

WHITTOU TURTLES

ER LISIANSKI EXPEDITION

(including FFS, LAYSAN, PHH, MIDWAY)

12-27 JULY 1978 USH/AH

23 SEPT. - 7 OCT. 1978 - MAEO/LAYSAN / PHH / MIDWAY

TAGGED WOOD RELEASED FOR DRIFT - P. 7  
FFS

2 OF 2

G. H. BALAZS

2 OCT 78  
MONDAY  
beans and weiners for diners - talked to Johnson's over coffee.

3 OCT 78  
TUESDAY  
Up ~ 1:30 AM for walk around island - NO MOON - some clouds - dark night. Depart 2 AM clockwise. Appears to be low tide. Along East rocky ledge area found what must have been thousands of turnstones roosting on beachrock. Good opportunities for tagging? At approximately center of East sandy beach area found an adult female boater - I left tag flap T 226 - no green apparent - look pretty good - applied 2951 to RFL. Saw imprint of double tag female - but not there. Proceeded all the way around island, returning at 3:55 AM. To bed and up at 8:30 - kam up at 7:30.  
Bkknote:

Harrison and Coleman took my shark line ashore at Laysan and tied it to a tree. Johnson's watched semi-entanglement by juvenile and wean pups.

Depart around island at 9:39 AM - tried to scoop turtle in front of tent, but missed. 9:50 AM at Site 1, tried to scoop 2 SA, 1 Juv SA, "rotated" in net - escaped.

<sup>North</sup> swell seems to be up - waves echoing off of beach (bouncing back).

3 Oct  
Tues

4 Oct  
Wednes

3 Oct 78  
Tuesday

1030 AM at site 3 - saw turtle over  
 UW beachrock - can feel algae when walking out  
 1050 AM - Site 3 - spent most of the day here -  
 caught 9 total - most were caught right up  
 close to shore - presumably all chasing and eating  
 floating *Turbinaria*. noted T225 bushier of  
 about 230 PM; Skip Haura brought chicken  
 lunch; Patti and Leighton passed by on census.  
 At ~ 5 PM proceeded to Site 4, no turtles  
 seen. Alan returned to camp with net, and  
 I proceeded around island to look for bushers.  
 Found ♂ T259 left front limb off - NE BEACH; also  
 118 Mono ♀ by rock ledge Bay. Ate C-ration  
 dinner by rock ledge Bay at 6-630 PM. Noted  
 an adult female at mouth or inside Bay - seemed  
 to be feeding. Went slightly across island  
 at South end - photos on Roll 6 of  
 sunset. Returned to camp - 7:30 PM.  
 Talked to Johnsons during evening - Informed  
 that Coleman and Harrison built fire and  
 roasted Teriyaki steak during visit to  
 Jaysan.

Photos  
w/ Seal

BACKNOTES - Tube does not inflict damage  
as evidenced by apparent healthfulness  
of recaptures.

4 Oct  
Wednesday

Slept from ~ 11 PM - 7:30 AM - decided not  
to do night survey. At 8:30 walked  
south along West shore to site of excavation  
where I previously thought that emergence  
may have recently taken place. Dug

4 Oct 78  
WED

in area, but did not find anything. Noted that sand "sticks" together, very well - due to fine particles (?). Returned to camp and gathered gear for snorkeling and netting. No turtles seen. At 9:15 AM at Site 1 - UV collection of algae in this area - only a small quantity of live Caulerpa, intertwined with other, present.

Proceeded to Site 3 - no turtles noted. Starting at 10:35 AM, made observations at Site 2. Trades up, and lots of Turbinaria washed up on beach - presumably from further off shore.

Tried to scoop 5 turtles, but only got two, both tag recaptures.

Whenever possible, tags have been slightly expanded using the handle of application pliers. This gives more area for growth to take place.

Collected algae in this feeding pasture - noted that smooth flat beachrock out (where many turtles were caught last trip) had a sandy-silty mat in which a red filamentous alga grows.

Where do LISIANSKI Turtles sleep?

4 OCT  
WEDseen  
~2:30

4 OCT 78  
WED

Departed Site 2 ~ 12:30 PM - Kam returned to campsite with net, etc.

Noted SA feeding close to shore just before beginning of beachrock. Water clear today, unlike yesterday when it was cloudy. Observed basket 2942-43 just before Messer - photos Roll 6. Tagged 2962-3-4

as she just hauled out in front of Messer. Backtracked along shore and proceeded across island back to campsite at 1:25 PM.

Noted dense stands of "burjwiled" also that *Tribulus* is thick and high (lots of rain last two months?). Alan was disassembling campsite - Johnson's already completed - they were just going along west shore - rain showers occurring. Recovered turtle and removed humerus, front limb, head and neck. Put turtle back in same spot with green trawl net.

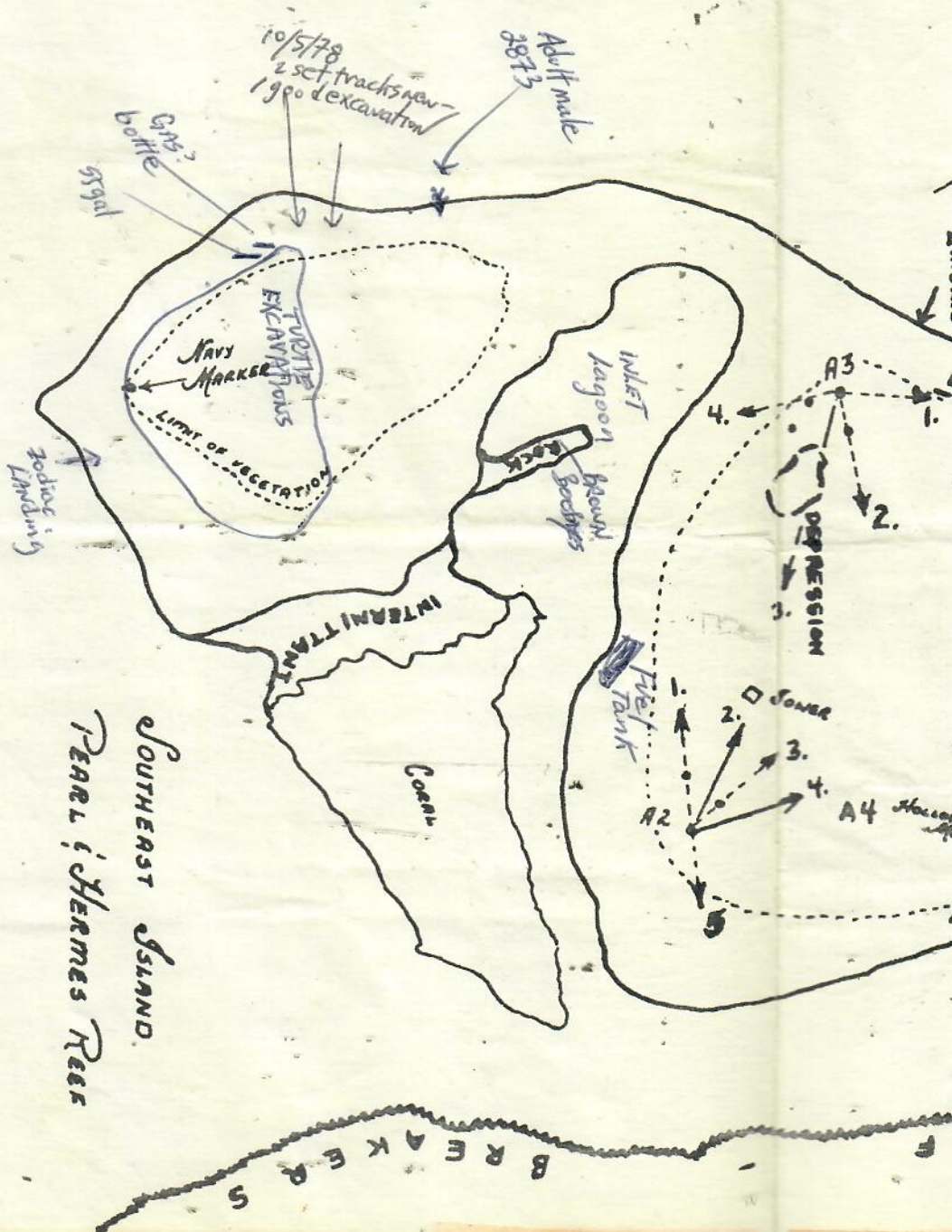
see page  
106

SEEMS TO BE AN UNUSUALLY HIGH NUMBER OF DEAD TURTLES FOUND AT LISIANSKI OVER THE YEARS.

~ 2:30 PM Spike came in Zodiac, loaded all gear and departed for E.R. - Dumped old lobster bait and departed Neva Shoals.

Backnote - Two shark lines were set out last night - one came up empty, the other was broken off. Feighton, Ed and Chip did SCUBA this morning in 10-15' water somewhere off of Site 1 - Ed saw Tiger and took photos.

[continued page 93]



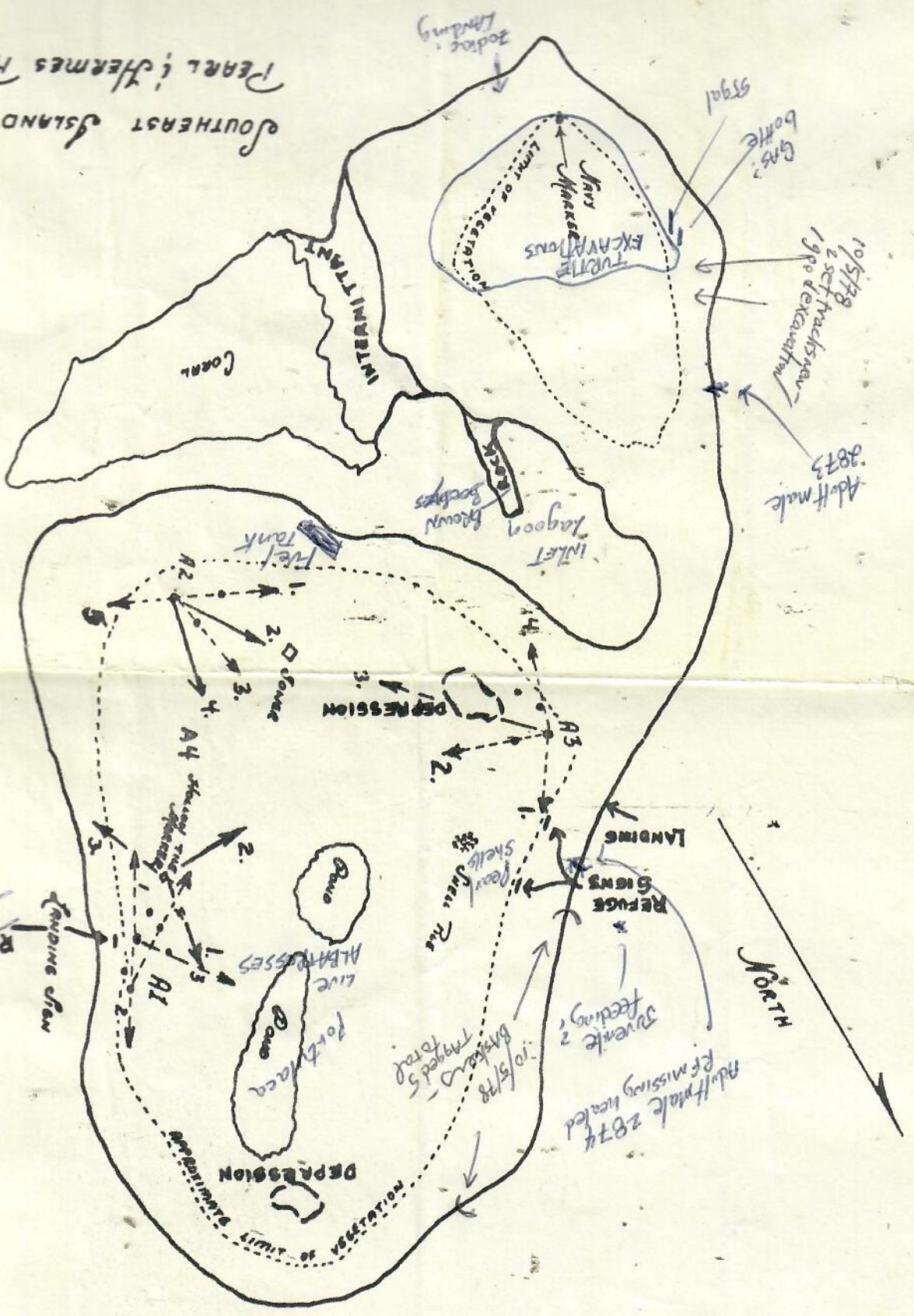
Southeast Island.  
 Pearl & Hermes Reef

CM.  
 P.L.W.  
 1964

PLK  
CM

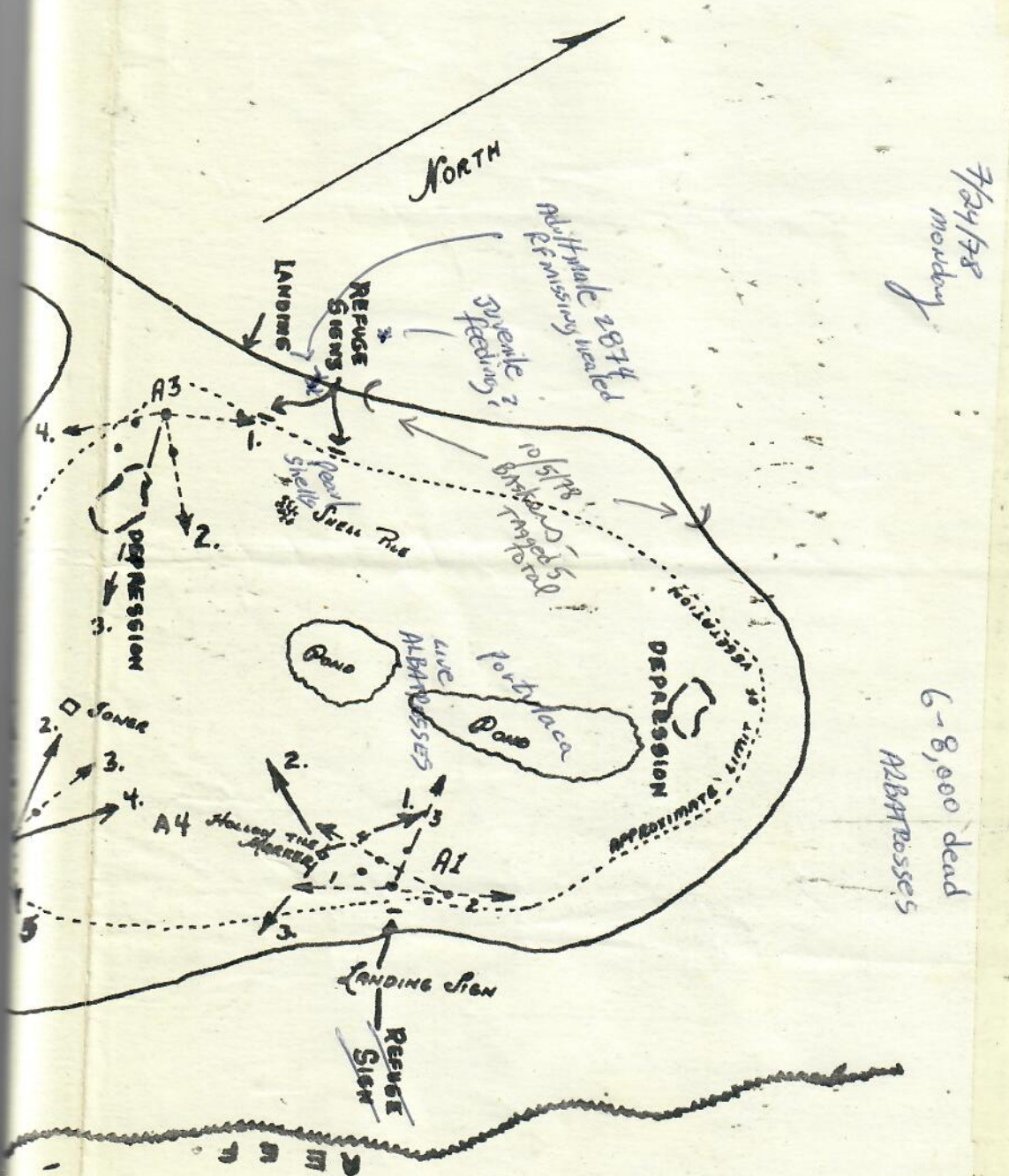
SOUTHERST ISLAND  
PEARL & HERMES REEF

BREAKEYS  
REEF



6-8,000 dead  
ALBATROSSES

7/24/78  
Monday







~800m total  
~285m inland  
~200m to go to  
reach the ocean





1000

Trunks  
in roots

Road 2/1/78

Johnston

Johnston

2/1/78

Remio  
 57-B EVANGELISTA  
 PROJECT 4-3007  
 QUEZON CITY  
 PHILIPPINES  
 sent 1/80  
 TEL 78-52 25

Figure 2. Aerial photograph of Lisianski Island, January 1966. U.S. Navy photograph.



1921  
 2 BASK  
 10/18/74  
 02866  
 not  
 10/11/78  
 Taylor  
 (buddy)  
 from  
 Midway  
 and  
 PH  
 ~ 1972  
 IPE  
 Report  
 5 days  
 H-46

Figure 2. Aerial photograph of Lisianski Island, January 1966. U.S. Navy photograph.



H-46  
Sdops  
Report  
see  
2-1972  
PH  
Mudger  
from  
Tough  
10/1/78  
not  
02866  
10/18/78  
2 BARK  
7/21

7/23  
AT BARK  
DEAD ADULT  
7/19  
TBARK

7/23  
AT BARK  
DEAD ADULT  
7/19  
TBARK

7/23  
AT BARK  
DEAD ADULT  
7/19  
TBARK

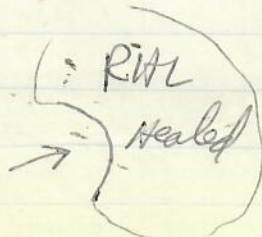
## JUVENILE RECOVERIES

| DATE                    | TAG NOS      | MEASUREMENTS   | Remarks   |
|-------------------------|--------------|--|---|
| <b>LISIANSKI ISLAND</b> |              |  |   |
| 7/20 Thurs              | 2630         | C-19 x 17  | BASK NE BEACH - ~5:30 PM  |
| LIS                     | 2631 LFL     | S-17 <sup>7</sup> / <sub>8</sub> x 14 <sup>1</sup> / <sub>4</sub>    | Small particles of <i>C. racemosa</i> in mouth; front part miss-healed. |
| (21)                    |              | PL-14 <sup>7</sup> / <sub>8</sub> TAIL-3 <sup>1</sup> / <sub>8</sub> |   |
|                         |              |  | section missing   |
| original tagging        | AT Lisianski | by NAFTZ - see p 31  | Left 10th with BW speckled Book   |
| 5/7/78                  | C 48 cm      | x 42.75 cm   | 8.1g<br>27 x 20<br>Smells   |



|      |         |                                 |   |                       |
|------|---------|---------------------------------|---|-----------------------|
| (1)  | 10/3/78 | x 2849 RFL                      | C-16 <sup>1</sup> / <sub>2</sub> x 15 <sup>1</sup> / <sub>2</sub>         | SITE 2 close to shore |
|      | Tuesday | (2850 LFL)                      | 16 <sup>3</sup> / <sub>8</sub> (+1/8) 15 <sup>1</sup> / <sub>2</sub>      |                       |
|      |         | lots of red algae and coralline | S-15 <sup>7</sup> / <sub>8</sub> x 13 <sup>3</sup> / <sub>4</sub>         |                       |
|      |         |                                 | 7/20-15 <sup>3</sup> / <sub>4</sub> (+1/8) 13 <sup>7</sup> / <sub>8</sub> |                       |
| (27) |         |                                 | PL-13 <sup>1</sup> / <sub>8</sub> HEAD-2 <sup>1</sup> / <sub>2</sub>      |                       |
|      |         |                                 | TAIL-2 <sup>1</sup> / <sub>4</sub>  |                       |

Mouth sampled - *Turpinia* retained. lots of red alga on neck and hind quarters; no barnacles noted; Brown shell; photo # 25 Roll 5.



(-1/2) 18<sup>1</sup>/<sub>2</sub> lbs  
7/20 - 20/65

Juvenile Recoveries

DATE ②  
10/3/78

TAG NOS

2851

2852

Red algae and red coralline

②8

Measurements

S -  $16\frac{3}{4}$  x  $12\frac{3}{4}$

7/20 -  $16\frac{3}{4}$  <sup>NO</sup> change  $12\frac{3}{4}$

C -  $17\frac{3}{8}$  x  $14\frac{1}{4}$

$17\frac{1}{4}$  <sup>②8</sup> ?

PL -  $13\frac{9}{16}$ "  $13\frac{1}{2}$

HEAD -  $2\frac{5}{8}$

TAIL -  $2\frac{3}{4}$

Remarks  
site 2

17lbs

7/20 - 21 lbs

②4

8.1g

27 x 20 mm  
"Smells"

ends of Rad L front limbs partly missing but healed.  
obstruction in left eye - probed and removed, - retained.  
Nothing in mouth; small amount of skin algae; no barnacles noted; Brownish shell.

10/3/78 ③

2630

2631

Red algae and coralline on legs

②9

S -  $17\frac{7}{8}$  x  $14\frac{3}{8}$

7/20 -  $17\frac{7}{8}$  <sup>NO</sup> change  $14\frac{1}{4}$

C -  $19\frac{1}{8}$  x 17

19 <sup>②8</sup> 17

PL -  $14\frac{3}{4}$   $14\frac{7}{8}$

HEAD - 3

TAIL -  $2\frac{3}{4}$

site 2

27lbs

Mouth sampled - retained; blackish shell; V-notch in left marginal; a few skin barns ventral hind; faint red skin alga; Photo #23 roll 5; Tip of left front limb off but healed.

## LISIANSKI Juvenile Recoveries

| DATE            | TAG NUMBERS  | MEASUREMENTS  | Remarks   |
|-----------------|--|---|---|
| 10/3/78<br>Tues | 2841 RPL<br>2842 LPL<br>red coralline alga   | S - $18\frac{5}{8} \times 15$<br>7/20 - $18\frac{3}{4} - 18\frac{5}{8}$<br>C - $19\frac{1}{2} \times 17$<br>$+18\frac{1}{8} 19\frac{3}{8} \times 17\frac{1}{8}$<br>PL - $15\frac{1}{4}$<br>HEAD - 3<br>TAIL - $3\frac{1}{2}$<br>15 <sup>3/8</sup> | Site 2<br>27 lbs<br>7/20 32 <sup>1/2</sup><br>$+5\frac{1}{2}$ |
| (30)            |  |   |   |
|                 | Stomach<br>Tube sample retained; many skin barns, but some dead;<br>faint red skin alga; Potts # 24 Roll 5 |   |   |



# Lisianski Juvenile Recoveries

71

| DATE           | TAG NUMBERS | Measurements   | Remarks |
|----------------|-------------|--|---------|
| 10/4/78<br>Wed | 2857        | C - 19 <sup>1</sup> / <sub>8</sub> × 17 <sup>1</sup> / <sub>2</sub><br><del>7/14</del> 18 <sup>7</sup> / <sub>8</sub> 17 <sup>1</sup> / <sub>2</sub> | site 2  |

(31)

2858

S - 17<sup>3</sup>/<sub>4</sub> × 15<sup>1</sup>/<sub>2</sub>  
 7/20 - 17<sup>5</sup>/<sub>8</sub> + <sup>1</sup>/<sub>8</sub> = 15<sup>3</sup>/<sub>8</sub>

PL - 14<sup>1</sup>/<sub>4</sub> 14<sup>3</sup>/<sub>8</sub>

HEAD - 3

TAIL - 3<sup>1</sup>/<sub>4</sub>

wt - 26lbs  
 7/20 - 31  
 (-5)

Photo #21 Roll 6; Stomach tube sample retained

## Juvenile Recoveries

| DATE                 | TAG NUMBERS  | MEASUREMENTS  | Remarks |
|----------------------|--------------|---|---------|
| 10/4/78<br>Wednesday | 2853<br>2854 | C-15 x 13 <sup>7</sup> / <sub>8</sub><br>+1/8 14 <sup>7</sup> / <sub>8</sub> 13 <sup>3</sup> / <sub>4</sub> | site 2  |

(32)

+1/8 S-14<sup>1</sup>/<sub>4</sub> x 12  
7/20 14<sup>1</sup>/<sub>8</sub> 11<sup>7</sup>/<sub>8</sub>

PL- 11<sup>1</sup>/<sub>2</sub> 11<sup>1</sup>/<sub>4</sub>

HEAD- 2<sup>3</sup>/<sub>8</sub>

TAIL- 2<sup>3</sup>/<sub>4</sub>

WT- 12<sup>1</sup>/<sub>2</sub>

7/20-15 lbs

-2<sup>1</sup>/<sub>2</sub>

red coralline and green alga on tags; lots of  
 (skin barnacles) <sup>green</sup> dried alga on skin (sample  
 retained); Ends of both front flippers partly  
 missing, but healed.  
 photo # 20 Roll 6

vial A - stomach  
 vial B - skin/PL

\*  
 Informed  
 10/6/78  
 aialab

2526 recaptured and released off of  
 Spit Is., Midway during the past month.

## LISIANSKI

- Growth Summary for 9 week period -

|    |      | straight<br>+1/8" | weight<br>- 1 1/2 lbs |
|----|------|-------------------|-----------------------|
| 1. | 2849 |                   |                       |
| 2. | 2851 | no change         | -4 lbs                |
| 3. | 2630 | no change         | no datum              |
| 4. | 2841 | -1/8              | -5 1/2                |
| 5. | 2857 | +1/8              | -5                    |
| 6. | 2853 | +1/8              | -2 1/2                |

Scale check = This expedition scale with lbs above (100lb max) read ~ 2 lbs light (less) due to indicator being slightly above zero "0" reading. This is, nevertheless, believed to be the same scale used during July 78 trip. Scale with lbs and kg's appears to be correct.

## NESTING PIT CENSUS

7/19/78

| DATE           | LOCATION   | DATA  |
|----------------|--|---|
| 7/15/78 SAT    | TERN - S beach   | AB pits (since last TRIP) 4 look good<br>3/4 LENGTH OF S TERN BEACH = 361 Ghost CRAB HOLES  |
| 7/16 SUN       | SHARK as per Ficus   | 3 EXCAVATIONS (?)   |
| 7/16 SUN       | LITTLE GIN as per Ficus  | 108 "   |
| 7/18 TUES.     | LAYSAN ISLAND  | 2 - (1 large, 1 small just S cross point)<br>3 - from dead turtle = 1st large, include 2 small<br>3 (1 good - large?) 2 small - past NE point where beachrock starts<br>14 > by Japanese shipwreck<br>7 |
| 7/19 WED.      | LISIANSKI  | 2 just before NW point<br>1-2 at SW end<br>4 on W shore midpoint (most recent)  |
| 7/21 FRIDAY    | PEARLAND HERMES from A. Johnson<br>SOUTHEAST IS.<br>1530 - 1630h | 55 nest excavations at SW end - up in grassy beach.   |
|                | NORTH Island<br>1325 - 1430h                                     | 13 nest excavations (12 on area - 1 opposite side)  |
| 7/24/78 Monday | Southeast<br>9:25 - 12:30  | all at South, high end.<br>38 false, 14 possibly good = 52 Total photos on roll 10  |

10/5/78  
Thursday

7/19/78

LAYSAN -

reported by Johnson's to me on  
C-130 7/27 that large excavation  
was made on vegetated zone of  
sand beach near Japanese shipwreck -  
turtle apparently crossed rugged  
zone of intertidal beach rock that  
I noted and photographed.  
Could this be a hawksbill?

10/5/78  
Thursday

Southeast Is., Pearl and Hermes Reef -  
Two sets of tracks on west shore - one of  
the excavations looks good - no other evidence of  
recent nesting.

NEST I EXCAVATION - South end 31" deep

|                      |                 |               |
|----------------------|-----------------|---------------|
| No Development       | - 7             | <del>20</del> |
| Partial              | - 7             | 8             |
| Successfully Hatched | - 74            | 84            |
| Hatched but dead     | - none apparent |               |

total - (88)

[to page 77]

## OBSERVATIONS OF COPULATION

DATE

7/30 Thurs

off northeast beach - waist deep water.  
 Drifting - swimming to the west - I waded out -  
 no sig. seen of male - female became excited  
 and thrashed around a lot - Juvenile seen  
 swimming in area for a short period -  
 Total observation ~ 30 minutes. Shells on  
 both appear light green translucent in  
 color - black spots - speckles.

— # —

Note - 9/23 - 10/1/78 <sup>MARCO</sup> LISI EXPEDITION -

No signs of mating or copulation

5 OCT 78  
Thursday


P&H  
NEST 2 - (SETS) 28" deep

|                        |               |                    |
|------------------------|---------------|--------------------|
| No Development -       | 11            | <del>9</del><br>14 |
| Partial -              | 4             | 5                  |
| Successfully hatched - | 64            | 81                 |
| Hatched but dead -     | none apparent |                    |

total - (79)

noted that no short crabs were present in the nests like at Laysan. Also that substrate was very uniform like sample previously collected and that no large roots or roots were present to hinder hatching emergence. This may be the reason for no hatchlings being found dead in the nest.

# JUVENILE TURTLE TAGGINGS

| DATE                                 | TAG NOS                        | MEASUREMENTS  | REMARKS   |
|--------------------------------------|--------------------------------|---|---|
| 7/15/78<br>SATURDAY                  | 3:30PM<br>2835 RFL<br>2836 LFL | scoopnet<br>C-18 x 16 1/8<br>PL-C-14 5/8<br>TAIL-3 3/8" | observed feeding along from Seagull - FFS<br>Northern - AIR STRIP MARKER I -<br>(Mouth contents and stomach contents obtained.)   |
| FEELS THIN ABOUT SHOULDERS AND NECK. |                                |   |  <p>RHL<br/>deep cut<br/>relatively fresh<br/>off. photos of feeding<br/>ROLL 3, #15-16.</p> |

TERN,  
FFS

|                                   |   |   |  |
|-----------------------------------|---|---|--|
| 7/19/78<br>WEDNESDAY<br>LISIANSKI | ~ 6:30PM w/skip<br>2837 RFL<br>2838 LFL | BASKING on gravel beach just before beachrock<br>LISIANSKI<br>C-21 3/4 x 20 1/4<br>C-PL-17 3/4<br>TAIL-3 5/8" |  |
|-----------------------------------|---|---|--|

(4)  
LISIANSKI

Brownish shell - photo while basking. stomach tube 3X - only small quantity - appears to be: Caulerpa.

DATE  
7/20/78  
Thursday  
LISIANSKI  
(5)  
Amphipod  
from 28  
in sand  
Vial  
283

7/20  
Thurs  
LISIANSKI  
(6)

7/20  
Thurs  
LISIANSKI  
(7)



| DATE   | TAG NOS.             | MEASUREMENTS  | Remarks   |
|--|----------------------|---|---|
| 7/20/78<br>Thursday<br>LISIAWSKI<br>(5)              | 2839 LFL<br>2840 RFL | C-18 $\frac{1}{4}$ x 16 $\frac{1}{2}$<br>S-17 $\frac{1}{2}$ x 14 $\frac{3}{8}$<br>PL-14 $\frac{1}{8}$ | 29 lbs, 4:30 AM<br>SITE 1<br>goldish shell,<br>red alga on skin;<br>BARNs and mouth<br>sample taken<br>AREAS of BK and<br>BROWN ON HEAD |
| Amphipods<br>from 2855<br>in same<br>vial as<br>2839 |                      | TAIL-3 $\frac{5}{8}$  |   |

|                                   |                      |   |   |
|-----------------------------------|----------------------|---|---|
| 7/20<br>THURS<br>LISIAWSKI<br>(6) | 2841 RFL<br>2842 LFL | C-19 $\frac{3}{8}$ x 17 $\frac{1}{8}$<br>S-18 $\frac{3}{4}$ x 15 $\frac{1}{8}$<br>PL-15 $\frac{3}{8}$ | SITE 3<br>32 $\frac{1}{2}$ lbs<br>mouth sample<br>TAKEN -<br>CAULEPPA<br>BARNs and<br>Red ALGAE on skin |
|-----------------------------------|----------------------|---|---|

|                                   |                      |   |  |
|-----------------------------------|----------------------|---|--|
| 7/20<br>THURS<br>LISIAWSKI<br>(7) | 2843 RFL<br>2844 LFL | C-21 x 18 $\frac{1}{2}$<br>S-20 x 16 $\frac{1}{2}$<br>PL-15 $\frac{1}{2}$ | 39 lbs SITE 2<br>pink coralline<br>alga on carapace;<br>C. <u>tracemosa</u> ID<br>from stomach;<br>1 photo #30<br>Roll 5 |
|-----------------------------------|----------------------|---|--|

| DATE      | TAG NOS  | MEASUREMENTS                          | REMARKS  | DATE      |
|-----------|----------|---------------------------------------|--|-----------|
| 7/20/78   | 2845 RFL | C-18 x 17                             | 26lbs, SITE 2  | 7/20/78   |
| Thurs     | 2846 LFL |                                       |  | Thurs     |
| LISIAWSKI |          | S-17 $\frac{1}{4}$ x 14 $\frac{1}{2}$ | Stomach Tube -<br>visual ID<br>C. racemosa                       | LISIAWSKI |
| (8)       |          | PL-14 $\frac{1}{8}$                   | no barns;  | (11)      |
|           |          | TAIL-3 $\frac{1}{4}$                  | 2 photos -<br>#31-32 Roll 5                                      |           |
| 7/20      | 2847 RFL |                                       |  |           |
| Thurs     | 2848 LFL | C-16 $\frac{3}{4}$ x 15 $\frac{3}{4}$ | 19lbs, SITE 2  | 7/20/78   |
| LISIAWSKI |          | S-16 $\frac{1}{8}$ x 13 $\frac{3}{8}$ | Stomach Tube -<br>visual ID<br>C. racemosa                       | LISIAWSKI |
| (9)       |          | PL-12 $\frac{3}{4}$                   | 1 photo, #33<br>Roll 5   | (12)      |
|           |          | TAIL-3 $\frac{1}{8}$                  |  |           |
| 7/20      | 2849 RFL | C-16 $\frac{3}{8}$ x 15 $\frac{1}{2}$ | 20lbs, SITE 2  | 7/20/78   |
| Thurs     | 2850 LFL | S-15 $\frac{3}{4}$ x 13 $\frac{7}{8}$ | Red filamentous<br>observed in<br>mouth and from<br>stomach.     | Thurs     |
| LISIAWSKI |          | PL-13 $\frac{1}{4}$                   | Small healed hole<br>in trailing edge of right<br>front flipper. | LISIAWSKI |
| (10)      |          | TAIL-2 $\frac{3}{8}$                  | photo #34 roll 5.<br>lots of algae on ventral<br>surfaces.       | (13)      |

| DATE               | TAG NOS                        | MEASUREMENTS   | Remarks   |
|--------------------|--------------------------------|--|---|
| 7/20/78            | 2851 RFL<br>2852 LFL           |  | 121 lbs   site 2  |
| Thurs<br>Lisianski |                                | C - $17\frac{1}{4}$ x $14\frac{3}{4}$<br>S - $16\frac{3}{4}$ x $12\frac{3}{4}$ | Mouth sample<br>in plastic Bag<br>(Red filament);   |
| (11)               |                                | PL - $13\frac{1}{2}$ TAIL - 3  | algae on ventral<br>surfaces; end<br>of R front flipper<br>part missing<br>but healed. photo<br>#35, Roll 5   |
| 7/20 Thurs         | 2853 LFL<br>Lisianski 2854 RFL | C - $14\frac{7}{8}$ x $13\frac{3}{4}$<br>S - $14\frac{1}{8}$ x $11\frac{7}{8}$ | 115 lbs   SITE 2  |
| Lisianski          |                                | PL - $11\frac{1}{4}$ TAIL - $2\frac{1}{2}$                                     | Both ends of front<br>flipper part missing<br>but healed; stomach<br>tube - small<br>amount of Red ALGA -<br>VISUAL ID. Lots<br>of SKIN BARNES; PINK<br>coralline on surface;<br>#36 on Roll 5.   |
| (12)               |                                |  |   |
| 7/20 Thurs         | 2855 RFL<br>Lisianski 2856 LFL | C - $19\frac{1}{8}$ x $16\frac{3}{4}$<br>S - $18\frac{1}{4}$ x $14\frac{5}{8}$ | SPM<br>SITE 2<br>131 lbs  |
| Lisianski          |                                | PL - $14\frac{3}{8}$ TAIL - $3\frac{1}{2}$                                     | Small sections of<br>L & R FRONT FLIPPERS<br>MISSING BUT HEALED.<br>GREEN PROTH FROM<br>MOUTH - <i>C. racemosa</i><br>VISUAL ID; 2 amphipods<br>collected from inside<br>CORNER of mouth;<br>small amount of pink<br>coralline on shell;<br>SKIN BARNES;<br>Algae of ventrals.<br>Photos Roll 5 |
| (13)               |                                |  |   |

| DATE             | TAG NOS                           | MEASUREMENTS  | Remarks   | DATE                        |
|------------------|-----------------------------------|---|---|-----------------------------|
| 7/20/78<br>Thurs | 2857 RFL                          | C-18 <sup>7</sup> / <sub>8</sub> x 17 <sup>1</sup> / <sub>2</sub> | 31 lbs!<br>NW BEACH<br>BASKER;<br>Photos #3-4<br>Roll 6 <sup>5</sup> / <sub>8</sub> ;<br>Cirrocumulus in<br>mouth;<br>BASKING in Day<br>said - 6 AM - FINE<br>of Right front Flipper<br>put miss-healed<br>some scalloping of marginals;<br>Recaptured about 10mm<br>after releasing -<br>swimming close to shore | 7/21<br>FRIDAY<br>Lisianski |
|                  | 2858 LFL                          | S-17 <sup>5</sup> / <sub>8</sub> x 15 <sup>3</sup> / <sub>8</sub> |   | (16)                        |
|                  | PL-14 <sup>3</sup> / <sub>8</sub> | TAIL-3 <sup>3</sup> / <sub>8</sub>                                |   |                             |
| RECAP            | 7/21 2858 netted area 2           |   |   |                             |

|                             |                                   |                                       |        |        |                                |
|-----------------------------|-----------------------------------|---------------------------------------|--------|--------|--------------------------------|
| 7/21<br>FRIDAY<br>Lisianski | 2859 LFL                          | C-15 <sup>3</sup> / <sub>4</sub> x 15 | 17 lbs | SITE 2 | 7/21/78<br>FRIDAY<br>Lisianski |
|                             | 2860 RFL                          | S-15 x 12 <sup>7</sup> / <sub>8</sub> |        |        | (17)                           |
|                             | PL-11 <sup>7</sup> / <sub>8</sub> | TAIL-                                 |        |        |                                |
| (15)                        |                                   |                                       |        |        |                                |



7/22/78  
SATURDAY  
Lisianski

(18)

2861 bad

| <u>DATE</u>                             | <u>TAG NOS</u> | <u>MEASUREMENTS</u>                   | <u>REMARKS</u>  |
|---|----------------|---------------------------------------|---|
| 7/21<br>FRIDAY<br><u>LISIANSKI</u>      | 2862 RFL       | C-21 $\frac{1}{8}$ x 18 $\frac{1}{2}$ | SITE 2<br>45lbs   |
| (16)                                    | 2863 LFL       | S-20 x 15 $\frac{3}{4}$               | <i>C. racemosa</i> seen<br>in mouth - not saved;<br>pink coralline;<br>red alga ventral;<br>photo - Roll 8                  |
|   |                | PL-16 $\frac{1}{4}$ TAIL-4            |   |
| 7/21/78<br>FRIDAY<br><u>LISIANSKI</u>   | 2864 RFL       | C-22 x 19 $\frac{1}{2}$               | 50lbs site 2<br>photo #3 Roll 8;  |
| (17)                                    | 2865 LFL       | S-21 x 16 $\frac{1}{8}$               | stomach tube<br>retained;<br>brinacles<br>on skin<br>retained; red<br>alga ventral  |
|   |                | PL-17 TAIL-4 $\frac{1}{2}$            |   |
| 7/22/78<br>SATURDAY<br><u>LISIANSKI</u> | 2867 LFL       | C-17 $\frac{1}{2}$ x 16 $\frac{1}{8}$ | 22lbs SITE 2  |
| (18)                                    | 2868 RFL       | S-16 $\frac{3}{4}$ x 14 $\frac{1}{8}$ | Beachrock<br>Flat 29.5°C  |
|   |                | PL-13 TAIL-3                          |   |
|   |                |                                       | Red alga ventral<br>Pink Coralline on shell<br>Skin brinacles and Mouth contents; photos Roll 8 # 35 - end<br>Samples saved |

| DATE                        | TAG NOS  | MEASUREMENTS  | REMARKS   |
|-----------------------------|----------|---|---|
| 7/22/78<br>SAT<br>LISIANSKI | 2869 RFL | C-18 <sup>3</sup> / <sub>4</sub> x 17 <sup>1</sup> / <sub>8</sub> | SITE 4<br>4:30 AM<br>Stomach<br>sampled -<br>C. racemosa; |
|                             | 2870 LFL | S-18 x 14 <sup>3</sup> / <sub>4</sub>                             |   |

(19)

PL-14<sup>1</sup>/<sub>2</sub> TAIL-3<sup>1</sup>/<sub>4</sub>  
C/S RATIO-1.161

Green and red alga ventral; skin barns retained;  
Bad breath; ~2 growth(?) lines seen in laminae;  
both front flippers tip partly (more than previous days)  
missing - healed.  
no photos

|                               |          |   |  |
|-------------------------------|----------|---|--|
| 7/22<br>SATURDAY<br>LISIANSKI | 2871 AL  | C-16 <sup>1</sup> / <sub>2</sub> x 14 <sup>5</sup> / <sub>8</sub> | 22 <sup>1</sup> / <sub>2</sub> lbs<br>SITE 4<br>5 PM |
|                               | 2872 LFL | S-15 <sup>5</sup> / <sub>8</sub> x 12 <sup>5</sup> / <sub>8</sub> | 29.5-30.0°C<br>5 PM                                  |

(20)

PL-12<sup>5</sup>/<sub>8</sub> TAIL-3  
C/S RATIO-1.158

very bad breath; very thick red alga (Polysiphonia),  
also a small amount of green on ventral. many  
skin barnacles (cleared off - sample retained);  
Stomach sampled, retained.

DATE

10/3/78

TUES

LISIANSKI

(22)

10/3/78

Tues

LISIANSKI

(23)

| DATE                                    | TAG NOS              | MEASUREMENTS   | REMARKS   |
|---|----------------------|--|---|
| 10/3/78<br>Tuesday<br>LISIAWSKI<br>(22) | 2944 RFL<br>2945 LFL | C-16 <sup>3</sup> / <sub>8</sub> x 15 <sup>1</sup> / <sub>4</sub><br>S-15 <sup>1</sup> / <sub>2</sub> x 13 | site 2<br>feeding close<br>to skiff on<br>drift |

PL-12<sup>1</sup>/<sub>8</sub> TAIL-3"  
HEAD-2<sup>5</sup>/<sub>8</sub> C/S RATIO-1.173

stomach tube 3x - retained; Red alga on plastron;  
Lots of pink coralline alga on shell; no barns noted;  
Brownish shell color; Photo #21 Roll 5.

17 lbs

|   |                      |  |        |
|---|----------------------|--|--------|
| 10/3/78<br>Tuesday<br>LISIAWSKI<br>(23) | 2946 RFL<br>2947 RFL | C-17 <sup>5</sup> / <sub>8</sub> x 15 <sup>1</sup> / <sub>2</sub><br>S-16 <sup>5</sup> / <sub>8</sub> x 13 <sup>1</sup> / <sub>4</sub> | site 2 |
|---|----------------------|--|--------|

PL-13<sup>3</sup>/<sub>8</sub>  
HEAD-2<sup>5</sup>/<sub>8</sub>  
TAIL-3 18<sup>1</sup>/<sub>2</sub> lbs

Brown and black spots on head; Mouth and  
stomach contents retained (*Turbinaria*); Brown shell;  
no barnacles; some red alga on plastron; faint  
red on skin; healed bay (large) on 2<sup>ND</sup> lat R  
and (small) second lat L. Photo #26 Roll 5

| <u>Date</u>                                 | <u>TAG NOS</u>         | <u>MEASUREMENTS</u>   | <u>REMARKS</u>   |
|---|------------------------|---|------------------|
| 10/3/78<br>Tues<br><u>Lisianski</u><br>(24) | X 2952 RFL<br>2953 LFL | C-20 x 17 1/2<br>S-18 3/4 x 14 7/8<br>PL- 14 13/16<br>HEAD- 3<br>TAIL - 3 1/2 | Site 2<br>29 lbs |

Many live skin samples; brownish-yellow shell;  
pink coralline on shell; faint red skin; stomach  
tube sample retained; photo #20 Roll  
+ coralline from carapace



| Date                         | Tog Nos                | Measurements                             | Remarks         |
|------------------------------|------------------------|--|-----------------|
| 10/3/78<br>Tues<br>Lisianski | x 2954 RFL<br>2955 LFL | C - $19\frac{7}{8} \times 18\frac{3}{8}$ | Site 2<br>335PM |

(25)

S -  $18\frac{7}{8} \times 15\frac{5}{8}$ C -  $19\frac{7}{8} \times 18\frac{3}{8}$ S -  $18\frac{7}{8} \times 15\frac{5}{8}$ PL -  $15\frac{3}{8}$ 

HEAD - 3

TAIL -  $3\frac{1}{4}$ 

Wt - 32lbs

Light brown shell; faint red in skin; no barnacles noted; pink coralline on shell; stomach tube sample retained; also amphipod (?) from corner of mouth. Photo # 22 Roll 5

separate vial

| <u>Date</u> | <u>Tog nos.</u> | <u>Measurements</u>                   | <u>Remarks</u> |
|-------------|-----------------|---------------------------------------|----------------|
| 10/3/78     | 2956 RFL        | C - $21\frac{3}{8}$ x $18\frac{7}{8}$ | Site 2<br>5PM  |
| Tues        | 2957 LFL        |                                       |                |

S -  $20\frac{1}{8}$  x  $15\frac{1}{2}$ 

(26)

~~PL - 16~~  
 PL - 16
HEAD -  $3\frac{1}{8}$ TAIL -  $3\frac{1}{8}$ 

wt - 39 lbs

width measurements taken at 6<sup>th</sup> marginals, but R  
 6<sup>th</sup> and 7<sup>th</sup> deformed - indented; Red alga on skin, there  
 in spots; Nothing in mouth; End of RFL partly  
 missing but healed. Photo #27 Roll 5

Midway

For the following three juveniles,  
see notes in narrative.

10/6/78

TAG NOS

Measurements

Remarks

SPIT IS.

2972 LFL

hard capture  
just off shore

Midway

2973 RFL

C - 17 1/4 x 15 1/2

FRIDAY (90)

~ noon

S - 16 1/2 x 13 3/4

PL - 13 1/8

HEAD - 2 5/8

TAIL - 2 5/8

Mouth very clean - whitish; lots of algae on skin  
and plastron; Small curved portion missing from right  
upper beak - no baracles noted. Note - Disgorged  
sand in stomach, tube sample - originated from  
substrate. Photo #14, Roll 8.

WT - 18 1/2 lbs

Midway

10/6/78

2974 RFL

C - 16 3/4 x 15 3/4

SPIT IS.

2975 LFL

Friday

S - 16 1/8 x 13 3/8

~ noon

(91)

vial-A stomach  
vial-B skin & plastron

PL - 13 1/8

HEAD 2 3/4

WT - 20 lbs

TAIL - 2 1/2

clean mouth  
Lots of algae on skin and plastron; small  
extra central plate between regular 4th and 5th central.  
Mouth sample retained; skin baracles and  
pl/skin algae retained in single container.  
photo #13, Roll 8

92

Midway10/6/78  
SPIT IS.Midway  
2 noon

(92)

2976 LFL

2977 RFL

C -  $15\frac{5}{8}$  x  $13\frac{15}{16}$ S -  $15\frac{1}{8}$  x  $12\frac{1}{2}$ PL -  $12\frac{1}{16}$ HEAD -  $2\frac{1}{2}$ TAIL -  $2\frac{5}{8}$ 

WT - 13 lbs

Very clean shell - small amount of alga on dorsal  
 skin of neck; very clean mouth;  
 Mouth sample retained; Stomach tube sample retained.  
 Photo # 15, Roll 8

↓  
 ↑  
 box spine  
 like particle  
 present

4 Oct 78  
WED

The other night, Skip and Leighton watched a monk seal close to the boat, apparently attracted by deck lights - experimented with live lobsters from bait well - threw them to the seal, but apparently showed no interest.

Backnotes - my night - vs - day counts of seals at FFS might be a valuable quick and easy paper.

DATA COLLECTION IS ONE THING - DATA INTERPRETATION ANOTHER.

Need to calculate level of nesting for various leeward areas based on best available data. Percentages? Could nesting at areas to the NW of FFS be carried out by females returning from FFS with a clutch?

### PEARL & HERMES

5 Oct 78  
Thursday

Arrive at anchorage off SE Island at ~8:30 AM. Land at SE at 9:15 - also in Zodiac are Brian, Patricia, Skip and two crewmembers.

100 sets of tracks noted on West shore - one of the excavations looks good. Tracks are not over 5-7 days old based on average weathering. Noted human footprints 4-5 sets, right over turtle tracks. Found three separate piles of small glass balls - one was in basket - photo. upatty. Noted that channel of SE IS "lagoon" now cut through sand beach and opens into PH lagoon.

9:45 AM

Noted the tracks of four turtle baskets

## P2 HERMES

5 Oct 78 along Northwest shore (see chart on page 62-63).  
 Thursday Noted a female basker by Refuge sign - turtle departed. It is possible that people's presence all the way on other side of newly cut channel may have caused departure - recall that in July 78 you noted aggressiveness by SE baskers. When offshore, this turtle floated high in the hind quarters - appeared to have difficulty diving - swam back and forth a short distance offshore.

Noted large log on the beach with "MORRIS" carved in it.

At 10:30 AM - tagged ♂ <sup>(short tail?)</sup> basker by Refuge sign - 2965 RFL

Noted lots of *Tusbinaria* washed up on the beach - apparently from the lagoon side.

Proceeded to excavate two of the turtle nests in which emergence was apparent - no others readily seen - see page 75 for results.

Proceeded to tag 4 more baskers that were present in Refuge sign area (to the NE) when I returned to this site at 12 noon - see proper data pages.

Returned to ER about 1245 PM -

Leighton and Alan made a Scuba from ER at anchor - current strong - some algae collected. Ulu took fish off of end of spear.

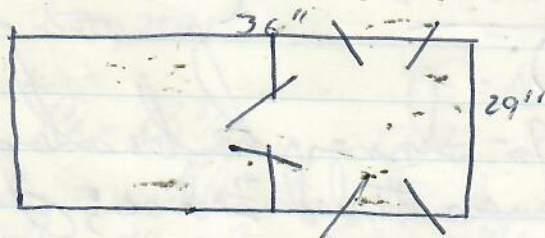
5 OCT 78 Skip, Laura and Ed swam for awhile with Thursday school of Spinner porpoise - inside lagoon, estimated 100-125 in school.

Depart for Midway shortly thereafter.

Skips lobster traps - measurements useful for assessing possibility of small turtle becoming entraped.

36" x 16" x 29"

9"  $\swarrow$  11 1/2"  
funnel



MIDWAY

Arrive Midway ~ 10 AM.

6 OCT 78

FRIDAY

1015 h depart for Eastern Is. vis Spit Is. in Zodiac with Leighton, Steve Kalston, Patti, Bryan and Gary. Spit had 3 monk seals - one estimated to be a yearling. Behind Spit Is. we observed 3 juvenile turtles in shallow clear water close to shore. Captured by hand and transported to Eastern Is. Proceeded to the South shore of Eastern and swam area from in front of house to the East to Bay (just before unquarantined - shark pit(?)). Sighted two turtles

## Midway

6 Oct 78  
FRIDAY

Swimming free, and on in "hole" after channel (under a ledge. obviously aware (alert) when I approached - swam away before capture could be made. Noted deformity in one of posterior margins - side pink brown. This turtle may have had tags. Water very cloudy. Returned to Zodiac on North shore and worked-up turtles. Spent several hours water skin using Pat Shaw's boat (Box 4, Midway - Chief Game warden).

write to him

## DIVE 3

~ 4:30 PM - Inner harbor along ledge with Alan; Brian Johnson tended Zodiac; Observed three turtles - two seen swimming free, one came out of depression in steep cliff rock. All juveniles. Noted exceptionally thick carpet of Kaulerpa serrulata growing from silt bottom - two other algae also present. Blades are very large and tall (dried sample retained).

Telephoned Jim at Home - 3 minutes  
Dinner at Ironwood restaurant courtesy of Pat Shaw - Captain Cowles drove us over to see ~ 175 lbs Sailfish and ~ 4 Wahoo taken outside of reef. Should check on stomach contents at a later date, as fish will be mounted in Honolulu.

Air Dale informed me that tags 2526 (273) recaptured and released off of Spit during last month.

7 Oct 78  
SATURDAYwrite letter  
to President



7 Oct 78  
SATURDAY

11/3/79  
visited with DAVID W. MCKINNON  
at [M.C.B. 40, FPO San Fran 9660]  
at Kk Club - He will be leaving on the  
21st Oct for Puerto Rico - New Club  
officers are - BERQUIST (President);  
SLOAN (Vice President); Nichols (~~Public~~ Affairs);  
WASSEL (Safety Officer).

write letter  
to President

Recorded from Kk log -

12 Aug 78 - 1541<sup>OFF</sup> - 1542<sup>OFF</sup> C-17<sup>7</sup>/<sub>8</sub> x 16<sup>1</sup>/<sub>2</sub>  
NOW - 2570, 2571

S-16<sup>3</sup>/<sub>4</sub> x 14<sup>1</sup>/<sub>8</sub>

PL-13<sup>3</sup>/<sub>4</sub>

TAIL-2<sup>1</sup>/<sub>2</sub>

WT-29lbs

Inner harbor - Weddington "Bad gash from tail to  
approximately 5" up shell cut through on both  
back and under part" (my comment - fishing?)  
see notes of my telephone conversation with  
Bob Weddington.

Notes page in Kk Turtle and Lobster Log dealing  
with Tagging made June 1972 - July 1972  
- T92, T93, T94 (or 914); T95; 913;  
T96; T97; T98; T99 - check -

visited boat house to look for shell of turtle  
reported as being found floating in Inner Harbor  
with spearhole in back.

7 OCT 78  
SATURDAY

Departed Midway for Honolulu on MHC  
flight at ~ 3 PM.

Site where turtles were sighted UW by  
Nøteland Naughton on Big Is. during last  
Whale Survey is PUE HOU

SPIT ISLAND, MIDWAY JUVENILE CAPTURES

Three juveniles caught behind Spit appeared to  
be "together" - Two are very close in size -  
perhaps of the same age group, the third  
is 1" smaller  $\therefore$  significantly smaller. All  
three had very clean whitish mouths,  $\therefore$   
suggesting that they had not been feeding on  
skin producing algae. The two larger turtles  
had <sup>abundant</sup> skin and plastral algae, while the  
smaller had significantly less.

Questions: Are these turtles (all or separate)  
new recruits to the Midway aggregation?  
Why clean mouths?

All animals were feeding, in part, on  
red filamentous alga.

What were animal-like spines found  
from stomach of one?

from Johnson's

informant for elephant seal sightings in Alaska -  
Ken Pitcher  
Alaska Division of Fish and Game  
333 Raspberry Ave.  
Anchorage, Alaska 99502

BASKING TURTLE CENSUS AND <sup>ADULT</sup> TAGGING

| DATE / TIME                         | LOCATION | M | F | I  | IN WATER |   |   |
|-------------------------------------|----------|---|---|----|----------|---|---|
|                                     |          |   |   |    | M        | F | I |
| 7/15 SAT<br>1020-1130<br>(EAST) →   |          |   |   | 7  |          |   |   |
| 7/15/78<br>WHALE-SKATE<br>1330-1530 |          |   |   | 39 |          |   |   |
| 7/15/78<br>1615-1700<br>TRIG        |          |   |   | 14 |          |   |   |
| 7/16 SUN.<br>1330<br>LGIN           |          |   | 1 | 1  |          |   |   |
| 7/16<br>1430<br>GIN                 |          |   | 2 |    |          |   |   |
| 7/16<br>1030<br>SHARK               |          |   |   | 0  |          |   |   |
| 7/16<br>3pm<br>DISAPPEARING         |          |   |   | 0  |          |   |   |

7/14/78 4pm NECKER ledge 1 (possibly dead?) <sup>cliffs say NO</sup>

7/18 morning LAYSAN - BEACH 3 of campsite  
IMMATURE Reported -  
Backnote - saw copulation -  
[Johnson's]

7/19 - 6:30pm LISIANSKI  
Juviles 2 (1-NE just before beachrock) <sup>Tagged 2857</sup>  
2 (1-W beach - midpoint)

7/20 Thurs. LISIANSKI  
2 Juviles, NW and NE beaches  
1 LARGE - SANDY EAST (Fiscus)  
Fiscus also reports large turtle basking on coral head offshore to EAST.

7/21/78 Friday LIS ENTERED NO. 17  
2:15 - Adult NE beach ~ 15 minutes -  
3 PM Adult Male w/ TAIL MISSING, poss same as above  
Photos on Roll 8?

6 PM. Small Adult Female - tagged - 2866 RFL  
(marked up (battered) carapace) - Did not return after TAGGING - STAYED ON BEACH.

Sandy EAST BEACH - JUST BEFORE MESSERSMITH

Adult Male - limb missing - healed - only a short stump remaining w/ 1018 3/11/64 LIS. A♀  
1018 Hawaii Division of Fish and Game Recovery.  
[Carapace battered (healed?) cloaca extruded.]

| DATE/Time        | LOCATION  | M   | F                    | I                                    |
|------------------|-----------|---|----------------------|--------------------------------------|
| 7/22 2:45 PM SAT | Lisianski | as per FISCUS seals nearby  | 3 Adults, 1 juvenile | EAST SANDY BEACH BL<br>MESSERSCHMIDT |
| "                | "         | near site 4 - noted tracks from baskers.  |                      |                                      |
| 7/23             |           | → Roger reports that he has seen basking turtles at night while working with Boobies on Lisianski during previous visits. |                      |                                      |

7/21/78 PEARL AND HERMES REEF - Reported by SKIP and ANCEL JOHNSON  
FRIDAY Southeast Island 7:30-16:30 h

104 recovered 5/26/69 SE by FWS PH  
2 males, 3 females (ISA) 104 tagged 4/1/66-SE-PH  
1 of the males tagged previously 104 FL  
1 of the females tagged - Both by Refuge sign. 7207 FL  
No inscription recorded

NORTH ISLAND 13:25-14:30 h

2 males  
2 females  
1 undetermined

Probably  
9/72  
PH-SE

G. Balazs - First Landing to P&M  
7/24/78 Pearl and Hermes -  
Monday Southeast Island - ~11:00 h

West shore Bask - Male (slightly small tail)  
2873 RFL Recov. 8/10/81 SE Island - Bask 5596 (new)

By Refuge sign - small tailed male  
Light green shell - black speckles  
R Front limb missing - healed  
2874 LFL  
Very observant - after return kept swimming in area offshore.  
Recov. 8/7/81 SE IS. BASK

## BASKING TURTLE CENSUS 9/23 - 10/1/78

DATE/LOCATION

10/2/78 Monday  
4:35 AM♂ 2938 RFL N. LISI Basker - Tail recently bitten  
off near base - possibly a TMR also bitten on  
ventral surface of RFL. NE Beach.10/2/78  
MON♀(?) SA Basker 2939 LFL, 2940 RFL, 2941 RFL  
LISI - Just past Rock ledgeS -  $25\frac{3}{8}$  x 21C -  $27\frac{1}{2}$  x  $24\frac{3}{4}$ PL -  $20\frac{3}{4}$ HEAD -  $3\frac{3}{4}$ TAIL -  $5\frac{5}{8}$ Black shell w/ a few brownish streaks -  
No injuries - red faint alga in crevices of  
plastron and skin. - Stomach tube 2x -  
juice and particles (?) retained.10/2/78  
MON

ENTERED NO. 16

just before Messersmith on East shore -

Adult female basker, 2942 RFL; 2943 LFL

Double tagged, but did not return to the water.

10/4 - 1:15 PM same site 2961 LF applied (photos R6)

10/3/78  
Tues

2:30 PM RECAP OFF

T225 LFL Between

1st &amp; 2nd web

Adult

female basker;

NE Beach

just around

Spt. of site

2949 LFL

skin barnacles

and brown stains in mouth

2950 LF

LISI

S -  $31\frac{1}{4}$ x  $26\frac{5}{8}$ 

79.4

PL - 25

TAIL - 10

HEAD -  $4\frac{5}{8}$ LISIANSKI  
WGG / B. JARMAN  
SE Side  
7/91 BASKING  
ADULT  
Males



## Basking Turtle Censuses 9/23-10/1/78

Date/Loc

10/3/78 Recap  
 T226 LFL adult female basker just post  
 3 AM 2951 RFL rock ledge. 10/3 Leighton Taylor  
 (night basker) Reports this turtle Basking same area - 3 AM

10/3/78  
 ~ 5:35 PM

T259 RFL adult male basker  
 Left front limb off at humerus - Healed  
 Tag 2958 LFL applied: about 3/4 along NE Beach  
 T259 Recovered by Gilmartin, LISI 5/16/80

*Header - LISI ANSKI May 73*  
*T256-258 applied LISI ANSKI July 73*  
*Kentler and Taylor T260 applied*

10/3/78  
 ~ 6:45 AM

ENTER. NO. 4

118 <sup>OFF</sup> Horn US Wildlife  
 2959 RFL  
 2960 LFL

Adult

♀ Basking just past beach rock  
 ledge Bag (w/ seal nearby) -  
 photos lost of R5 and first  
 few R6.

7/22/84 LISI sec. 25 2960 <sup>D. ALCOCK & R. FORSYTHE</sup>

9/19/66

LISI ANSKI

20 1/2 x 18

Recovered LISI  
 5/16/80 by Bill Gilmartin

by Amerson and Huber

## BASKING TURTLE CENSUS

DATE/LOC  
10/4 wed  
1:15PM

2962 Adult female basker - just  
2963 hauled out by Messer on  
2964<sup>F</sup> East side - had to turn.

This expedition - LISIANSKI

Total no. Baskers tagged - 8  
of those - recoveries - 4

No Turtles seen basking on beachrock "ramp" situated offshore.

---

Pearl & Hermes - OCT. 5, 78

10/5/78  
SEIS. Thurs  
PH 10:30AM

2965 RFL basking by Refugl Sign -  
Adult Male - however tail doesn't quite  
look full size - 50-50 yellow/black shell.

10/5/78  
Thurs  
~ noon  
PH

2966 Adult female basker by sign -



## Pearl &amp; Hermes

DATE/LOC

10/5/78 2967 RFL Adult female basker - refuge sign area  
 Thurs SE IS. Recov. 8/7/81 SE Island Basking  
 ~ 12 noon PH

10/5/78 2024 BLUE Adult female Basker - sign area  
 Thurs. 12 noon 2968 LFL  
 SE IS. PH 2969 RFL  
 2970 LF slightly long for a female.  
 Rec. 8/8 & 8/9/81 SE IS. Basking

96 already recovered at PFS  
 96? Notify US Wildlife Honolulu USA (number should be upside down to inscription)  
 RF

10/5/78 937 US Wildlife Hono <sup>still on</sup>  
 Thurs. 12 noon 2971 LFL new  
 SE IS. PH  
 Kridker 937  
 12/14/70 SE - PH  
 Recorded as a Female  
 29.7 x 22.1 125lbs  
 7-10

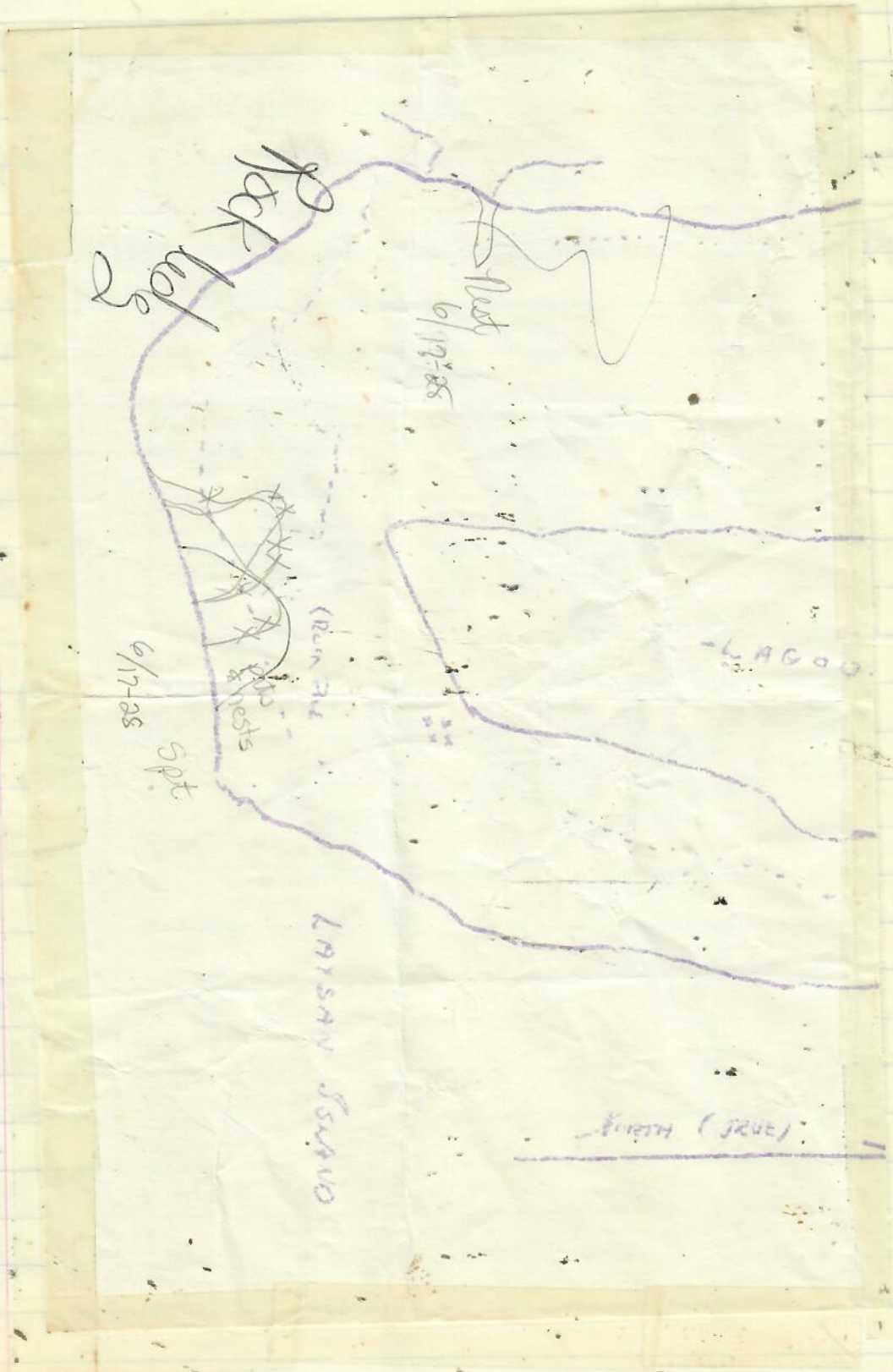
This expedition - Pearl & Hermes  
 Total no. Baskers - 5  
 of those - Recoveries - 2



SUMMARY OF TURTLE MORTALITIES  
OR AMPUTATIONS AT LISIANSKI:  
(couldn't make it to destination, NW or SE?)

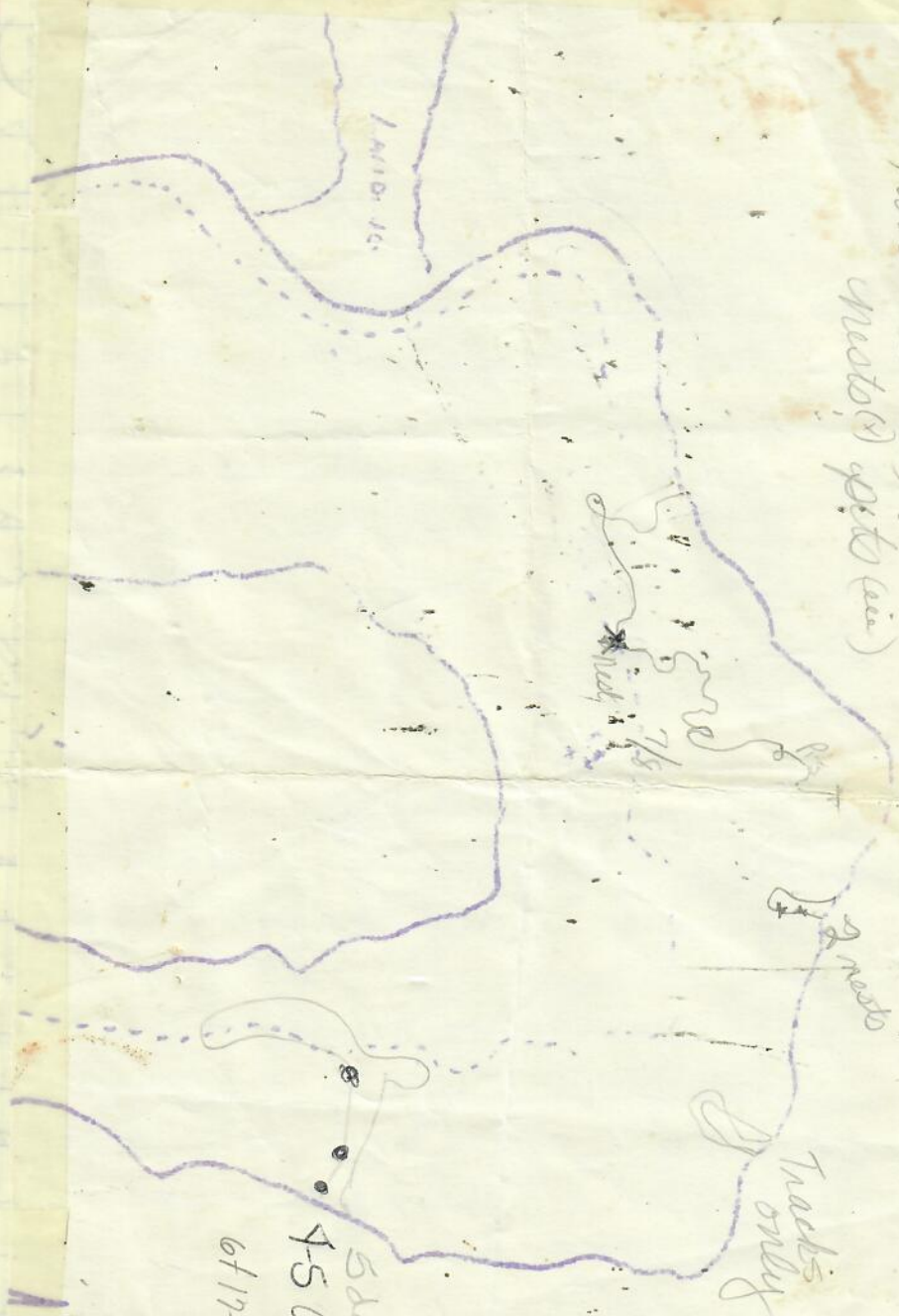
1. Kridler excised shell to Midway C.O. (Taylor kept)
2. Zellenmaker recovery - T?
3. Dead on Rock ledge
- 4.

Notes from Johnsons 9/78 - "Occasional banding of Cross's Petrel Point"  
 "watching two weeks ago at Point Band"  
 1978



From Johnsons while of  
Fogson IS. 9/78

Turtle tracks, —  
meats (9 pits (see))



LBH/109

5 days  
4-5 digging  
6/17-28

*[Faint, illegible handwritten notes on the left margin of the notebook page.]*

- LISIANSKI OBJECTIVES - 7/18 - 7/27/78

1. Initial survey/observation (first-hand) to
  - a.) gather information on occurrence, intensity and <sup>and</sup> distribution of breeding
  - b.) gather information on occurrence, intensity and size distribution of basking
  - c.) gather information on occurrence, intensity, land (habitat), and size distribution of offshore fledging
  - d.) Determine types of food utilized by size category.
  - e.) gather information on level and kinds of predation.
  - d.) Movements - Growth through tag recoveries
  - e.) New Tagging for future information.
  - f.) Coloration - Morphology of Juveniles, S.A., Adults

Base references for Lisianski:

1. Clapp
2. DeLong - Eisner - Naftel - Kidler (?)
3. Within Clapp - National Geo. Wetmore; \*MUNTER,
4. Taylor MS Report

- MARO-LISI OBJECTIVES - 9/23 - 10/7/78 -

MARO

1. Examine for turtle parts/stomach contents in the stomachs of large sharks caught at Maro in conjunction with Taylor Sea Grant project
2. Look for live turtles <sup>(POST-HATCHLINGS)</sup> - Sea Watch and UW
3. Collect additional algae [lobster traps - handnet]
4. Look for wood-tags released at FFS in July

LISIANSKI

1. Recapture turtles that were tagged two months ago for growth and actual continued presence
2. Make additional taggings <sup>(POST-HATCHLINGS)</sup>, body measurements of mouth/stomach samplings - look at ratio of tagged VS untagged of those captured;
3. Do nearshore UW survey and collect Algae;
4. Delineate level of nesting that has taken place; excavate
5. Census baskers - daytime and nighttime;
6. Examine offshore basking ledge;
7. If possible, collect turtle carcass;
8. Look for wood-tags released at FFS in July

If landing is made at LAYSAN:

1. Delineate nesting and basking occurrences <sup>EXCAVATE</sup> since July;
2. Inspect dead turtle and see if emergence of hatchlings may have occurred in "dune"-site;
3. Look for juveniles

## CLIMATIC

DATE

LISIANSKI

Conditions

7/19 WED  
78

arrive 1:30 PM

Light trades - calm seas - sunny

7/20 THURS

Light trades, calm seas - sunny

7/21 FRIDAY

moderate trades - partly cloudy - but mostly sun,  
some rain showers during PM and 7/22 AM -

7/22 SAT.

28°C seawater in front of Camp. Sunny, hot AM - passing clouds  
29.5°C site - 4:30 PM moderate trades - hot.  
29.5°C - 30.0°C SITE 4 TO STRONG

7/23 SUN.

SUNRISE ~ 7 AM ;  
Departing LisianskiSunset estimate -  
STRONG TRADES, BUT SUNNY.

7/24 Monday

Pearl &amp; Herms

~ 1100h 27.5-28.0°C off nesting area  
strong wind and seas, passing dark rain showers  
and sun

7/25 TUES.

Midway

Moderate to strong Trades

7/26 WED.

Midway

Condition 2 Hurricane FICO warnings  
Sunny during 30 minute trip to kule  
At Pearl & Herms -

7/27 Thurs.

Depart Midway USCG C-130 1349 for Honolulu  
Condition 1 Hurricane warnings -White caps all over in the open seas - diminishing  
by the time we reached Laysan Is.

9/23 - 10/1/78

9/24/78

SAT Day

Mild Trades - easy seas crossing Kauai channel

9/25 MON

Calm seas - light wind

- DATE <sup>Tues.</sup>  
 9/26/78 Calm seas - mild wind
- 9/27 ~~Wed.~~ Arrive Maro reef ~ 11AM Calm seas -
- 9/28 Thursday Maro - calm seas - some black rain squalls <sup>(no wind)</sup> in morning
- 9/29 Friday Maro - calm seas - but slight NE wind in Afternoon
- 9/30 Saturday Maro - Glossy all day - DIVE NW 2' Rock  
 28.5°C recorded in fant. wells
- 10/1 SUN Glossy - light wind at Laysan  
 10/2/78 Anchor at LES TANKS 1 ~ 2 PM - calm - partly cloudy - sunny
- 10/3 TUES. 2151 - Trades up slightly - appears to be N swell - 29.5°C SITE 2  
 10/4 WED 413 Moderate trades - rain showers - SITE 1 SEAWATER 27.5°C  
 SITE 2 28.5°C
- 10/5 Thurs Pearl and Hermes - sunny w/a few clouds
- 10/6 Friday Backside of EASTERN IS. Midway - calm offshore -  
 but cloudy water inside reef - particularly channels  
 flowing out - seawater 28.5°C.
- 10/7 Sat



30 MARCH  
1980

LAYSAN ISLAND NOTES - BASED ON  
TELEPHONE DISCUSSION WITH  
ERIC SCHLEMMER

He lived on Laysan as a boy in 1915. Used to see from 30 to 60 turtles per day basking on beaches - some of each - one foot to large size. High tide would wash up on their tails, then they would return to the water. Turtles were frequently seen on the southwest side of the island, only a small amount of resting took place on the island. No turtles were ever seen in the lagoon. He was on 1923. <sup>(E. Bryan also)</sup> Tarzeger Expedition. More turtles were present on Lisianski. He returned to island in 1971 with Kridler, Ken Norris, etc. "Belgian rabbits" were brought to Laysan.

In 1915 a 26' skiff was caught at Laysan - it contained two turtles (dissolving, and a kerosene can). Also in 1915 he remembers walking <sup>way</sup> out on reef - not the case in 1971... thinks island may have sunk, or something. Possibly military blasted coral during World War II. This speculation based on fact that he saw lots of rusted drums on island in 1971.

He mentioned island visit by Alison Bryan and Schwin Island - very few seals present.

I should have asked him if any "different" kinds of seals were ever seen.

*[Faint, illegible handwriting, likely bleed-through from the reverse side of the page.]*

PHOTO LOG

- Roll 1 - 7/9/78 Aerial of Molokai Coastline  
 EL ASA 64 7/13/78 - Approach to Nihoa (sun going down); <sup>LEON</sup> Bow  
 7/14/78 Approach to Necker;
- Roll 2 7/14/78 - Approach to Necker;  
 NIKORMAT  
 PX 125
- Roll 3 7/15/78 SAT. - Depart Necker (?); La Perouse from ER; Roger & me by sign;  
 EL ASA 64 (OR ON ROLL 1?) SEAL TEAM IN ZODIAC; Roger tagging  
 JUVENILE 2835 by sea wall; North side tern w/200;  
 (#15-16);  
 7/16 - Tern colony and quarters. GRAPES on rock. TROPIC w/PAIN; <sup>By MARY</sup>  
 Messer-smelt; <sup>By MARY</sup> Marty on aft deck; 7/18 Group on W Laysan;  
 Terns on crosses at cross-st. LAYSAN
- Roll 4 7/18 - Terns on crosses - WA; DEAD TURTLE IN SAND; Lagoon and  
 EL 64 palms. Tracks of 800 yard travel. Pit at NE LANDING & TRACK;  
 3 views of plant; 3 views of KAYO. Martlets w/25 w/200; 105mm DVCK;  
 6:45 PM - Laysan feeding @ YOUNG 125mm.
- Roll 5 7/18 SELF PHOTO - FLIES ON FACE; LAYSAN FINCHES; 7/19 - Lis sign;  
 EL 64 Lis camp. skip/seal/zodiac. Basking turtle Tagged 2837 2838;  
 dead turtle on beach rock; skip on ER with JVA; 7/20 Group by campsite;  
 Juvenile 2843-44 #30; 2845-46 #31-32;  
 2847-48 #33; 2849-50 #34; 2851-52 #35; 2853-54 #36.
- Roll 6 7/20 2855-56 #1-2(?); 2857-58 #3-4; 7/21 photos of Landscape, head of sooty,  
 EL 64 TRIBULUS flower and thorn; Iron woods and palms. <sup>#29</sup> EAST rocky  
 shoreline to the South; #30 105mm Bredly; SW corner of island;  
 mouth contents of 2859, 2860.
- Roll 8 7/21 Basking turtle;  
 EL 64 2862-63; dead turtle on rocky EAST beach #5-6-7; #8 - 34 Fairy  
 Terns, one <sup>Bird</sup> w/Fish; noddy tern on branch; photos of me w/the water w/net  
 By MARY;  
 Photos of mouth contents of 2867-68 #35-36; 2867-68 Linton roll.
- Roll 9 7/22 - Roger netting and tagging sooty terns; 7/23 #16-17 - Cooking breakfast;  
 EL 64 Marty in grass; Adult frigate w/young; seal  
 on rocky coral; Young Sooty w/green paint.

## PHOTO LOG

- ROLL 10 <sup>7/23</sup> personnel on afterdeck packing gear; Lisianski on the horizon; 7/24 - heard and Hermes Reef - nesting excavations; Rusted fuel tank; landscape; old BSW sign w/ 250mm  
ASA64 EL
- ROLL 11 <sup>7/24</sup> old BSW sign; one by wood refuge sign (taken by ship); seals and boobies; boobies by inlet; 2 photos for Roger - eggs under plywood; personnel on beach; spinner porpoise  
ASA64 EL  
7/27 - USCSC 1301 #16-36 over Lisianski - Neva Shoal (was on 55)
- ROLL 12 <sup>7/27</sup> #1-3 Laysan WA;  
ASA64 EL
- 23 SEPT - 7 OCT 1978
- ROLL D Previous photos on this roll - 10 at Kaalaki; walking up road; KAU Monty #2 (Pumkin net deformed shell - or ELW?); Fin by house; 9/28 - Skip shooting sharks at Maro Reef - Alan and Jerry with lobster traps  
ASA25 EL
- ROLL 1 <sup>9/28</sup> West reef from Zodiac; Heighton, Alan, Ed with Maro Reef in the background; ER at anchor; 9/29 Sharks in water; Shark enema  
ASA64 EL
- ROLL 2 <sup>9/29</sup> Shark measuring - Skip and Laura; SW line reef w/ seal at surface; 9/30 Heighton - top-level carnivore team returning from SW line reef dive w/ ulua and small shark; Ed and Heighton by large ulua hoisted up; Noddy Tern on ER Cabin  
ASA64 EL
- ROLL 4 <sup>9/30</sup> Maro Reef Emerged land; Laura, Jerry, Skip in Zodiac; 10/11 - Laysan tobacco plants at cross point; Skink at turtle carcass; disturbed area at dune; nesting site (crabs and hatchlings); Tracks at NE landing  
ASA64 EL

Photo Log

Roll 4

(continued) 10/1/78 - Laysan - Beachhook <sup>and SW</sup> East shore; Laysan ducks.

Roll 5

10/1/78 - burning wood at Laysan; Mead Johnson by refuge sign taken by Kam. 10/2 SA feeding by ledge <sup>Suminski</sup>; 10/3 basket 118 w/seal nearby; photos of turtle weighing, measuring, new w/net, group of turtles on the ground - some taken by A.KAM.

Roll 6

10/3 - <sup>118</sup> basket of seal CSI; <sup>sand flipper</sup> sunset at LISI; 10/3/78 - Top #2952  
#20; 2944 - #21, 2954 - #22, 2630 #23; 2841 - #24; 2849 - #25; 2946 - #26  
2956 #27

10/4 wed - seal at NW area; Johnsons walking down the beach; #20 - 2853; #21 - 2857; double tagged basket w/new toy (3rd) showing; mead A.KAM by refuge signs; close-up of ship in Zodiac; 10/5 - Leighton in Zodiac going in to SE IS. PH reef; Patty by glass ball basket; contents of container by Refuge sign; Patty by emerged nest

Roll 8

10/5/78 Area shots of SE IS.; Finch while excavating turtle nest; Finches in/on Refuge sign. 10/6/78 - Spit Islands, Midway (Refuge sign and Sand Is. in the background); Spit IS. juvenile captures - 2975 #13; 2972 #14; 2977 #15; Patti Johnson with turtles; New turtles by Kam; 10/7/78 - Jenny Johnson w/harbor Master hat;

~~Also~~ Also ASA 200 Nikomat III - Kam and uw at Maro reef rock

3 tagged by Naftel on 7 May 1978 to 7

## 7/12-7/27/78 SUMMARY OF JUVENILE TAGGINGS

| <u>DATE</u> | <u>LOCATION</u> | <u>CAPTURES</u>                   |
|-------------|-----------------|-----------------------------------|
| 7/15/78     | FFS-TERN        | 1                                 |
| 7/19        | LISIANSKI       | 1 (BASKING)                       |
| 7/20        | LISIANSKI       | 11 (2 BASKING; 1 Recovery May 78) |
| 7/21        | LISIANSKI       | 4 (1 recapture from 7/20)         |
| 7/22        | LISIANSKI       | 3                                 |
| 7/23 SUN    | LISIANSKI       | 0                                 |

17 different juveniles  
of Lisianski  
(but only 16 of these new)

## 9/23-10/1/78 Summary of Juvenile Taggings

|           |           |                           |
|-----------|-----------|---------------------------|
| 10/2 MON  | LISIANSKI | 0                         |
| 10/3 TUES | "         | 9 (1 Recap May & July 78) |
| 10/4 WED  | "         | 2                         |

excluding  
Naftels

11 different; 6 Recoveries  
from July 78

(22 different juveniles to date) (approx. 9 wks elapsed time)

Recoveries in order of occurrence - ① 2849-50; ② 2851-2;  
③ 2830-31; ④ 2841-42; ⑤ 2857-8; ⑥ 2853-4.

Tag sequences used in July - 7/19: ① 2837-38; 7/20: ①  
② 2841-42; ③ 2843-4; ④ 2845-6; ⑤ 2847-8; ⑥ 2849-50; ⑦ 2851-2; ⑧ 2853-4;  
⑨ 2855-6; ⑩ 2857-8; ⑪ 2859-60; 7/21: ① 2859-60; ② 2862-3; ③ 2864-5;  
7/22: ① 2867-8; ② 2869-70; ③ 2871-72;

TABLE OF CONTENTS

EASY RIDER MARO-LISI 23 Sept - 7 Oct 1978

Narrative . . . . . EXPEDITION OBJECTIVES . . . . . page 111  
 pages 42-61, 93-98  
 Tide Calendars . . . . . pages  
 Juvenile Turtle Taggings . . . . . pages 87-92  
 Photo Log . . . . . page 118-119  
 Nesting Pit census . . . . . page 75  
 Juvenile Recoveries . . . . . page 68  
 CLIMATIC . . . . . page 112-113  
 BASKING TURTLE CENSUS  
 AND ADULT TAGGINGS . . . . . page 102  
 Summary of JUVENILE TAGGINGS . . . . . page 120  
 MAP OF LISIANSKI . . . . . page 35  
 MAP OF LAYSAN . . . . . page 36  
 TIDE CHARTS, SEPT-OCT. . . . . pages 38-41

27 turtles total ÷ \$3,000 (ER Charter) = \$111.11 per turtle  
 AS PER CABR AND CALDWELL (1956):

$$\frac{\text{NUMBER OF MARKED TURTLES RECAPTURED (6)}}{\text{TOTAL NUMBER OF TURTLES CAPTURED (11)}} = \frac{\text{TOTAL NUMBER OF MARKED TURTLES RELEASED IN THE GENERAL AREA (17)}}{\text{TOTAL TURTLE POPULATION IN THE AREA}}$$

~ 31

2494617  
\$22.00