hatch 4	6	82	1	1	1	84
Hatch 5	9	55				55
Hatch 6	13	78	5	2		85
Hatch 7	15	57	4	4	16	65
Hatch 8	17	81	1			82
Hatch 9	18	unknown				
Hatch 10	20	72				72
Hatch 11	21	59	2	12	4	73
Hatch 12	22	72	3	1	2	76
Hatch 13	23	70	3			73
Hatch 14	26	73	4		1	77
Hatch 15	28	79	7			86
		1005	35	20	27	1060

The contents of these nests were as follows:

No hatch for Nest 9 was observed, 55 empty shells were found when the nest was dug 33 days past it's expected due date.

The hatch for Nest 18 was observed, the exit area was not identified. No shells were found when the area was dug.

Nests 26 and 21 were too close together to dig separately. Nest 21 was dug up 25 days after it hatched, 4 of the dead were very decomposed and not saved.

The 27 live hatchlings found in Nests 2, 6, 15, 21, 22, & 26 were released to the ocean.

The 35 undeveloped eggs, 16 dead hatchlings recovered from the nests and the 1 dead hatchling found on the shoreline from Nest #4, were frozen and given to George Balazs

Of the 96 false crawls reported, 9 crawled high up onto the beach and 83 stayed below the high tide line. 81 of those were found at the western end of the beach.

Nesting activity was mainly east of the River, of the 28 nesting trips onshore, 2 were west of the River.

55 empty shells were found washing out of the dune, the most recent nest in that location was 2007 Nest 12 - no hatch was reported for that nest.

Monk Seals basking on the sand were sighted on 3 occasions between mid May to mid July.

Submitted by: Lil Macmillan

Date	Nest #	Мар	# of Pits		Hatch Date	Days	Hatch #		Dig Date	Dig Count	spoiled/	Dead	Live	Successfu
		Location		(60 days)		Incubated					<u>undeveloped</u>			Hatches
May 15/10	1	I	2	14-Jul										
May 16/10	2	K	3	15-Jul	7/25	70	1		7/29	70	3		3	67
May 31/10	3	G & H	2	30-Jul										
May 31/10	4	H/I	1	30-Jul	8/01	62	2		8/6	86	2			84
June 2/10	5	Н	2	1-Aug	8/10	69	3		8/15	76				76
6/15/10	6	I/J	3	14-Aug	8/21	67	4		8/25	84	1	1	1	82
6/18/10	7	J	2	17-Aug										
6/19/10	8	Н	3	18-Aug										
6/20/10	9	F	2	19-Aug	? *		5		9/21	55				55
6/29/10	10	P	2	28-Aug										
6/30/10	11	I	2	29-Aug										
7/1/10	12	0	3	30-Aug										
7/2/10	13	E/F	8	31-Aug	9/2	62	6		9/7	85	5	2		78
7/6/10	14	H/I	1	4-Sep										
7/8/10	15	F/G	1	6-Sep	9/7	61	7		9/12	65	4	4	16	57
7/8/10	16	I/J	2	6-Sep										
7/16/10	17	J	1	14-Sep	9/19	65	8		10/1	82	1			81
7/24/10	18	K	2	22-Sep	9/28	66	9		10/1					
7/30/10	19	Н	1	28-Sep										
7/31/10	20	н	1	29-Sep	10/3	64	10		10/7	72				72
8/9/10	21	I/J	1	8-Oct	10/13	65	11		11/7	73	2	12	4	59
8/15/10	22	J	3	14-Oct	10/15	61	12		10/20	76	3	1	2	72
8/26/10	23	Н	2	25-Oct	10/29	64	13		11/2	73	3			70
8/30/10	24	G/H	1	29-Oct										
8/31/10	25	G	4	30-Oct										
9/1/10	26	I	1	31-Oct	11/2	62	14		11/7	77	4		1	73
9/1/10	27	M/N	3	31-Oct										
9/17/10	28	Н	1	16-Nov	21-Nov	65	15		11/26	86	7			79
										1060	35	20	27	1005
					Average incb	64.5								
					-									
NOTES -	Turtle #9 -	hatch #5 - r	monitors mis	ssed sighting	the hatch, for	und nest whe	en dug Sept 2	21/10						
					e to find shells									
			1											1