

19 October 1982

GEORGE:

Here are preliminary numbers of sea turtles observed on

- A) LAYSAN ISLANDS (16 March - 30 June)
- B) PEARL + HERMES REEF (2-6 July)
- C) LISIANSKI ISLAND (7 July - 14 Sept.)

Animals grouped into ^{A)} swimming or basking behavior,

B) age groups: juveniles, subadults and Adults.

Tagged animals will usually enter table as an animal that was basking.

LAYSAN ISLAND

SWIMMING

BASKING

Total

MARCH		SWIMMING			BASKING			Total
		Juv	Sub	Adult	Juv	Sub	Adult	
16	Day night				1		1	2
17	○			2			1	3
18	○						1	1
19	○					2	2	4
20	○						3	3
21	○		1		2	2	4	
22	○	4			1		1	6
23	○		2			1		1
24	○							
25	○							
26	○	1	1			2	2	6
27	○	7					2	9
28	○	6			2		3	11
29	○				1		1	2
30	○	7				3		10
31	○	1					1	2

LAYSAN ISLAND

SWIMMING

BASKING

Total

APRIL		SWIMMING			BASKING			Total	
		Juv	Sub	Adult	Juv	Sub	Adult	observed	✓
1	day night						1		1
2	○						1		1
3	○					1	2		3
4	○		1	1	1		1		4
5	○				1		4		6
6	○						2		2
7	○		2			1	1		4
8	○	2					10		12
9	○					1	2		3
10	○								
11	○								
12	○						4		4
13	○					2			2
14	○	2					1		3
15	○			1		1	1		3
16	○			1			3		4

17	○	4							4
18	●			1			2		3
19	○	1	1				3		5
20	○			2					2
21	○			2					2
22	○		1				2		3
23	○		1	1			2		4
24	○	2							2
25	○								
26	○		1						1
27	○						2		2
28	○						2		2
29	○						3		3
30	○			4		1	5		10

+ also MAY (31 days)
 JUNE (30 days)

NOT COMPLETED

PEARL + HERMES REEF

SWIMMING

BASKING

TOTAL

July	SWIMMING			BASKING			TOTAL
	Juvenile	Subadult	Adult	Juvenile	Subadult	Adult	Observed
2		2	1		1	13	10
3			1			13	15
4			1		1	13	17
5	1	1	1	1	3	13	16
6			1		1	13	18
							7

day night
 000000
 North
 South

1
 NNNNN
 W
 1

13
 13
 13
 13
 13

-ISIANSKI ISLAND

SWIMMING

BASKING

Total

JULY		SWIMMING			BASKING			Total observed
		Juvenile	Subadult	Adult	Juvenile	Subadult	Adult	
8	day	3	1	4				8
9	day							
10	day	6	1					7
11	day	13	3					16
12	day	1					3	4
13	day				1		3	4
14	day		1		1		2	2
15	day	12	6	5	1	1	2	26
16	day					2	2	4
17	day						1	1
18	day	3	4	3			1	11
19	day	1	3	5		1	2	7
20	day	4	1	1			1	6
21	day	8	2	5	1		2	18
22	day	3					1	3
23	day	7	5	4		2	1	18
24	day	6		1		2	2	11
25	day	4	2	1		1	2	7
26	day	10	4	5			2	21
27	day	4					2	4
28	day	2	3	2			2	7
29	day	1	1				3	5
30	day	18	5	6			3	32
31	day	9	2		1	1	1	13
								2
		122	44	42	5	19	38	258
		3.94	1.42	1.35	.16	.65	1.22	8.32

LISIANSKI ISLAND

SWIMMING

BASKING

Total

AUGUST		SWIMMING			BASKING			Total observed
		Juven.	Subad.	Adult	Juven.	Subad.	Adult	
1	day night				2	1		3
2	●	9	4		1		1	15
3	●	7	1			2	2	12
4	●	8		3	1	1	2	4
5	●	17		4	1			12
6	●	5	1	2	1		1	3
7	●	9	5	3		1		21
8	●	1			1		2	1
9	●	6	1			1		11
10	●	1						1
11	●					3	3	9
12	●	8	2	3		1	3	4
13	●	2				2	1	2
14	●	5	3	1	1	1		4
15	●					3		9
16	●	8	5	1			1	4
	●					2	4	17
	●					1		5

LISIANSKI ISLAND

SWIMMING

BASKING

Total

SEPTEMBER			juvenile	Subadult	Adult				Townsend	Subadult	Adult			juvenile
1	day night			3	1					1				5
2	●●●●		2		1						2			2
3	●●●●		10	1						2	1			14
4	●●●●		2	1	1			1	1		4			6
5	●●●●		2							2	1			5
6	●●●●		2	1	2			1			1			7
7	●●●●		14	3	4						1			22
8	●●●●		17	4	3						1			25
9	●●●●		10	3						1				23
10	●●●●		3											3
11	●●●●		6	1										7
12	●●●●		2		1			1			1			4
13	●●●●		13	1	4					1				19
			2											

14th Townsend Cromwell arrives
RETURN TO HOODOLOLO

ALAN

ENT # 287

12/6/84

Basking or nesting?

Tag 3573 recovered by Alan Summer ^{6/25/84} (date?)

originally tagged by G. Balazs
as a basking adult female
TRig IS, FFS 6/9/80

Sector 18. Laysan Island 6/25/84

Basking (Southwestern part of island)



cracks
in
central
scutes



6-7-85
note /
severe cracks
also seen in east
nesting ♀ on ??
~1984-83
need to
check
tag #

Via Radio 6/27/83

Turtle # Laysan

George

1 new tag applied -

3 resights -

(1) 5917
(2) 5906
(3) 5887
5886

ENT # 45 ♀ S 95.0

ENT # 46 ♀ S 94.3

1 turtle -
S-61.5
juvenile

very few basking

NO nesting

to 2 trials \approx 25 ft -

last night - 6-26-83

Lisianski -

turtle info -

in from Lisi on BT/C -

soon -

CORRECT AS OF
29 NOV. 1982

Table —. Results of tagging effort NWHI by A.K.H. KAM
(15 March - 31 October 1982.)

LAYSAN ISLAND (15 March - 30 June 1982)

Numbers of newly tagged turtles	24
Numbers of tag recoveries	<u>6</u>
Total number identified	30 animals
Number of female turtles	straight length RANGE 13 N=12 82.8-95.0
male turtles	7 N=7 83.0-90.8
juvenile/subadult turtles	10 N=10 44.2-77.3

PEARL and HERMES REEF (2-6 July 1982)

Numbers of newly tagged turtles:	16
Numbers of tag recoveries	<u>11</u>
Total number identified	27 animals
Number of female turtles	straight length RANGE 12 N=12 81.5-93.5
male turtles	5 N=5 81.9-91.8

juvenile / subadult turtles 10 N=9 49.2-77.8

LISIANSKI ISLAND (15 March - 13 September) 15 Sept. Lewis TC

Number of newly tagged turtles: 68

Numbers of tag recoveries 24

Total number identified 92 animals

Number of female turtles 29 N=14 straight length RANGE 81.5-94.1

male turtles 14 N=11 77.2-89.3

juvenile / subadult turtles 49 N=46 37.4-79.2

Pearl and Hermes Reef (27-31 Oct. 1982)

Numbers of newly tagged turtles 23

Numbers of tag recoveries 13

Total numbers identified 36 animals

Number of female turtles 17 N=3 straight length RANGE 84.3-99.3

male turtles 13 N=2 87.5-91.6

juvenile / subadult turtles 6 N=3 67.9-75.0

LAYSAN

RESIGHTORS

"Two Crosses"

4/9 (1400)

4/14 (1600)

4/28 (1810)

4/30 (1720)

5/3 (1653-1800-2230)

5/18 (1720)

6/16 (1345)

ENTR
#36

tag recapture
Bureau Wildlife
Kailua Hawaii

T265 RFL
5901 LFL trl

8 April 1982
"Two Crosses"
(S) 77.3

Time: 1450
NW ♀

carapace round w/marginals
serrated

'white' spot 1 R. Lat.

'notch' 11th L. Marginal
tail has second 'nub'
on left side



First tagged Subadult. Laysan 1973

Subadult Laysan 1973

tag return

TAG NO. T265 RFL (Bureau Wildlife
Kailua Hawaii)

2,3,4 Rt. Lat. 5901 LFL

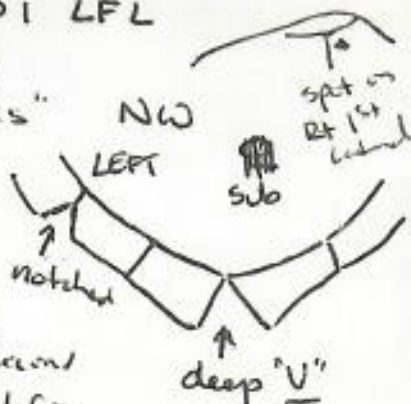
○ Dupont White Holly Green 4/19

Area: "Two Crosses" NW

8 April 1982

(S) 77.3

marginal
edge serrated
tail
has second
"nub" left
side
very round carapace



①

7 July 1982

Dear George:

Well this has been some hectic moments of my life running around Laysan, then Lisianski Island and when Gilmartin informed me I was going to Pearl and Hermes Atoll, wow! surprised and excited. Problem was that I was still breaking down the Laysan Island Seal/Turtle camp readying for Lisianski and did not have time to get ready for P+H until July 1, the day the Easy Rider arrived at Lisianski and took off for P+H. I wanted to know where all of Laysan Islands ^{gear} got packed so that ate up a lot of time, I was tired on the boat so only now do I have a moment to "rip" this letter off to you. I do not know how much time Gilmartin (B.G.) will be here

on Lisianski (the photography group traveling up the NWHI with him are probably 'ancy' to do work at perhaps other islands - Necker) so here is somewhat of an idea of what has transpired.

15 March - 30 June SEAZ/TJCE Research Laysan Island.

I tagged 24 turtles = 10 Juvenile/subadults

Snout length (cm) Range: 44.2 - 77.3

but in addition 6 turtles were "tagged recoveries" so ensuing data will deal with the 30 turtles identified at Laysan. (Please excuse this repetition I am still a bit seasick and tired from P+H)

= 7 Adult ♂

Snout length (cm) Range = 83.0 - 90.8

= 12 Adult ♀

Snout length (cm) Range 82.8 - 95.0

Total turtles = 29 (with one turtle #986, 115)
♀ with no measurements

There is a table listing the results - "Tag recoveries of green sea turtles at Laysan Island" and "Green sea turtles tagged on Laysan Island" which will show you my data. (2)

There is also a log of the number of turtles I have seen either (A) Basking on the beach or wave wash or (B) swimming along the shore. The highest count was in April with 10 turtles basking and 2 animals seen swimming = 12 turtles seen. The later months May and June it was average to see just one or two turtles basking, one seen swimming or no turtles seen at all when circuiting the island. Certainly not a time for a turtle researcher to find 'high' counts. I don't know where they went to.

I have also been keeping a log of "identified" turtles that have been basking on Laysan Island's beaches with times and areas noted. Most of the turtles tagged, appeared basking at "Two Crosses" a beach north of cays (NW Laysan), the count was 16 turtles ^{that} use this beach off and on during our stay. It also appears that turtles tagged at particular beaches tended to be seen usually just at those beaches (site specificity, or whatever.)

I have also tried to collect a representative sampling of algae on reefs of Laysan. A box containing them is on the ER marked BAZAES, NMFS so I hope you will be able to get it without having it lost. Most of the samples are from the western reefs with smaller specimens from various other places. I have also included a list of the samples in this letter "Algae collection on Laysan Island." They have been stored in whulpac with formalin so be careful when

(3)

you open the box, the wire closures on the whirlypaws might have punctured the plastic. Two samples that I consider important ~~to~~ for you to view, are LA:83 and LA:85, two algal samples taken from turtle's mouths as they were feeding on the reef near camp. Also in the same box are samples of ticks. Eliza and I said that I wanted to keep. The ticks were off my body so they are especially memorable. (Ticks were nothing on Laysan when I compare them to the "bearable misery" of ticks on Southeast and North Island of Pearl and Hermes Atoll, but that will come later in the letter).

History, past history, I tuned in to FFS 5 June at 1300 but could not hear you, so I listened in at 1930 and at 2030. The Surair transceiver was acting

up - the radio took a longer time to tune in on the frequency and then lights on the console would dim and at the 2030 radio contact the whole system went dead. Kaput! No no nothing! No amount of checking the fuses or wires or contacts could raise that animal back to life, so no radio contact since then. So with what information you sent in your letters I have been conducting sea turtle research on Laysan Island. From 30 May to 29 June I have spent 18 nights either circling the island or monitoring the northern half of the island between the hours of 1900-0400. I was able to totally observe 2 nesting turtles (#5908 and 5922) from body pit, egg chamber excavation, egg deposition to cover up. Eggs laid numbered 97 and 116. The total number of times turtles came up to excavate, explore or possibly nest were 12, that I mapped and marked. A map "Nesting activity on Laysan Island 1982" has been included in this letter,

(4)

listing the various beaches on Laysan that turtles emerged upon, the dates and the number of body pits. My gut feeling (at least pseudo scientifically) is that about 6 different turtles have created these nests (or should I say excavations). This guess is based upon my looking at turtles that use these beaches and the number of tracks and time between excavation events.

Night Basking behavior primarily occurred at "Two Crosses" NW. There were 14 instances of night basking on Laysan, which included the two nestings; involving 9 separate animals.

Well, that's about it for turtle information off the top of my head. Sent specific questions that I should have answered by my research on Laysan

to assess whether I have doing it "correctly". I want to write up this portion of the research conducted on Laysan to the best of my abilities so your consultation and advise is gratefully expected.

The Easy Rider got to Laysan around the 28th of June so there was a few days spent by Gilman's accompanying Doris Alcorn around the island doing seal observation, the photography group stayed on the western side filming the Laysan albatross, frigate and seal with some time underwater filming wrasses. The 1982 Laysan field camp was dismantled and the whole party left on the evening of 30 June arriving at Lisianski Island the 1st of July. I had a few hours to throw together some gear for my trip to Pearl and Hermes Atoll, so I hope given this surprise opportunity to visit this area I just hope "I done good!". We arrived at P+H Atoll

on the 2 July and stayed there 'til 6 July.

During this time I was able to visit all of the islands and sandy spits (Southeast Island, Bird, Grass Seal and Kitting, Little North and North Island) I observed turtles only on Southeast Island, Little North and North Island. Since I only had tags 5855-5875 remaining from Lisianski I chose to pay special attention to female turtles, tagging those that I could discretely approach. Most of the turtles I observed appeared on the northern side of Southeast Island (by the Refuge sign) with counts of 13-15 turtles either in the wave wash or high wet sand, or swimming in the near shore waters. The other area turtles hauled out to bask was on the NE stretch of the island, a sandy high beam area with a deep

channel fronting the beach, I have some xerox copies of aerial photos of SE Island and North Island that Sherida Stone got from USFWS, so areas can be identified more easily. There were four excavated pits on the SW part of the island (near a rocky point, part of a large grassy vegetated area) by the time I arrived, and 10 more pits were excavated on the night of 5 June (we were on North Is. that night); while on North Island there were 5 pits on the N. NE side of the island.

On Southeast Island most of the turtles were observed on the northern part of the island by the Refuge sign, some (1 or 2) hauled up north of the Lagoon area and I saw one swimming in the shallows of the NW-most beach area. Exploratory tracks appeared on the beach of the northern part of the Lagoon, by the nesting area, and along the

(C)

beach of the NE stretch. The turtles would head inland and then back to the ocean with no marks indicating nesting activity, a sorta quick in and out. Most of the turtles were old (2 week) so were hard to follow on the windswept beaches.

On North Is. the turtles were seen in the SE core area, both basking and swimming in the nearshore waters. There were 8-10 turtles usually w/ another 4-5 turtles in the water. Two small turtles were seen swimming in the nearshore water (20' from shore) along the coast, up past the NE side to the north and northwest part of the island. I tried to grab one, but it was too alert. I made night circuits of both SE Is. and N. Is., but no new nestings.

though I was able to grab one turtle while it slept in 2' of water on the SW portion of North Island. (complete measurements). Twenty-seven animals were identified (19 w/new tags and 10 tag recoveries)

TAG RECOVERIES: Pearl & Hermes Reef

5567	5547	7/2	SE Is.	♂	(S) 89.2 x 73.1	(C) 94.5 x 90.4	+ 153FW #9 ENT1
orig. tagged by GB - NESTING - EAST FFS 6/29/80	3671	7/2	"	♀	(S) 91.2 x 73.5	(3604) (3605)	ENT1 #25
	5544	7/2	"	♀	82.3 x 66.7		ENT1 #23
	5553	7/3	"	♀	(S) 78.4 x 66.3	(C) 84.4 x 80.3	ENT1 #24
	5599	7/3	"	♀	(S) 82.4 x 68.4	(C) 90.4 x 88.2	ENT1 #25
	5598	7/3	"	♀	(S) 85.9 x 70.5	(C) 91.1 x 84.7	ENT1 #12
	5587	7/5	North Is.	♀	(S) 90.2 x 76.1	(C) 97.3 x 94.4	ENT1 #26
5590	5589	7/5	"		no measurements		ENT1 #10
BUREAU WLDW KAIL, HAW.	A 1052	7/2	SE Is.	♂	(S) 81.9	Tag saved	retag 5855
BW K. Hawaii	TS	7/5	North Is.	♀	(S) 93.5 x 78.3		ENT1 #21 5870 new?
					(C) 100.2 x 97.5		
B. WLDW Kailua, Hawaii	323 - 5862	7/2	SE Is.	♀	(S) 83.3 x 69.5		ENT1 #22
					(C) 90.2 x 84.5		

(7)

For Pearl and Hermes Atoll 2 July - 6 July I identified
27 turtles, 5 Adult Males Range 81.9 - 91.8 cm
13 Adult Female Range 81.5 - 93.5 and 9
Juv/Subadults Range 49.2 - 77.8 cm. In
addition I was able to get 7 measurements on turtles
but no tags because the animal awoke and started
to move back into the water. A more complete
follow up will come as I get more time to
work on it.

Its kinda late tonight so I will stop, perhaps
I will pick up the pen tomorrow to send you
off a few more notes, but if there is no
further communication, see ya later.

Bye til later.

A

GREEN SEA TURTLES TAGGED ON LAYSAN ISLAND 15 MARCH TO JUNE 1982

Tag Number	Date first tagged	Sex	Straight Length (in cm.)	Straight Width (cm.)
① 5876 5877	(3/16)	~	44.2	37.3
② 5878 5882 5883	(3/17)	♂	89.1	69.3
5879	TAG LOSS			
③ 5880 5881				
④ 5884 5885	(3/19)	~	64.1	51.8
⑤ 5886 5887	(3/21)	~	41.5	36.5
⑥ 5888 5889	(3/21)	~	61.5	50.0
⑦ 5890 5891	(3/21)	♀	92.4	72.9
5892	TAG LOSS			
⑧ 5893 5923	(3/27)	♂	86.2	
⑨ 5894	(3/19)	♀	86.3	
⑩ 5895 5896	(3/28)	~	48.2	40.2
⑪ 5897 5898	(3/31)	~	50.2	40.2
⑫ 5899	(4/7)	♀	84.5	

(13)	5900	5917 5918	(4/8)	♀	95.0	
	5901	[T265] [Ⓢ]	(4/8)	-	77.3	
	5902	TAG LOSS				
	5903	TAG LOSS				
(14)	5904		(4/29)	♀	82.8	
(15)	5905		(3/26)	♂	90.8	
(16)	5906		(4/30)	♀	94.3	
(17)	5907		(4/14)	♂	84.3	
(18)	5908	5920 5921	(5/6) ^{also} <i>NESTING</i>	♀	92.0	72.5
(19)	5909	5924	(5/7)	♀	90.0	
(20)	5910		(5/10)	♂	83.0	
(21)	5911	5912	(5/17)	-	67.2	54.3
	5913	[5363] [Ⓢ]	(5/18)	♀	92.1	71.8
(22)	5914	5915	(5/19)	♂	89.0	69.8
(23)	5916	5919	(3/28)	♂	84.2	
(24)	5922	5925 5926 5927	(6/18) <i>NESTING</i>	♀	94.6	72.3

Tag recoveries of green sea turtles on Laysan Island
15 March to — June 1982.

	Tag number	Date of Recovery	Sex	Straight Length (cm.)	Straight Width (cm.)
① ENT. 156	3580	(3/20)	♀	91.4	73.9
				originally tagged nesting at FFS ^{EAST} in June 1980 (by GB)	
				Also, photos in GB file of this turtle basking at Laysan - 1978	
② ENT. 157	5096	(4/3)	♀	89.0	
				originally tagged nesting at EAST IS. FFS JUNE 1981 (by G.B.)	
③	2633 2634	(4/4)	-	56.1	45.0
				originally tagged at Laysan 6/78 - Cross pt.	
④ ENT. 159	T265 5901	(4/8)	-	77.3	
				originally tagged basking at Laysan July 1973	

⑤ ENT.
158

5363

5913

(5/18)

♀

92.1

71.8

originally tagged basking at W-S, FFS, JUNE 1981 (by GB)

⑥ ENT.
NO. 101

986

115

(4/22)

♀

no measurements

originally tagged at Laysan Sept 1966

Seen by GB at Whale-Skate

on 21 May 1975 & 30 June 1980

28 MARCH 1982 Area: George Bay SW

Sample Area A: LA-01 to LA-03 (3 packs)

LA: 01-05

Sample Area B: LA-04 to LA-05 (2 packs)

Depth of sampling 1-5' Method: Snorkeling

Total number of samples 5 in plastic whirlpacs

31 MARCH 1982 Area: NW Cove Landing to Two Crosses, NW

Samples: LA-21 to LA-27 (7 packs)

LA: 21-27

Depth of sampling 1-5' Method: Snorkeling

Total number of samples 7 in plastic whirlpacs

25 APRIL 1982 Area = Red Rope to Pup Point, West
Samples: LA-31 to LA-43 (15 packs)

LA: 31-43

Depth of sampling: 0-5' Method: Snorkeling and reef walking

Total number of samples = 15 in plastic whirlpacs

27 MAY 1982 Area: Georges Bay, SW

Composite sample from entire beach/cave area

Depth of sampling: 1-5' Method: Snorkeling

Total number of samples 1 in plastic whirlpacs

Note @ Ulva sp. from Express Channel

LA: 60

25 MAY 1982 Area: Weaner Pt. NE

Composite sample from reef rocks awash at low tide

Depth of sampling: 0, surface rock Method: reef walk

Total number of samples 1 in plastic whirlpacs

LA: 70

28 MARCH 1982 Area: Two Cresses NW

Turtle tag # 5895, # 5896 Algae scrapings from neck and pelvis. 1 glass vial

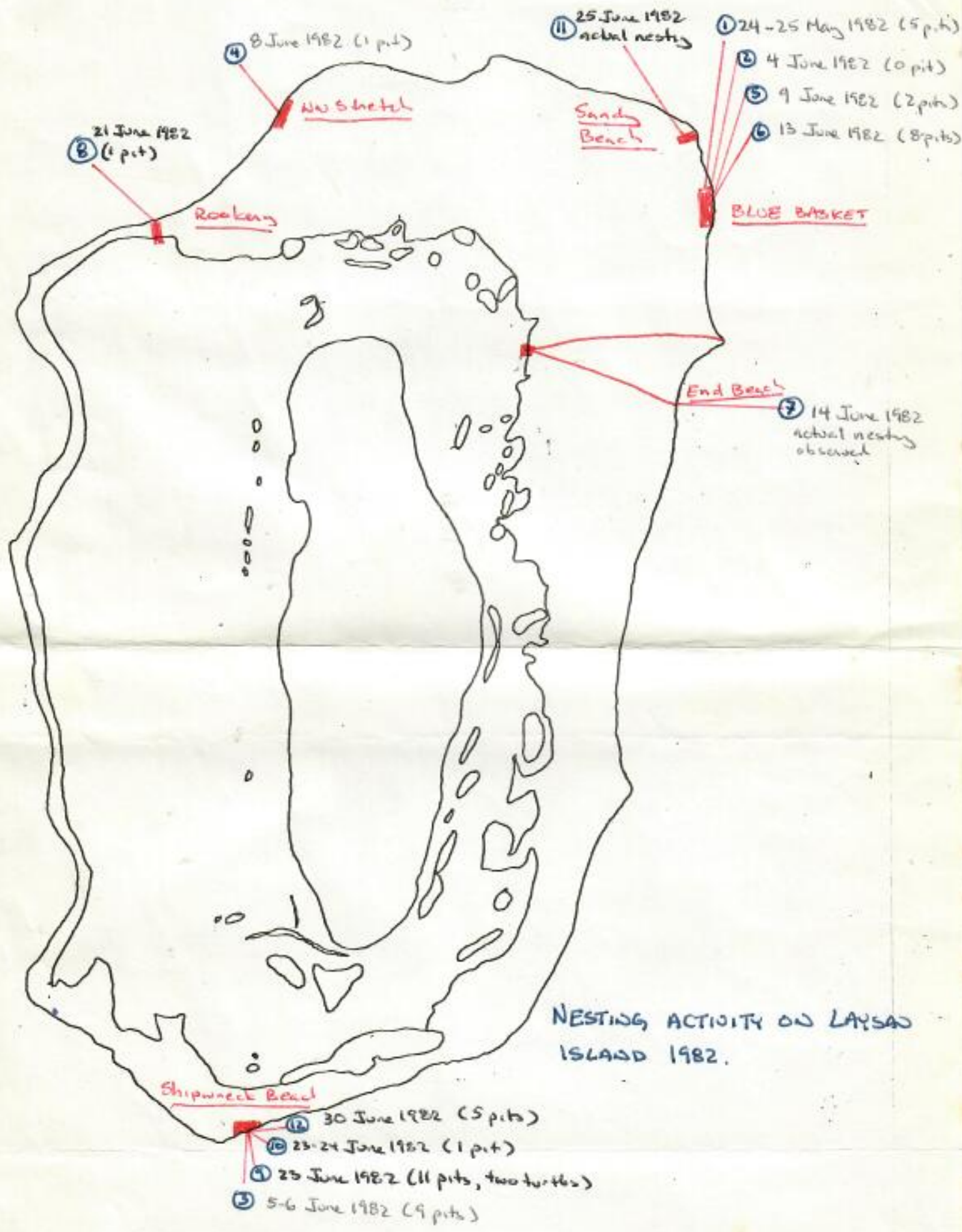
LA: 81

LA:82 19 MARCH 1982 Area: Two Crosses NW
Turtle tag # 5880 #5881 Skin barnacles and
red algae from neck and pelvis [1] glass vial

LA:83 31 MARCH 1982 Area: Two Crosses NW
Turtle tag # 5897 #5898 Algae removed from
mouth [1] glass vial

LA:84 8 April 1982 Area: East Laysan beach, E.
Algae picked up from wave wash, high wet sand
[1] glass vial

- LA: 85 13 MAY 1982 Area: NW Cove Landing Reet, NW
Turtle tag # 5880 #5881 Algae removed from
mouth [1] glass vial
- LA: 86 21 JUNE 1982 Area: Cliffs (east of Two Pile Flats), NE
Algae picked from rocks wash at low tide by hand.
[1] glass vial
- LA 87 4 April 1982 "Two Crosses" NW Turtle # 2634, # 2632
Skin biopsies [1] glass vial
- LA 88 5 April 1982 "Two Crosses" NW and "Wearn Pt" NE (6 ticks)
6 May 1982 Camp, NW cove "largest tick" (1 tick) [1] glass vial
- LA 89 5 May 1982 "Two Crosses" NW beach flies [1] glass vial
- LA 90 9 June 1982 "Blue Basket", NE sand sample from
excavated pit
- LA 91 27 June 1982 "Shipwreck Beach" surface from nest



NESTING ACTIVITY ON LAYSAN ISLAND 1982.

LISIANSKI ISLAND

GEORGE:

9 July 1982

Hello again, this is probably the last communique with you (and civilization) for a while 'coz I don't expect any boat will be coming up here. I tried to best fit in the most important data and numbers I have originated at Laysan and ~~Lisianski~~ Island and Pearl and Hermes Atoll for your reading and hope it gives you a comprehensive idea of all of my efforts. Included with this letter are two tags removed from adult ♀ at Laysan and Southeast Isld, P+H Atoll.

I took all of the tags for Lisianski Island and used them to tag turtles at Pearl and Hermes Atoll. I don't know how often you will be able to get up to P+H, so I decided to expend the remaining tags there rather than at Lisianski. I hope my timing is right to catch you between trips so more turtle tags can be "air dropped" to me. Until that happens there are no tags on Lisianski (I still have ~20 tags from Layman, but have them stored away) and will primarily be making observations of turtle activity. We have two cans of Dupont Lucite spray paint left, so I will discretely use it on basking turtles to identify individuals. I hope your summer plans have been favorable toward your goals. Will probably see you sometime in September (~19th) Give my aloha to Linda and Christine.

From the boomer of the NWHI

A

p.s. If you have the time send me up some Tipnillos or something similar (from or voice soaked). We smoked the cigar you send for a change of pace. Davis and I that is.

Green turtles identified
in NWHI, Summer 1982.
Laysan (15 March - 30 June)
5876 - 5927
Pearl + Hermes (2-6 July)
5855 - 5875
Lisianski (17 March - 13 Sept)
5826 - 5854, 5928 - 5950
6276 - 6336

and TAG RECOVERIES

turtles I tagged ~~A~~ (also JH + SS)

George.

29 June 1984

There is not much to say about turtles on Laysan Island this time. I have not been feeling very dynamic about field work this year, and so have spent most of my energy with monk seals. Some of the many problems that exists on Laysan concerning research a) No cover to hide from seals, they can spot you ~ hundreds of feet away. b) Most every female seal has an adult male consort who is looking up every few seconds to check if any other male is sneaking up on him c) Laysan monk seals seem more skittish. d) I have so much junk and things to carry - water, camera, VHF radio, binoculars, blending supplies, etc. every day, that the distance just beat me down. e) Seems that most often the times that monk seal work is to be conducted is during the 'hottest' part of the day [1200-1300] - a real burnout, sometimes the sunscreen[#] is just doesn't feel strong enough. Wish I could stay out the sun for a few days to recuperate. f) Heat.

April-May were very hot months, light variable 3-5 kt. winds, glassy seas and still, calm air. Brightly hot, sorta the type of weather that makes siesta time great. It's hard to keep awake when you are perspiring and the data and numbers seem unrecognizable

The small tents are not as cool as the larger tents, but are comfortable during the night. During the day - air just seems to stay trapped in them. In addition to the heat, the glare from the white sand reflects so much light that my sunglasses are slowly being destroyed; therefore enabling more than just incidental light to my eyes. My polaroid glasses are so good now, that they can be used at night to walk around the Eragrostis clumps.

g) One of the major problems of Laysan is the FLIES. If I ever get off on a boat, I'm never, ever coming back to Laysan Island again. I've had it with the flies. When combined with the heat, no wind - the fly problem escalates and makes thinking and working so much more difficult. Luckily the flies are less of a problem on the windward - or eastern side of the island. Well these were some of my major gripes: The weather these past two weeks, ^{has} have been more accommodating - winds 10-15 knots, temp 78-84°F. cooler, cloudier, rain every day, to make Laysan appear in a better light. A person can begin to appreciate the island as a wildlife refuge, rather than the armpit of the NWHI!

LAYSAN

③

Well, here comes the turtle data: As usual the dominant basking area appears to be "Two Crosses" again (Sector 2), (enclosed is the sector boundary map of Laysan). I think the highest count of basking turtles there was four (in April) and now there is usually only one. Only one instance of mating offshore by turtles in Sector 2. Areas ^{that} one or two turtles bask at are Sectors 2, 5, 7, 8, 17 and 18. I feel that there were less turtles basking on Laysan this year than in 1982.

Tag recoveries: only a few!

Recovery data

1984 observation	Tag	Sex	Tag #	Location	Date	Count	Notes
ENT #49	4/25/84	[Sector 2]	Ad. ♀ #5894	RFL TL	Laysan 3/19/82	[2]	Basking
ENT #24	5/1	[6]	Ad ♂ #5910	RFL TL	Laysan 5/10/82	[5]	Basking
ENT #28	5/21	[2]	Ad ♂ #5916/5917	LFL TL, LFL	Laysan 3/20/82	[2]	Basking
ENTERED NO. 154	6/16	[5]	Ad ♀ #5182/5096	LFL	Laysan 4/3/82	[6]	only tagged East Is. FFS 1981, June - Neely GHS
ENT #29	6/26	[2]	Ad ♂ #5907	RFL TL	Laysan 4/14/82	[2]	Basking

I don't think very many tag recovery numbers will be coming from Laysan this year. While snorkeling Sector 18 (Deep Pond) found a number of juvenile turtles sleeping under ledges and crevices (deepest ~ 10', shallower water ~ 4' deep). I have only made one tagging excursion there and caught 2 turtles, but on three other

occasional I probably could have caught one on each separate tour. (Hopefully it wasn't the same turtle, but saw seven different ones in the area)

17 June 1984 'Sector 18' Deep Pond w/ TCJ + RF

Time: 1430 Tag # 6802 RFL # 6803 LFL

(S) 43.3 x 36.2 Skin barnacles on neck + pelvis

(C) 45.5 x 42.0

PL 35.0

HEAD 7.0

TAIL 8.0

RFL width 7.5

St. length to notch 42.3

Time: 1500 Tag # 6804 RFL # 6805 LFL

(S) 44.7 x 36.4 Very scummy, ++ pink coraline on carapace (thick), PL - red + green algae, skin barn. on pelvis + neck, mouth - 1 amphipod

(C) 48.0 x 43.1

PL 35.5

HEAD 7.2

TAIL 8.0

RFL width 8.0

St. length to notch 44.0

digits of Rt. Hind, still viable + pliable, no muscle tension but is scar tissue + healed



→ therefore blood vessels must still be serving the distal edge - tissue is soft and not hard. Turtle does not use flipper while swimming it dangles

I have not done any specific "turtle surveys" on Laysan. Information was collected after monk seal data was recorded, or in conjunction. You supplied 49 tags (number series 6802-6850) and one (1) pliers. I have used tags (6802, 6803, 6804, and 6805). I have not done any night surveys yet. Only six excavations dug by turtles have occurred so far.

1.	28 May	Section 5	Number of pits:	1
2.	4 June	[2]		1
3.	11 June	[20]		1
4.	11 June	[18]		1
5.	19 June	[7]		1
6.	25 June	[20]		1

(See map for locations)

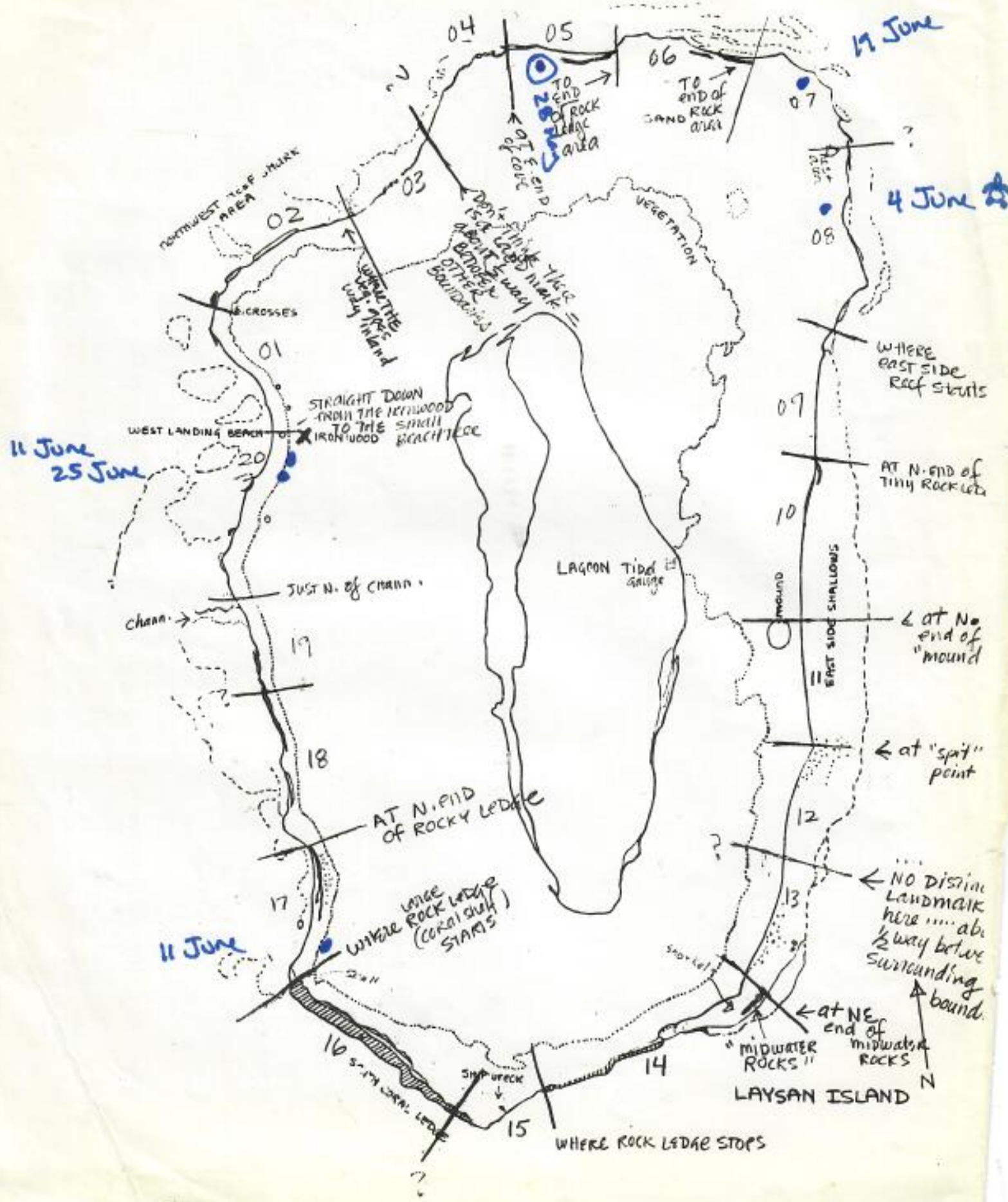
The turtle on 6/4/84 became stranded after digging one exploratory pit and then wandering in the dune system (~160 m. inland from water). When I discovered her, she was sand basking - covering her carapace w/ sand (time 1410) headed toward the ocean, but stopped for a while. I felt that she would probably 'hole-up' in that spot for the resto of the day - the heat would get to her and possibly do damage. With Robert Forsyth, we pulled and dragged the turtle ~200' to the water where she floated and then swam away. No tags.

Well, that's about it from Laysan Island. All is going well between Theo and I, hopefully we can do some traveling together in November and forget about seals, turtles and Laysan Island. Please say 'hi' to Linda and Christine for me. If your parents are in Hawaii, please send them my regards. I hope all is going well with your work - congratulations on your new permanency at NMFS. You deserved it!! Hopefully I will be able to discover some new turtle turtles on Laysan, but 'til then - See ya later!

Take care,

A stylized handwritten signature consisting of a vertical line that curves to the right at the top, then loops back down and under to the left, ending in a horizontal line that extends to the right.

LAYSAN SECTORS
1983



Received 11/16/84

Which Recoveries Does
AKHK Already Have
DATA FOR?

TAG RECOVERIES

Tagged animals identified on Laysan Island,
6 April - 7 August 1984

Adult ♀

5894 ✓
✓ 5906
✓ 5182
6806, 6807^①

Adult ♂

✓ 5910
✓ 5916, 5919
✓ 5907

Adult unknown

✓ 3573
ENT #
FFS

Juvenile

6802, 6803^①
6804, 6805^①

For your records
↓

① Newly tagged animal

LAYSAN ISLANDS 6 April - 7 August 1984

- 4/25/84 Sector 2 [1043] Ad ♀ 5894 RFL +1 ENT#49
- 5/1 Sector 6 Ad ♂ 5910 RFL +1, sandbasking
to mor ventral LFZ ENT#27
- 5/21 Sector 2 Ad ♂ 5916 ENT#28
- 5/23 Sector ~~2~~ [1815] Ad ♂ 5919, 5916
- 6/11/84 Sector 18 [1837] Ad ♀ 5906 RFL +1 ENT#46
- 6/16 Sector 5 [1035] Ad ♀ 5182 LFZ ENT# FFS #157
- 6/17 Sector 18 Deep Pond handcapture white snake
- | | |
|-------------------------------------|-------------------------------------|
| <u># 6802, 6803</u> <u>NEW TAGS</u> | # <u>6804, 6805</u> <u>NEW TAGS</u> |
| (S) 43.3 x 36.2 | (S) 44.7 x 36.4 |
| (C) 45.5 x 42.0 | (C) 48.0 x 43.1 |
| PL 35.0 | PL 35.5 |
| Head 7.0 | Head 7.2 |
| Tail 8.0 | Tail 8.0 |
| RFL width 7.5 | RFL width 8.0 |
| SL to notch 42.3 | SL to notch 44.0 |
- 6/25 Sector 18 [] Ad? 3573 RFL ORIG. 6/9/80 TRIG ♀ BASK
- 6/26 Sector 2 Ad ♂ 5907 RFL +1
- 7/25 Sector 17 [1754-1700] Ad ♀ # 6806, 6807 NEW TAGS
(S) 96.3 x 74.5 and dug one excavated pit

16 October - 9 November MONK SEAL PROJECT

1984

FFS - LAYSAN - JOHNSTON ATOLL

TURTLE SITINGS AND TAGGING

10/19/84 FFS (boat dock) 1400 hand capture (AK)

6861 LFL

Juv. turtle

6860 RFL

(C) 47.4 x 42.2

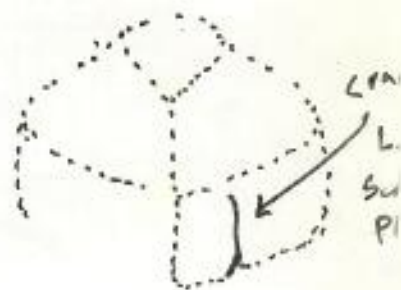
PL 37.0 cm [⊕] w/ tape measure

Clean upper and lower palate, Carapace - pink coralline

Green algae on Plastron (skimming)

Few skin barnacles on pelvis

Pink coralline ventral marginals



10/30/84 LAYSAN 1415 (WGG siting)

19837 # 6702 ^{LFL} ♂ 1 [3]

5906 RFL ♂ 1 [6] 1500 (WGG siting) - ^{BNT} #46

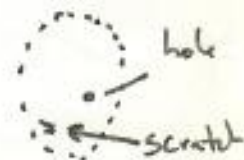
11/2/84 LAYSAN 1030 [8] (AKK)

Ad ♀ ♂ 1 # 5182 LFL new TAG 6926 RFL + 1

11/3/84 LAYSAN 0924 [8] (AKK)

Ad ♀ ♂ 1 # 5182 LFL new TAG 6927 LFL + 1

(C) 96.0 x 92.5



BNT #157
FFS
JUN 1981
EXP 27

GEORGE,

For your information, tag resittings are already entered in my files on Laysan

Received 11/16/84

A

1984
LAYSAN - ESTABLISHMENT
P. November - 1984

JUSTICE SITINGS AND TAGGING

ORIGINAL DATA 10/18/84 1400 (last date) 277

TAGGED
6/9/80 Female 3573 - LAYSAN
TRIG BASKING Summer 1984



Put collars on birds
Give them a number
Give them a name
Give them a sex

10/18/84 1400 (last date) 277

11/2/84 1400 (last date) 277

11/2/84 1400 (last date) 277

For your information: tag markings
are almost entirely in my files

A

10/18/84

on tag recovered

Table 1.--Adult green turtles newly tagged at Laysan (dates)

Tag No.	Date	Location	Status ¹	Carapace length (cm)	
				Stripped	Curved

Male

resight →

15024 (left) 2 Nov. '88 Laysan, sector 1 Basking 34 1/8 inches
 spray painted #1

newly tagged {

W-2 (Rt.) 10 Nov '88 Laysan, sector 1 Basking 85.5 cm

W-3 (Left) 10 Nov '88 Laysan, sector 2 Basking 85.6 cm

4 turtles end of tail was amputated - could see the bone, but penis was intact!! (see photos)

W-6 BAD - NOT APPLIED (turtle moved)

resight →

Female ~~see file~~ 6/6/81 FFS 6/6/81 Nest East ENT NO. 427
3781 right metal 9 Nov. '88 Laysan - sector 18 Basking no measurement taken but huge!
W-5 rt. metal 12 Nov '88 Laysan - sector 2 Basking 81.5 cm

W-4 (rt. metal) 12 Nov. '88 Laysan - sector 8 Basking 49 cm
W-7 (lt. metal) / W-8 (rt. metal) 12 Nov '88 Laysan - sector 2 Basking 85.0 cm

¹Basking, nesting, foraging, etc.

* Table 3. ~~Green~~ green turtles newly tagged at LAYSAN 1986
 (dates)

Tag No.	Date	Location		Status ¹	Carapace length (cm)		Carapace width (cm)		OBSERVER
		Island	Sector		Straight	Curved	Straight	Curved	
6813	15 JUNE	LAYSAN		} TAGS used but not successfully applied to turtle. # 6813 "spring" off pieces during tagging, and lost in sand. We sacrificed a tag (#6814) to make certain pieces working okay. TAG 6814 saved... SHOULD BE W/TMS.					
6814	" "	"							
<u>RIGHT</u> 6815	8 JULY	LAYSAN	(01-02)	BASKING (0700h)					DJA

¹ Basking, nesting, foraging, etc. *FORM FILLED OUT FROM NOTES 15 MAY 1987. DJA 1987

from Tim 2-25/86

Turtle tag resightings at Laysan, 1985.

(TURTLAG.SAS)

OBS	MONTH	DAY	SIZE	TAG	SEQNO
*1	03	09	T	6702	361
*2	03	27	T	5906	1740-#46 ♀ excluding
*3	03	30	T	5894	1909-#49 ♀ need to add
4	03	30	T	6702	1932
* not in sheets 5	04	02	T	5888	2235 22 Laysan? in 1982
* in sheets 6	04	04	T	6702	2376 1983 Laysan or Laysan?

Same - Not in sheets

* need to add these

* 3 - 09 - 85 388 left rear flipper missing
ENT. NO. 322

7/13/70
EAST
S-35.6"
♀

TAG RECOVERIES - LAYSAN IS.
(copied from log 4-19-85 sent from
field camp on Laysan)

3/9/85 7-13-70 EAST IS. S-35.6"
TAG 308 FW (NOTED THAT LEFT REAR
FLIPPER MISSING)

(6/4/85
3/30/85)
3/9/85 TAG 6702 (LFF T3)
10/30/84 → WGG LAYSAN

not found
in "excluding"

3/30/85 TAG 5894 (RFF T2)

Tagged
3/19/82
LAYSAN
#49 ♀ "excluding"

Kam ~~...~~ ♀ 94.3
4/30/82
LAYSAN

tufts T3 sex unknown

5906	Metal
------	-------

(Laysan 1985
sector 18
date 03-27-85
observer BLB (Brenda) (Becker)

question:

Is it noted whether
it is a right or
left tag?

Table 11

Tag resightings of ~~green~~ green turtles at LAYSAN

1986

(dates)

Tag No. ²	Date		Location		Status ¹	Carapace length (cm)		Carapace width (cm)		OBSERVER
	left	right	Island	Sector		Straight	Curved	Straight	Curved	
AD 5919	5-21-86		LAYSAN	/01	BASKING					DJA
	April-May-June of 1982				"Two crosses" Laysan					
					also originally had 5916 LT tail AA					
					seen by c/hoy					
					seen by Turner Laysan					
					w/ Bob looking Laysan 1988					
					Guam					

AD

NOT IN FIS ALBERTA LISTS

¹ Basking, nesting, foraging, etc.

² () indicates additional tag applied at the time of resighting.

Laysan 1987

Turtle Observations

B. Decker

P. Ching

Turtle Observation

6/9/87, B.B.
1045 hr., sector 16

Adult ♂ turtle hauled up behind rock ledge near 15/16 border (between black rocks of rock ledge & w/ rocks further inland). (B.P. 1) Turtle didn't have anyta

Turtle was continuously moving lower jaw & distending throat area. He stretched his neck skyward several times & continued inflating throat. Moved towards the ocean (also towards observer) to w/in 10 ft of observer & then turned & hauled up beach towards w/ rocks. He didn't move rapidly away.

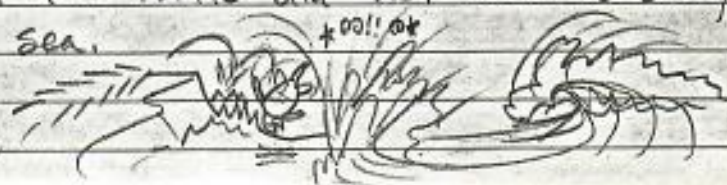
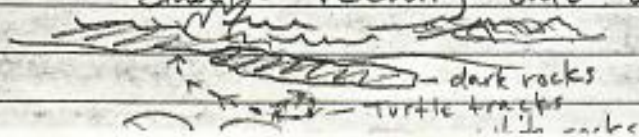
When I first came to the turtle, I stopped and didn't move, hoping not to disturb the turtle any more. I left after he turned to go inland & had his back to me.

Turtle had small growths of tissue on its dorsal left jawline.

Turtle was seen in same location 6/8 during census by R. Ching.

6/10/87

Came upon the place where the turtle had been seen for two days prior. Discovered tracks going in a circle and then along the rocks and over "the edge". The tracks ended at a 4' cliff that dropped virtually straight down onto very sharp rocks. Below the rocks was another cliff that dropped straight into the rough water that pounded against it. It's safe to assume that the turtle did not have a very smooth reentry into the sea.



Location: Laysan Island - sector 1

Observer: P. Ching

Date: 5/18/1987

Time: ~ 19:30

Observation: I noticed a strange, dark object ~~sw~~ cruising past camp (sector 1) in about 4-6 feet of water. At a closer look I noticed that the large dark mass was not a single object but actually 3 turtles - (one mounted on another and the third swimming close ^(about 2-3 feet) behind). The trio made their way down the way and disappeared behind the bend, ~~the~~ the two in front surfacing at regular intervals. (every 2-3 min)



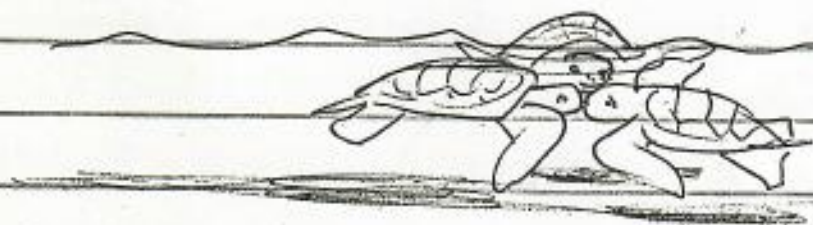
Location : Laysan Island - sector 1

Observer : P. Ching

Date : 6/4/87

Time : ~13:30

Observation: Upon returning from doing necropsy on a pup, I noticed 3 turtles in shallow (2-4 ft.) water on the north side of the reef fronting the camp. One of the turtles, ♀ + the largest, swam with its shell $\frac{1}{2}$ above the water's surface. The other two (smaller) turtles swam around her and each mounted (or attempted to mount her) for brief periods (~10-15 seconds). The 3 swam in a close circle, heads ~~to~~ touching often. After I watched for about 20 minutes, the two smaller animals swam away and the larger female sank to the bottom of the lagoon (about 4 ft.) and remained there.



Location: Sector 1 - Laysan

Date: 6/20/87

Time: 14:02

Observer: P. Ching

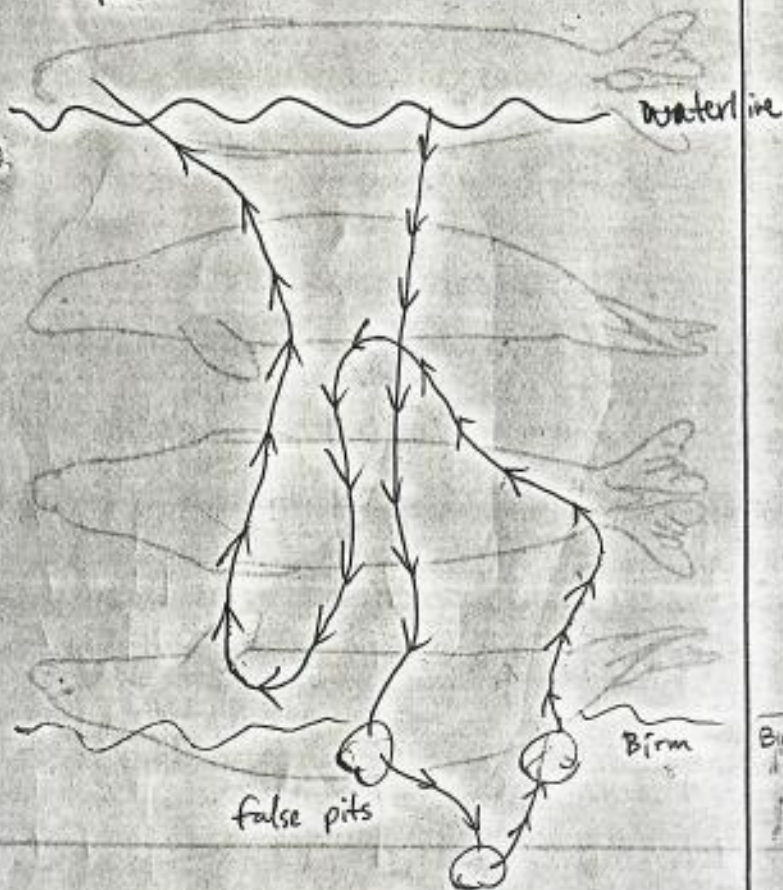
Observation 1

- a pair of turtles copulating in about
10 ft of water. Animal on top - head breaking
surface every minute or so



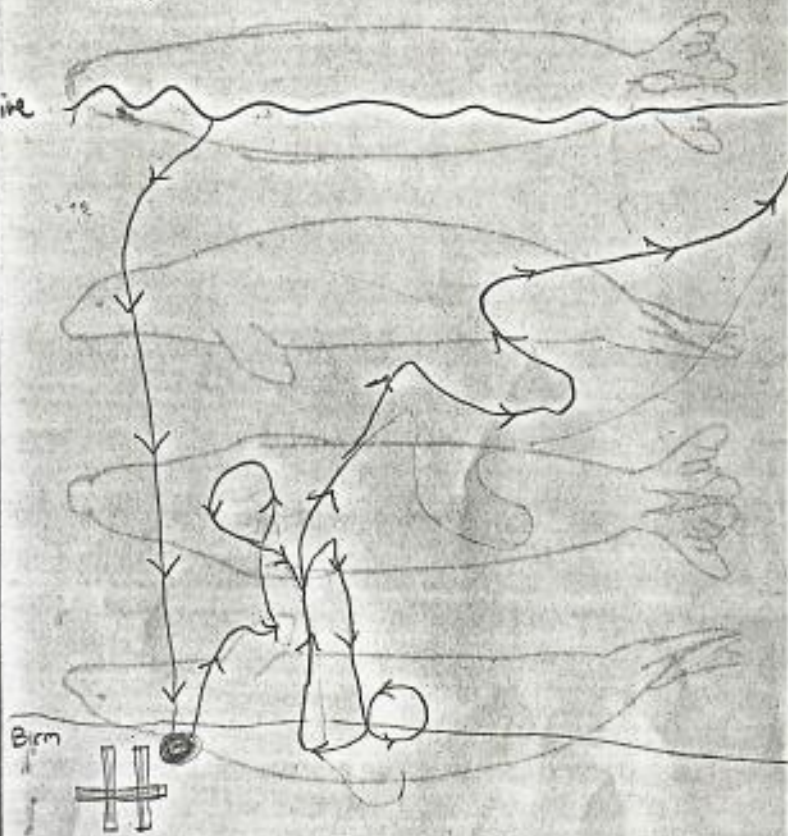
T-1

5/11/87



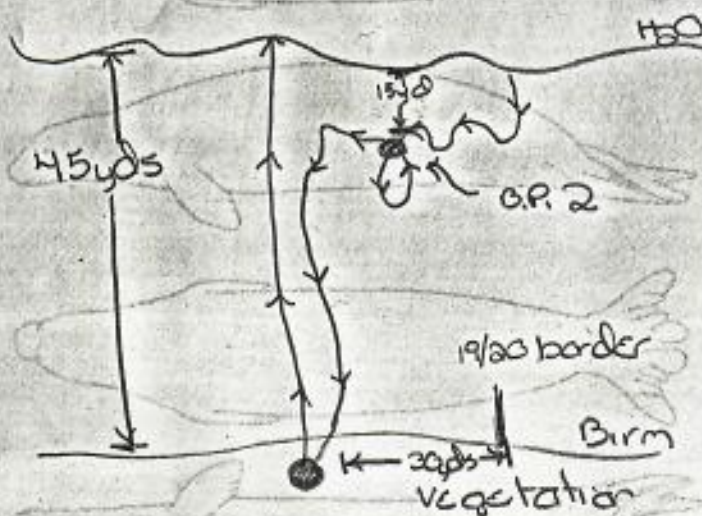
T-2

6/2/87

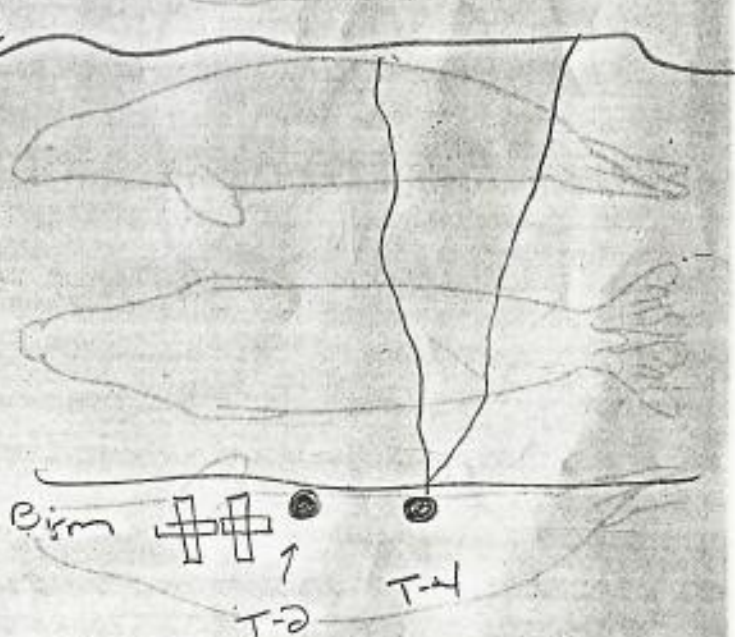


T-3

6/11/87



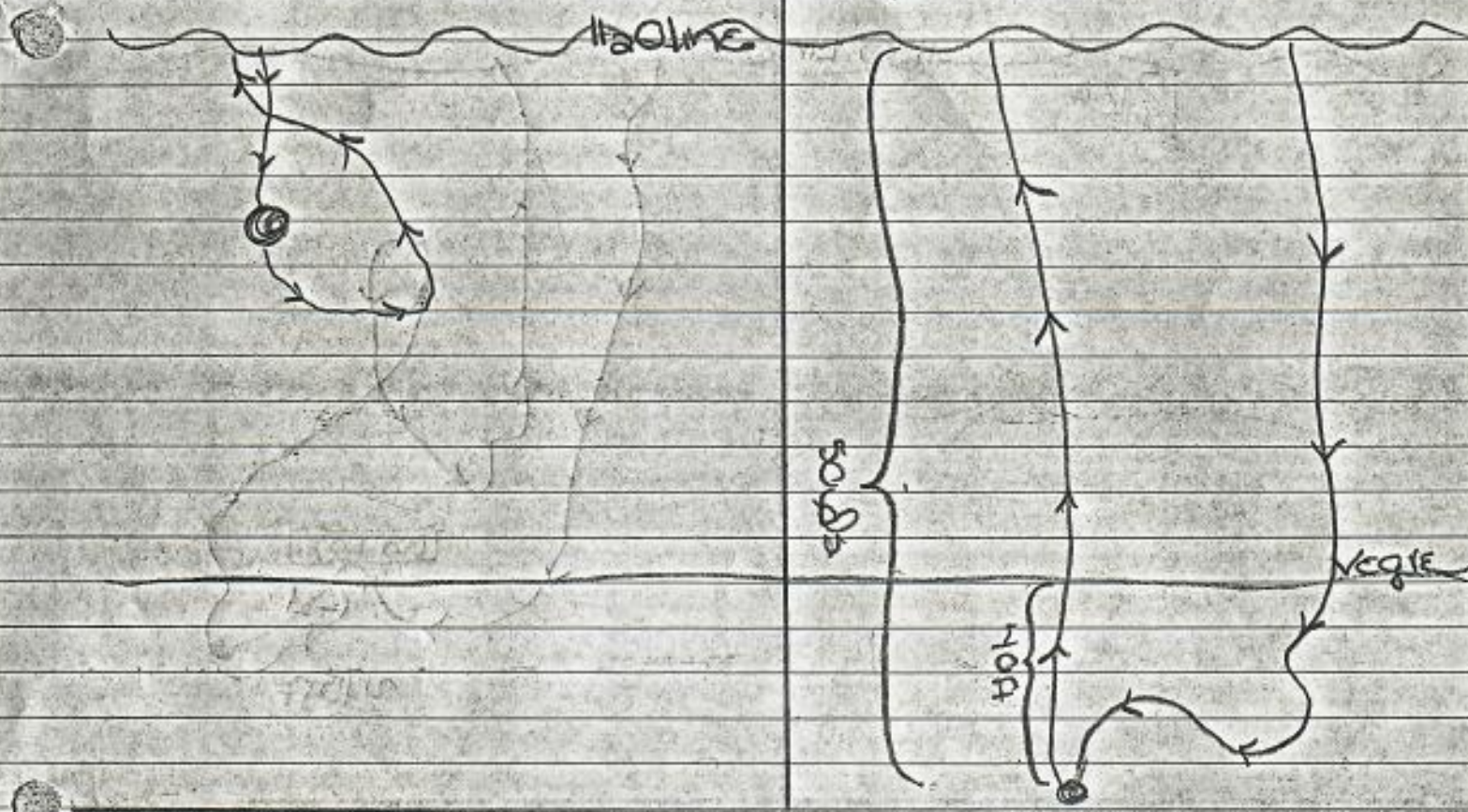
T-4



T-5

CIT
H2O line

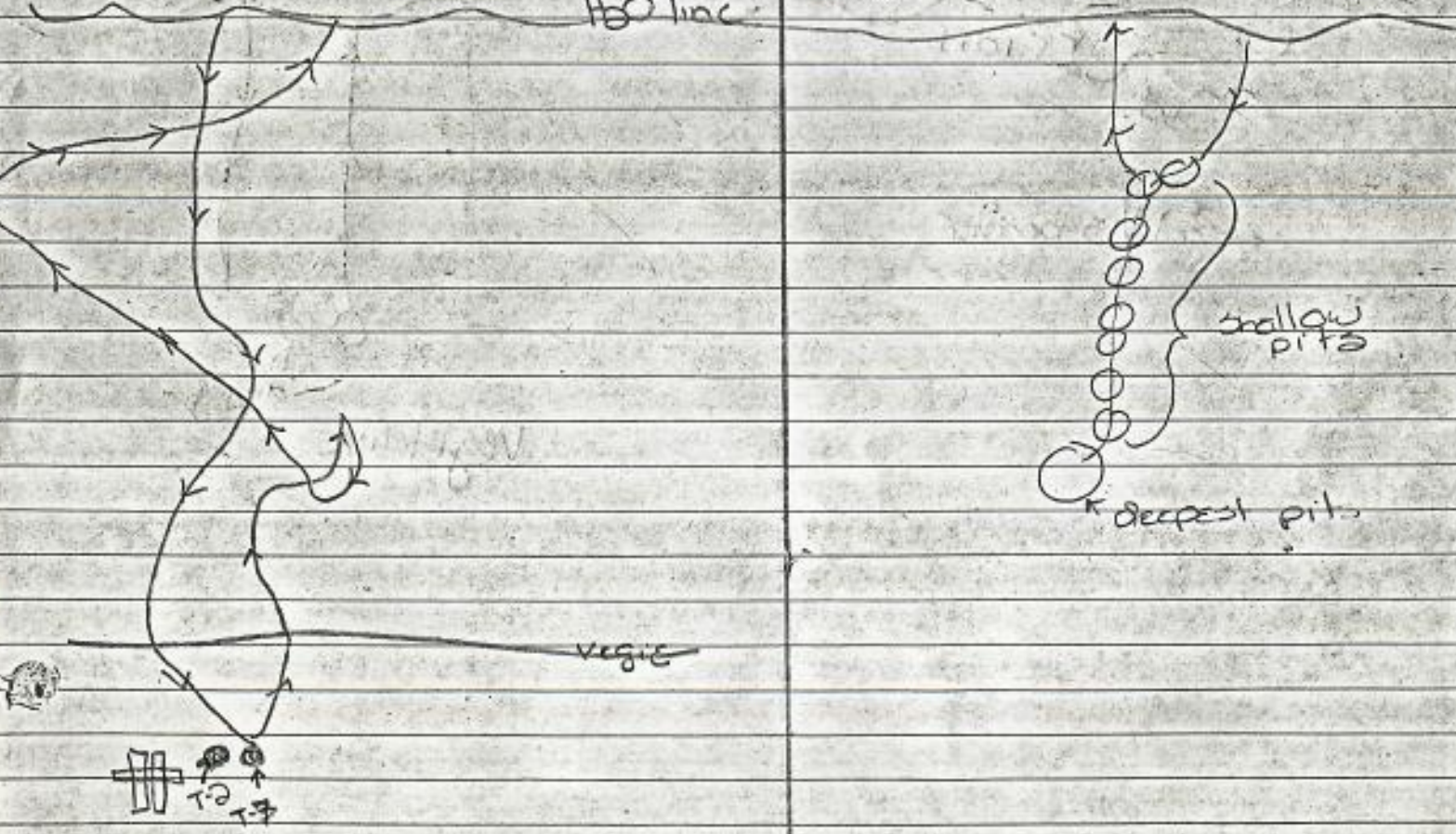
T-6



T-7

CIT
H2O line

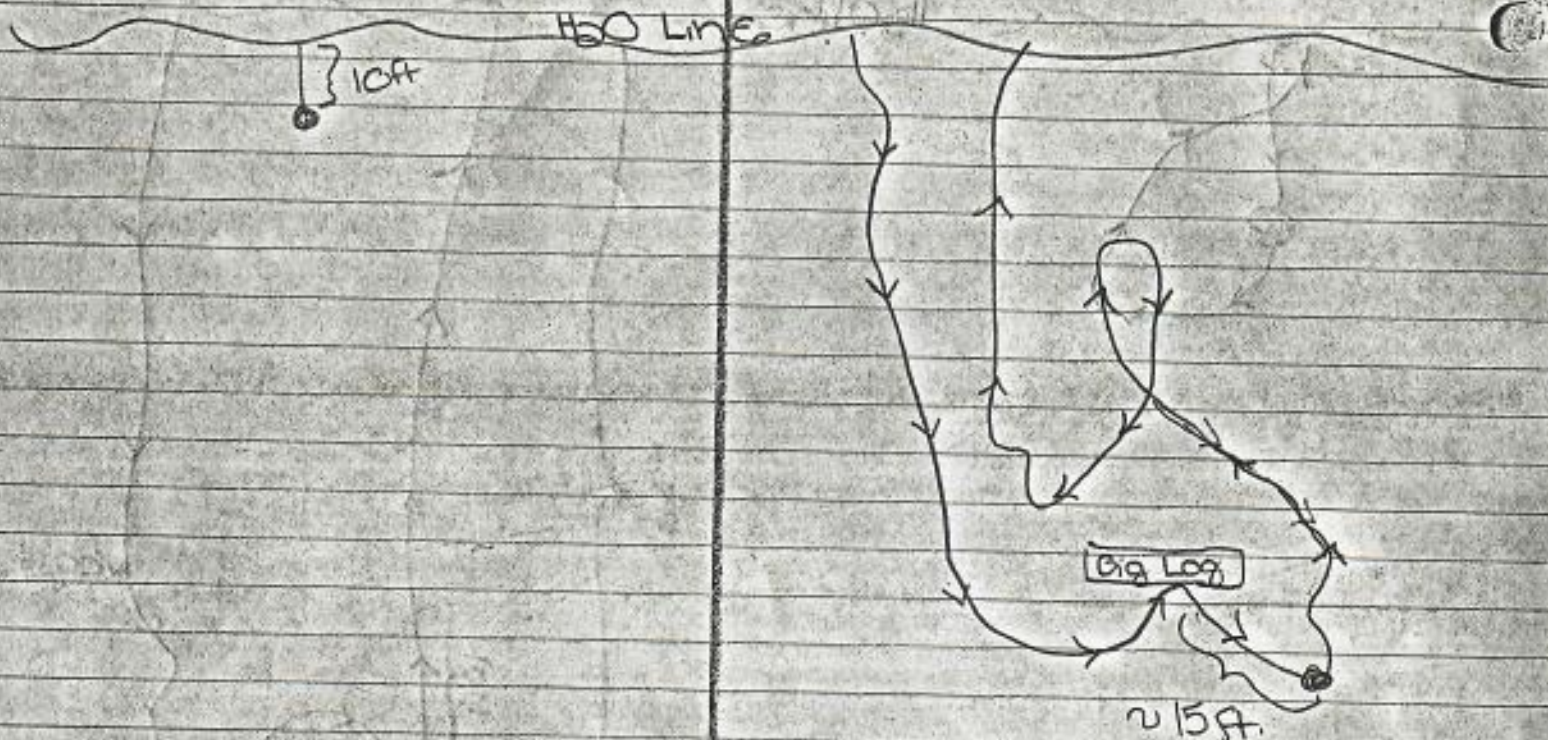
T-8



T-9

T-10

H₂O Line

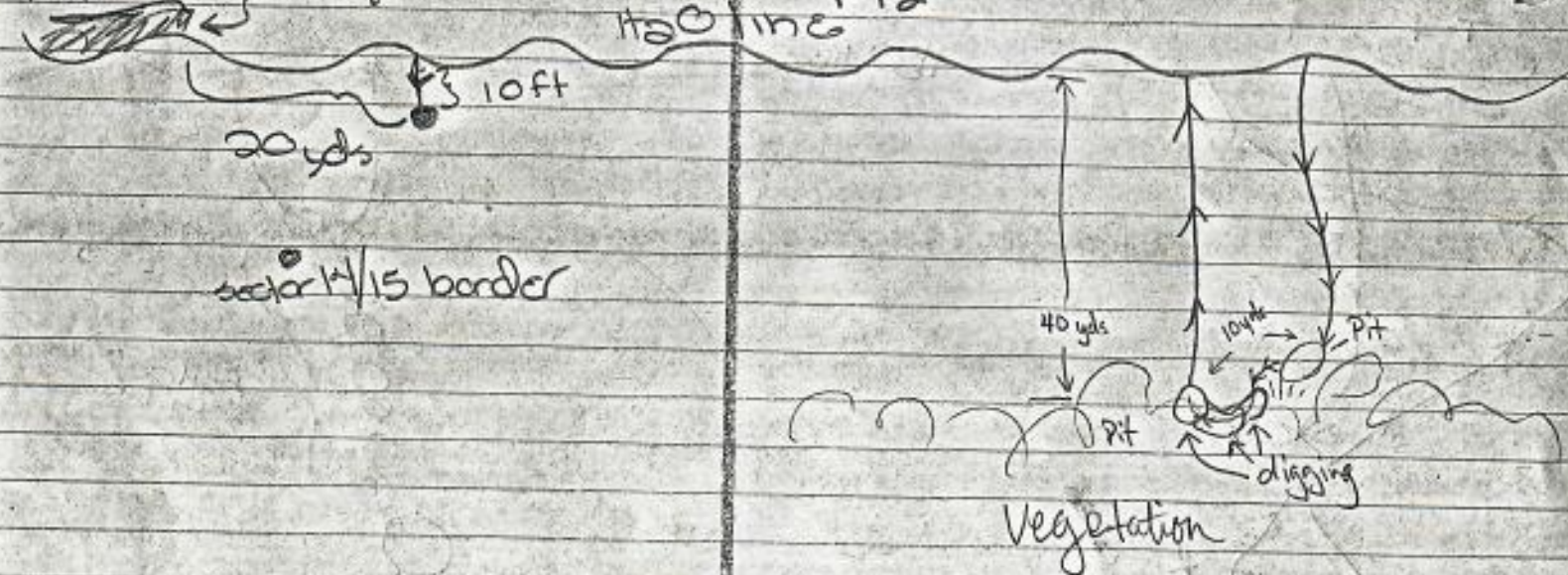


T-11

Rock Ledge

H₂O Line

T-12

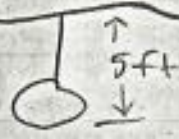


T-13

T14

H2O line

75 ft



7.8 border

← 35ft. →

Vegetation

old pit

30 ft.

old pit

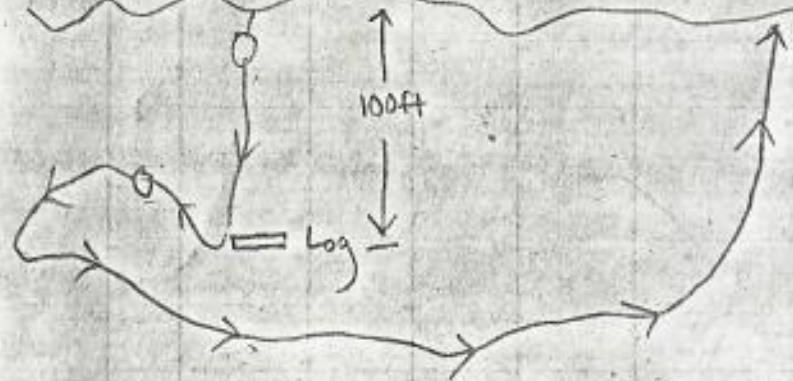
H2O line

T15

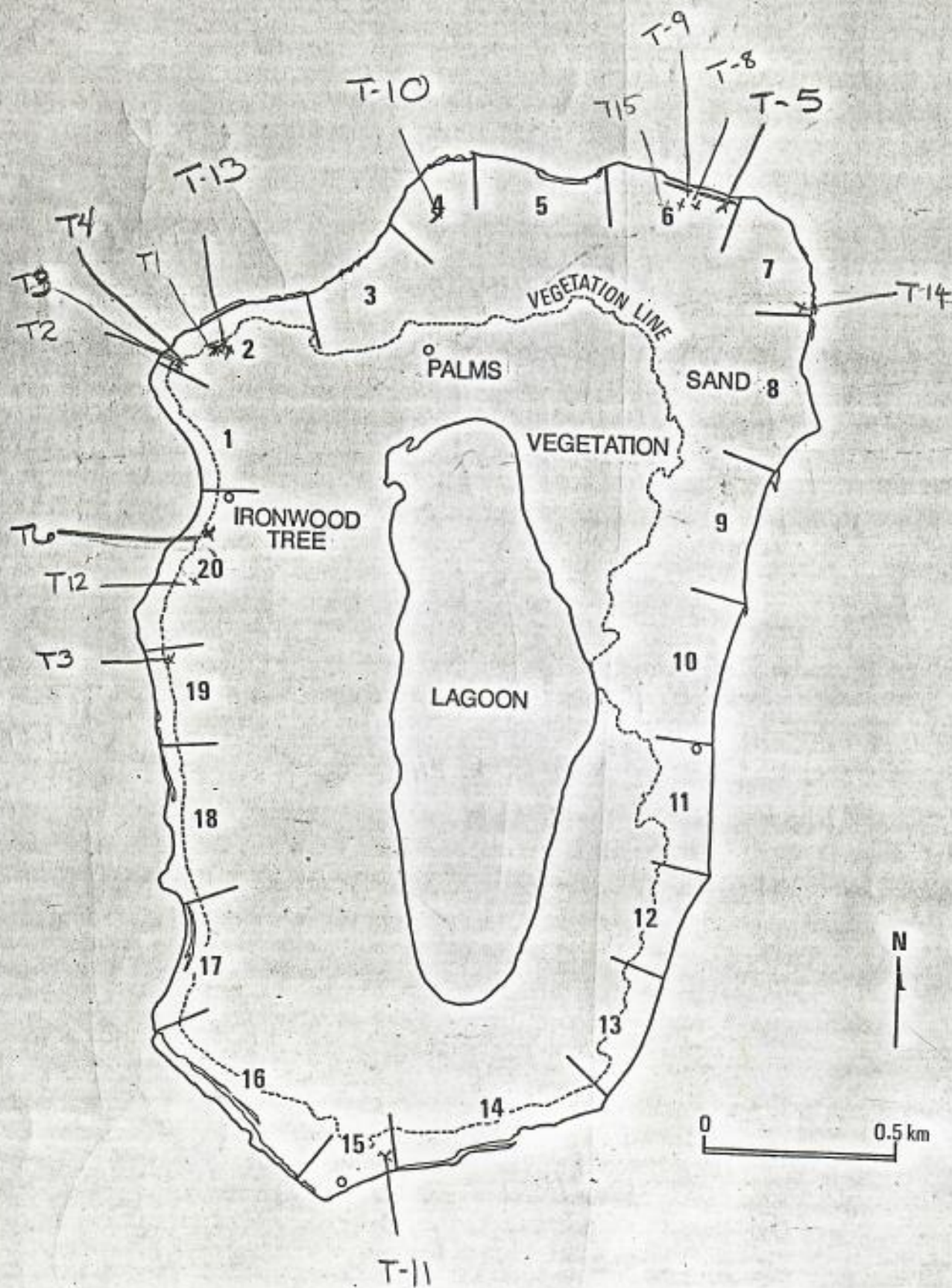
100ft

Log

300ft



1987 Turtle Pits



Laysan Turtle Mortality (#1)

T11A87

Date: 9 April 1987

Observers: B. Becker, R. Westlake, P. Ching, R. Vetter

Metal Tag I.D # 6815 right flipper

Found a partially buried T_2 carcass in beach position 2 at the 1/2 sector border. The carcass had been lying on the beach for some time (months). We dug in the sand to locate the hind flippers and tail, but no bones were found. On the right lateral side (dorsal) there were scrapes in the scutes which had penetrated to the body shell (possible shark attack?)

Dimensions: curved length 71cm

curved width 73cm



(lacerations)

Laysan Turtle Mortality (#1)

T11A87

Date: 9 April 1987

Observers: B. Becker, R. Westlake, P. Ching, R. Vetter

Metal Tag T.D. # 6815 right flipper

Found a partially buried T_2 carcass in beach position 2 at the 1/2 sector border. The carcass had been lying on the beach for some time (months). We dug in the sand to locate the hind flippers and tail, but no bones were found. On the right lateral side (dorsal) there were scrapes in the scutes which had penetrated to the bony shell (possible shark attack?)

Dimensions: curved length 76cm
curved width 73cm

Photos

Roll T-2 Frame #1 general

#2 overview

#3 dorsal overview

#4 right overview

#5 dorsal overview

#6 shell overview (wounds)



T2/u

ref tag #6815

Layson
4/9/87



Roll T-2: 4.

T2/u

ref tag #6815

Layson
4/9/87



Roll T2: 3

T2/u

ref tag #6815

Layson
4/9/87



Roll T2-6

T21A87

Date: 19 June 1987

Observers: B. Becker, P. Ching

Found a partially buried T3 carcass just south of the sand spit in sector 8, beach position 1. The turtle had been there quite some time - most all of the flesh was gone on the head & flippers, but some flesh inside the ^{bony} carapace. The scutes were gone from the bony shell.

No measurements were taken, nor any photos taken. Both humerus bones were collected from the front flippers. The carcass was then buried.

6/20/87 The bones of the turtle were strewn about the beach due to the wave action. So much for measurements, but the carapace bones were beginning to separate.

Turtle Resighting - Injury

6/4/87 B. Becker, P. Ching 0930 hr.

ht. tag 58961

sector 2, beach position 1

[old injury] - tail & rff truncated (munched on?)
Also 2" dia. area of bone in carapace, exposed
on left of dorsal mid-line at mid-body

Turtle was seen ~1400 on 6/3 floating at
surface in 4-8' deep H₂O, with shell half way
out of H₂O. Turtle was seen at ~2000 hr.
hauled up on 6/3 by the crosses.

Photos: Roll T-9 Frame 1 rear view Frame 2: rt. side
(bite marks on rff?)

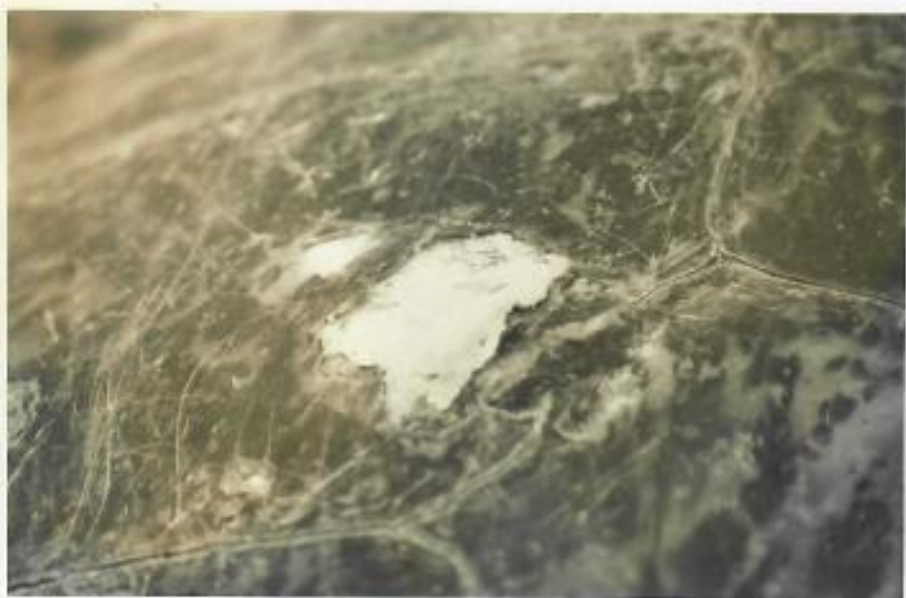
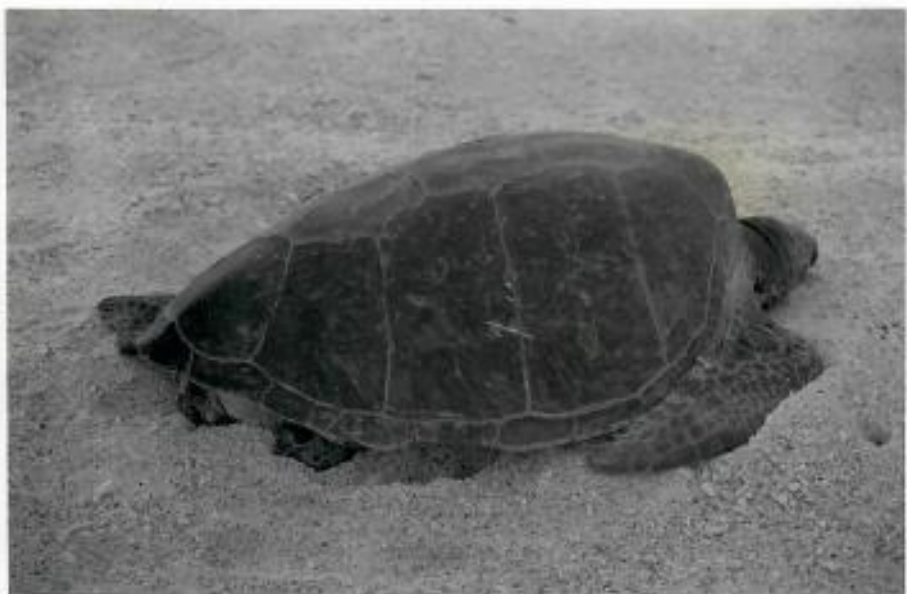
Frame 3: dorsal scar - exposed bone

6/16/87 B. Becker ~1400 hr., sector 1 (near 1/2 border), B.P. 1

T30♂ - Ø tags

old scar on tail & top of head. outer skin layer
was gone. Turtle went into the H₂O, staying in the
near vicinity, floating at the H₂O surface.

Photos: Roll T-10 Frame 35 - Dorsal view of turtle.
Frame 36 - close-up of tail scar w/ 1 rff



T3♀
Tag # 5896 Rm

old scar
missing part of tail & rt. rear flip

Laysan
6/4/87
Roll T-9:1

T3♀
Tag 5896 Rm

rt. rear flip missing

Laysan
6/4/87
Roll T-9:2

T3♀
Tag 5896 Rm

dorsal scar (bone staving)

Laysan
6/4/87
Roll T-9:3



T3 01

Layson
6/16/87
Roll T-10:35

scar on tail

T301

Layson
6/16/87
Roll T-10:36

scar on tail

11

Table 1. Tag resightings of adult green turtles at Laysan Island 9 Oct 1987 → 7 Feb 1987 (dates)

Tag No. ²	Date		Location Island / Sector	Status ¹	Carapace length (cm)		Carapace width (cm)		OBSERVER
	left	right			Straight	Curved	Straight	Curved	
Male tag turned in while caught 6/10/87			Laysan [6]	Basking O.P. 1					CLB
3/28/87 1st 2 cm AN 2nd sex									
6809	6/2/87		Laysan [Sector 8]	Basking on beach					CLB
Also tag 6/11/87				"					
6896	6/7/87		Laysan [Sector 2]	"					
* 5363	6/17/87		Laysan [Sector 18]	"					MAC
Unknown sex:									
6815	4/9		Laysan [1]	"					
more 10	4/9/87								

Applied by
Rod Watson et al. /
Laysan 7/1/85.

(Tried tag him
used by Jayson 3 (6809
6810
6811)

FEMALE:

NOT IN FFS MONITOR

old scar - missing part of tail + rtf
also bare on left side, midbody exposed

NOT IN FFS MONITOR - 6/5/87 FFS ? +
+5913

NOT IN FFS MONITOR length
+5913

width 73

RLW

1986

Note -
in 1986 tag
6813, 6814 & 6815
used

¹ Basking, nesting, foraging, etc.
² () indicates additional tag applied at the time of resighting.

NEWLY TAGGED

Table 1.--Adult green turtles newly tagged at TERN IS. 1988
(dates)

Tag No.	Date	INITIALS Location	Status	Carapace length (cm)	
				Straight	Curved
Female					
6967 R 6868 L)	4-30	K.N.	N.	Recovered Tern - N Summer 1991	
6869 L 6870 R)	5-6	K.N.	N.		
6871 L					
6871) 6872)	5-14	K.N.	N.		
10259 L 10260 R 3-4) 10261 R)	5-19	K.N.	N.		
Female					
10263 R (1-2) 10264 L + 10267 R = 6-03	5-25	V.S. GN	N.		
10256 R (3-4) (6967 R) (6868 L)	5-13	G.B.	N.		
10266 R 3-4 (10259 L) (10261 R BAD, REMOVED)	6-1	S.M.	N.		
10268 R	6-03-88	GN	Nest		
1 Basking, nesting, foraging, etc.					
6875 L (3-4), 10269 R	6-08-88	PLM			

NEWLY TAGGED

Table 1.--Adult green turtles newly tagged at WHALESKATE 1988
(dates)

Tag No.	Date	INITIALS Location	Status ¹	Carapace length (cm)	
				Straight	Curved
FEMale 9801 R	5-26	V.G.	N.		
9802 R	5-25	V.G.	N.		
9803 L					
9808 R	5-27	V.G.	N		
9809 L					
9816 R	5-28	V.G.	N		
9817 R					
9806 R	5-27	V.G.	N		
9807 L					
9804 R	5-27	V.G.	N		
9805 L					
9814 R	5-28	V.G.	N		
9815 L					
9818 L	5-28	V.G.	N		
9810 R	5-28	V.G.	N		
9811 L					
FEMale 9812 R	5-28	V.G.	N		
9813 L					
9821 R	5-29	V.G.	N		
9820 L					

FLY
SWATER

¹Basking, N = nesting, foraging, etc.

NEWLY TAGGED

Table 1. -- Adult green turtles newly tagged at WHALESKATE 1988
(dates)

Tag No.	Date	Location	INITIALS Status	Carapace length (cm)	
				Straight	Curved
PAINT # OR LETTER					
Female					
10296 L 10297 R	6-4		V.G.		
10298 10299	6-4		V.G.		
10300 10326	6-4		V.G.		
10327 L 10328 R 10329 R (3-4)	6-5		V.G.		
10330 R, 10335 L	6-7		V.G.		
10333 L	6-6		V.G.		
10334	6-7		V.G.		P.N. #16
10336, 10337	6-7		V.G.		

Female

¹Basking, nesting, foraging, etc.

NEWLY TAGGED

Table 1.--Adult green turtles newly tagged at WHALESTATE

1988

(dates)

Tag No.	Date	Location	Status ¹	Carapace length (cm)		
				Straight	Curved	
Female						
10341R	6-8	HJ				
10342R	6-8	HJ				
10343R (3-4)	6-8	HJ				
(10339L 10340R)	6-8	HJ				
10346L	6-8	HJ				
(10347L 10348R)	6-9	HJ				
10349R	6-9	HJ				
(10324L 10325R)	6-9	HJ				
Female						
(10322L 10323R)	6-10	HJ				
(10321L 10350R)	6-10	HJ				
(10319L 10320R)	6-10	HJ				
(10318R) <i>misapplied</i>	6-11	HJ				
(10316L 10317R)	6-11	HJ				
<hr/>						
¹ Basking, nesting, foraging, etc.						
10314L						
10315R, 10313R (3-4)	6-11	HJ				
10312R (3-4)	6-11	HJ				

NEWLY TAGGED*

Table 1.--Adult green turtles newly tagged at Whaleskate
ISLAND (dates)

Tag Nos.	Date	INITIALS Location	PAINTED # OR LETTER Color	Carapace length (cm)	
				Straight	Curved
10301 L, 10303 10318 R (rec)	6-11	SM, PD			
10302 L (3-4), 10303 R (3-4)	6-12	SM, PD			
10304 L, 10305 R (3-4)		SM, PD			
10306 L (3-4), (3190 R) rec		SM, PD			
10307 L, 10311 R (3-4)		SM, PD			
10454 L (3-4), 10455 R (3-4)	6-13	PD			
10456 L (loose), 10457 R (3-4)	6-13	PD			
10458 L, 10459 R	6-13	SM			
10309 L	6-13	PD			

¹Basking, nesting, foraging, etc.

* ARE TURTLES WITH NO PREVIOUS TAGS

Turtles tagged at town is
by R. Vetter 86/87.

Date	Tag#	Sex	Location
6/12/86	9727 LF	Adult Female	Crab beach basking
6/15/86	9728 LF	Adult Female	Basking Female behind Gen Bldg on beach
6/16/86	9729	Adult Female	basking at Fuel tank beach

with George at town ↑
Did you use tags 9730, 431? - during the last days of your visit

6/25/86 9732 on Adult Female (laying eggs)
9733

6/29/86 9734 on Adult Female (trapped adjacent near crab beach)

1/3/87 9735 LF Sex unknown, 46cm
9736 RF basking near fuel tanks

1/25/87 9737 RF Sex unknown, 46cm
9738 LF caught by net at tide gauge 2" scratch on right side of plastron

2/26/87 6862 LF Tide gauge Sex unknown 48cm, Dented shell
6863 RF

Tags on Hand: 3 sets, 6864-6875
9739-9750
9801-9825

1986

Green Sea Turtle Observations at TAMI, FFS 1986
except on 10/25 - Tring

Date	Left Tag	Right Tag	Sex	Location	Comments
6/25/86	9727	9707	F	Crab beach	Basking
6/26	32	68	F	meter 719	Nested ENT. NO. 365 NOT ON MASTER LIST
6/26	9769	9700	M	Crab beach	Basking 6/29/79 east-B 23
6/26	9727	9707	F	Crab beach	Basking
6/27	9731		F	Barrack beach	Digging, dime size tumor where dog goes on flipper
6/27	6696?		F	Crab beach	Basking uncertain not entered 9699
6/28	97	97	M	South beach	Basking, small tumor on right eye
6/29	9697	9734*	F	Cement pad Shell - Crab	Trapped between concrete & ground *traged
6/30	9728		F	NDBS Beach	Basking
6/30		9707	F	South beach	Basking
7/2		9086	F	Under fuel tanks	Nested & trapped & released barrack on RF and on shell above head
7/4	9727	9707	F	Crab beach	Basking
7/18	9699?		M	Crab beach	Basking
7/28	9727	9707	F	Crab beach	Basking
7/29	97	77?*	F	South beach	crawling along berm *Blue #8
8/10	96	86	F	west of shell beach	trapped along seawall near new structure and nested there
8/12	9729		F	South beach	basking
8/16	9727	9707	F	Crab beach	basking
8/16	9699		F	Crab beach	basking
8/17	82 42	81	M	Fuel tank beach	basking Male note ENT. NO. 113
8/17	9727	970	F	Crab beach	basking
8/21	9727	9707	F	Crab beach	basking
9/20	9727	9707	F	Crab beach	basking ENT. NO. 62 female 3129, 2032
9/27	3129		F		also had black discharging on LF and metal bar on flipper
9/28	9727	9707	F	Crab beach	basking left rear flipper freshly cut off and right flipper had an old slice
10/25	3014		M	Tring Island	Basking NOT IN MASTERS 5/79 WS? *
11/30	9729		F	South Beach	Basking found of L rear flipper missing

Turtle Tag & Obs. Notes

- ① If I did not have info concerning which flipper the tag was on I wrote it in pencil and in between the two options. Your records probably have that info.
- ② Two tags were partially read before the turtle demonstrated its interest in the water again. (on 6/28/86 and 8/17/86) you should be able to figure the one on 8/17/86 out by the other tag.
- ③ Tag # 6696 or 9969 depending on what position the observers head was in (or under the influence of) was read incorrectly once. Therefore I left it in pencil until the correct # is known I think it should be 9699. It was read on 6/27/86 and 8/16/86.
- ④ After I made this table I realized I actually have more observations of turtles if I used the blue painted #s on the turtles & figured out what tag they had on thru past observations. Maybe Later.

4 1/2

A question mark means I did not collect the info or parts are missing

5 I don't have any record of tags 9730 & 9731 that were on the set of tags we used to tag turtles during your visit. I continued to use that set after you left ⁽¹⁹⁸⁶⁾. Since they were used before you left, I hope you have notes on them. Let me know about the outcome. I'll improve my records at this end also, for this season

6 In general I don't attempt to read the tag unless the turtle is unaware of my presence and the tags are visible without moving the flippers to the point where the turtle heads for the water. I also limit this activity to myself and Joan, who conducts the seal counts. How do you feel about this? Should we leave the turtles alone or try to read all tags? - My next mail drop is about March 17 - write by the 13th to catch the plane packing.

Hope to see you around April 11-13 or May 8-10 when I am in Honolulu - otherwise I'll be on vacation during my time off in between those dates and I am sure I'll be busy during those dates as usual.

Green Sea Turtle Observations at FFS 1987

Date	Left TAG	Right Tag	Sex	Location	Activity	Comments
1/16/87	3135		U	East IS	Roosting	about <u>50cm</u> in size ^{see sample list}
1/28		4259 ^{orig. no. 113}	M	Batterh Beach ^{Sector 1}	Tem	
1/31	4729		U	South Beach ^{Sector 1}	Tem	4729 not in Master's 1986? <u>still in drawers!</u>
2/3		4259 ^{same 113}	M	Batterh Beach ^{Sector 1}	Tem	
2/8		4259 ^{same}	M	Batterh Beach ^{Sector 1}	Tem	
2/9	3135 ^{sample}	3136	U	East IS	↓	found at same location as on 1/16/87

Table 3.--Tag resightings of adult green turtles at TERN ISLAND Summer 1987
(dates)

Tag No. ¹	Date originally tagged	Location tagged and status	Location recovered and status	Interval years/months	Date resighted
----------------------	------------------------	----------------------------	-------------------------------	-----------------------	----------------

Male

MALE

SAME TURTLE

1.	9699 L	21 MARCH 82 Tern, FFS-B BS			10/12/87, 9/5/87
2.	5456 R				6/2/87 + 10/1/87
3.	8132 ?		NOT IN LOG 4/84 8132 ? Dead at Waianae 5/86		

Female

♀

4.	3812 - L	see 471 ENT. NO. 368			7/26/87
5.	9729 - L	1987	This turtle has a small bump on rear of shell		5/23/87
6.	8231 (?)				6/11/87

Continued *Therefore "BASK"*

() indicates additional tag applied at the time of resighting.

UNrecorded sex

7.	3358 R	see 474 ENT. NO. 367 ♀			6/6/87
8.	2614 R, 3032	6/78, 5/79, 10/86 Trig, Trig, Tern	(MALE) ENT. NO. 34		6/7/87
9.	9727 ?	NOT IN LOG 1987			6/11/87
10.	{ 6661 or 6667 R } 6651 L 6660 L	8/83 95cm carapace	♀ ENT. NO. 366		6/22 + 7/6/87

Table 1.--Adult green turtles newly tagged at TERN ISLAND (FFS) May-Sept, 1987
(dates)

Tag No.	Date	Location	Status ¹	Carapace length (cm)	
				Straight	Curved
Male					
1. 6864	5/30/87	Left front Flipper	Basking	No measurement	
FEMALE					
1. 6865 6866	9/4/87	Left front Flipper Right front Flipper	Nesting	-	91cm
2. 9950 9949	9/3/87	Right front Flipper Left front Flipper	Nesting	-	101cm
3. 9948 8216 9948	8/29/87	Left front Flipper Right front Flipper	Nesting	-	99cm
<p>ENTR 369 } { 8216 old tag Old Left front tag unreadable so 9948 was placed on this turtle }</p>					
4. 9947 9946	9/16/87	Right front Flipper Left front Flipper	Nesting	-	98cm
5. 9945 9941	7/26/87* 7/2/87	Left front Flipper Right front Flipper	Nesting	-	92.3cm
6. 9944	7/14	Left front Flipper	Nesting	-	103cm

Continued next page

¹Basking, nesting, foraging, etc.

Note: All turtles banded had no distinguishing tumors, scars, or other marks.

Table 1.--Adult green turtles newly tagged at TERN Island (FFS) MAY-Sept 1987
(dates)

Tag No.	Date	Location	Status ¹	Carapace length (cm)	
				Straight	Curved

Male

Female

7.	9743	7/11/87	Left Front Flipper	Nesting	-	101 cm
8.	9742	7/16/87*	Left front Flipper	Nesting	-	95 cm
	9740	6/16/87	Right Front Flipper			

* Bands were put on at different times.

¹Basking, nesting, foraging, etc.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

300 ALA MOANA BOULEVARD
P.O. BOX 50167
HONOLULU, HAWAII 96850

IN REPLY REFER TO:

January 19, 1988

George H. Balazs, Zoologist
Southwest Fisheries CNTR
Honolulu Laboratory
2570 Dole Street
Honolulu, HI 96822-2396

Dear George,

Enclosed is a list of green sea turtles tagged at Tern Island, French Frigate Shoals during the last six months. Hopefully, Rick Vetter informed you of any turtles tagged during the first six months of 1987; I have not been able to find any records of turtles being banded during that period in the Tern Island files.

Turtle Bands on Hand at Tern as of January 15, 1988:

Bands 9801-9825 and 6867-6875

Also enclosed is a list of tag resightings at Tern.

Sincerely,
Ken Niethammer
Kenneth Niethammer
USFWS
P.O. Box 50167
Honolulu, HI 96850

MEMORANDUM OF CALL

TO: *George Balazs*

YOU WERE CALLED BY— YOU WERE VISITED BY—

OF (Organization)

PLEASE PHONE FTS AUTOVON

WILL CALL AGAIN IS WAITING TO SEE YOU

RETURNED YOUR CALL WISHES AN APPOINTMENT

MESSAGE

I hope to have a synopsis of the last two years of Turtle nesting data (TERN) Completed by next Flight (March) I will send you a copy.

RECEIVED BY: *K. Niethammer* DATE: TIME:

63-110 NSN 7540-00-634-4018 STANDARD FORM 63 (REV. 8-81)
Prescribed by GSA
+ U.S.G.P.O. 1985-0-481-247/20000 FPMR (41 CFR) 101-11.6

SIGHTINGS OF

Tagged Turtles on FFS

<u>Tag #</u>	<u>flipper</u>	<u>Date</u>	<u>Island</u>
6364(?)	R	6-25-84	WS
6/84 3358	R	6-25-84	WS
4/84 8149	L	6-18-84	TR
4/84 3377	R	6-9-84	EA
6211(?)	L	5-22-84	EA
7072 6252 #181	R	5-22-84	EA
5709(?)	L	5-22-84	EA
5457(?)	R 4/81?	3-20-84	TR
6/84 Rec 5155 526 by #278	L #278	7-20-84	WS (5154 on RT)
5099 #276	L	7-15-84	EA (Also 5214 on RT)
6/84 7976	L	7-12-84	WS
42--	R	7-5-84	WS (Also on L)
6/84 3401	L	6-28-84	WS
6/84 4283	R	6-26-84	WS

George -
 Here is the
 turtle data from
 FFS. I included
 turtles with tags
 that could not be
 read, just to give
 you an indication
 of how many
 tagged turtles we
 were able to see.
 The blanks (-)
 indicate an unknown
 digit. A question
 mark (?) means
 the printed number

Sightings of tagged turtles with unknown tag # on ffs

Tag #	flipper	Date	Sex
?	L	5-21-84	EA
?	R	"	"
?	L	5-20-84	"
?	L	"	"
?	B	"	"
?	B	"	"
?	B	"	"
?	L	"	"
?	L	5-12-84	"
?	L	"	"
?	R	5-11-84	"
?	L	5-7-84	"
?	L	"	"
?	R	5-6-84	"
?	B	"	"
?	L	"	"
?	L	"	"
?	B	"	"
?	R	4-27-84	"
?	B	4-26-84	"
?	L	4-25-84	TR
?	R	4-21-84	EA
?	B	4-20-84	WS

<u>Tag #</u>	<u>flipper</u>	<u>Date</u>	<u>Vol</u>
?	L	4-14-84	EA
?	R	"	WS
?	R	4-10-84	WS
?	L	3-30-84	EA
P	L	3-20-84	TR.
?	R	3-10-84	"
?	R	7-30-84	WS
?	L	7-21-84	EA
?	R	7-20-84	EA
?	L	6-6-84	EA
?	R	"	"
?	R	6-4-84	EA
?	R	5-30-84	EA
?	L	5-21-84	EA
?	R	"	"

Sightings of Painted Turtles

<u>Paint #</u>	<u>Date</u>	<u>Island</u>
45	6-26-84	WS
68	"	"
60	"	"
48?	"	"
43	"	"
57	"	"
65	6-26-84	WS
26	"	"
4-?	7-18-84	WS
139	7-13-84	EA
1-8?	"	"
175?	"	"
78	"	"
111?	"	"
TB	7-9-84	EA
HO	7-7-84	EA
TB + 24	"	EA
149	"	"
KC	"	"
45	6-27-84	WS
41?	6-27-84	"
66	"	"
6-?	"	"
41	"	"

green
TB = green
24 = white

Paint #

Date

Set

26	6-27-84	WS	
66	6-25-84	WS	
48	"	"	
65	"	"	
11 ?	"	"	
43	"	"	
57	"	"	
45	"	"	
?	"	"	
?	"	"	Blue
84	"	EA	
56	6-24-84	WS	
61	"	"	
45	"	"	
32 ?	6-21-84	WS	
68	"	"	
56	"	"	
4 ?	"	"	
6 ?	"	"	
13	"	"	
67 ?	"	"	
64	"	"	
4	"	"	

Sightings of Painted Turtles

FFS

<u>Paint#</u>	<u>Date</u>	<u>Pl.</u>	<u>Paint</u>	<u>Date</u>	<u>Pl.</u>
131	6-21-84	FA	54	6-19-84	WS
52?	6-20-84	WS	40?	"	"
65	"	"	19	"	"
?	"	"	39	"	"
?	"	"	26	"	"
37	"	"	56	"	"
61	"	"	25	"	"
44	"	"	?	"	"
54	"	"	11	"	"
26	"	"	64	"	"
35?	"	"	-2?	"	"
16	"	"	24	"	"
50	"	"	53	"	"
107	6-19-84	EA	38	"	"
63	"	"	65?	"	"
11A	"	"	19?	"	"
84	"	"	65	6-18-84	WSD
81	"	"	?	"	" "
121	"	"	32	"	" blue
67	"	"	42	"	" "
24	"	"	13	"	" "
111	"	"	38	"	" "
83	"	"	10	"	" "
101	"	"	115 @ 85?	"	" "
87	"	"			

Sightings of Painted Turtles FFS

<u>Paint</u>	<u>Date</u>	<u>Sex</u>	<u>Paint</u>	<u>Date</u>	<u>Sex</u>
56	6-14-84	EA	43	6-11-84	EA.
93	"	"	18	"	"
85	"	"	90	"	"
84	"	"	2	6-9-84	"
87	"	"	37	"	"
80	"	"	9	"	"
73	"	"	21	"	"
8	"	"	3	"	"
64	"	"	32	"	"
65	"	"	29	"	"
27	"	"	30	"	"
53	6-11-84	"	64	"	"
29	"	"	19	"	"
82	"	"	34	"	"
23	"	"	33	"	"
23	"	"	46	"	"
22	"	"	21	6-8-84	"
28?	"	"	5?	"	"
44	"	"	24	"	"
19	"	"	19	"	"
13	"	"	15	"	"
34	"	"	57	"	"
18?	"	"	46	"	"
93	"	"	23	"	"
46	"	"			

<u>Paint</u>	<u>Date</u>	<u>Sol</u>
9	6-6-84	EA
28	"	"
20	"	"
40	"	"
?	"	"
9	6-4-84	EA

23 June 84

Hi George,

Everything here's going fine spent the last 5 nights on East. Here's a summary of the action:

DATE (PM of)	# ASHORE =	# OLD +	# NEW	(# Tags applied	# Tags Recovered)
6-18	20	12	8	3	1 + 4 short-term +1 unreadable
6-19	28	17	10	5	4 + 1 short-term
6-20	39	36	3	2	1
6-20	41	38	3	2	1
6-22	25	23	2	1	1

Many of your numbers are still highly visible, and those that I'm not sure of I've been adding a letter code. I quickly ran out of white paint!

Here's a list of Tag Recoveries from nesting females: (it may very well be that you saw them nesting but the paint has washed off --)

DATE	TAG L	TAG R
6-18	✓ 5099	6-15 BASK-EAST Yes
6-18	✓ 3541	Yes (short term)
6-18	✓ 3388	✓ 8154 (by SRL) (short term) 6/7/84 BASK-EAST
6-18	✓ 4284	Yes (short term)
6-18	✓ 3416	No (short term)
6-19	✓ 4279	Yes (short term)
① - 6-19	① two left	- 3601 ENT. # 194
6-19	5189 (Distal 2-3) (No fl area)	Yes 6-4 BASK-EAST
New- 6-19	8164 (SRL)	① 5428 ENT. # 274
New- 6-19 5008-5011 4/11/77	8165 (SRL)	① 5008 ENT. # 180 5/7/77 - 83.2 cm Punaluv net
① New - 6-20	two left	① 5145 (Distal) ENT. # 781 also tag in fl area
① 6-21	Yes (2213)	① 2214 6/9-6/10 NEST-EAST-TC77
① 6-22	tag distal, 3595 fl	① 6094 fl, tag distal ENT. # 183

Basking recoveries:

Island	Date	Sex	Tag L	Tag R
East	6-19	F	No	3444 <i>short term</i>
<i>New</i> -East	6-20	M	<i>6017 6/22</i>	No
<i>New</i> -East	6-21	F	<i>5440</i>	<i>5439 ENT # 282</i>

The night of 6-17 I did one walk on Tern, and found #46 Blue from Whale-Skate up nesting (and another turtle too, who was untagged).

I'll come in and see you shortly after my return, and give you all my other numbers then. I've really been enjoying working on East, though a Tern Island bed will feel good tonight!

We've seen hatchlings the nights of 6-19, 6-20, and 6-21. Quite a wonderful sight seeing the cycle come full circle.

Well, I've just been informed that the plane is leaving soon -- hope all goes well on the Big Island. Talk with you soon.

Sue

Tags Lost: 7971
7978
8112
8193
8194
8152
8159

Tags Misapplied: 7018
(and given to GB) 7970
7999

tags applied to "fl" area unless noted

Tags applied to basking turtles (Adults unless noted)

6-9	WS	F	7968 (L)	night basker, xxxx recovered 6-13 (N) and 6-14 (N)
6-9	WS	M	7969	night basker
6-10	WS	F	7980	night basker, xxxx recovered 6-11 (B) and 6-14 (B)
6-10	WS	M	7982	night basker
6-11	WS	F	7984	recovered 6-15 (B)
6-11	WS	M	7985	
6-11	WS	F	7986	recovered 6-15 (B) and 6-15 (N)
6-11	WS	F	7987	recovered 6-14 (N) and 6-15 (N)
6-11	WS	M	7988	limb bones of both foreflippers exposed
6-11	WS	F	7989	
6-11	WS	F	7990	recovered 6-14 (N)
6-11	WS	F	7991	
6-11	WS	M	7992	
6-11	WS	F	7993	recovered 6-14 (B)
6-11	WS	F	7994	
6-13	WS	F	8111	night basker, recovered 6-15 (N)
6-13	WS	M	8114	night basker, recovered 6-14 (B) (also at night)
6-14	WS	F	8115	
6-14	WS	M	8116	
6-14	WS	F	8117	recovered 6-15 (N)
6-14	WS	F	8118	
6-14	WS	F	8119	
6-14	WS	F	8120	
6-14	WS	M	8121	
6-14	WS	F		8122 (R) recovered 6-15 (B)
6-15	WS	F	8130	
6-15	WS	F	8131	
6-15	WS	F	8132	
6-15	WS	M	8133	
6-15	WS	F	8141	night basker
6-16	WS	F	8143	
6-18	TRIG	F	8145	
6-18	TRIG	M	8146	
6-18	TRIG	F	8147	Female? Very bright yellow-green carapace
6-18	TRIG	M	8148	
6-18	TRIG	F	8149	
6-20	EAST	M	8166	
6-21	EAST	M	8172	
6-21	EAST	M	8173	
6-22	EAST	M	8178	
6-28	TRIG	?	8196	
6-30	TERN	M	8198 (3-4 area)	Subadult, straight carapace length 62.2 cm Turtle tangled in net around neck and proximal "fl" area of left fore flipper. Net was tangled with propagator and line. Fibropapillomas fl right fore flipper and right eye. Turtle cut free of net; photos.

3 or 4 STRANDS OF LINE (of NET)
AROUND HEAD + FLIPPER. LEFT "FL"
AREA HIGHLY ABEADED.

tags in "fl" area unless noted
 n = no tag present
 y = tag present, not read
 ? = not noted

Tag recoveries -- basking turtles (adults)

6-8	WS	M	n	3404 (R)	GB tagged 84; also recovered 6-14 (B) and 6-15 (B)
6-8	WS	F	3400 (L)	3401	GB tagged 84; also recovered 6-11 (B)
6-9	WS	M	?	2750	night basker
6-10	WS	M	5988 (3-4)	y	
6-10	WS	M	?	2625	
6-10	WS	M	3765	3234	night basker; also recovered 6-13 (B at night)
6-10	WS	M	3018	?	night basker
6-11	WS	F	n	3474	also recovered 6-15 (B)
6-11	WS	M	3044	?	
6-11	WS	F	?	2722	
6-11	WS	F	n	5150	also recovered 6-15 (B)
6-11	WS	F	n	6171	also recovered 6-11 (N), 6-13 (N) and 6-14 (N)
6-11	WS	F	3535 (3-4)	n	GB tagged 84; night basker; also recovered 6-15 (B)
6-14	WS	F	3597	y	
6-14	WS	F	n	3399	
6-14	WS	F	3397	y	GB tagged ⁸⁴ ; night basker; also recovered 6-15 (B)
6-15	WS	M	2704	y	
6-15	WS	F	n	3403	GB tagged 84
6-15	WS	F	y	3395	GB tagged 84
6-18	TG	F	n	3444	GB tagged 84
6-20	EA	M	6017	n	night basker
6-21	EA	F	5440	5439	6-24(N)
6-24	EA	F	4267	y	GB tagged 84, 6-24(N)

Basking counts

6-8	WS	1900 hrs	30	
6-9	WS	1430	24	including "white 50"
6-10	WS	1730	56	
6-11	WS	1530	46	including "white 50"
6-13	WS	1730	45	
6-14	WS	1800	37	including "white 50" + "white 48"
6-15	WS	1700	31	(27 female, 4 male)
6-18	TRIG	1453	9	(3 female, 3 male, 3 sex unknown)
6-18	EAST	1730	32	
6-19	EAST	1630	43	
6-20	EAST	1430	49	
6-21	EAST	1730	37	
6-22	EAST	1730	28	
6-24	EAST	1915	23	
6-25	EAST	1700	24	
6-26	EAST	1730	28	
6-27	EAST	1700	33	

Tags applied to nesting females - Whale Skate (tags applied to "fl" area unless noted)

carapace measurements are CURVED CARAPACE MEASUREMENTS

DATE: e.g., 6-8 = evening of 6-8, dawn to dusk

6-8	7951 (L)	7952 (R)	
6-8	7953		
6-8	7954		
6-8	7955	7956	
6-8	7957		
6-8	7958		
6-8	7959		
6-8	7960		
6-9	7966		----- 92.0 cm recovered 6-10 (B)(at night) half of R hind flipper missing
6-9	7967		
6-9	7965		----- 97.0
6-9	7963		
6-9	7961		
6-9	7964		
6-9	7972		stub R fore flipper at 2nd scale
6-9	7973		
6-10	7974		----- 101.0
6-10	7975		----- 95.0
6-10	7976		recovered 6-11 (B)
6-10	7983		
6-10	7977		----- 95.5
6-10	8101	8110	101.0
6-10	7979		----- 105.5 barnacle over R eye
6-10	7981		
6-11	7996	7997	
6-11	7998		
6-11	7989	8000	98.0 left tag applied while basking 6-11
6-11		8103	
6-11	8127		----- 98.0 recovered 6-15 (B)
6-11	8105		
6-11	8107	8106	
6-13		8108	fibropapilloma L fl area
6-13	8134		
6-13	8126		
6-13	8113		----- 99.5
6-13	8109		
6-14		8123	
6-14	8124		tag rip ? R "fl" area
6-14	8125		
6-14	8128	8129	
6-15	8135	8136	90.5
6-15	8137		
6-15	8138	8139	
6-15	8140		
6-15	8142		
6-9	8104		

Tag Recoveries - nesting females - Whale-Skate

Note measurements are CURVED CARAPACE

6-8	n	5350	(R)	
6-8	n	3402		GB tagged 1984
6-9	2818	7962		R tag applied
6-9	3383	y		GB tagged 1984 (East #14)
6-9	n	3390		GB tagged 1984
6-9	5463	5464		
6-11	?	5149		
6-11	n	6171	101.5	
6-13	3752	3753		
6-13	4260	n	92.5	GB tagged 1984 while nesting on Tern
6-13	7968	n		SRL tagged 1984
6-14	3156	3187	104.5	
6-14	7987	n	94.5	SRL tagged 1984
6-14	7980	n		SRL tagged 1984
6-14	n	5154	96.5	
6-15	7986	n		SRL tagged 1984
6-15	n	3407		GB tagged 1984
6-15	8117	n		SRL tagged 1984
6-15	8111	n		SRL tagged 1984

Tern Island nesting females

6-17	8144	(L)		tag applied
6-17	8134			tag recovery, #46 Whale-Skate nester
				turtle"nesting"on WS 6-13 and 6-15

Tags applied to nesting females - East

tags applied to "fl" area unless noted

carapace measurements are STRAIGHT CARAPACE MEASUREMENTS to "the point"

DATE: e.g., 6-19 = evening of 6-19, dawn to dusk

6-18	8151(L)		
6-18	8153		
6-18	8156	8155 (R)	
6-19		8157	89.5 cm
6-19	8158	8170	88.2
6-19	8160	8161	88.2
6-19	8162		
6-19	8163	8171	85.2/88.8
6-20	8167	8168	84.8
6-20	8169		
6-21	8174	8175	
6-21	8176	8177	
6-22	8179		
6-24	8182(2-3),	8180 (fl)(L)	8181 (R) 88.5 cm
6-24	8183	8184	
6-24	8185		
6-25		8186	
6-25		8187	
6-25	8188	8189	91.25
6-25	8190		94.0
6-26	8191	8192 (2-3)	97.5

Tag Recoveries - nesting females - East

6-18	5099	y		
6-18	3541	y	89.8	GB tagged 1984
6-18	3388	8154		GB tagged 1984, SRL added R tag
6-18	4284	y		GB tagged 1984
6-18	3416	n	90.5	GB tagged 1984
6-19	4279	y		GB tagged 1984
6-19	yy	3601	95.5	two tags L - one "fl" one "2-3"
6-19	5189 (2-3)	y		no tag L "fl"
6-19	8164	5428		L tag applied
6-19	8165	5008	97.2	L tag applied
6-20	yy	y 5145 (2-3)	95.2	4 tags evident
6-21	y	2214	99.5	
6-22	y 3595(fl)	6094(fl) y	92.8	4 tags evident
✓6-24	y(2-3)	5306	96.8	one tag L in 2-3 area only, R tag in fl ENT # 283
✓6-24	3417	y		GB tagged 1984
✓6-24	5440	y		ENT # 282
✓6-24	3450	n	96.9	GB tagged 1984
✓6-24	3360	y		GB tagged 1984
✓6-24	y	3002		ENT # 284
✓6-25	3127	y	95.2	ENT # 285
✓6-26	8195	3444	96.0	GB tagged 1984
✓6-27	3001	y	81.5	
✓6-27	4267	y	95.5	GB tagged 1984; partial L hind flipper

Nesting Summaries

Whale-Skate

Date	# ashore N	=	# Old	+	# New	-----New-----		
						# Tags applied	# Tags recovered	# misc
6-8	12		0		12	8	2	2 untagged
6-9	19		6		13	9	4	
6-10	13		5		8	8	-	
6-11	23		13		10	7	2	1 untagged
6-13	15		7		8	5	3	
6-14	15		7		8	4	4	
6-15	17		7		10	5	4	1 untagged
					<u>69</u>	<u>46</u>	<u>19*</u>	<u>4</u>

*19 = 8 long-term recov.
11 short-term (tagged
1984)

East

Date	# ashore N	=	# Old	+	# New	-----New-----			# misc.
						# tags applied	# tags recovered	# short-term recov*	
6-18	20		12		8	3	1	4	
6-19	28		17		10	5	4	1	1 tagged, un-
6-20	39		36		3	2	1	-	read
6-21	41		38		3	2	1	-	
6-22	26		24		2	1	1	-	
6-24	20		11		9	3	3	3	
6-25	22		17		5	4	1	-	
6-26	13		11		2	1	-	1	
6-27	11		9		2	-	1	1	
					<u>44</u>	<u>21</u>	<u>13</u>	<u>10</u>	

* turtles tagged either nesting or
basking by GB 1984

Hatchlings observed the evenings of 6-19, 20, 21, and 27.

UNITED STATES GOVERNMENT

memorandum

DATE: 19/1

REPLY TO
ATTN OF:

SUBJECT:

TO: Hi GEORGE!

Steve tagged a T₃ ♀ on TERN on 29 Sept. X002 is
on the LFF + X003 is on the RFF. The enclosed tag
X001 WAS SUPPOSED TO GO ON BUT THE TURTLE MOVED + THE
REST IS HISTORY!

WE'RE HEADED TO THE MAINLAND ON 11 OCT - HOPE ITS
NOT TOO COLD! TAKE CARE!
GALE

FARIZEL

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

U.S. GPO: 1978-0-261-647/3522

OPTIONAL FORM NO. 10
(REV. 7-76)
GSA FPMR (41 CFR) 101-11.6
5010-111



12-20 - 83

Hi GEORGE!

THANKS FOR YOUR NOTE OF 20 NOV! SOUNDS LIKE YOU'VE BEEN REAL BUSY AT JOHNSTON ATOLL. ALSO, GLAD TO HEAR THAT YOUR WIFE IS RECUPERATING SO QUICKLY - WISH I COULD SAY THE SAME. OF COURSE, OUR LIFE-STYLE IS NOT EXACTLY CONDUSIVE TO POST-OP RECOVERY, BUT ITS HARD FOR ME TO JUST "TAKE IT EASY." I SUFFER REAL INTENSE PAIN IN MY UPPER BACK, RIGHT SIDE + LOWER ABDOMEN - ESPECIALLY AFTER BEING OUT IN A BOAT! Hmmm - MAYBE I SHOULD STAY OUT OF BOATS! ANYWAY - THE LAST COUPLE OF WEEKS HAVE SEEN A MARKED IMPROVEMENT + I'M FEELING MUCH BETTER. WE EVEN DID AN ATOLL SURVEY IN 20 KT WINDS STRAIGHT OUT OF THE WEST + I LIVED THROUGH IT!

THOUGHT I'D SEND YOU MORE TURTLE INFO - SEEMS LIKE WE'RE SEEING MORE OF THEM LATELY SO MAYBE 1984 WILL BE "A BOOM YEAR." HOPE SO! NOT SURE HOW MUCH INFO I SENT BEFORE SO SOME MAY BE REPETITIVE -

TIMES?

11-3-83 0 - 4 DAY SURVEY

11-7 0 - 4 DAY

11-9 1 T₂♀ on WS, sec 5 - 36 DAY ATOLL

11-11 0 - 4 DAY

11-15 T₃♂ TERU, SEC 5 - 4 DAY

11-19 0 - 4 DAY

11-23 T₃♂ TERU, SEC 5, NO TAG - 4 DAY

11-27 0 - 4 DAY

12-2 0 - 4 DAY

12-5 1 T₂♀ tag 6358; 1 T₃ sex unk; Tern, SEC 4 - 4 DAY12-9 1 T₃ sex unk, Tern, sec 3 - 4 DAY

12-13 0 - 4 DAY

12-15 T₂♂ on WS sec 6T₂♀ on Trig sec 1T₂ sex unk "T₂ " "T₃ sex unk, Tern sec 5

} 36 DAY ATOLL

ENTERED

12-17 0 - 4 DAY

12-20 T₂♀, TERN-01 Tag on LFF-719- could not read last digit.
no survey - just looked out window!

12-21 0 - 4 DAY

GUESS THAT'S ALL! WANT TO GET THIS OFF ON THE 23 DEC. FLIGHT -
WILL FINISH OFF THE REST OF THE 1983 INFO A.S.A.P!

MERRY CHRISTMAS + HAPPY NEW YEAR!

GALE

UNITED STATES GOVERNMENT

FISH AND WILDLIFE SERVICE
PORTLAND, OREGON**Memorandum**

TO :

DATE: 11-14-83

FROM :

SUBJECT:

Hi GEORGE!

THANKS FOR YOUR LETTER - WAS NICE TO HEAR FROM YOU. SOUNDS LIKE YOU'VE BEEN BUSY DOWN AT JOHNSTON WITH TURTLES - WISH WE COULD SAY THE SAME. TURTLE ACTIVITY AT FFS HAS BEEN VERY SLOW. ATTACHED PLEASE FIND TURTLE "COUNTS" FROM THE 4 + 36 DAY SURVEYS SINCE 2 JULY 1983 (IF YOU NEED MAY + JUNE + ETC) JUST LET ME KNOW).

UNFORTUNATELY, I FEEL THAT A LOT OF INFO. ON HATCHLINGS WAS LOST. BEFORE OUR ABRUPT DEPARTURE IN LATE AUGUST STEVE + I CHECKED ALL OF THE NEST SITES ON TERU + OUTER ISLETS BUT WE DIDN'T FIND ANYTHING. NOTHING WAS CHECKED WHILE WE WERE GONE + SINCE OUR RETURN WE HAVEN'T FOUND ANYTHING. I FEEL VERY IGNORANT IN THIS REGARD - I DON'T KNOW IF I'D RECOGNIZE A NEWLY HATCHED NEST, UNLESS THERE WERE LOTS OF HATCHLINGS AROUND!

WISH I HAD LOTS TO REPORT - BUT I DON'T. IF YOU WANT ANY ADDITIONAL INFO, ETC. JUST LET US KNOW + WE'LL BE GLAD TO HELP OUT.

HOPE YOUR WIFE IS RECUPERATING - I KNOW JUST HOW SHE FEELS! I STILL ACHE + TIRE EASILY! SAY HI TO ALL!
GALE

UNITED STATES GOVERNMENT

FISH AND WILDLIFE SERVICE
PORTLAND, OREGON**Memorandum**

TO :

DATE:

FROM :

SUBJECT: TURTLE RESULTS FROM 4 & 36 DAY SEAL SURVEYS

JULY 2 06 1-T₂ ♀

10 0

14 0

18 1-T₃ ♂

22 0

26 0

30 0

ATOLL SURVEY

25 JULY 2-T₂ unk.1-T₃ unk.1-T₃ ♀

} WHALE SKATE

AUG 3 0

7 0

11 0

15 1 T₁ ♀

19 0

23 0

27 2-T₂ ♂ CRUISING SEC. 04 + 06 - TERN30 1-T₂ ♀ SEC. 02 ATOLL SURVEY - 0 TURTLES ON OUTER ISLETS

31 0

SEPT. 0 TURTLES SIGHTEDOCT 2 05 ATOLL SURVEY T₃ ♀ - SEC 2 - TRIG

6 0

10 1-T₃ ♀ - SEC 6 - TERN

14 0

18 0

22 0

NESTING ♀♀ TAGGED ON EAST POST 6/19-6/30/83 (POST 6B)

DATE	TAG-R	TAG-L	LENGTH cm	LENGTH TO "NOTCH"	WIDTH cm	PAINTED #	NEST	
6/30-7/1	7202	7184				#17		ADDED R TAG
7/9-7/10	7204	7203	93.7	no notch	73.8	#29		
7/26-7/27	7205	7206	94.0		-	#30		
7/26-7/27	7207	7208	-		-	#31	7/26-7/27	
8/3	6674	6673	86.7	no notch	71.5	#32		up during dry - asleep in body pit
8/3-8/4		6675	-		-	#33		
			89.2	no notch	-	#8		
			-	no notch	-	#15		

BASILISK CENSUS - EAST

DATE	TIME	MALE	FEMALE	UNKNOWN	TOTAL	PAINTED NUMBERS
6/29	1630		9	1	10	#22, #20
6/30	1610		8		8	#15, #20, #10
7/8	1400	2	5	2	9	#20
7/9	1500	1	9	1	11	#12
7/15	1615		.5/1 inch		6	#22, #11 (tag recovery)
7/16	1615		10	1	11	#17, #27, #24
7/25	1530		2		2	#12
7/26	1610		2		2	
8/3	1700		1		1	#22 (tag recovery)

SEAWATER TEMPERATURES - EAST

DATE	TEMP
6/29	27.7
6/30	27.9
7/15	27.6
7/16	28.0
7/25	27.5
7/26	28.0
8/3	27.8

EAST ISLAND NESTING ACTIVITY - POST 6/20 (POST 6B)

1983

6/29 - 6/30

COVERAGE: 2200; 0230; 0600

NUMBER UP NESTING: 4 OLD - 3 NESTS

18 LAYED

6 LAYED

20

21

MISSED A TURTLE WHO NESTED ON ^(WEST) SECTOR 1 SPIT

6/30 - 7/1

COVERAGE: 2200; 0115; 0600

NUMBER UP NESTING: 4 OLD - 1 NEST

20 LAYED

21

17

8 (up 7/1 after 0700)

7/1 - 7/2

COVERAGE: 2100; 0630

NUMBER UP NESTING: 1 OLD

25

7/8-7/9

COVERAGE: 2130; 0600

NUMBER UP NESTING: 1 OLD

#6 - UP 0845, AGAIN 0900-0930

7/9-7/10

COVERAGE: 2200; 0600

NUMBER UP NESTING: 1 OLD, 1 NEW, 2?

#15 - UP AFTER 0700

#29 - NEW (7204R/7203L)

? TURTLES JUST COMING UP AT 2200 -
? DID NOT WANT TO DISTURB

7/15-7/16

COVERAGE: 2100; 0600

NUMBER UP NESTING: ~~1 OLD~~ 2?

?

?

7/16-7/17

COVERAGE: 2200; 0600

NUMBER UP NESTING: 1 OLD

#11 - UP AFTER 0700

7/25-7/26

COVERAGE: 2130; 0600

TURTLES UP NESTING: 2 OLD

#21

#28

7/26-7/27

COVERAGE: 2200; 0600

NUMBER UP NESTING: 3 OLD, 2 NEW

#26 LAYED

#31 LAYED (NEW - 7207R/7208L)

#7

#21

#30 NEW (7205R/7206L)

8/3-8/4

COVERAGE: 2230; 0630

NUMBER UP NESTING: 2 NEW, 1?

#32 - new (6674R/6673L) UP AT MIDDAY - FOUND HER SLEEPING IN PIT SITE HAD EXCAVATED - NOT SURE IF SHE HAD COME UP 8/3 OR NIGHT OF 8/2

#33 - new (6675L)

?

JUNE 1983
FFS

TR = TAG RECOVERY

NUMBER OF TURTLES NESTING ON WHALE-SKATE
by SRL

	DATE PM - AM	TOTAL # PRINTED OBS	# NEWLY SEEN/ PRINTED	# FROM PREVIOUS NIGHTS	# LAYING EGGS	# NEWLY SEEN TR (PREVIOUS SEASONS)		RUNNING TOTAL # TAGGED / TR
* DAY	6/3-6/4	2	2	0	0	0		2 2
1	6/4-6/5	5	4	1	1	0		4 6
2	6/5-6/6	4	2	2	0	0		0 6
3	6/6-6/7	4	2	2	0	0		2 8
4	6/7-6/8	0	0	0	0	0		0 8
5	6/8-6/9	0	0	0	0	0		0 8
6	6/9-6/10	1	1	0	0	1		1TR 9
7	6/10-6/11	2	1	1	1	0		1 10
8	6/11-6/12	0	0	0	0	0		0 10
9	6/12-6/13	3	2	1	0	0		1 11
10	6/13-6/14	2	1	1	1	0		1 12
11	6/14-6/15	0	0	0	0	0		0 12
12	6/15-6/16	2	1	1	0	0		1 13
13	6/16-6/17	2	0	2	0	0		0 13
14	6/17-6/18	1	1	0	0	0		0 13
15	6/18-6/19	3	1	2	0	0		0 13
16	6/19-6/20	6	3	3	1	0		1 14
17	6/20-6/21	5	0	5	0	0		0 14
		<u>2.35 per night</u>						
			21 Turtles		4			
			TOTAL					14 ENCOUNTERS (of which 1 was a tag recovery)
			<u>1.24 per night</u>					were the untagged turtles checked for tags?

* Both T1 & T2 were observed during 6/4-6/20 study period
subsequently

JUNE 1983
FFS

TURTLES TAGGED/RELOADED AT WHALE-SKATE
by SRL

NESTING ♀♀ TAGGED*/RELOADED						
DATE	TAG L	TAG R	LENGTH	WIDTH	LAY EGGS	
6/3-6/4		6359				(6B TAGGED)
	6654	6367	86.5	67.2		(6B TAGGED) 6/7 SL REPLACED 6366 with 6654
6/4-6/5	6368		98.8	72.7	6/4-6/5	no notch [symmetrical]
	6370					
	6371	6372	88.2	67.0		
	6373	6374	97.3	74.0		
6/6-6/7	6375		88.1	70.6		
	6651		90.9	71.6		
6/9-6/10	5415	3019	94.4	69.5	6/10-6/11	TAG RECOVERY - WILL TRY TO RELOAD FROM R TAG #
6/10-6/11	6656					
6/12-6/13	6657		89.2	72.8	6/13-6/14	no notch [lopsided]
6/13-6/14	6659		90.0	70.2	6/14-6/20	no notch [lopsided]
6/15-6/16	6660	6661	92.4			notch - length 92.1 to notch
6/19-6/20	6663		94.7	75.0		notch - length 94.5 to notch

NON-NESTING TURTLES TAGGED*/RELOADED						
DATE	SEX	TAG L	TAG R			
6/7	♂	6652				
	♂		6653			
			5417		TAG RECOVERY	
6/8	SA ♀	6655			NOT ABLE TO IMPROVE	
6/12	♂	6658				
	♂		5236		TAG RECOVERY	
6/15	♂	5237	5236		TAG RECOVERY	
	♂	6658			TAG RECOVERY	
6/17	♂	6662				
	♂		5417		TAG RECOVERY	
6/18	♂	5171			TAG RECOVERY	
	♀		5986		TAG RECOVERY - DISTAL TO SIZE 49 TAG	
6/19	♂		2400		TAG RECOVERY - RADIO TRACKING TURTLE - WILL TRY TO GET PICS	
6/20	♀	3755			TAG RECOVERY	

* ALL TAGGED IN "FI" AREA

	ISLAND	NEST OR BASK	PAINT	SEX/LN	TAGS APPLIED OR RECOVERED	OTHER TAGS PRESENT	COMMENTS
7/14 (cont)	EAST	NEST	-	♀/-	(R) 2168R (R) 2107L	NONE	
	EAST	NEST	-	♀/-	(R) 4263R	NONE	
	EAST	NEST	-	♀/-	(R) 6190R DIST	R. AX; L. AX; L. DIST	
	NESTING	EAST	NEST	-	♀/95.3 (R) 2232L	NONE	
	CHEIVED	EAST	NEST	-	♀/- (R) 2186R	L. AX	
	2230	EAST	NEST	-	♀/93.0 (R) 5299R	L. AX.	
	2345	EAST	NEST	-	♀/- (R) 2177R	L. AX.	
		EAST	NEST	-	♀/- (R) 6111R	L. AX.	
		EAST	NEST	-	♀/- (R) 2229R DIST	(NI)	
		EAST	NEST	-	♀/- (R) 2176R	L. AX	
		EAST	NEST	-	♀/- (R) 5195R DIST	R. AX; L. AX; L. DIST	
		EAST	NEST	-	♀/- (R) 2237R	L. AX	
		EAST	NEST	-	♀/- (R) 2174L (V) 2217R	NONE	
		EAST	NEST	-	♀/97.3 MISSED TWICE.	NONE	OH WELL
		EAST	NEST	-	♀/- NONE	(NI)	BY SEALS
		EAST	NEST	-	♀/- NONE	(NI)	" "
	EAST	NEST	-	♀/- NONE	(NI)	LAYING	
7/16	TEAN	NEST	-	♀/95.0 (V) 2220L (V) 2221R	NONE	+ 2219, 2219 ⁺ BAD	
						♀ ASLEEP UNDER	
						BARRACKS IN A.M.;	
						TRANSPLANTED 45 EGGS; 54 EGGS CRACKED DURING LAYING; HAD LATE EGGS ON	
						SURFACE; NO CHANGES	
7/19	W-S	NEST	-	♀/- (R) 2151L	R. AX		
	W-S	BASK:	-	♀/- (R) 2152L (R) 2154R	NONE	JTE	
7/20	EAST	NEST	-	♀/94.2 (R) 5237L	R. AX		
	EAST	NEST	-	♀/98.5 (R) 5281R	L. AX L. DIST R. DIST		
NESTING	EAST	NEST	-	♀/90.4 (R) 2229R	L. AX	JTE	
CHEIVED	EAST	NEST	-	♀/88.1 (R) 2123L	R. AX	JTE	
2200	EAST	NEST	-	♀/- (R) 2151L	NONE	JTE	
2237	EAST	NEST	-	♀/- (NI)	(NI)	EGG CHAMBER	
7/21	EAST	NEST	-	♀/- (R) 2189R	L. AX.	BY TENT, NESTING	
						CHECK NOT DONE 7/21	

F.F.S. 7/5 - 7/25 1984

(R) = TAG RECOVERY (T) = TAG APPLIED (NI) = NOT INSPECTED

	ISLAND	NEST OR BASK	PAINT	SEX/LEN.	TAGS APPLIED OR RECOVERED	OTHER TAGS PRESENT	COMMENTS	
7/5	W/S	BASK	-	?/65.0	(T) 8199R	NONE	NEW	
7/8	EAST	NEST	KA	♀/NI	NI	(NI)	NESTING CHECKED 2145-2215	
	EAST	NEST	154	♀/NI	NI	(NI)		
	EAST	NEST	WHITE, ?	♀/NI	NI	(NI)		
	EAST	NEST	GREEN, ?	♀/NI	NI	(NI)		
	EAST	NEST	WHITE, ?	♀/NI	NI	(NI)		
	EAST	NEST	KC	♀/NI	NI	(NI)		
	EAST	NEST	-	♀/-	(R) 8151L (T) 8200R	NONE		
	EAST	NEST	-	♀/-	(T) 8202L (T) 8201R	NONE		
	EAST	BASK	-	-/0	(R) 2213L	RT AX		
	EAST	BASK	-	♂/-	(R) 8172L	NONE		
7/11	W/S	BASK	-	♀/-	(T) 8203R	NONE	WRITE ON CARAPACE NEW	
7/12	W/S	NEST	-	♀/-	(R) 2976L (R) 8205R	NONE	ASLEEP IN A.M. ^{SEE TAG} ↓ 8204 BAD	
7/13	EAST	BASK	-	♀/90.0	(R) 3541L (R) 3542R	NONE	NESTING CHECKED 2200- 2320	
	EAST	BASK	-	-/-	(R) 3584L	RT AX		
	EAST	BASK	-	-/-	(R) 3912L	RT AX		
	EAST	NEST	-	♀/-	(R) 8185L	(NI)		
	EAST	NEST	-	♀/95.7	(R) 3601R	L. AX		
	EAST	NEST	-	♀/-	(R) 8186R (T) 8206L	NONE		
	EAST	NEST	-	♀/99.0*	(R) 8207L	NONE		NEW; [*] POST CARAPACE INJURY
	EAST	NEST	-	♀/-	(R) 2592R	NI		
	EAST	NEST	-	♀/-	(R) 6206R DIST.	R. AX, L. DIST		
	EAST	NEST	-	♀/-	(R) 3145R DIST.	R. AX; L. DIST; L. AX		
	EAST	NEST	-	♀/-	(R) 2716R	NONE		
	EAST	NEST	-	♀/-	(R) 3597R	L. AX		
	EAST	NEST	-	♀/-	(R) 5209R DIST.	R. AX; L. AX		
	EAST	NEST	-	♀/-	(R) 3371R	L. AX		
	EAST	NEST	-	♀/-	(R) 3927R	NONE		
	EAST	NEST	-	♀/99.0	(R) 8157R (T) 8208L	NONE		
	EAST	NEST	-	♀/-	(R) 6091L	RT. AX		
	EAST	NEST	-	♀/93.7	(T) 8207R (T) 8210L	NONE		NEW
EAST	NEST	-	♀/92.6	(R) 2707L (T) 8211R	NONE			
EAST	NEST	-	♀/93.4	(R) 7963L (T) 8212R	NONE			
EAST	NEST	-	♀/-	(R) 5249R DIST.	R. AX, L. AX			
7/14	EAST	NEST	-	♀/-	(T) 8213R (T) 8214L	NONE	NEW	
	EAST	NEST	-	♀/-	(R) 8209R (T) 8215L	NONE		
	EAST	NEST	-	♀/-	(R) 8113L (T) 8216R	NONE		
	EAST	NEST	-	♀/99.8	(R) 3118R	L. AX		
(CO-TO)	EAST	NEST	-	♀/-	(R) 2601L	R. AX		

(D) AX. = AXIAL; DIST. = DISTAL



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

26 July 1982

Dear Ernie -

Alan Kam recently made the following
turtle tag recoveries at Pearl & Hermes
Reef. When your time permits,
would you please look them up
in your files and give me the
original tagging data.

TAG A 1052 (♂) seen 7/2/82 at
Southeast Is., PH Reef. probably 3/15/73
PH

TAG T 5 (♀) seen 7/5/82 at North
Is., PH Reef. 3/13/72 Southeast
PH

Many thanks -

Best regards, George Balazs

2 August 1982

Dear Ernie -

Here is another tag recovery
that I would like you to
try and locate in your
files:

TAG

T127

on

Seen by me basking
on Trig on June 20, 1978;

Also seen at this same
location again in May 1979
and June 1979.

Thanks
help.

once again for your

Sincerely,

George Balazs
NMFS - Box 3830
Honolulu 96812

can't find
in cards

This tag
placed on
wood float?

see 1978
Gray book

Call John 7/24

John - Julie

TERN

Gail -
FYI
GB

White PAWT 140

Message sent

PAWNT 6/19

7/13 AM
Through Bruce at Team

last seen 6/27 (seen 6 times up roosting)

left new 8165 nothing precipitation

right old "5008"

3008?

VERY IMPORTANT -
NEED

caliper measurement &
right tag recheck

really (is it 5008 ??)

~~Already done?~~

Have small pocket knife or something else

~~Sue says Hi~~

available to scrape tag clean of fouling growth so number can be accurately read.

Any questions - Call Sue at Home

7/11

Telcom Tern

3268 nested as tern,
seen basking on EAST

Orig. date - 6/29/79 tagged as East

~~I don't have complete
info as of 1/2/87~~

~~Need tagging &~~

~~recor. records 1986~~

~~for Tern
Rick & Larry~~

Turtle resightings at Laysan, fall, 1985

OBS	MONTH	DAY	SIZE	TAGNO	SEQNO
1	11	4	T3	<u>3573</u>	3013

6/9/80 EXP. 24
TRIG-B ♀

Rec. 6/25/84
LAYSAN-B
AK

ENT. #282

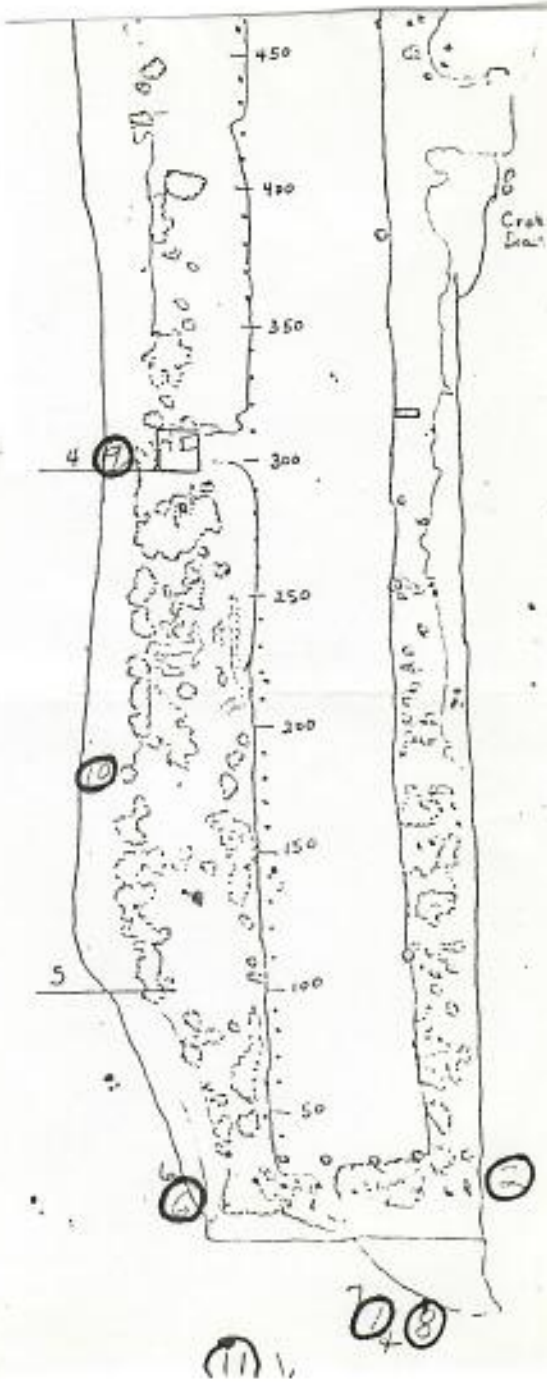
Turtles

map #P

Date	Location
1) 16 Feb 85	NW corner of runway, swimming
2) 17 Feb 85	NE corner of runway, swimming
3) 25 Feb 85	Sector 1, on beach by fuel tank
4) 7 March 85	Sector #3 on beach
5) 9 March 85	Sector #3 on beach
6) 9 March 85	Sector #6 \pm 30m apart
7) 11 March 85	Sector #7 \rightarrow probably saw turtle on beach
8) 12 March 85	Sector #7 on beach
9) 14 March 85	Sector #4 on beach
10) 14 March 85	Sector #5 on beach
11) 16 March 85	half way between run & runway

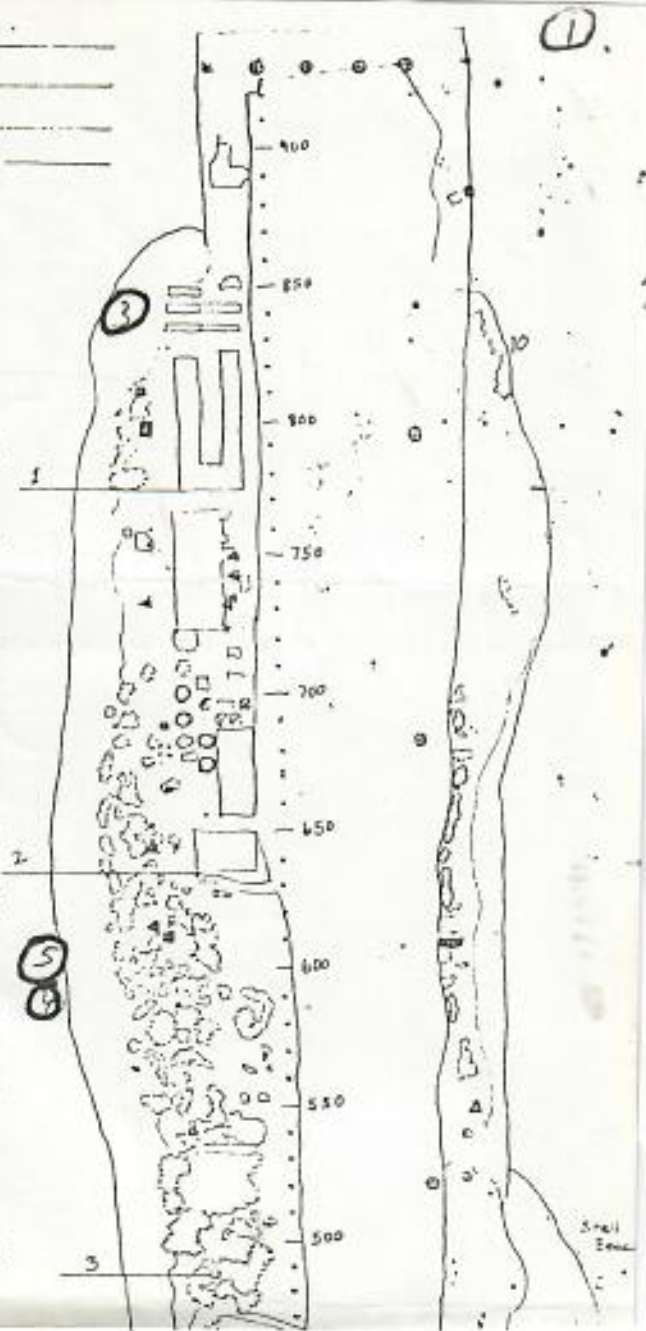
4/25/85
 These turtle sightings were made on 4-day seal surveys conducted by FWS on Tern. Thought you might like a copy of the data. I'm not sure of the definition of "swimming". If you have suggestions that would make info more useful to you/other turtle people, pls

CRUISERS



I did not realize the Terns were tagged & we are supposed to get Tag #s & identify as far as possible. I will start doing this in the future. I've used now we have avoided the Terns so they would not be disturbed. I did not include the small Terns, but we were when I arrived. You may want to mark them on the map. We could not show 50 maps like this on attached, please send them when possible.

TEMP
TOTAL



TERN IS.

#	terns	size	Tag #
1	1	mid	u.
1	1	Small	u.
1	1	large	u.
1	1	large	u.
1	1	large	u.
2	2	large	M
1	1	large	u.
1	1	large	u.
1	1	large	M
1	1	large	u.
1	1	large	u.

↙

DATE	WIND SPEED
TIME	DR.
OBSERVER	PRSS.

6-2-83

George,

This is copies of my maps & data for Sue, or you can keep a copy for the files also.

In reviewing individual turtles I realize that possibly only 1 or 2 turtles (#11 & #12) would be reidentifiable. The other turtles were identifiable from 1 day to the next but not from 1 season to the next.

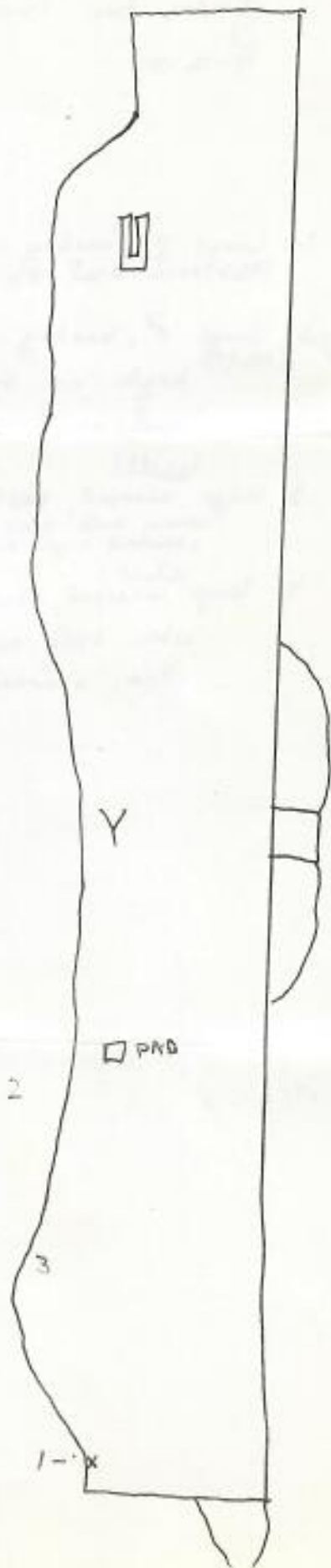
Anyway I hope you have a good trip up there. Hope Sue is doing ok, too. Such a nice place to go for a couple months.

If I can ever do anything for you on Maui, let me know.

Aloha
Beth

Tern Island
Green Sea Turtle
4-14-81

1. Adult ♀ sea turtle, in splash zone up against steel wall, no time ^{waiting} just seen at 1600 - appeared to be basking

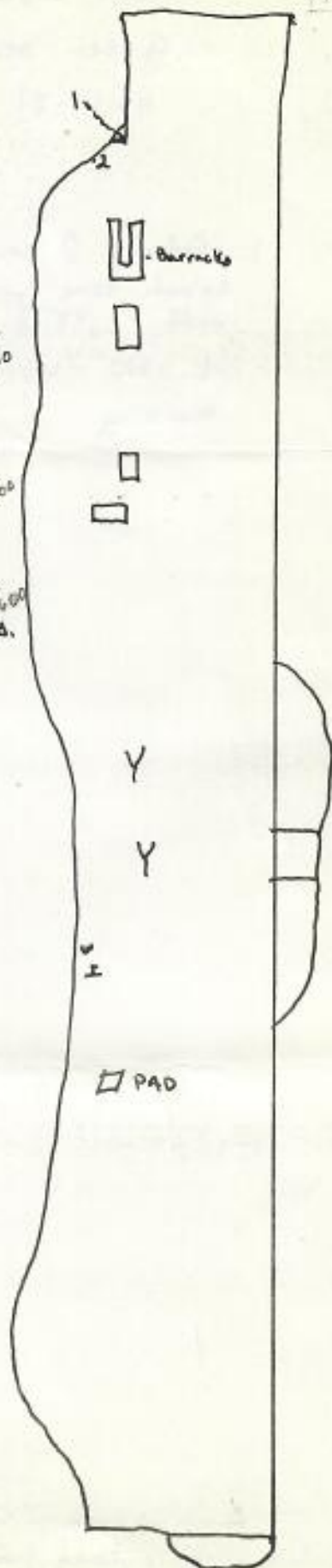


OBSERVERS:
Elizabeth Sheekey
John Andre

Tern Island
Green Sea Turtles
4-16-81

4+4

- 1- Large ♀, basking at least 4 hrs.
(Adult) occasional splashing
0800-1200
- 2 large ♂, basking at least 6 hrs.
(Adult) high on beach, in afternoon
had sand on back
0800-1400
3. large unsexed, basking at least 7 hrs.
when tide came up in splash zone,
started high on beach
0900-1500
4. large unsexed, basking at least 7 hrs.
(Adult) when tide came up in splash
zone, started high on beach
0900-1600



OBSUS:
Elizabeth Sheekey
J.A. 3F

Tern Island
Green Sea Turtles

4-17-81

weather: nice, clear mostly
03 ENE

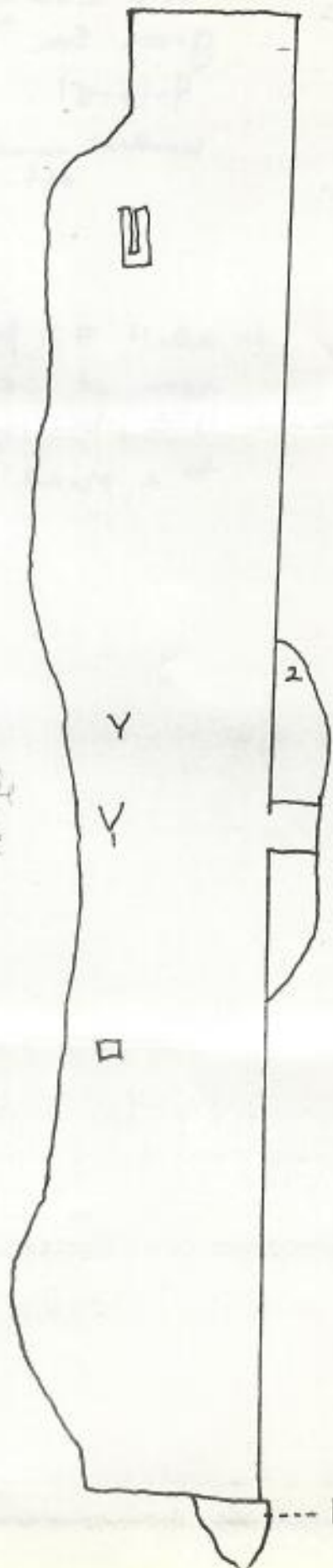
1- Adult sized, unsexed,
somewhat skittish & didn't
look at it, in splash zone

2- Adult (SAR) ♂ - basked from
0800 to 1700 at least, high on
beach

#2



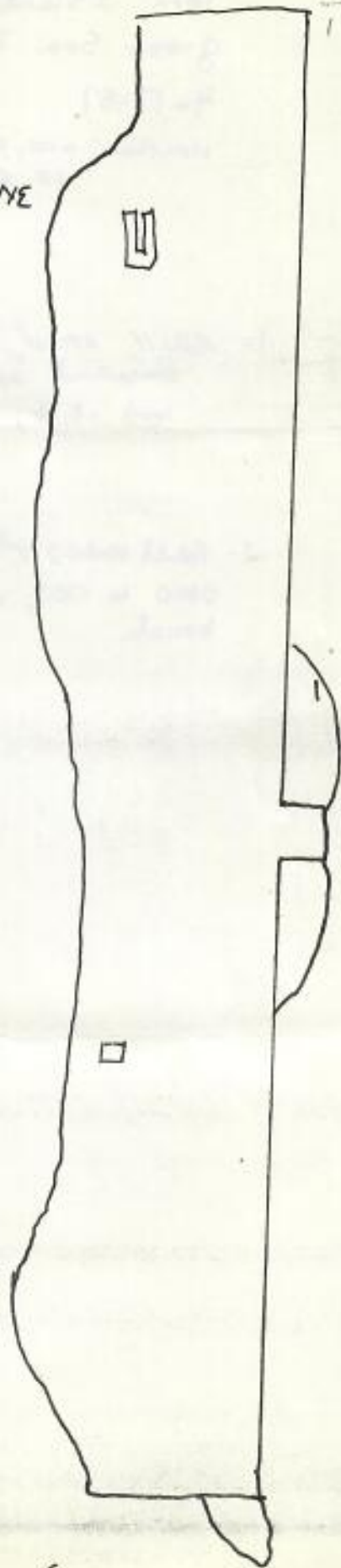
2nd photo, faint scar on left side
could be identifiable mark



Tern Island
Green Sea Turtles
4-18-81

weather: morning: cloudy
aft - sunny 3 knots ENE

1 - adult #2 from 4-17-81,
seen at 0830 but not at
1130, basking high, next
to a Monk seal (Adult ♂)



Amb

Tern Island Time unk

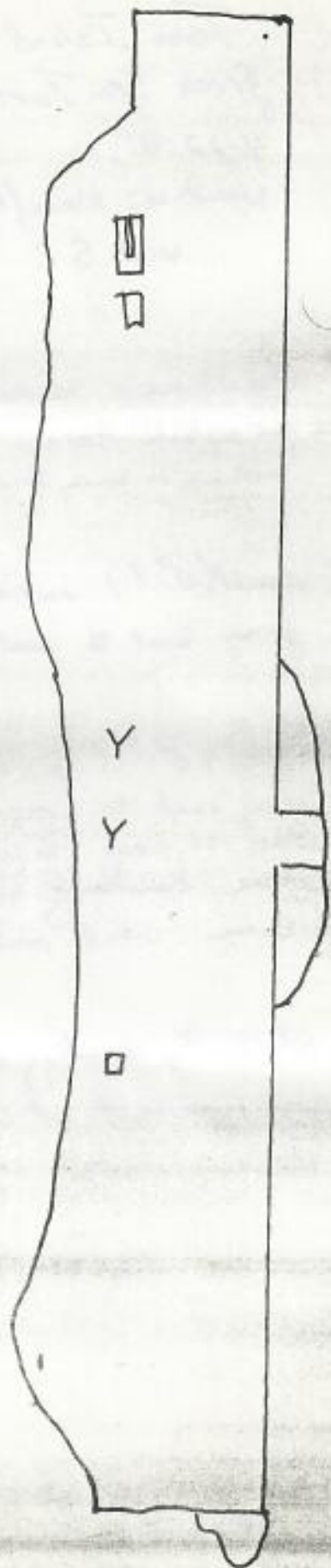
Green Sea Turtle

4-19-81

weather: clear, 3 km. ESE

1- Adult, couldn't see a tail, but
couldn't positively see
in splash zone seen at 1500
not there earlier at 1030

2- swimmer seen "platter size"
Beth Flint says



2
AS 1
A^o 1

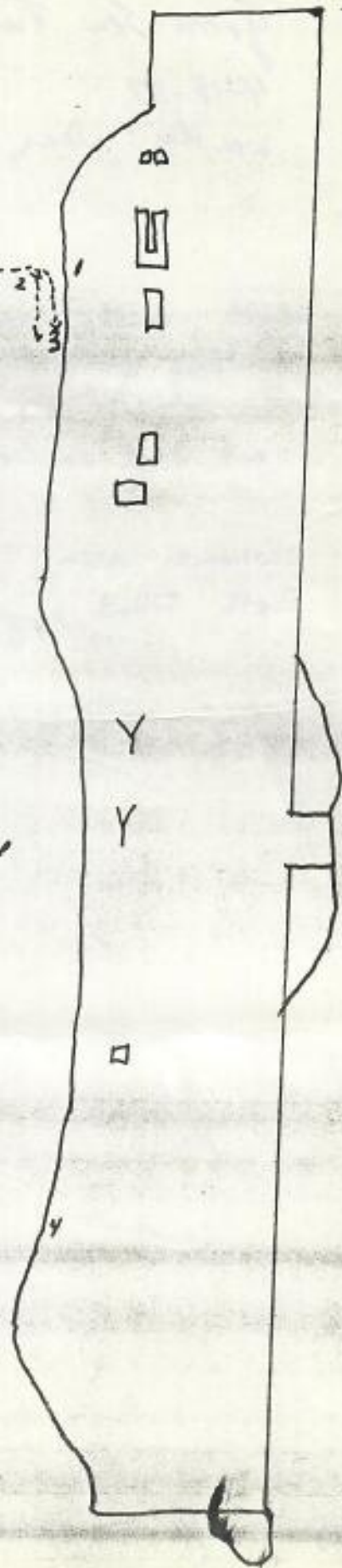
Time 4+-1 < 3

Tern Island
Green Sea Turtle

4-22-81

weather; clear (10% scattered clouds)
wind: 5 E

- #3
1. Adult male, no distinguishing marks in splash zone seen at 0900 to moved up on beach, drier at 1800
 2. Adult (♂?) swimming by at 1200 going west to east 70' from shore
 3. Adult (♂?) swimming by at 1400 going east to west, was 30' from shore & came to within 5' of shore where basking turtle was & then went out from there
 4. Adult ♂, basking, in splash zone present at 1515 not at 1800 < 3



4
- 1

Time 4+-1

2 5
1

Tern Island

Green Sea Turtle

4-23-81

weather, clear 7-ENE

- 1. Adult male, same as yesterday
0800 - to at least 1830
probably stayed overnight
in am was high on shore
in hot afternoon was in splash zone.

#3

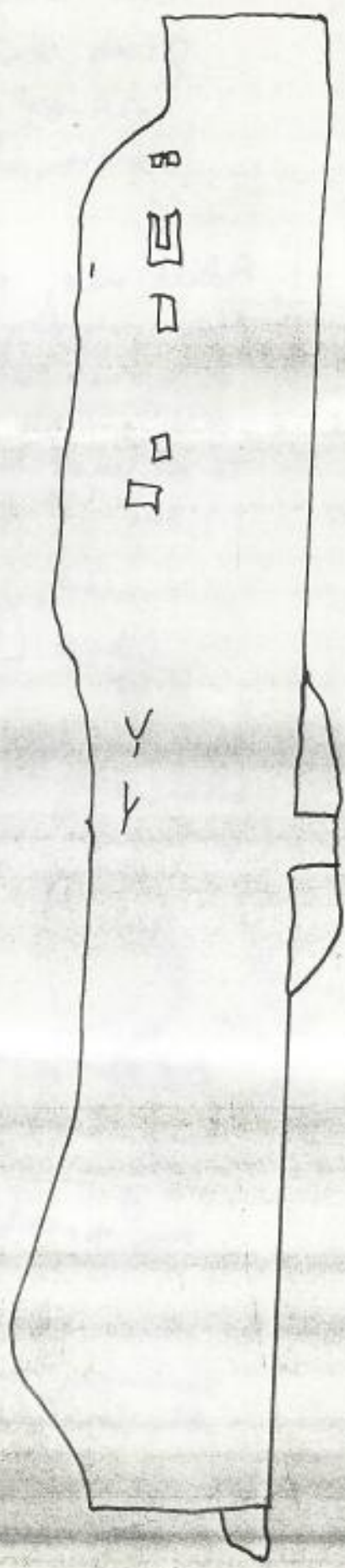
back



high mark
front

right

light thin scratches,
only visible when
dry



3
AP 2
Mk 1

Tern Island Time 4+1 hck 2
Green Sea Turtle
4-24-81 hot-85
weather, clear, 5ENE

1. Adult male, possibly different from yesterday, was high & in splash zone moved slightly eastward on beach 0800-~~15~~ to at least 1600 not there at 17:30 no tags

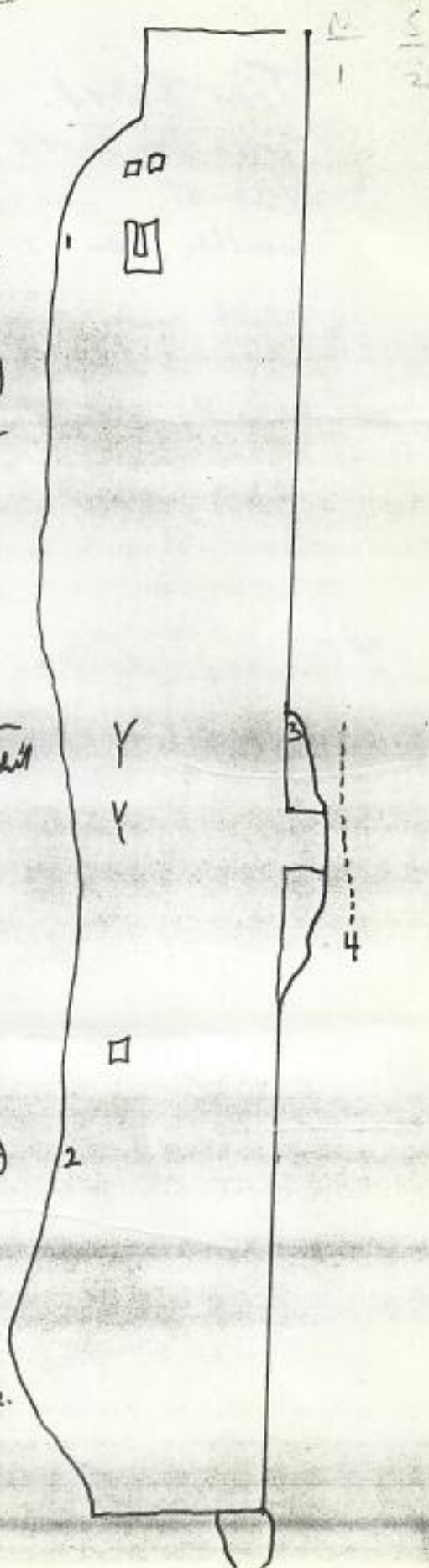


2. Adult male basking high on beach, only seen at 1000 didn't go to area again today



3. Adult in splash zone only observed at 1730 • only time in area today may possibly be #1 above saw good - no tags

4. 1 1/2' carapace "platter size" swimming eastward in shallow reefy area - picture.



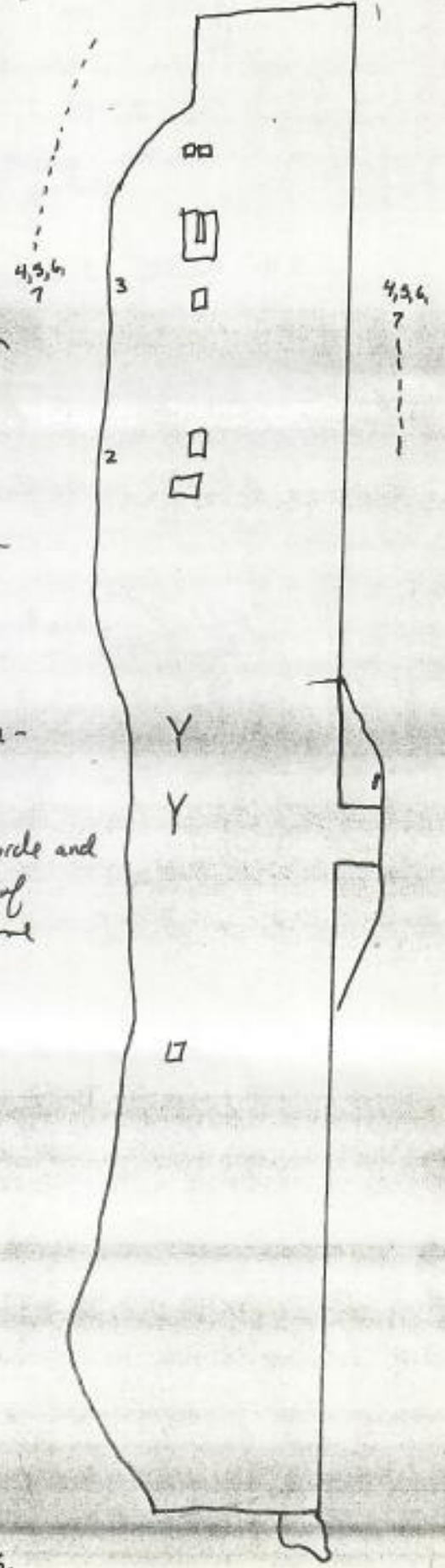
3 A unit
 3

Green Sea Turtle Time Unit
 4+1 2

N S
1 2

Tern Island
4-26-81
Weather - partly cloudy
 still in morning
 squalls

1. - adult, unsexed, present at 0900 + at 1400, not ✓ed again high not in H₂O
2. adult, unsexed, there at 0900 not seen at 1400 high + dry
3. adult, unsexed there at 1400 - could be #2 moving down beach (? - I don't know) in splash zone
- 4,5,6,7 - group of 4 adults in H₂O - 15' away from shore - 2 were coupled + 2 were "just being around" seen at 0900 on south side and at 1000 saw some kind of group probably the same one on the north side



$\frac{A}{4}$ $\frac{A \uparrow}{1}$ $\frac{A \downarrow}{1}$ $\frac{unk}{2}$

Time 4+2 Link 2

$\frac{10}{4}$

Green Sea Turtle
Tern Island
4-27-81

weather - ~~partly~~ overcast,
stormy 12 NE

1,2,3,4 - Adults, 2 coupled, 2
extras at 1700 - 240' off shore

1,2,3,4
↓
⋮

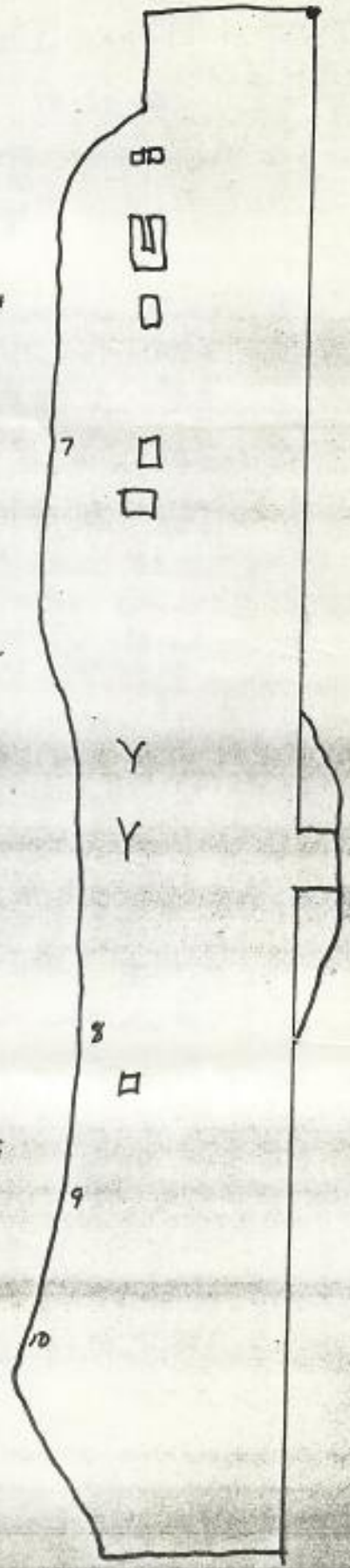
5,6 - 2 coupled adults -
at 1230 - 30' off shore

7. ● Adult, unsexed, basking high
at 1130 - at least 1600

8. Adult ♂, basking high on beach
from 0930 - at least 1600

9. Adult in splash zone at 1600

10. Adult ♀ in splash zone at 1500.



A mile
3

Time 4±

line
2

Green Sea Turtle
Tern Island

4-28-81

Turtles #5

#5

1. Adult

0930 - 1500

, high on beach



orange yellow

2. Adult

gone just came up 1000
gone at 1400

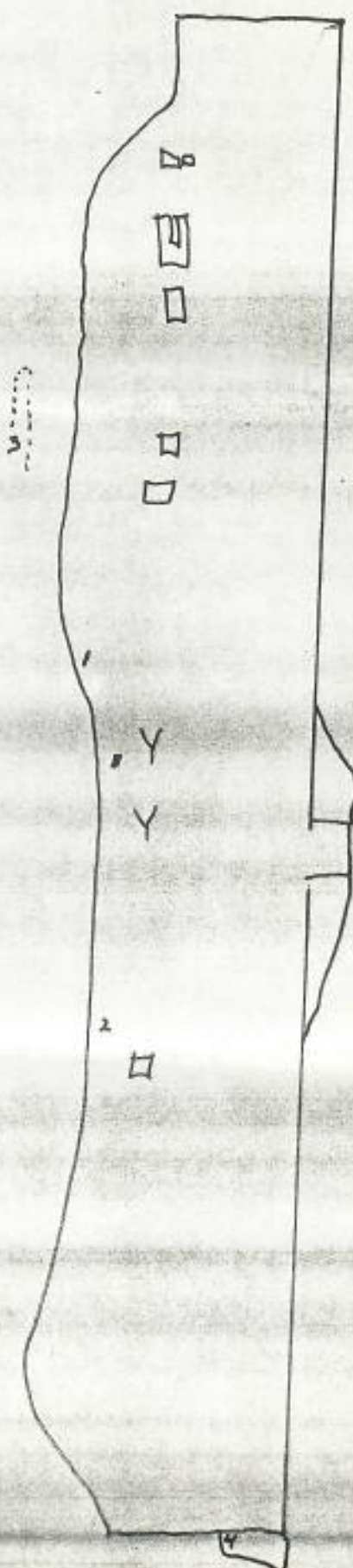
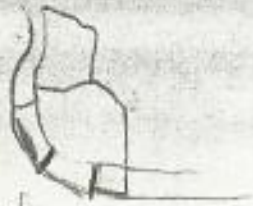
, in splash

3. swimmer Adult, went west then east at 0930

4. Adult, high on beach
observed at 1430

left

rawley



2 A5 → Aumb
1 1 1

Time - 4+ - 1
 1 - 1

Green Sea Turtle

Tern Island

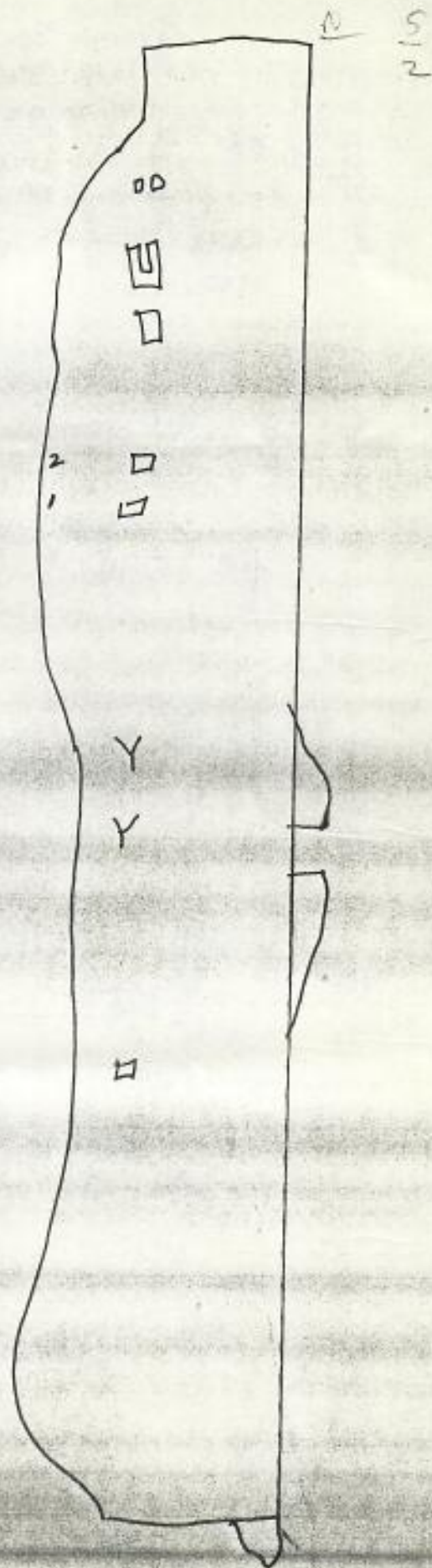
4-29-81

weather - partly cloudy
 15 ENE

Observer - Elizabeth Sheehey

1. Adult - Tern Island
Turtle # 5 , same as
#1 yesterday , high on
beach seen at 0900 & at 1600
was there the whole time

2. Adult ♂ , only one
observation at 1600, high
on beach



4 A♀ Unk
4

Green Sea Turtle Time Unk
4+2 1

Tern Island < 1/2 hr - 1

4-25-81

weather: mostly overcast
squalls from south
still, muggy

1. smaller adult (female?) in splash
zone seen at 0900 - still there at 1430
different from yesterday's turtle

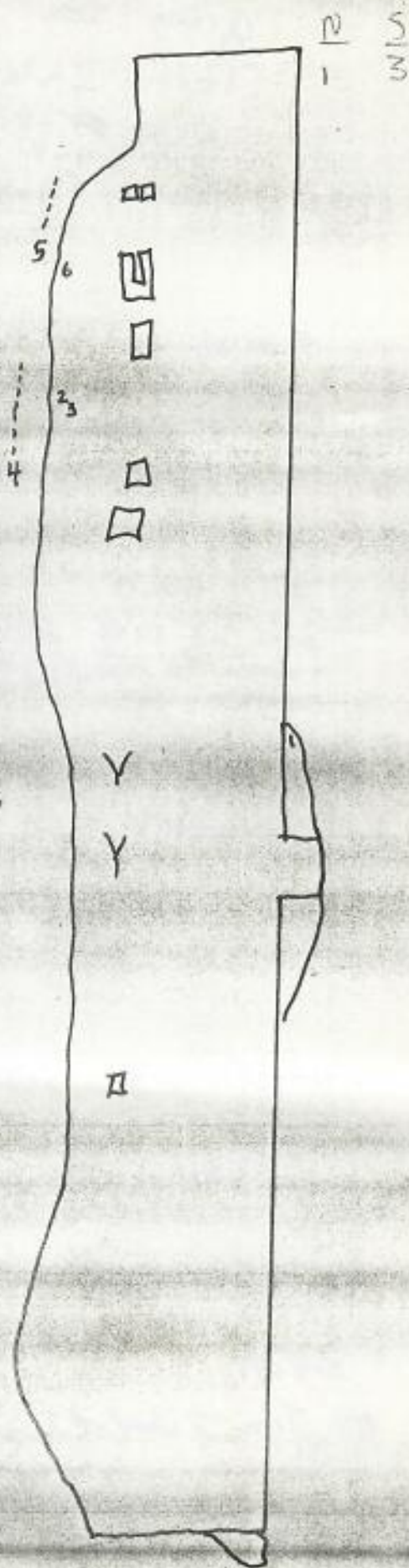
2. Adult (female?) making a little high,
occasional wetting 1000, gone at
1400

3. Adult unsexed, ~~back~~ in splash
zone 1000 still present at
1500

4. Adult swimming by about 10'
from shore at 1000 had no
reaction to 2 on beach

5. Adult swimming by very
close to shore about 1100

6. Adult in splash present at
1400 gone at 1430



Green Sea Turtle
Tern Island

4-30, ~~5-1~~ -81
5-1, 2, 4-81
Observer: Elizabeth Sheekey

4-30-81- No turtles basking on Tern

one Adult swimming east to west around 1000

weather: partly cloudy, very windy 14 knots ENE

5-1-81 (II-#6)

#1 Adult ♂ observed

once at 1445 shortly left beach + swam to #2, circled several minutes then both went separate ways

#2 - Adult swimming right at shore west to east at 1450 encountered by #1 & circled w/ each other several minutes + went separate ways

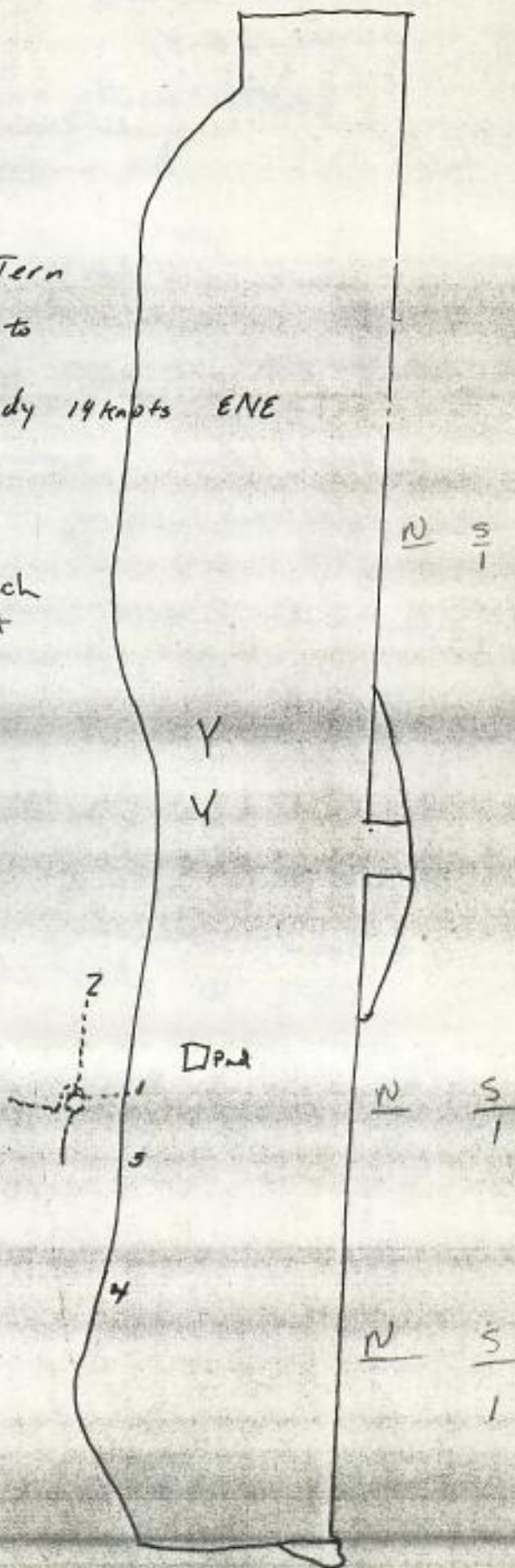
5-2-81

#3 Adult ♂ Tern Island #7

4-1 was observed basking by at 1000 or 1430 in the same place

5-4-81

#4 Tern Island #7 seen at 1400, 1600, was in splash at 1600 moved high,



Green Sea Turtles

Tern Island

5-6-81

Observer: Elizabeth Shockey

weather: clear, 5 N

- 5-6
 # 1 $\frac{A}{1}$ $\frac{F}{1}$ $\frac{unk}{1}$ $\frac{unk}{2}$ 2-1- Adult ♀, observed at 1645
 Tern Island #8, high tide in splash zone
2. Adult ♂ (?) Tern Island #7, observed at 1600, in splash zone, very high tides today

5-7-81

weather: clear 6 knots NE

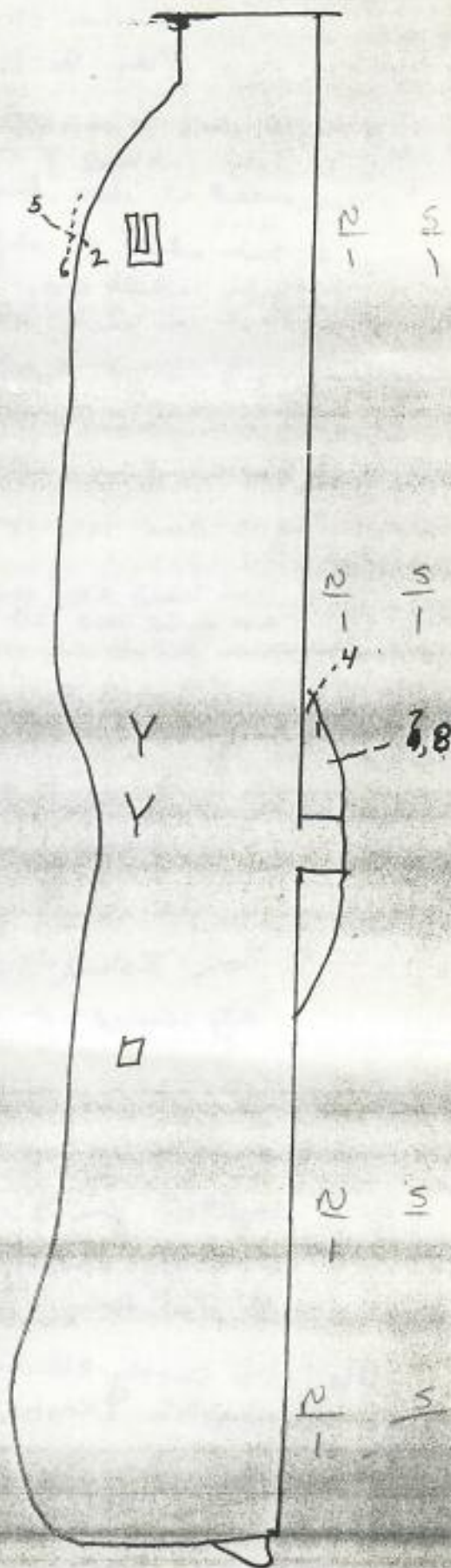
- # 1 $\frac{A}{1}$ $\frac{F}{1}$ $\frac{unk}{1}$ $\frac{unk}{2}$ 4- Adult ♀, Tern Island #9
 same place as #1 but different turtle, was high on beach - low tide saw at 1100
5. Tern Island #7, was not here in morning, first observed at 1500 - high out of splash, dug
6. Swam by at 1530 5' from shore going east to west

5-8-81 - clear, 4 kn. South

- # 1 $\frac{A}{1}$ $\frac{F}{1}$ $\frac{unk}{1}$ 7. Adult ♀ probably Tern Island #9? - in a different place than yesterday - seen at 1100

5-9-81 - clear

- # 1 $\frac{A}{1}$ $\frac{F}{1}$ $\frac{unk}{1}$ 8- Adult ♀ Tern Island #8 observed at 1000



Green Sea Turtles Tern Island

Observer: Elizabeth Sheekey
May 12-14, 1981

May 12, clear 10 knots @ NE

- # 3 A ♀ ♂ SA ♀
1 1 1
1. Tern Island #10 ♀, only observed once at 1500, high
Time 4+3
 2. Sub adult ♂, definitely smaller than adult #10, they were right next to each other for comparison only seen once at 1500, high
 3. Tern Island #11 ♂, high on beach observed at 1000 + 1500.

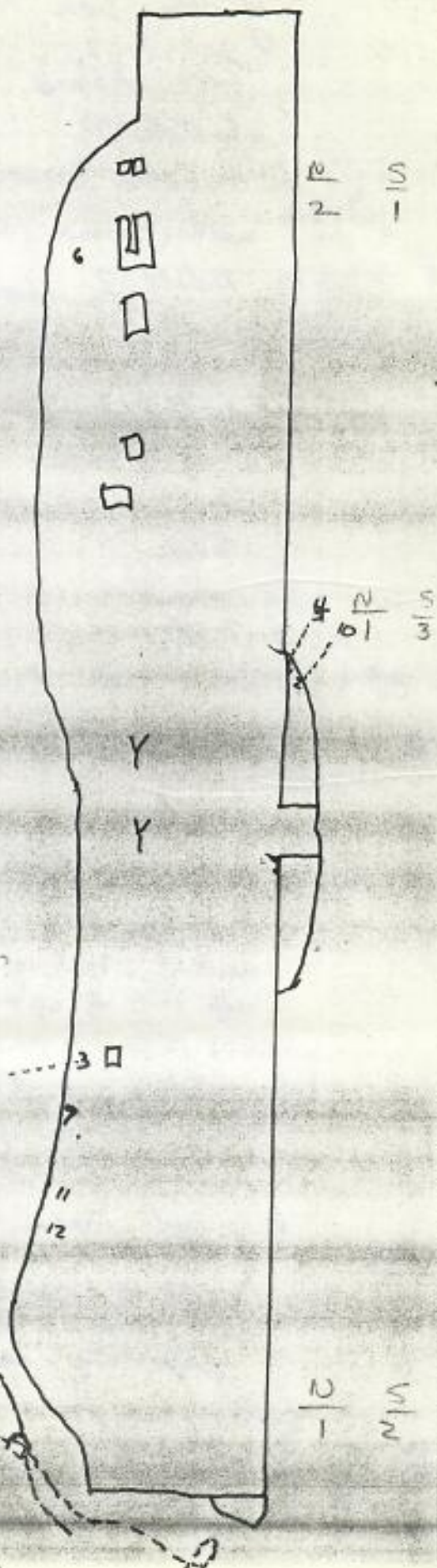
May 13 - clear 12 kn. SE

- # 4 A ♀ A ♂ SA ♀
1 2 1
4. Tern Island #10 ♀ same as yesterday first seen at 1000 till at least 1500
Time 4+1 link-3
 5. Tern Island #11 ♂ same as yesterday first seen at 0900 not there at 1500
 6. Tern Island Turtle #7 ♂ high out of splash one observation at 1520
 7. Tern Island Turtle #12 - ♀ (SA) ? only observed at 1500

8, 9, swimmers, Adults - came together for 1/2 minute then went off in different directions

May 14 - partly cloudy
NE 7 knots

- # 3 A ♀ A ♂ SA ♀
1 1 1
- 10 - Tern Island #10 ♀ same as yesterday further along beach - 1000 to at least 1500
 - 11 - Tern Island #11 ♂ - moved but same as yesterday - high at least 1000 - 1500



Green Sea Turtle
Tern Island
5-15 thru 5-20-81
Obs. Elizabeth Sheekey

A♂ A♀ SAR

5-15-81

weather: scattered clouds
SNE

1. Tern Island #11 - same as yesterday
0900 - to at least 1500
2. Tern Island #12 ♀ same as yesterday
0900 - to at least 1500
3. 2 copulating turtles - 1000
4. Adult unsexed, not distinguishable

SAR Time

5-16-81

5. Tern Island #12 - seen at 1000
in splash gone

5-17-81 - clear, 5 knots NE

SAR A unsexed

6. Adult / Sub ♀, working in splash
seen at 1000 & 1500

7. Adult - in splash
seen at 1500

8. swimming west then east right
along shore in waves

5-18-81

SAR Time

9. Tern Island #12 only observed
once at 1630

5-19 clear 04 kn NE

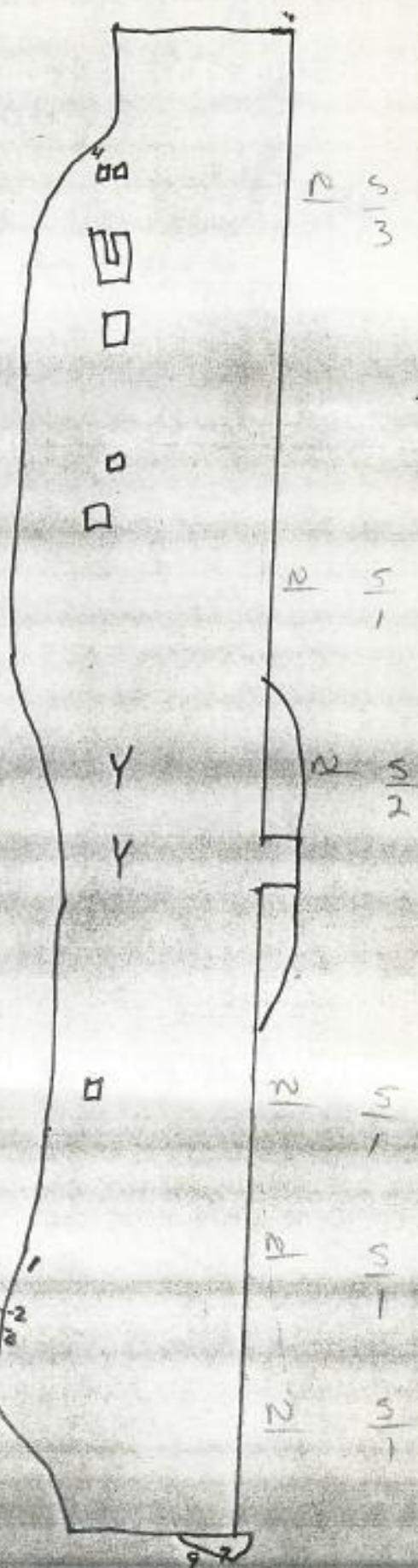
SAR 2♂+1

10. Tern Island #12. seen
at 1900 → at 1630

5-20 clear 4 kn NE

SAR 4+ -1

11. Tern Island #12. seen at
1000 - 1500 at least



TERN ISLAND

Green Sea Turtle

5-21-81 thru 5-27-81

Obs. Elizabeth Sheehey

5-21-81

1. Adult - did not see him hardly at all - only observed at 1700

5-22-81

2. Tern Island #12, seen at 1000 not at 1500

3. Tern Island #13 seen at 1000 + 1500

4. copulating seen in H₂O in morning

5-23-81

2- Tern Island #12 - seen at 0900

5- copulating turtles seen at 1800 seen coupled for at least 1 hr.

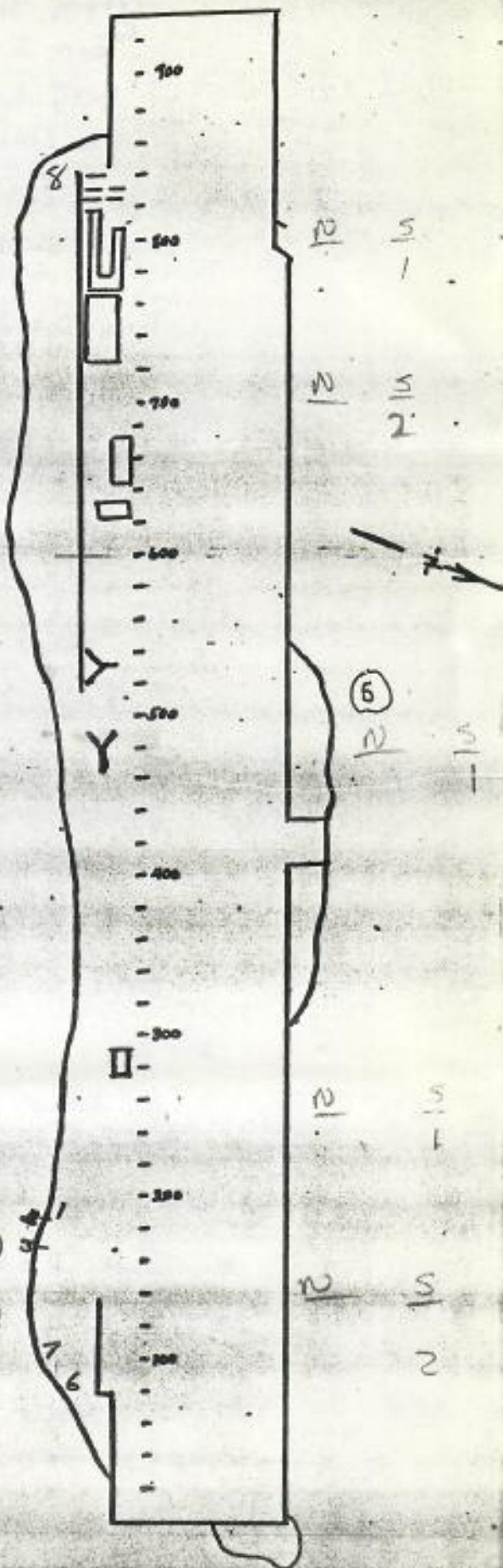
5-26-81 - still !!

6. Small ♂ seen at sunset high on beach

5-27-81 - partly cloudy 12kn NE

7. Small ♂ seen at 1800 not there at 1500. High - could be same as yesterday? - same mark - size.

8- small ♂ seen at 1500 still there at 1900



1
+ Amb
+ time
+ unk

2
+ HSAQ
+ time
+ unk

1
+ SAQ
+ time
+ unk

1
+ SA
+ Small ♂
+ time
+ unk

2
+ small?
+ SA
+ time
+ unk

2
+ same?
+ time
+ unk



TERN ISLAND

Green Sea Turtle

5-28-81

Obs. Elizabeth Sheehy

5-28-81 weather: partly cloudy 13 km NE

1. Adult seen at 1000 not there at 1600

5-29-81

44 Turtles pits: 3 pits

432

largest

435

419

small, shallow

- track 42"

5-30

on map in pen!

4 pits down near 150 meters

4 new pits in yesterday's area

5-31



TERN ISLAND

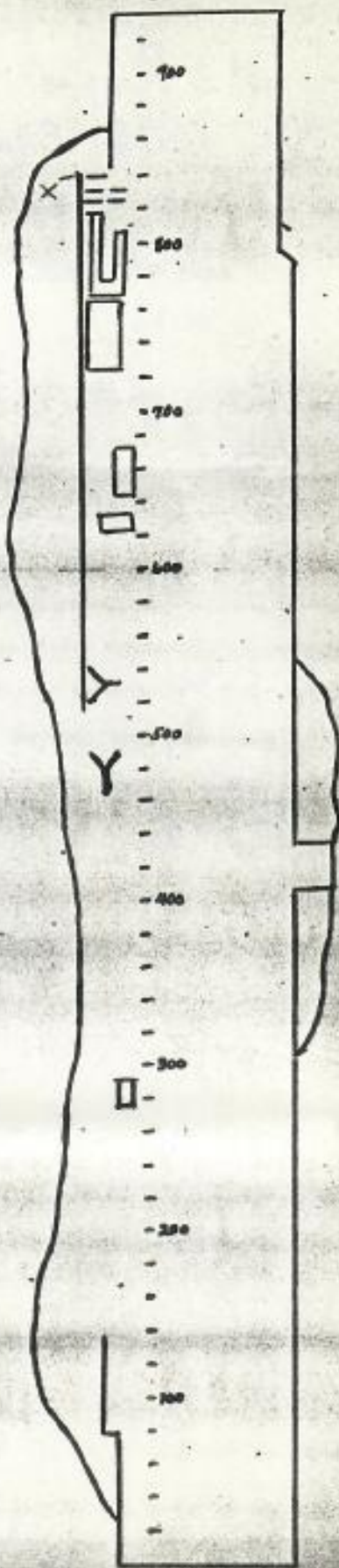
1
AQ 1
time 4+1

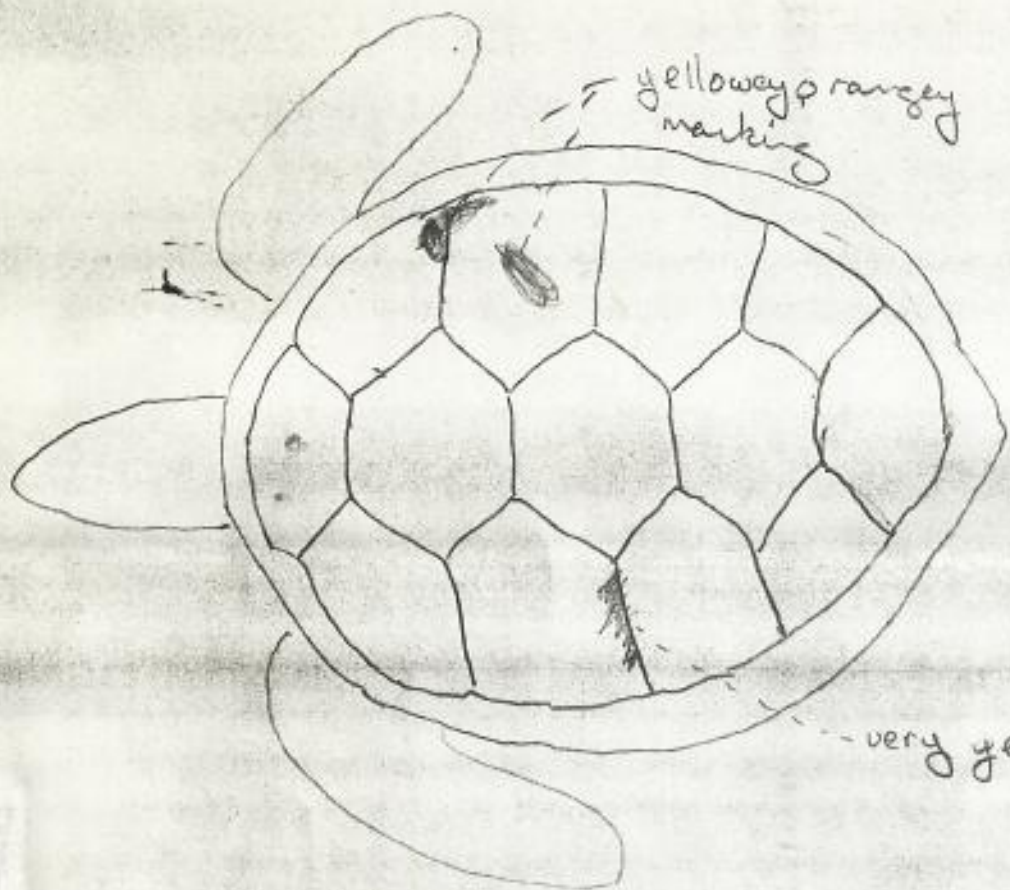
Green Sea Turtles

6-4-81

Obs. Elizabeth Shecky

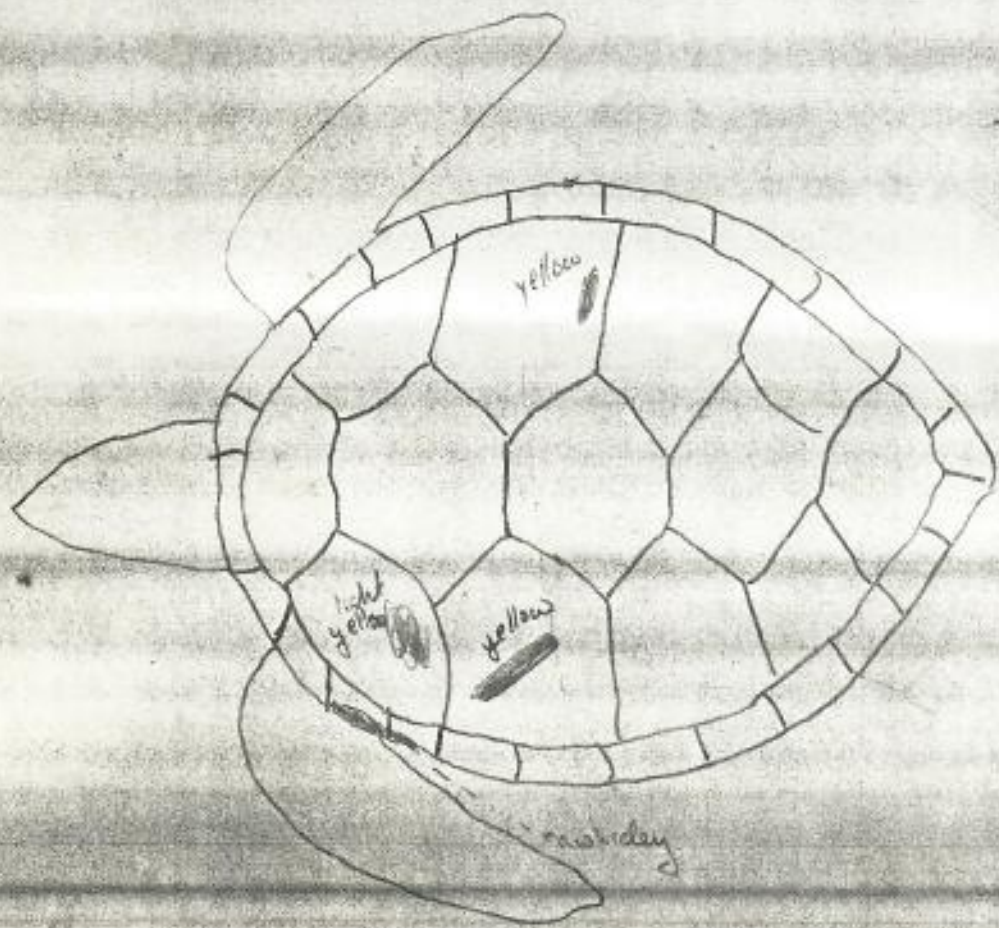
⊕ Adult ♀ seen at 1200 till sunset in splash zone



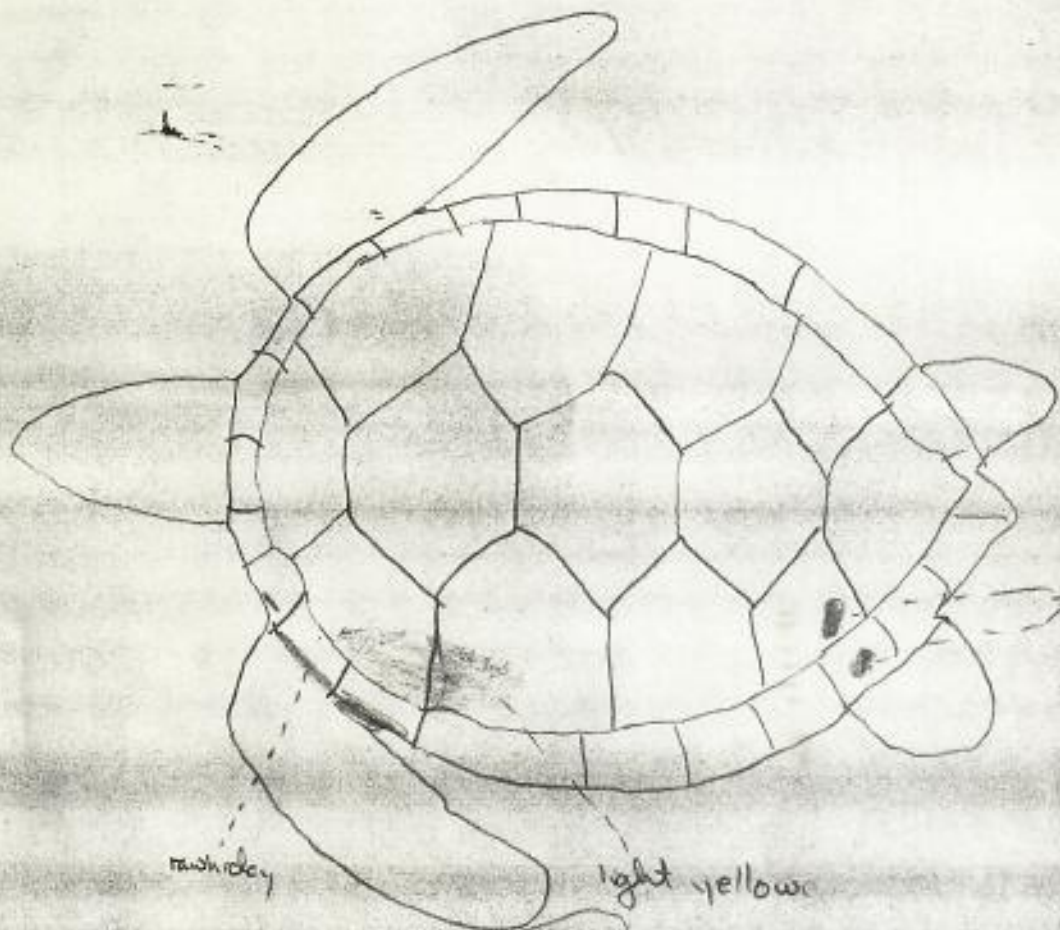


A
Tern Island
Turtle #5
4-28-81, 4-29-81

very yellow, lighter colored



Tern Island
Turtle #6. A →
5-1-81



Tern Island

#7 A ♂

5-2-81

5-4-81

5-6-81

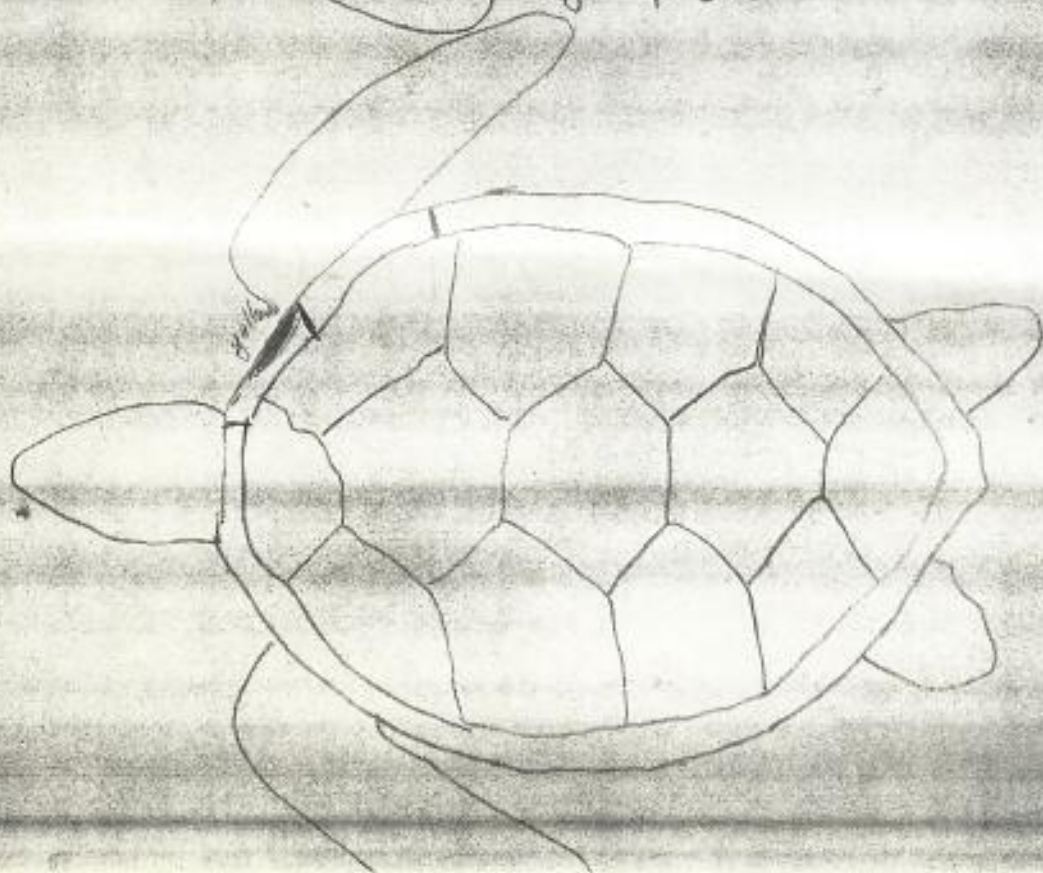
5-7-81

5-13-81

yellow

mud color

light yellow



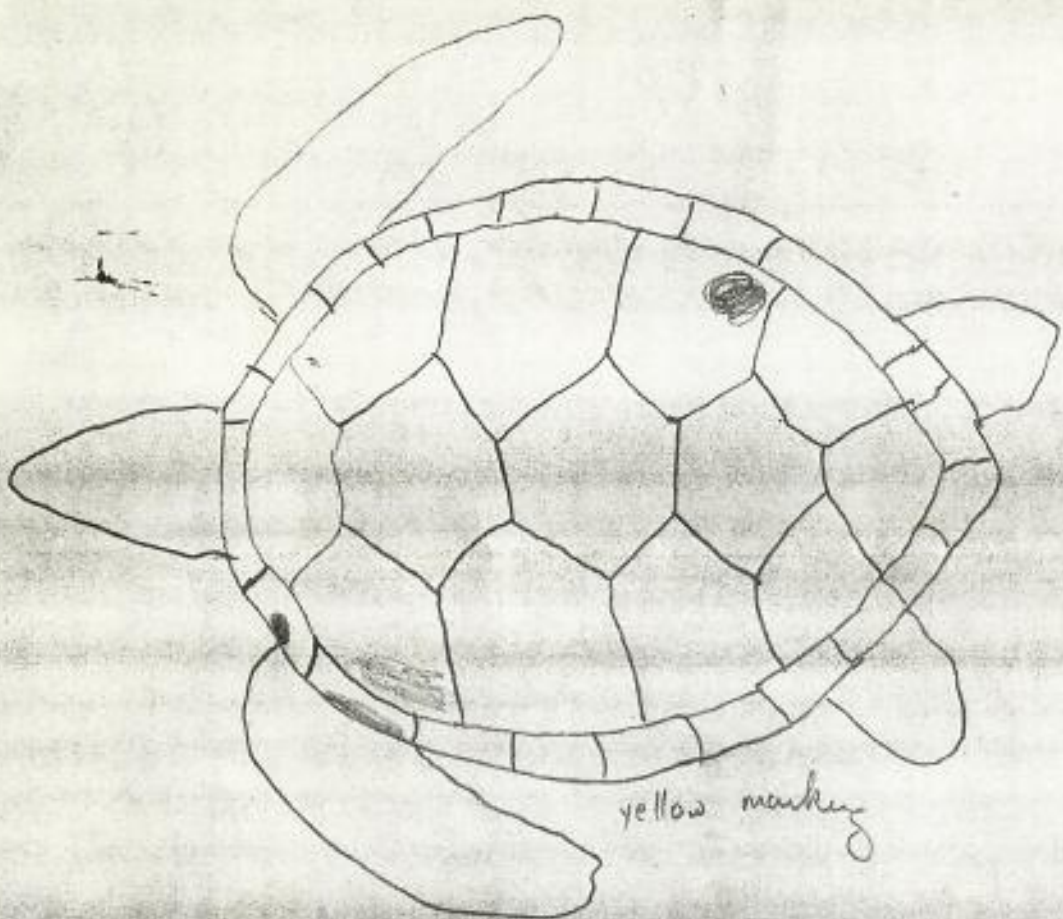
Tern Island

#8 ♀

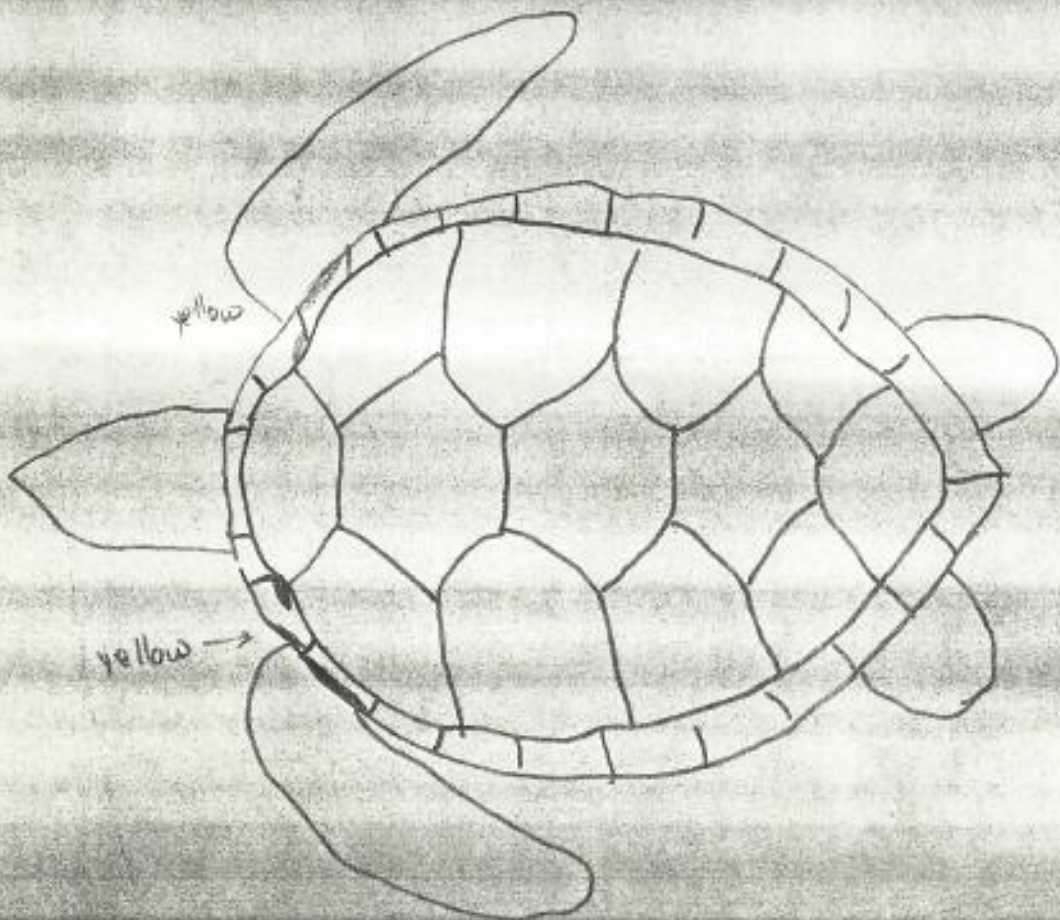
5-6-81

5-9-81

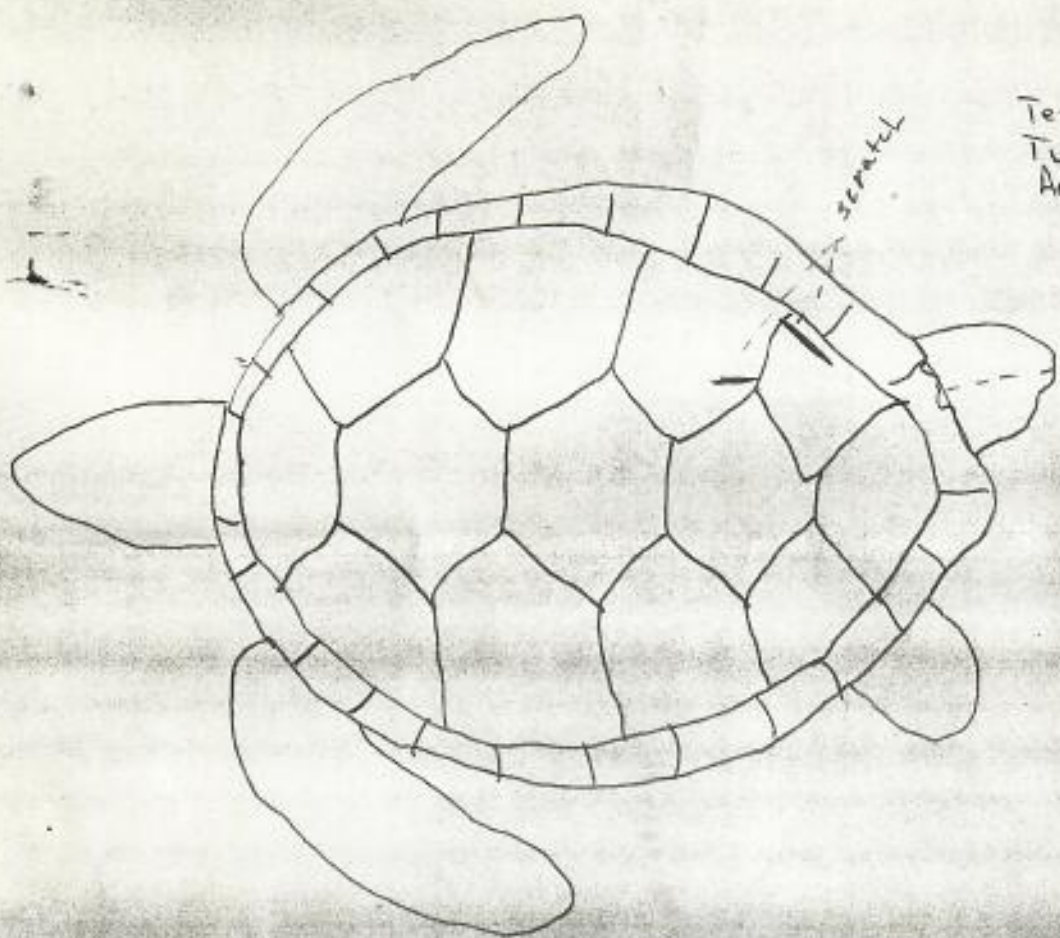
yellow



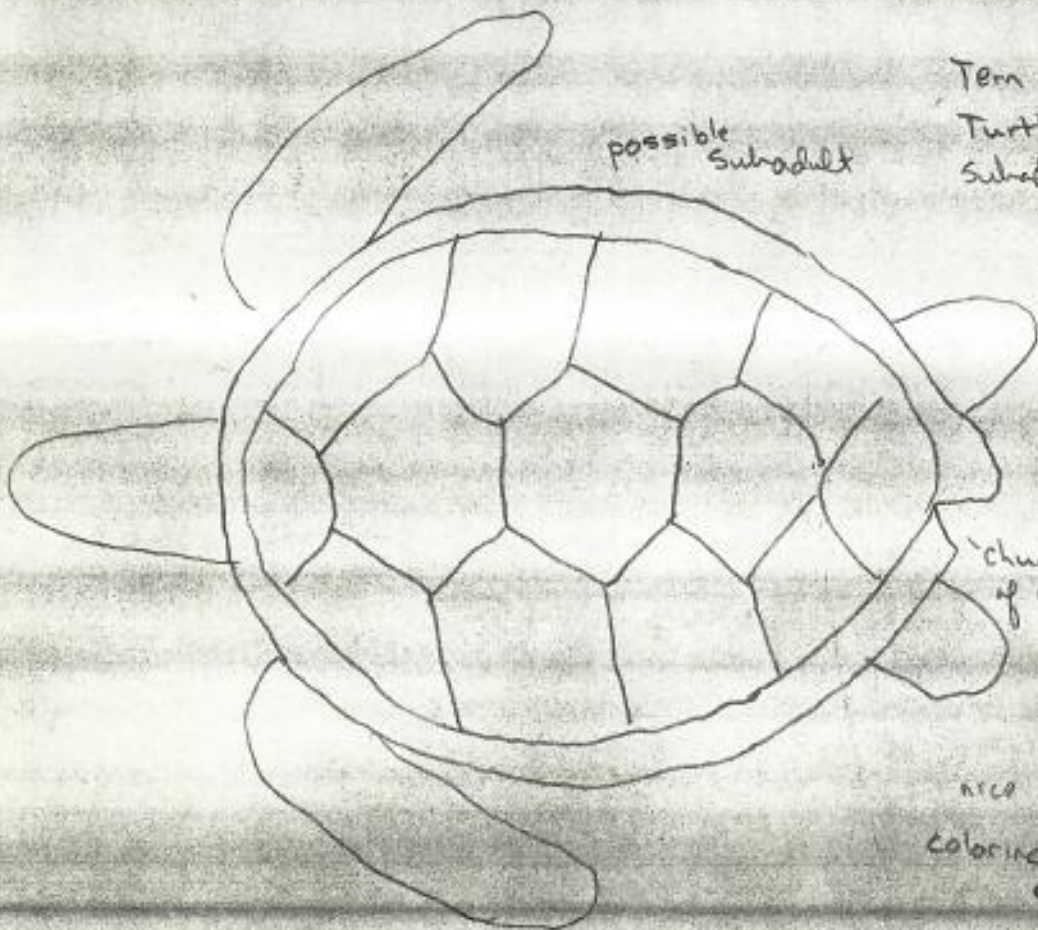
Tern Island
Turtle #9
♀ Adult
5-7-81
5-8-81(?)



Tern Island
Turtle # 10
Adult ♀
5-12-81
5-13-81
5-14-81



Tern Island
Turtle # 11
Adult ♂
5-12-81
5-13-81
5-14-81
5-15-81
chipped
carapace
edge

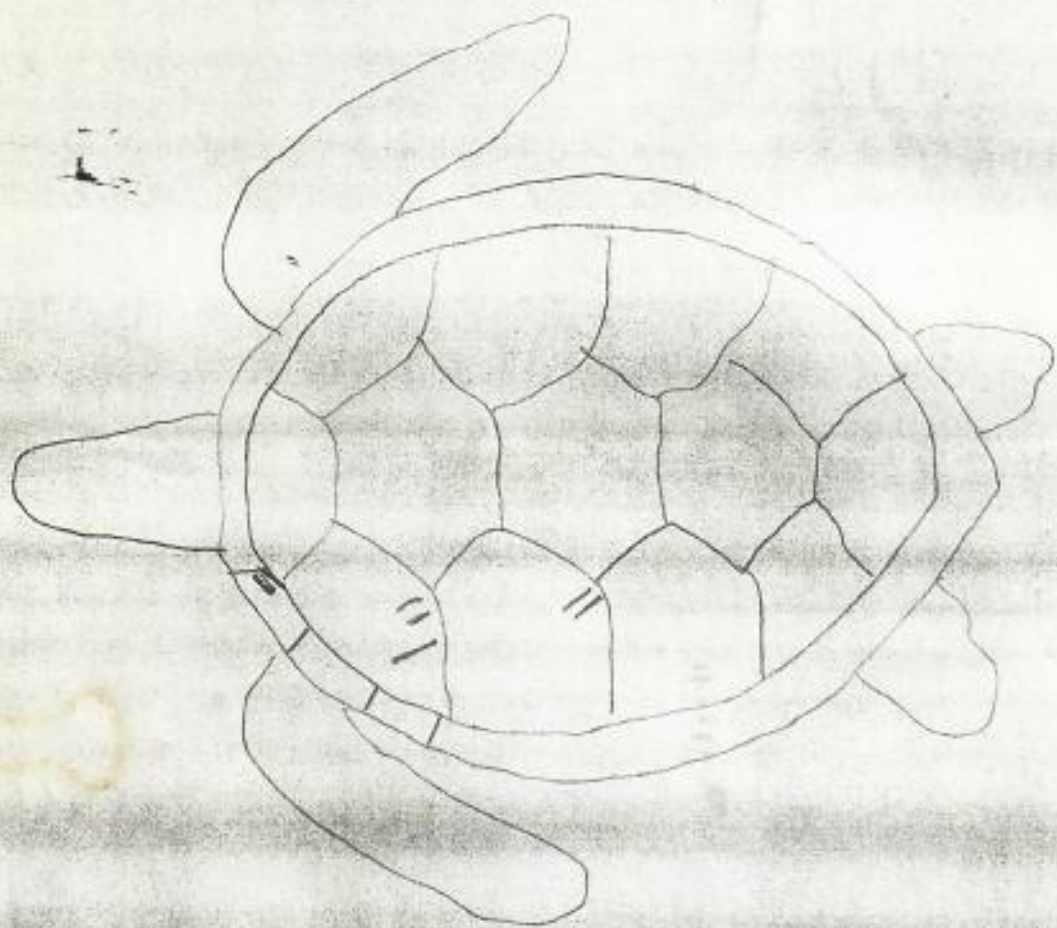


possible
Subadult

Tern Island
Turtle # 12
Subadult? ♀??
5-13-81
5-14-81
5-15, 16, -81
5-18-81
5-19-81
5-20-81
5-22-81
5-23-81

chunk out
of carapace

nice even yellow
coloring



Tern Island

#13

♀(?)

-very dark in
general
so yellow stands
out

5-22-81