

EAST
ISLAND
PROJECT

AND MAIN ISLAND
TAGGING

LIBRARY OF
GEORGE H. BALAZS

BALAZS

MAY 1973 - KIMMO
JUNE - JULY 1973 - FFS

TOC INDEX ON OTHER PAGE

All with horizon even:

7-6 Visit - color

① groups of BASKERS, ♂s

② Red foot Boobies

③ Shearwaters

④ Black foot & Laysan Albatross

⑤ Tern beach, behind quarters, hoist area, CG at plane time.

⑥ Tern from boat, inside reef.

⑦ whale-Trig from boat - get close!

⑧ Dug up nesting area on whale.

⑨ Walk around East - photo areas

⑩ Campsite, face on.

⑪ East from air

Get in Close

⑫ ^{EAST} From pole

⑬ color from boat around island.

⑭ Laying by sea

⑮ Standing by pit

⑪ determined retention term ✓

⑫ Inside Base ✓

⑬ Turtle measuring on beach

Photograph - Birds, *Seals, plants,

BASKERS, *Each IS,

*Boat, Tern facilities,

*campsite,

*fairy terns

nesting Sooty Terns on Tern

Tropic birds on East

nesting Noddy-Tern

- ~~At the end of East~~

- Turn around Tracks.

* Each Area - describe, sand print

- Turtle laying w/ birds in air

- Bird map of East.

* wide angle from end of East sand point

* color in NIKONOS

photo - sand, mullet ✓

shale, Trig, East ✓

from water

Describe each area on East ✓

SAND PIT SAMPLES ^{EAST} ✓



NO. 1130

COMPOSITION BOOK

FAINT RULED WITH MARGIN

120 PAGES • 9 1/2 x 7 1/2 IN.

No. 1130-P Has Numbered Pages

S. E. & M. VERNON CO., ELIZABETH, N. J. 07208
DIV. OF THE MEAD CORPORATION

for color

Nikonos - F stop O.K.

Nikomat - too bright -

bring needle up more.

out window - too bright -

Bring needle up - or - close aperture more.

NUMBER OF TURTLES NESTING PER NIGHT - p. 112-114

Written MAY 24, 2012

AY540055

AY540056

AY540057

GIN - June 4th
Little GIN

43 DAY
EAST MONITORED

Whale-skate - June 2nd; June 5th, June 9th July 14
Trig - July 14

Mullet - July 15
Round -

East Island Shark -
C. amblyrhynchus 11/6/77 negative
or
C. galapagensis

April 1973 - visit to Mokapu, Oahu, (P. small) . . . p 73

7-9 Sept 1973 LANAI - POL. HUA VISIT . . . p 74-75

4-17 Oct 73 FFS p 76-93

9-16 MAY 73 KIHULO - BIG IS. with E. BILDERBACK p 80-82

30 MAY 73 DISSECT OF TWO DEAD TURTLES - KANEHE p 82

10 MARCH 1974 Survey of KANEHE BAY (Carl Glezum) . . p 96

18 APRIL 1974 FFS (DAY TRIP - LEFT ENGINE FAILURE) . . p 97-98

2 MAY 1974 FFS (w SEKORA) p 98-99

[GRAY Data Book II compiled by John Wheeler
must accompany this book!]

9 MAY 1974 J. WHEELER CAPTURE - MONO HARBOR . . p 99

16 MAY 1974 FFS CENSUS BY TAG 713
BY SEKORA p 100

19 MAY 74 DEAD ADULT AT ALAKOA - BURIED . . p 100

30 MAY 74 FFS

- CONTINUED -

SLP captive TAGGING 10 JAN 75 . . . p105

RIDLEY AT WAIKIKI AQUARIUM (CARAPACE) . . p108

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CP General Services - 244-2800

1000 Avenue

ET Miller 244-4130

244-4134

and big before flight -

Mr. Stroh
CP General Services
1000 Avenue
244-4134

FAAR 252-0422

CP Communications 244-2888

Edward F. Kelly
244-4134

1000 Avenue
244-4134

546-7130

- Ramsey

CG General Information - 546-5500

LT MINER 546-7130

Chief TUDOR - 546-7184 - LON Martin

- call day before flight -

H. Shaw

Aids to Navigation Branch

14th Coast Guard District (OAN)

677 ALA MOANA BLVD.

HONO 96813

FAA 955-0452

CG Communications 546-5588

Edwin F. Rollison, Lt. J.G.

Commanding Officer

USCG LOR STA, Box 48

FPO San Francisco 96610

BASEHOND 1974
Temp. ↓
replacement
for martin

MARK

PUGH

warrant
officer

NOZMAN, Chief FFS

May 1, 73 Olsen reported that whaleskate had approximately 25 boskers - 23 of which were males. No evidence of nesting on any island as of this date.

1 flight a week

*

2 Scheduling possible

1. Balays 6-1 to 6-15
6-22 to 6-29
7-6 to 7-13

Returned to Harsloh 7/19/73

wheeler 6-1 to 6-8
6-15 to 6-22
6-29 to 7-6

Brick 6-8 to 6-15

Corbin 6-15 to 6-22

Lighter 6-22 to 6-29

Yap 6-29 to 7-6

Chan 7-6 to 7-13

Possible

Schedule

2

Balays

6-1 to 6-12

6-19 to 6-26

7-3 to 7-13

2 flights a week

Wheeler

6-1 to 6-8

6-26 to 7-3

Brick

6-8 - 6-15

Lighter

6-15 to 6-22

Corbin

6-12 to 6-19

Santerre

6-22 to 6-29

Chan

7-6 to 7-13

Yap

6-29 to 7-6

Breakfast

.70

Lunch

1.65

Dinner

1.70

4.05estimate 1974
282 non meal days

Items to take
 Water Bottles ✓
 Thermos
 Light cooking utensils
 Toilet paper

2 sleeping bags - air
 Large calipers ✓
 tape measure ✓
~~measured line for plowing stakes~~
 spray paint ✓
 matches ✓

Radios - batteries ✓
 Sun tan Lotion - ~~bug spray~~
 Hat visor ✓

First aid kit - band-aids, chopstick
 outboard motor - Tank - lines - prop. - pin
 Pop Tent ✓

Min. max thermometer ✓
 Water Temp. Therm.
 Gray book, pens pencils ✓
 charts - ✓ with scale inscribed ✓

Heavy Plastic Bags ✓
 numbered stakes ✓
 Swabs for bacteria ✓
 stakes ✓

Medication for turtles ✓
 Tide tables ✓

* Fish pole, line, hooks *
 Tab toed Japanese slippers ✓
 Mask fins snorkel ✓

PENS
 white paint spray 5
 Batteries
 Sterno
 Bug spray (RAID)
 4-cell Flash
 Snow age blanket
 Flash light - signal mirror
 PANS -
 letter
 thermometer
 Fish to Bait hook (salted)
 Itch ointment ✓
 mattresses ✓

(over)

Flash lights, batteries ✓
towel

6-1-73

Departed FAA terminal 8:45 AM for Parking
Sands. 4 passengers - 3 operators.

Fuel at parking sand - 15', leave at 9:55 AM.

Officed approx 12:15 PM - came in low over
islands starting w/ Disappearing - seal and turtle

Count. Set up boat, mooring, unloaded gear
met chief webster, G.O. Trainer, Roger Klinkman.
Walked around island - many terns dead (airplane?)
Birds - many bands.

Noddy Tern - gray

Sooty Tern - black/white

Red foot Booby - in trees

Goony - black/white

Black Foot Gooney

Tropics bird - red tail - "Bosun bird"

Turtle tracks and nesting pits (some fresh)
on south sand beach, side of Terns.

Sea wall with rusted steel sheeting
on most other sides.

Losan Finch - male yellow

"Rays" off whales - skate
gray red shark (dark strip on end of tail)
breeding off whales - skate this time of year.

Both seen feeding - Gooney

Booby - 2 chicks

9:00 PM walked Tern - no signs
seal - 1 SA 1 A Tern

6-2-73 SATURDAY 7:00 AM walked Tern - 2 seals on Beach 1 North 1 South
no signs turtles

blue face body ^{on the} ground ⁱⁿ trees
female - low pitch voice footed

Trig - 3 pits 6 turtles basking
T 736 3 flippers off ←
whaleskate
Basker on coral head
8 pits - East

6-2-73 Launched boat in the morning, visited
originally tagged Trig Island - walked completely around -
East 6/17/68 dragged trail. saw baskers on back
Recap Trig 5/17/71 → side T736 = F one front flipper 1/2 - 3/4 off, both
and Trig 5/5/72 hide missing. ♀
with no note of front flipper being missing
visited whaleskate, landed for short time,
motor backside - saw 2 turtles basking on
coral head - saw 2 head to head, returned
to Tern for 12:00 noon. 2:30 PM motored to
East - choppy - many seals w/ new pups -
many baskers on South side. Schools
of sharks on North side - counted 8 (?)
pits. To mullet and round (1 basker)
and whaleskate-dragged Island
36 pits - baskers on North side - many
seals - returned to Tern - 7:00 walked.
1 very small seen off East 1 small off whaleskate

beach - 14 pits - ^{Tern} - no new activity since arrival.

Ideas: Census baskers each time arrive at other islands, also in water. BY SEX

Census baskers on East at specific times: 8 morning 6 night
To recheck each island, Redrog, where tracks cross old drog, follow up and count every pit that has been apparently dug by that turtle.
Record. Indicate North or South Sides.

Roll 1 - ASA 64 Kodak - Flight in, Tern (6-1)
Trig (6-2). Roll 1 BI;WT ASA 125 Plus-X whale skate (6-2 morning).

Roll 2 Kodak ASA 25 1-14 EAST (6-2)

Map new building locations.

Tag each nester after measurements -
Spray consecutive number on carapace -

Do not disturb baskers unless old TAG is seen -
Mark individual charts
original Census from Dave of Islands; ^{ON} Shore
Tern $\frac{05}{0}$ ZW
Trig
Whale

OS IWSUNDAY EAST
6-3-73observed
6 bottle-nose dolphins.

Visited Lakerouse in the morning -
saw 1 juvenile turtle ~ 25-30% (probably closer to 75 lbs)
Took Rock samples and photos -
algae - Kohn and green and hard kind.
To East at 6:15 PM - set up camp for
spending night -

7:15 PM Walked around at 7:15 PM (sunset 7:50) -
Ebb tide

Census -

Seal w/ pup (SWP) - 15
Individuals (A) - 15 - TAG 451
Individual juveniles - 11

Turtles

Baskers - 4 ♀ 2 ♂

IN WATER

(area 3) 8
at waters edge pair cop. 4 ♂ around.
Photos by OLSEN

9:00 PM 2 baskers, 1 in body pit, 1 in
second of 2 body pits.

11:30 PM →
JUNE 4
1:15 AM

Seals		INDIV	A	SA	P
SWP	- 15	21			15
I	- 6				

Turtles -

basker - 3

TSP 1 in body pit N;

TSP 2 in pit, sand end; TSP 3 in pit N;

TSP 4 moving inland N;

* Pits count for outer IS, is in addition to previous counts.

JUNE 5 TS1 and TS6 completing stages.

12:15 AM

6/4/73

1 pit

TS1 - AREA 4

FW ^{ish} T302 ^{1d life}
CI ^{Island} 632 ^{coconut}

6034

← Right

CL 39 1/4

CW 29 1/4

3 Tracks up and down S side

12:37 AM

6/4/73

TS6 2 pits
AREA 5

FW T301 ~~T301~~
CI 631

CL 39 3/4

CW 29 1/2

↻ Basking on S side

TS7 digging (2nd pit) by boat

TS4 digging N side - scratched

3:00 AM

6/4/73

TS2 digging N sand side - scratched

TS4 1 pit
AREA 13

FW T303 ~~T303~~
GI 630

CL ~~34 1/2~~

CW 26 1/8

6/4/73

TS7 3 pits
AREA 15

FW T304 ~~T304~~
CI 633, 634

CL 37 1/8

CW 29 7/8

TS2 N sand - 2 pits in/out, up again 100M down 1 pit
1 set tracks in-out 1 pit N sand-out

8:00 AM

1 ♀ basking S side - To Tern - 3 seals 2A, 1SA.

3:15

Walk around trig

Turtles basking - 8

" water - 0

Pits - 0

seals $\frac{A}{9}$ $\frac{SA}{3}$ $\frac{P}{0}$

4:00

whales skate

Many Frigate Nesting

Turtles basking - 16 (12 N tip)

" water 5 (1-15 1b)

Turtle pits - 22

Seals	A	SA	P
	29	9	12

1 adult with ^{medial} bad bit on hind quarters.

1 adult with skull scar - seen earlier

on East - molting

EAST ISLAND

NO FRIGATES NESTING
ON EAST

6:30 PM TURTLES BASKING 4 (all ♀)
 " IN WATER 2 (1 - 20 lbs.)

SEALS	A	SA	P
	19	3	20

9:30 PM Ts 8 in 1 pit S side; 2 in water edge S side
 1 up beach N side. (Ts 9)
 Sand point - track right across - not pit.

JUNE 6

12:05 AM Ts 8 in 3rd pit - laying 12:15 AMTs 9 in 2nd pit

1♂ barker S side; 1♀ up and down

1:05 AM Ts 8 Pau 144 eggs

Ts 9 down - no eggs

2:45 AM

Ts 8

HIMB 635

CL 35¹/₄

AREA 1

FW - T305

CW 27¹/₈

Ts 9 up on sand point - 3 pits and down (3:15 - 3:30)

10:45 AM

Staked Island - saw 2 small turtles S side

17 markers counter clockwise O at tent

excluding sand point.

Saw pup with pieces of steel in side, pulled
some out - rested.

12:30 PM 2 turtles basking N sand point. 1 ♂ 1 ♀.
 Started approach approx. 25 M on belly -
 able to crawl up to, around and beside
 ♂. Slightly lumpy shell. Eye periodically
 closed. Touched shell, limb. Animal
 eventually turned and slowly returned to
 ocean.



← limu - East Is. Green - Spongy.

" Lakerousse →
 hard -



3:30 PM

8 ♂

5 ♀

Baskers

1. Maximum 3 at any one time probably ~~most possible~~ without significant impact.
2. Almost impossible to walk inland without bird damage.
3. Seals are well aware of presence, however seem to adjust fairly well. Earlier in puffing season may have bad effect.
4. Basking turtles scare very easily - almost impossible to walk border of island without having several retreat.

7:30 AM

Small turtle ~ 5-8 lb in water S side.

JUNE 6

10:15

S side 2 in H₂O ♀ on beach - head out.

JUNE 7

1:15 AM

S side - 1 basking head in.

N side - 1 basking? head out.

4:00

nothing

8:00 AM

Area 6 - 1 pit nested! tracks going out. Missed.

Area 4 - up down tracks - no pits - Missed.

Area 1 - up down tracks - 2 pits (not good) Missed.

between 4:00 - 8:00

9:00AM To Tern and return at 4:30 P.M.
 Very choppy return. (JUNE 7)
 Tern census and East 5:30 census book II

~~June 7~~
 June 8 ↓

Ts 10

CL $35\frac{1}{8}$
 CW $26\frac{3}{4}$

Previous T 253 FW
 CI 636

Ts 11

CL $37\frac{1}{4}$
 CW $26\frac{3}{4}$

FW T 308
 CI 638

Ts 12

CL $36\frac{1}{4}$
 CW $26\frac{3}{4}$

6:00 PM East Census

Turtles ♂
 Basking 8

♀
 5 + Ts 1 south point
 Ts 12
 Ts 1 scratches

Seals

$\frac{A}{19}$

$\frac{SA}{6}$

$\frac{P}{23}$

10:30 check 5 baskers S side -
 1 Tracks in out, can't make bank, N side.
 1 Tracks in area 15 - out again?
 " " " " 16.
 " " in out sand point, 1 pit.

June 9

1:00 AM

1 tracks in out area 4 (S side) can't find pits.
2 ♂ boskers, south side. - also 1 ♀

2:00 AM

Ts 13 Way Inland in brush -
entered area 16 - digging egg chambers.

3:00 - eggs

3:40

1 other pit? = 2 total

Covering eggs.

FW T307

CI 639

C.L. $36\frac{7}{8}$ CW $28\frac{1}{4}$

~4:10 AM

area 14 1 ♀ tracks to veg. line,
turned around to return. Turned
around - Ts 14

CL $35\frac{3}{4}$ CW $26\frac{1}{2}$

FW T306

CI 640

10:00 AM

To Tern -

1 SA seal 11:00 AM

To Trig w/ Dave Colley 4:00 PM

Turtles

♂

♀

Bosking

2

3

IN Water

1

Pits

6

Seals

ASAA

13

Picture taken of Balaga by Bosker - Brick

5:00pm

whale-skate

Turtles
 Boskers
 In water
 Pits

Polyethylene in regurgitations "
 Paraffin floating in water?
 - Seals and birds
 cover up drag trail.

♂ 9
 ♀ 10

2 1-small 15 16-20 16
 19?

Seals

A

29-1-1907

SA

P

★

1-sub adult thin with 1-eye clouded.

1 ♀ w/very new pup.

Many boskers on whale-skate N-point

Very small turtle (4-6lb) seen on S side -

Photo by Brick.

7:50 PM

EAST Island -

1-Turtle on sand point (South) up
 (Still light) 1 pit - Sprayed w/black
 only TS 15 - animal returned quickly to sea

9:30pm

Nothing -

2 boskers S side.

12:30 AM

JUNE 10

3 Boskers S point 1- TS 14

Possibly scratched.

1 turtle - 2 pits.

2-3 turn around tracks seen.

Tracks on sand point, in-out 3-pits.

Turtle in-out, laying in surf,

3:15 AM

Egg Chamber almost completed - laying Eggs.

107 + 3 after starting to cover.

Sequence **Ts 16** (b/k. f/wt.)

Hind Flippers in Egg Pau.

Gently scratch soil in - pull larger scoops in - knead - knead with patting
→ Tail Up pointed down - stuck in dirt.

SL CL **35 1/2**

SL CW **27 5/8**

Animal not very thick - only sighth ~ 1".
Previously tagged "U.S. Wildlife" Honolulu
372

Fronts:

Pulling dirt from further forward - throwing
Throwing dirt - then all 4 -
Same body orientation. Slapping carapace w/ fronts.

Curved measurement with tape CL **36 3/4**

Slapping fronts against carapace alternately. Tag - CW **33 1/2**
CI **641**

Dug in U deep from covering - on return next morning, area covered alot.

10:45 AM

Picked up floating albatross chick - saw large shark - To Tern Is.

Seals at Tern - 1 SA on beach. 1 A in water.

5:30 PM

To East -

Saw large shark in water - many rays

6:45 PM

East Census

Seals $\frac{A}{15}$ $\frac{SA}{0}$ $\frac{P}{16}$

East Census cont.

Turtles	♂	♀	undetermined
boaters	2	9	3
In Water	1		

Ts 14 one of 9 boaters at south point -
 many scratch marks.

Birds present on East:

- * indicates chicks or eggs seen,
 or nestings
1. Sooty Tern *
 2. Noddy Tern *
 3. Red foot Boobie *
 4. Blue face Boobie *
 5. Ruddy Turnstone
 6. Tropic bird *
 7. Wedge Tail Shearwater *
 8. (occasional Frigate seen)
 9. Black Foot albatross *
 10. Laysan albatross *

10:00pm In out tracks, area 2.
 Ts12 s side shell scratched, 1 pit.
 Ts17 already tagged w/ U.S. Wildlife,
 Honolulu 699

11:15 Tag upside down & body covered ~~692~~
 Eggs completed & covered AREA 7
 Only 1 pit(?)

Turned for CI 642
 curved CW $34\frac{3}{4}$ SL $28\frac{3}{4}$
 CL $39\frac{1}{4}$ $37\frac{1}{2}$

11:45 Ts12 area 6 2nd pit - close to beach
 Ts12 on 3rd pit.

JUNE
 11

1:00AM Ts12 starting on 4th pit.
 South point - 2 turtles on beach
 Area 15 Ts(?) in water.

2:00AM Behind tent - turtle climbing beach and
 sitting.

2:30AM Turtle climbing over beach at sand point.

3:40AM Ts14 on second pit, Area 17.
 1st bosker - South point.

Ts12 CI 644 curved CW $35\frac{1}{4}$
 FW T310 CL 38

4:30AM Pau - Turned for 2nd tag - Damit!

- 4:50 AM Ts 14 2 incomplete pits -
 returned to ocean, rechecked because
 of scratch marks. Hind flippers
 partially missing (but healed) difficulty
 nesting?
- 5:20 AM 2 ♂ boskers - South point.
 1 turned - tagged CI 643
 S.L. CL 29½
 CW 27½
- 9:30 AM TO Tern - large sharks in water.
 Tern census - seals
 1 A in water
- 6:30 PM 1 A on beach
 Returned to East - set shark float.
 Cooks helper -
 P.J. Stokes.
- 9:15 PM 2 Turn around tracks, 1 Turtle laying at water's edge (bosker?)
 3 Turtles basking at South point.
- JUN 12 Ts 14 area 13, 1 pit, shell scratched.
- 12:05 AM Area 1
 (Ts 18) (1 pit?) covering egg hole.
 straight line CL 37
 CW 28⅝
 curved CL 39
 CW 37¼
- Area 2 turtle going up beach slope.

1 ♂ barker south side; 1 ♀ Barker South point.

Ts 14 way inland (N side), 2nd or 3rd pit.
~~Reprayed~~ because of scratch marks.

curved measurements CW 35³/₄

Turtle on 2nd pit, N side. Recovered $\frac{CL}{81} = \frac{38}{81}$ - EAST-NESTING

1:05AM

Ts 18 covering nest Tog CI (645)

1:20AM

Area 13, N side Ts 19 digging egg chamber -
 Wire cut that was exposed by digging.

2:15AM

1 Barker, S point; 1 at waters edge, south side.
 Ts 20 moved from area 1¹/₂ along beachtop
 to area 3¹/₂ (1 pit).

4:15AM

Ts 18 still covering eggs.
 Ts 19 finished.

straight line CL 34¹/₂
 CW 28¹/₂
 curved CL 36¹/₂
 CW 36³/₄

Previously tagged (F;W KAIIUA T? 212)
 (Colored and upside down)
 C.I. 646

Missing tip of right front flipper.

4:45AM

Ts 20 dug pit and moved on to area 3.

↓
 TO
 7:00AM

stem line of boat free - retrieved
 with hammer on throw line.

T521 - turtle stopped behind campsite - turned; if possible don't turn, too dangerous (cut arm). 3 pits dug - probably no lay.

straight line	C.L.	38
	C.W.	26 $\frac{3}{4}$
curved	C.L.	40 $\frac{1}{4}$
	CW	35 $\frac{1}{4}$

C.I. TAG 647

Fand W T309

Growth on eyes, left flipper by tag, and hind flipper dorsal. Barnacle on right side edge of shell. A few top plates appear loose.

8:30 AM To Tern Island - motored around East in search of copulating turtles - none seen. Tuna observed and Gooney bird rescued.

~12 noon Tern Survey - 1 set tracks up - down by wharf. " " " " " water tanks.

1 Adult Seal on beach.

6:30 PM

Fast Census

Turtles ♂ ♀ I

Basking 2 10 -

In Water

which included Ts 1, 8, 14, 18, 19

Seals	$\frac{A}{17}$	$\frac{SA}{6}$	$\frac{P}{20}$
-------	----------------	----------------	----------------

9:30 PM 1SA tag 1045; ^{Previously} 1SA₁ seen on Whale - 1 eye cloudy.

Turtle on beach, area 5.

Turtle at water's edge, area 6.

2 boskers at South point.

TS21 going up beach area ~~15~~ 15.

TS14 digging deep body pit and trying to dig egg chamber, area 17 behind tent. Left ocean $\frac{1}{2}$ way out on N side of sand point and followed beach to site.

JUNE 13

12:01 AM

TS14 1 pit - back in ocean.

TS21 no pits(?) - back in ocean

TS14 in 1 pit area 14.

Turtle moving up beach, area 6.

1 ♂ bosker, area 5.

4:00 AM

Returned ocean, area 6 - no pits(?)

TS14 out of pit in Area 14 - laying motionless beside hole.

2:30 PM

Stayed on ~~East~~ East today -

When rain showers or hard winds blow, Gooney chicks all flap wings to fly, Sooty's all fly and noddys crouch on ground.

East census

(East census
cont.)

Turtles

♂

♀

I

Baskers

5

12

In Water

1 (light shell)

(2)

1 small

- ~15%

Among baskers Ts 1, 5, 16, 17, 18, 20 were seen. ^{all except 18 had scratches}

~1/6 shark (gray reef) off area 14.

Many color close ups of Ts 5. Turtle point, area 8 and 9. Possible entrance & exit into reef area.

Many dead black foot albatross noted. Very light colored turtle seen at H₂O edge moving around (foraging?).

Seals

A

SA

P

21

2

22

7:00 PM - Est - 3 baskers on south point, one at area 5.

9:00 PM

Frequent rain showers - almost full moon.

10:15 PM

Ts 23 inland at border of area 4-5.

Just scratching ground.

♀ basking at south point.

Smaller turtle ~50 lb at water's edge, foraging(?)

Ts 14 digging egg chamber area 15 - leaving.

Turtle along water at sand point.

1 - Tracks in-out sand point.

JUNE 14

1:30 AM

Ts 23 - left first pit.

Turned - 1/2 left rear flipper missing.

straight line

C.L. 36

C.W. 27 3/4

curved

C.L. 38

CW 35 1/2

C.I. 649

Previously Tagged - FW 254 KAIIUA

2 Baskers south point; 1 turtle at H₂O edge - Area 8.
Small male coming up on beach -

Not sure if same animal as several days ago - turned - FW Tag T313 put on right flipper.

T514 coming up beach by tent area 17 - turned around.

5:30 AM Turtle basking right at south point.
In/out tracks Area 15 - 1 pit, looks as if could have layed. I Dug into - very hard ground under 3-4" soft sand - probably didn't nest.

7:30 AM TO Tern Island

Census ~ 1:00 P.M.

2 set of in-out tracks, 2 pits,
1 SA seal

TO Trig - very windy (15-22 knots)

3:30 Census Trig:

Turtles	♂	♀	<u>Indeterminate</u>
Baskers		1	1
In Water			2
Pits		3	

Seem to be moderate number of tracks but few pits. Trig is a hard coral and shell island with little organic-like soil. Veg. is mostly bunch grass. The N side is sandier beach and landing is made here.

June 14

Trig Census cont.

	$\frac{A}{15}$	$\frac{SA}{4}$	$\frac{P}{0}$
--	----------------	----------------	---------------

Seals
one dried up sub-adult seen.

4:00 PM To whale Skate

Census:

Turtles	♂	♀	I
Baskers	3	4	3
In Water			2
Pits		~9	

1 ♂ basker very thick - photo taken of bird spraying black paint on carapace.

Seals	$\frac{A}{38}$	$\frac{SA}{3}$	$\frac{P}{13}$
-------	----------------	----------------	----------------

2 adults with very small pups - photo taken. 1 adult very large - ready to pup.

Pits sprayed w/ black paint.

Whale-skate is abundant w/ bigger coral chunks. The NW side (point) is the site of most basking.

Most of the turtle pits are located on South ~~side~~ half.

Birds on Trig

1. Sooty Terns (w/ little chicks and slightly older chicks. Seals (Turtles) seem to crush a lot of them.
2. Red foot and Blue Face Boobies.

3. Gooneys - Black foot and Laysan
4. Shearwaters - (Tern chicks hide in holes)
5. Recheck for Turnstones, Noddies
(present)

Birds on whales-Skate

1. Sooty
 2. Noddy on ground
 3. Shearwaters
 4. Turnstones
 5. Frigate's tail
 6. Red Bill Tropic
 7. RF and BF Boobies
 8. Gooneys - Black Foot and Laysan.
- 6:00 PM To East - Windy, Rainy.

10:15 PM Ts 23 seen inland border of area
4-5. Number scratched - resplayed.

Big Turtle - border area 5-6.

U Sprayed Ts 22
1 Bosker area 5.

1 Turtle water's edge area 8 point.
Ts 24 sprayed right at S point digging
1 pit is coarse sand.

JUNE 15

1:00 AM

Raining hard - frequently.
all night.

5:45 AM

1 at water's edge area 7.
Ts 19 basking area 7 - scratched - repainted.
2 in water's edge area 8.
No other obvious tracks noted from 10:15 PM check

7:30 AM To Tern IS. to make ready for departure.

1:30 PM Departed Honolulu - John Corbin John wheels in as replacements!

Many photographs of East Gin, Little Gin, adjacent reef area with KX on roll of 36.

6/16/73

2 rolls of ASA125 BLK & wt developed - Flashes look good however, 1 roll (whole 6-7 clear. all color slides taken w/NIKORMAT.

Synopsis of Tag Returns -

Seals

June 9 T907 adult whale-skate
June 12 1045 SA East

Turtles

Date	Island	Tag	Location	Notes
April 1973	East	June 8, 1973	T253	Kailua ♀
July 1970	East	" 10 "	U.S. Wildlife-Honolulu	372
June 11, 1968	Whole	" 10 "	U.S. Wildlife-Honolulu	699 (692) Corroded
<u>Not found</u>	"	" 12 "	T212	Kailua (?) Corroded possibly State Fish & Game
April 1973	East	" 14 "	T254	Kailua ♀
July 10, 1970	"	" 17 "	362	(check book for) should be U.S. w. - Honolulu NO lettering noted 9/10 8/25/74
June	2nd	T736 ♀	(Book on Tag - Triple appropriate)	see page 7

Doubtful if (therefore Kailua) present on tag - T212 Aquarium release animal - This tag very corroded.

If "Kailua" there should be a T (7/26/79)

check trip report [NO T in Trip report May 72]

"Kailua" series in FWO office FFS 7/26/79 = T101-200.

however my note p7 shows T

1 roll K135-20 II Gin-whale-skate-East → wide angle
 " " K135-36 II Taken 6-13 to 6-15
 " " PX 135-20 ASA 125 NIKONOS → East from water.

6-22-73 Regent Honolulu w/ Fred Lighter ~ 8:30 AM -
 stopped banking sand, Kawai
 Saw Nihoa - Very clear weather.
 Have Nikonmat loaded with PX ASA
 36 exposures - 2 photo Neckert + 1 stick(?)
 Altitude approx. 8200' air speed ~ 140-150 mph.
 Water very calm - partly cloudy skies.



TRIP 2

4:00pm

1 large turtle in water off Tern
 1 " " " " N Shore East

6:20pm EAST Census

Turtles	♂	♀	I
Basking	2	0	0
I W V	0	0	0
Seals	A	SA	P
	18	3	18

2 of the pup just born last few days.

9:00pm TS ~~9~~^{TC9} South side inland ^(TS 22 moves from side to side white digging)
 TS 22 scratched - repainted red area 6 1 pit
 area 13 Turtle tried to climb cliff -
 returned to water.

JUNE 23 TS 13 going inland by boat.

12:01AM

TS 9 scratched - repainted red - 4 pits ^{moving on}

TS 50 area 6 - 1 pit

CL $38\frac{1}{4}$

CW $29\frac{1}{2}$

curved CL $40\frac{1}{2}$

CW $37\frac{3}{4}$

3:00AM

TS 13 scratched - repainted red - 2nd pit
 area 1 tracks in-out 1 shallow pit

TS 51 area 3 1-pit

Turned

CL - $36\frac{3}{4}$

CW $28\frac{1}{2}$

"5" all messy.

CI 659

FW 324

TS 13 gone - pit looks as if laid.

No sign of TS 9 ; 22 or 50

TS 51 at waters edge - also
 unmarked turtle. - Low Tide.

6:00am

TS 51 still at waters edge, area 3
 unmarked turtle waters edge area 6-7.

To Tern

ISA

IA

Trig Census 2:00PM

Turtles

Bask

IW

3

PITS

7

Seals

A

SA

P

5

6

0

45A on small sand spit off Trig.

Turnstones present.

Pits immediately above boat landing area,
little at other locations.

Whales-Skate

Turtles

♂

♀

I

Bask

1

1

IW

1

2

2

Pits

11 (?)

✱

1 on coral head.

1 ♀ in water with black paint 30, 36 or 38;
No tag on left flipper.~~Seals~~

A

SA

P

21

13

16

1 SA with glossy eye (previously seen)

1 SA Tag 9003

1 A Tag A1093

JUNE 23 To East - via Base (above water - some seals)

9:15PM

Many Turn around tracks areas 5, 6 and 7.

TS 019 on the beach area ~~00~~ (5)?

TS 50 in 1 pit area 6-7 scratched.

1 Basher area 8.

June 24

12:01

TS 18 area 1 scared back to water from veg. zone.

AM

1 basket area 8.

TS 16 area 10 - resprayed - scratched - foded.

3:30 AM

TS 20 in deep pit area 2.

Straight C.W. $26\frac{3}{4}$

CI 660

FW T317

Unable to get straight line CL.
Animal had to be tugged - wild.

TS 22 in 1 pit area 6

straight CL $34\frac{1}{4}$

CW $27\frac{1}{2}$

TS 16 in area 13 - 3 pits

10:00 AM

To Tern via viewing board and mullet

2:00 PM

Moved to shark - could not find entrance for land

3:00 PM

To whales - Skate

3 very small turtles in Cove (5-10 lb maximum) 1 with white scum on shell.

Put Red chip in each pit.

Turtles	♂	♀	I
Bask	1	1	
IW			4
Pits			3
Seals	$\frac{A}{22}$	$\frac{SA}{9}$	$\frac{P}{12}$
	1 - A8TAG	1 - A798 1 - A794	

Mummified young removed from N side - whale

* only indicated if scratched.

4:15 PM Landed on Round Island
 Seals $\frac{A}{3}$ $\frac{SA}{1}$ $\frac{P}{12}$
 1 bobby egg - TAG 1098 1 Brand New

Mullet Island - landed

Seals $\frac{A}{3}$ $\frac{SA}{2}$ $\frac{P}{4}$
 1-754 1 Brand New

7:00 PM Caught ULVA - released - on way to East Island
 20-40 lb (?)

Weather Conditions -
 Very little wind, no seas since
 June 22 - reported since June 19.

EAST Census

Temperature sea water 28°C

6/24 PM Seals $\frac{A}{8}$ $\frac{SA}{2}$ $\frac{P}{21}$
 1 pup trying to nurse another - no mothers (2 very new)

Turtles ♂ $\frac{1}{1}$
 ♀ $\frac{3}{1}$

bask 2 3 1
 IW 4

TS 16, 20 44

4+ tracks on sand point; 1 all the way across
 6 pits.

Few Adults seen feeding Gooney Chicks.
 Chick plumage advanced - many trying to fly on East.

June 24 K135- II roll 36 from Nikonos Pav and removed.

10:30 AM 2 pits in area one (1) - Turtle returned to water.
 1 turnaround tracks, area 3.
 " " " " , area 4-5.

Turtle in 1 pit area 6.

1 Basket area 8.

1 turnaround track area 9.

TS 16 starting body pit area 15.

June 25 1 turnaround track area 16 by boat.

12:01 AM Area 6 Turtle digging egg chamber very rapidly.
 Almost Pav - front of hole seemed to cave or slip in.
 Some method exists by which animal "tests" pit?

Turtle moved on - Sprayed TS 52 red.

2:30 AM TS 16 covering (by coke bottles) - eggs laid (?)

Rain moderate hard approx. 3:30 AM.

6:00 AM Tracks coming down (1 pit - not complete(?)) area 3

TS 16 in water, caught inside reef, area 15.

1 Turtle in water s sand point.

9:30 PM

To Gin Island Smooth - but light westerly
 No turtles seen.

Seals

$\frac{A}{4}$

$\frac{SA}{2}$

$\frac{P}{2}$

(brand new)

1 placenta present, photo

Lots of tracks.

9 pits (newer) seen - none look successful.

Ruddy Turnstones

blue face boobies with chicks

10:00 PM

Little GIN Island

No turtles seen.

Seals	$\frac{A}{3}$	$\frac{SA}{1}$	$\frac{P}{0}$
-------	---------------	----------------	---------------

Lots of tracks - 9 pits

Noddies with a few chicks

Blue face Boobies with chicks

Black foot Chicks 120-150

* Boobie seen with black head, body-white neck and front.

Big shark.

< 3 unnamed sand spits seen on return
3rd from GIN the largest - "St. George Group"
Several seals on each.

11:00 AM

To Tern - $\frac{A}{1(\text{beach})}$ $\frac{SA}{1}$ anchored on N beach.

6/25 PM

To East 6:00 PM

sea water - $28\frac{1}{2}^{\circ}\text{C}$

Census

♂

♀

I

Turtles

Bask

3

4

IW

(RHF $\frac{1}{2}$ missing)

1

(44? ^{white})

Ts numbers include 5, 23 both scratched.

In addition, 1 female had 3 pits in shell,
1 ♀ had several barnacles, growth on
right eye and right hind flipper (no tag).

3 leopard rays in sand point (N) area, mating(?).

Seals $\frac{A}{9}$ $\frac{SA}{1}$ $\frac{P}{22}$

10:30 PM 1 - ready to pup
1 turn around track - area 3
" " " " - area 4

1 Turtle in pit - area 5-6

3 ♂ Boskers - area 8

TS 14 - scratched - behind tent - area 17.

11:20 PM area 5-6 Turtle has 1 tog each flipper - can not see sprayed number. Dug one egg chamber - moved forward, covered in, moved on to circle and returned to water.

June 26 Seal gave birth, between 6:30 and 11:30 PM
12:00 AM TS 14 Digging egg chamber behind tent - not successful moved on. Color photos taken.

2:30 AM TS 18 in 1 pit area 1 - appears to be in covering up stages but difficult to tell. TS faded, scratched - repainted red - returned via area 1 later. Unpainted ♀ on beach area 7.

1 ♂ Bosker area 7.

" " " area 8.

TS 14 in 4th pit area 17.

In-out tracks area 9 and 8 (1 set).

5:50 AM Turtle in water on reef flat - motionless area 7, No togs - sprayed TS 53 red - doubt if will stay on due to wet shell.

HIMB 661

B53 (cont.)

CL 35 $\frac{1}{4}$
CW 27 $\frac{3}{4}$ curved CL 37
CW 35 $\frac{1}{4}$

Barnacle on carapace immediately behind neck. also curved piece taken out of hind left flipper.

area 8 SA Seal A958

area 15-16 SA Seal 1034

10:00 Am

To LA Perouse - circled - photos w/ Kodak II Nikonmat.
To TERN - anchored N side beach due to west wind - 10-15 knots
1 Roq 35 Kodak II La Perouse TERN CENSUS ISA

noncomplete 1 set tracks 3 pits

4:00 Pm

To Whale-Skate

Place chips in new pits - also counted present number of marked pits previously. - 106

Turtles	♂	♀	I
Baskers	2	6	
IW			
Pits			15

Male basker had rear left flipper missing plus adjacent section of shell. Fleshy area very red.
Bikw photo taken w/ Nikonmat
Congregation of baskers - one with very large barnacles
photos taken

Seals	A	SA	P
	31	11	15

Very poor tag location = difficult to READ!

- 5:30pm Turtle seen on sand point -
 TS number not readable, small traces of
 white paint - Double tagged HIMB 646 +T212
 animal resprayed TS 54 (originally TS 19)
 Curved measurement CL 36 1/2 CW 35 1/2 S side - No pits
 Returned same
- 7:30pm Turtle on very tip of sand point believed
 to be TS 44 white directly across S & N.
- 9:30pm old ♂ Barker area 7 - No tag
- 8:30pm TS 14 repainted - scratched - area 17 digging.
- 9:30pm Turtle with no apparent sprayed number - up
 down area 6 - Left hind flipper 1/2 gone and lesion
 on dorsal side of right hind flipper.
 TS 23 area 5-6 in 1 pit.
 Turtle right behind tent digging chamber area 1,
 came up on N side sand point TS 54.
- 10:00pm Caved in
 TS 23 resprayed.
 curved CL 38"
 CW 36"
 moved to area 5 HIMB 649, T254 Kailua
- 10:30pm TS 54 into 2nd egg chamber - not much of a body pit.
- 10:50 Caved in again. Moved very short distance
 and started digging body pit 3rd
- June 27
 1:45pm TS 54 covering 3rd pit.
 2 sets tracks in and out.
 TS 14 area 17 laying on beach

5:45 AM TS 54 on reef flat area - completed nest.

TS 14 in 4th pit area 16

Staying on East June 27th

Note on egg chamber cave-in observations. As animal digs, angle of body becomes more pronounced. To prevent slipping back, animal pull herself forward partially using ~~hind~~ ^{front} flippers - if chamber then collapses animal abandons pit and moves on. Sand around edges is not firm enough to hold her weight - This type of rejection differs from that seen on Canton where hard gravelly substrate discouraged further egg chamber digging.

10-11:00 PM Light rain showers - hot - during night wind shifted to west to North - slight East. 10 km Birds seek closest point to wind (down beach) and face into it.

#	Tally for pits counted	as of 6-2	-	36
	Whales-Skate	on 6-5		22
		on 6-9		19(?)
	Factors contributory to differences -	on 6-14		9(?)
	seals marking out line	wheeler corbin - on 6-17		26
	thus NON-ID of new pits -	" - on 6-21		53 40
	paint fading - Turtles covering paint	on 6-23		11 (!)
	wheeler drawing lines in pits	on 6-24		3
	106	VS		<u>179</u>

6/27

12:00 NOON EAST CENSUS

Seals	A	SA	P
	<u>14</u>	<u>3</u>	<u>19</u>
Turtles	♂	♀	I
Busk		4	
IW			1

1 ♀ 44- scratched

1 plover seen on beach

Lots of half dead Neumabanchs (Hexabanchus) in water.

2:00 PM

Seal pup anal 35°C ♂

air 30.5°C

seawater 29°C

Dry sand 30°

Wet sand 30°

TS 20 hind skin fold 29° scratched.

Unmarked ♂ (old broken) 30°

2 turtle in water area 16 by boat - 1-10 lb approx.

Seal tags

A - 683

SA 1098

A - 451

SA 1097

* Meal payments to June 30

Balays

13

20

16

69.30

Wheeler

11

15

14

56.25

Brick

5

7

6

25.25

Corbin

6

8

7

29.30

Lighter

4

8

5

24.50

B

D

S

204.60

170

165

170

* More painted sticks - Take red paint.

5:00pm - Light rain showers
7:00pm

6:30pm East Census

Seals	<u>A</u>	<u>SA</u>	<u>P</u>
	13	1	20
Turtles	♂	♀	I
Baskers			

7:30pm Turtle just visible on reef flat sandpoint, S side.
 IW 1-area 9 Algae on shell

Seal Tags to date

<u>Date</u>	<u>Island</u>	<u>Type</u>	<u>Tag NO.</u>
6-9	W	A	907*
6-12	E	SA	1045*
6-18	E	A	451*
6-19	E	A	A786*
6-19	E	SA	756*
6-20	E	SA	ⓔ 756
6-23	W	SA	903*
6-23	W	A	1093*
6-24	W	A	A8*
6-24	W	SA	A798*
6-24	W	SA	A794*
6-24	R	SA	1098*
6-24	M	SA	754*
6-26	E	SA	A958*
6-26	E	SA	1034*
6-27	E	SA	ⓓ 1098 1097*

<u>Date</u>	<u>Island</u>	<u>Type</u>	<u>Tag NO.</u>
6-27	E	A	683*
6-27	E	A	④ 451

JUNE 27

9:45 PM

Turtle sprayed TS 55 in area 2 - 1 egg chamber moved on - Fog present on left.
 Turtle sprayed TS 56 in big body pit area 4
 Area 4 - 1 turn around track.
 Area 5 - Turtle inland 3 pits in carspace.
 Area 6 - Track just before stake - no sign of turtle
 Area 13, Tried to climb cliff - failed
 Area 14-15, turn around.

11:30 PM

Area 2 TS 55 2 pits - down up again area 2 in 1 body pit.

TS 56 still in pit area 4.

JUNE 28

3 pit turtle still digging on 2nd pit.

TS 23 way inland from area 5 - 2nd pit

3:00 AM

TS 55 - down - unknown if complete.

3rd pit uncovered machinery.

3 pit turtle sprayed TS 57 - working in area 5.

CL

39½

CW 30½

curved CL

42

CW 39½

HIMB 662

TS 56 - digging chamber - failed - area 4-5 way inland near TS 23 (still digging)

CL 35½

CW 30½

curved CL 37½

CW 36½

HIMB 663

3:30-4:00 AM TS57 out Area 12 - across island.
 TS53 in pit Area 12 - Resprayed white.
 Area 11 turn around on steep bank.

4:30 AM Area 15 Turtle w/algae, scum on back
 digging chamber - moved on
 Toy numbers HIMB 647, FW 309
 originally TS 21 however wet shell
 and dirt prevented spraying. Animal
 turned - Light green spray on each
 side of carapace. Large barnacle *
 taken off right side.

8:00 AM TO tern - West wind - rain in
 morning, afternoon - wind ESE
 * June 29 plane (Friday) lost 2 a week flight.
 July 5 (Thurs) no space for return due to
 contractors. message sent to Wheeler,
 Yap via brick indicating such. "must
 stay 13 day if board plane"
 Tern Censuses -

1 set tracks - 1 weak body pit.
 Seals $\frac{4}{1}$ $\frac{54}{1}$ $\frac{P}{1}$

3:00 PM TO TRIG
 Census - Seals $\frac{4}{4}$ $\frac{54}{0}$ $\frac{P}{0}$

1 may pup soon.

No Turtles observed
 Total painted chip put out - 28


* NEED GARDEN RAKE TO CHECK FOR PIT THAT HAVE CHIPS.

High tide - sand spit off Trig gone. or at least completely covered by water.

Tape worms taken from untagged seal feces - parasites still alive. 2 jars - one in files - one separated.

* check on bringing back dead birds for parasite check

Seal Behavior observations -

Continual sneezing in pups - some adults while basking - distinct tail stretching and twisting 

4:00PM

WHALE-SKATE CENSUS

Seals	$\frac{A}{35}$	$\frac{SA}{8}$	$\frac{P}{15}$
-------	----------------	----------------	----------------

Many adults seals molting

Togs	1A - 794		
	1A - 212 - Injured skull, completely		
	1SA - 915		
	1SA - 1036		

Turtles	$\frac{\text{♂}}{7}$	$\frac{\text{♀}}{7}$	$\frac{I}{0}$
Bask			
IW			

New pits - 16

add to old total count - 6

6:30AM

TO EAST CENSUS

Seals	$\frac{A}{14}$	$\frac{SA}{1}$	$\frac{P}{23}$
-------	----------------	----------------	----------------

1A - A451

4-6 plovers seen on beach.

Turtles	$\frac{\text{♂}}{0}$	$\frac{\text{♀}}{3}$ (all scratched)	$\frac{I}{0}$
---------	----------------------	--------------------------------------	---------------

TS numbers 20, 47, 49

* SAND SAMPLES
* WISK BROOM

45

JUNE 28
10:00 PM

East

TS 57 turn around area 5-6, resprayed.
Turtle laying at water's edge area 12.
Turtle in body pit, hard to see, partially
covered with sand. Sand point, up on the
South side, down same side. No tags
felt. Several B & W photos taken.
Sprayed TS 58 new leucite paint.

CL 37½

CW 31

JUNE 29

12:45 AM

1 Turn around area 1.

1 Turtle up into area 1, no pits yet.

4:15 AM

area 1 turtle down. 3 pits.

unknown if nested.

6:30 AM

2 Drags made in prep. for no replacements
due to full plane on July 6 (Friday).
Much wire collected and dumped.

Tent, Food, all gear secured.

BW on mooring

12:00 NOON

Plane arrival with John Wheeler - Fred
Yaf for replacement -
1 hour briefing -

June billet paid -

4:30 PM

Over Niha Island -

Good crescent sand beach on west side -
Check into this area for turtles.

Contact DofE for school teacher names.

Kam schools

Robinson Hein

MR. Gilbert Pahulehua

Teacher in Charge ^{letter sent}
Niha School 8-1-73

Niha

TO 8th grade



7-6-73 Depart Hono 7:30 To FFS via banking sands -
land 10:45 - Saw B.W. coming in.
3:30 PM To East ^{w/ Fred} _{YAP} very rough
7:30 PM Turtle on beach area 3 still light, 1 seen earlier
in water S side sand point.

EAST

Very few black footed Jaysen - Sooty Tern much
less - many Noddys by tent - sand bar on
sand point built up high, sand erosion on
N side - cliffs steeper.

Seals	$\frac{A}{15}$	$\frac{SA}{3}$	$\frac{P}{16}$
Turtles	♂	♀	I
Bark		4	
IN		Including TS 22, 51, 54 and 47 #657 hole in shell	

8:30 Turtle going up beach, red NO., can't read, scratched
area 4. Most scratched

Turtle going up beach area 5

July 7
12:01 AM

" Water edge area 8
Turtle area 2 sprayed TS 67 in 1 pit found
to be CI 631 (TS 6)
Curved

$4\frac{1}{4}$
 $36\frac{1}{2}$

♂ barker, area 6.
TS 7 going toward water area 7.
Turn around area 1 - Tent.
TS 20 area 5 1 pit inland
5 CL 35"

* Luminous paper

7/7/73

TERN Survey

1A 25A 47

1 of SA

923

TS7 in area 5, no pit curved CL 39
CW 36 1/2

1:00 AM TS 49 laying eggs in area 15 -
paint scratched, repainted 2nd pit.

3:15 AM TS 9 repainted CI 670 area 4, 2nd pit.

old ♂ barker area 5 SCL 37" SCW 27"

TS 49 Pau nesting - down.

5:30 AM TS 9 still digging at area 4

TS 16 going back to water area 13. Turn around.

9:00 AM TO TERN - Light rain in morning, Not as much
WIND AS YESTERDAY.

2:30 PM TO TRIG - chips not all there -

must be wind blown or da seals.

No signs of recent digging - no new pits.

(several pits,
tracks on sand point)

Seals	A	SA	P
	13	8	0

15A A971

difficult to tell pups from SA due to
molts - Newly molted SA fur looks like
pups - sand spit still gone.

3:30 PM whales - Skate

Same problem with pit chips on
this island

Turtles ♂ ♀ I

Bark 3 6

IW 8 (many small)

pits - 14 ; almost all south side-whale ends.
subtract 4 from last count.

Seals A SA P many molted.
 $\frac{34}{20}$ $\frac{20}{20}$
 1 adult 798

SA 903 (how old?? look intermediate), 1032, 915
 Lots of Noddies w/ chicks.

6:30 PM East boshers 4♀ 1♂ MAY¹³ Be TS5
 include 22, 11, 20, 44 ← scratched and C-1650 (cut red TS)

Hard rain shower!

9:30 PM TS 7 area 17 1 pit.
 Turtle in area 8 - sprayed TS 68 - 1 pit.
 Turtle on beach, area 4.

Turtle up-down, area 1, sprayed TS 69 -
 may not stick in water too soon.

July 8
 1201

TS 9 sand point - ^{in side} south.

TS 69 area 17 - red paint - CI tag, 1 pit returned.

TS 9 2nd pit area 17.

~~TS 68 NO TAG area 8 - 3rd pit~~

Red TS 5/2 or (?) - CI tag - area 3 back
 to ocean.

TS 68 NO TAG area 8 - 3rd pit

CL 38 $\frac{1}{4}$ CW 29 $\frac{3}{4}$

CCL 40 CCW 36 $\frac{1}{4}$

TS 16^{red} area 14 - came up cliff from around log
 in 1 pit - repainted.

TS 7 area 16 moved along vegetation zone
 dug 3 pits - laid eggs from look of last pit.

7/8

1:30 AM

TS9 on to 3rd pit.

TS 5(3) round bite out of left hind flipper going up beach area 2.

4:00 AM

TS53 FiW T322 CI661 Tanned-

1 pit not in vegetation zone, area 2.

TS16 in 3rd pit - may have laid.

TS9 completed nesting, covering area 17.

TS68 going up steep bank N side sandpoint.
Tagged CI671

5:00 PM

Return to East from Tern -

6:00 PM

Census

	Seals	A	SA	P
		9	4	15
Turtles	♂	♀	I	
Bask	2	8		
	1 CI 637			

IW

1 small

Baskers included [TS 57, 44, 22, 23 (CI tag)
47 54 19 14 and 1 with CI tag]

♂ basker on S sand point painted with white diagonal. (near tent)

When ♂ move on sand tail is hooked rigidly down making a distinct line.

9:30 PM

TS 5(3?) (2?) 1 pit area 5

* areas 7 and 8 eroding - getting steeper.

TS 6918 area 1 up to tent and back down.

July 9, 73

12:30 AM

TS 69 and 54 (646 from sheet) area 1 each in 1 pit

50

July 9

12:30 AM

area 6 turtle - no TS seen, muddy carapace -
clearing 1 pit.

Double tagged turtle in 1 pit below
vegetation zone, area 6, can't read TS.

TS 5(?) area 5 2nd pit.

Turn around tracks area 4.

TS 69 moved, clearing 2nd pit, area 1.

TS 54^{red} returned to ocean 1 pit(?) S side area 17

3:30 AM

TS 54^{red} area 1 nesting - covering pit - repainted.

TS 69 area 1 moving from 2nd or 3rd pit.

TS 5(?) area 5 in 3rd or 4th pit.

Area 6 - 2 turtles in edge of H₂O - TS 50,
other unknown.

Big turtle area 7 - no numbers.

5:45 AM

TS 54 still covering - area 1

area 5 TS 52 tags checked - same as

TS 12 - four nestings.

Turtle at waters edge - large barn-pier

Large turtle area 7 sprayed TS 70,

light out - 6:15 AM.

CL 39 $\frac{1}{4}$

CW 29 $\frac{1}{2}$

CCL 41

CCW 36 $\frac{1}{2}$

Tagged CI 672

FW 278

light rain - light finned tailed shark seen

9:15 AM

3 baskets area 8 - 2 no TS apparent
1 with 2(3?) white

10:00 AM

TS 69 seen swimming along area 1.

7/9

11:00 AM Staying on East - strong wind - some rain squalls
Wind but nice all day - sunny.

1:30 PM Census

Seal	A	SA	P
	<u>9</u>	<u>3</u>	<u>21</u>

Turtles - 1 small in water ~ 51b
Bask 7 ♀ - TS 23 ^{white all scratch} over red (I 660); 44; 47; 25; 13;
1 flipper hind gone no TS but shell scratched.
many smaller sharks area 7

note 660 is

TS 20

Red paint

6:15 PM

many red foot boobies nesting area 14, also some
figates roosting. Noddies have nests off ground in bushes.

Turtles basking

♂	♀	I
1 area 7	7	
♀s include TS 22 ^{sc} , 44 ^{sc} , 49 ^{sc (f m back 654)}		
14 ^{sc} , 57 ^{sc} - looks like 57! white pits		
in shell), 1 NO TS NO. Tumors left eye.		

9:00 PM

Turtle up area 1, right onto canvas by tent,
under cot, turn around and back to ocean,
left hind flipper 1/2 missing - no tags - sprayed
TS 91.

10:45 -

Turtle coming out of water area 2.
" area 50 tag read 657 - thus resprayed
TS 22, digging 1 pit.
TS 68, TS 70, and ♂ basker area 8
on beach. TS 68 previously seen by
Fred 8:45 PM

- Turtle up down cliff, area 12, may have got caught in tangle of wire for short time.
 Several tracks, 3 pits on sand point.
- July 10
 12:01 AM TS 69 area 2, 1 pit, nice egg chamber.
 12:40 AM TS 69 pan 119 eggs. TS 69 scratched.
 Initial cover up w/ hind flippers starts by pulling dirt from behind egg pass (chamber) ~~open~~ over eggs; after 5 minutes kneading starts. During laying, hind flippers seem to be positioned over eggs to keep dirt from slipping in over eggs.
 During egg chamber digging, body is firmly planted in body chamber, front flippers out to each side dug in. Body rocks, or dips, back to reach deeper with hind flippers. Front flippers both hold and lift up body, - when fixed properly no cave ins or slides occur. - Lots of roots in this pit. Body pit not very deep.
 TS 69 is CI 645 (from sheet that would be originally TS 18)
- 1:00 AM TS 22 in 3rd egg chamber, area 5.
 ♂ basket, area 7, white line painted down center of carapace.
 ♂ basket, area 8.
 Turn around tracks by cliff, area 10.
- 1:10 AM TS 68 area 15 in 10' nice egg chamber.
 shot hard rains.
- 1:35 AM TS 68 - laid many eggs

* Electronic apparatus for detecting egg clutches.

7/10
 4:00 AM TS 22 in ^{or 5th} 4rd pit. TS68 and TS69 down since lost time.
 8:00 AM To Tern - John W. - George out today.
 8:15 AM Tern Is. Census
 2 sets tracks, total 5 pits.

~~Out~~

1 by loan tower.

1 ~~by~~ between loan and Sears.

One of these was up ~ 12:45 AM.

Seals - A SA
 1 1 N cove

4:00 PM To Trig Island

Sand spit still gone - southerly swell coming in, surf near pass way to back side of island.

Seal tag A-794; A-785; SA-1093.

advise that seals be tagged opposite from each other on flipper.
 No new turtle tracks, no new pits.

Back on N shore 4 (3 ♀, 1 ♂) B & W photos taken of hazy head ♀ with F & W tag (couldn't read)

4:45 PM Whale-Skate

Cove not affected by S swell, however seems like lots of coral rubble on S end S side of island. Lots of 1/2 grown frigate chicks.

Seal tags SA-914; SA-1036, SA-1094
 SA 757; A-926;

Pits - 17 - Rain, wind and other factors are concealing chips in pits.

* Write description of each area.

* Look for pole stumps.

7/10

6:30 PM

East Island

Basins - 4 ♀ TS 44, 69, 49, 71

1st B & W nest on roll is, area 1 nest.

Seal tags #786 (photo taken) 1 yellow plastic tag.

SA1045

Southerly and/or westerly swell - larger surf on South side of Island. Erosion on all sides.

9:30 PM

Turtle up on beach area 2, can see faint trace of red paint.

TS 23 inland area 5.

TS (?) 5 in 1 pit area 5.

TS 22 crawling around area 6.

JUNE 11

TS 71 (scratched) area 12 in 1 body pit.

12:01 AM

TS 56 in 2nd pit area 2. (CI 663 from sheet).

TS 22 3rd or 4th pit area 5.

Turtle going up beach area 5, can't see any TS.

TS 71 covering nest.

CL 35 $\frac{1}{2}$ CW 27 $\frac{3}{4}$

curved CL 37 $\frac{3}{4}$ CCW 36

repainted-scratched TAG F & W 280

returned to H₂O. F & W 273 put on but apparently

did not go on, but could not find on ground.

3:30 AM

TS 56, tracks down - 3rd pit, not complete.

TS 23 area 5 (CI 649 from sheet) scratched, repainted

Left hind flipper $\frac{1}{2}$ missing.

TS 22, 2 pits since last round. area 6, scratched, repainted.

Wire in 1 of TS 56's pits.

IN AT 4:30 AM

* Bring Bolt on heavy wire cutters -
* Extra clothes.
* Throw net.

55

make table
for easier tabulation

7/11
9:30 AM Palled up exposed copper wire N side - jetsoned.
TO TERN - no turtle activity, info via YAP.
Swell running - wind normal but light - buoy tender "Butterwood"
unhooked off Tern - swung out on account of reef breaking e.g.
Near Is.

5:45 PM East Census

Seals $\frac{A}{14}$ $\frac{SA}{9}$ $\frac{P}{24}$

A includes A786 - same place by log.
SA - 954; 1034; 1044 - one adults could pup.

Turtles - ♂ ♀ I
Baskers 5

TS 47, 11, 44, 22

Tern Island - Fred Yap

July 12, Thursday
1:30 AM

Turtle up on beach behind F&W quarters

Curved CL 38
Curved width $34\frac{1}{2}$

CI 629 - may not have held.

Sprayed with X
distinctive barnacle right side of carapace
approx 2" aft. 1 pit

July 11, Wed
9:45 PM

CI 642 in area 1 in 1 pit - moved to 2nd
(by yellow sheet TS 17).

2 Turn around tracks, area 3.

Turtle sprayed TS 72 area 6 inland.

Turtle in surf, area 11 - can't read number.

Turn around by cliffs - area 13.

Last high tide brought back much of fine sand
all around Is.

* 11:00pm Stepped off tent to end sand point ~ 240 steps
area 1 turtle ^{CI 642} near egg chamber - 110 EGGS
pan laying 11:30 - Tail moves back and forth
before eggs start to come out.

TS 70 area 9 - same one seen in surf - 1 pit.

Turtle w/ right hind flipper 1/2 missing, area 4 inland.
Turn around tracks - area 2.

CI 642 - FW 699 covering chamber - originally
TS 17 - resprayed. Pan to ocean 12:10 AM.
Looks like "5" on right.

Area 6 turtle, TS 72, 2 pits, 1 very large, deep.
Moved across island and out - stopped by log,
had to turn.

Thursday
July 12
2:30 AM

Turtle w/ 1/2 flipper missing, inland on 2nd pit area 4.
Area 4, 2nd pit, nested - CI 650 is TS 5 -

1/2 right hind flipper missing - resprayed - No TS apparent
Area 9 turtle - 2 pits and in 3rd - egg pit.

~ 3:00 AM egg laying started by round machinery. Tail
seems to almost position eggs. Mud mucus.
cements clutch? Body pit very shallow.

SC 70 resprayed. Note presence of fine root hairs.

Egg count pan 3:40 AM Total 123.

TS 72 in 1 pit - nested, area 13.

up moderate cliff. CI 656 is TS 40 resprayed.

8:00 AM

TO TERN

12:00 noon

Randy CHAV IN - Fred YAP, John Wheeler out

7/12 CHAU-BALAZS
 3:45 PM TO wheels-skate, very light wind, surf down.

Seals $\frac{A}{38}$ $\frac{SA}{17}$ $\frac{P}{16}$

Togs A-920 SA-754 (both); 903
 Photo (Chau also) taken of bad fresh bite on mouth of SA.
 Buoy Tender departed.

Turtles $\frac{\sigma}{1}$ $\frac{\text{♀}}{4}$ $\frac{I}{6}$ (2¹⁵/₁₆; 2⁵⁰/₁₆)
 Baskers $\frac{1 \text{ SC}}{\text{Photo BW}}$ $\frac{4 \text{ (low barnacles)}}{\text{Photo BW}}$ $\frac{I}{6}$
 IW
 Pits 12 - same problems as last check.

6:15 PM

East

Turtles $\frac{\sigma}{1}$ $\frac{\text{♀}}{4}$ $\frac{I}{1}$
 Bask $\frac{14 \text{ SC}}{49 \text{ SC}}$
 Include 14^{SC}; 49^{SC}

Seal Togs SA 954
 SA 757
 A 786

9:30 PM

1 turtle, no TS apparent, in area 1 in 2nd pit.
 Turtle up beach, area 3 - TS 57^{SC}
 1 turn around area 4.

Pan eggs
 10:45 PM

TS 14 basking, area 8.
 area 1, CI 648, from sheet TS 33; respayed.
 85 eggs.

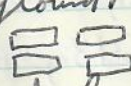
11:00 PM

1 turn around, area 4.
 TS 57 inland area 5.
 TS 14 basker area 8 aiming out.
 TS 59^{SC} in out area 11.
 area 1 TS 33 out.

FRIDAY
 JULY 13, 73
 2:00 AM

- TS 57^{SC} in 1 pit, laying eggs inland area 5, crawled over low log. Pan eggs. CI 662.
- 7/13 Zig-zag in out area 11. Up down by coke bottles area 15.
- 5:15 AM TS 59^{SC} in 3rd pit area 5, respayed, NOT mated, ^{however} ^{look like it!} extra CI 677 put on. TS 57 out area 11.
- 1:00 PM Baskers - TS 14, 44, 49, 54 2 unnumbered. 2 small (5-10 lb) in surf.
- 1:30 PM Description of East areas
STAYED ON EAST JULY 13 - light wind, good weather.

Area

- 1 - medium coral chips, gentle slope, sparse vegetated knoll with good organic dirt. Some silver dollar size pieces of coral on surface. Shearwater holes - N, S, BF, L.
- 2 to log pier, - thicker bushy veg averaging 2' high beach & steeper consist of coral and sheet chips - V. organic gravel - some buried and surface mounding. S, RF, BF.
- 3 Same veg. and ground. cement slab + 4 elevated slabs .
- 4 Iron pole - cement bag directly access ^{from} stake 3. Some buried timber. Silver dollar and bigger coral chunks on surface. Some birds + N.
- 5 2 strips cable on beach. Denser coral chunk along edge and slightly inland of veg zone.

5 (cont) almost no elevated veg. - sparse runner surface veg. present. cement elevated slab - opposite side stake 4 with timber, junk and corrugated tin along side. no or few birds toward S half.

6 Same terrain as 5. 2 fallen poles ^{opposite side} gas bottles opposite no 5 stake. Soil organic with small chips ^{coconut} some shell. wire seen underground.

7 S point of island, narrow - many S, some 7' veg toward center. Silver dollar coral and shell on surface same as area 6. Some buried mooring.

8 South point. Much round bronze surface mooring site of bashing on both north and South. grad to fine sand beach. Larger coral chunk in sparse (non-elevated veg) zone. ^{Deep H₂ entrance on both N and S.}

Seacoast - fringing coral reef entire length off shore - almost bare at low water.

9 Same as 8 but more organic finer soil. Much mooring on beach wash.

10 Mooring - same as 9 - few birds.

11 Sawed stump inland of stake 10. buried wire. 2 and 3' coral chunks on beach wash. Drum inland $\frac{1}{4}$ way to stake 11. ^{gas bottles}

fallen pole at stake 11. "Seals" like to sleep by pole. gas bottles by pole.

12. poles, buried wire, 15' log on beach wash. ^{fast pipe coral on beach.} Cement foundation Δ 2' x 2'. Mummified seal.

13 Began cliffy region - coral coarse beach. 4 elevated foundation, $\frac{1}{4}$ way to stake 13.

7/13

deteriorated log my foundation. Pole at end of 13.

14. Cliffs - cement bags $\frac{1}{2}$ way to stake 14.

2 elevated cement slabs inland - w/ fuzite angled log on beach awash, rusted iron rod in coral beach, pipes coming out of cliff. Cement slab awash after log, rust sheet steel by slabs.

Just pile and water heated(?) inland.

15 Stake 15 at knoll (or point) by engine block that is awash. 2 cement filled drums on beach. Coke bottle rubble.

16 Whaler mooring. Curved pipe off ground - birds roost. Lost $\frac{1}{2}$ start none elevated veg portion

17 Just post whaler piling to tent.

end of coast

Sand Point - coral and shell sand - no vegetation - much silver dollar coarse size. End section fine sand.

3:00 PM Went trolling around East, Caught 4 Vlua - saved 2. Many mummified turtles seen in reef areas around S point 1 small (5-10lb) seen in water.

6:00 PM East Census

Seals

A

SA

P

A-451; 786

11

6

22

SA-1045

Turtles

♀ boskers 54 SC 4950

10:15 PM Tracks up cliff, 1 body pit and return, area 13 by pole.
 July 14, Saturday TS 59^{SC} 1 pit, heading down, area 14.
 1:15 AM TS 59 finishing up resting - 1 pit, area 15.
 TS 44^{SC} (watch right hind flipper) (originally (?) TS 1)
 CI 632 up area 7 no pits seen, resprayed.

4:30 AM TS 44 down area 7.
 Turtle in nice egg chamber, area 9.
 TS 59 down area 5.

5:00 AM area 9, turtle progressing - ^{in egg chamber} left hind
 flipper $\frac{1}{2}$ missing, in deep body pit,
 chamber looks good.

5:15 AM out of pit - turned sprayed TS 73,
 (will bite?) CI 676
 FW 281

straight CL $36\frac{1}{4}$ CW $28\frac{1}{2}$
 curved CL $38\frac{1}{4}$ CW $35\frac{1}{2}$

Turtle looks round.

9:00 AM TO Tern

2:15 PM 1 A 1 SA 1 IWA by M-Boat.

3:30 PM 1 set tracks - 5 pits - 1 may be complete
 TRIG, - light trade wind - calm seas.

Seals 4 5A P
 15 8

1 SA with bad face bite.

Turtles

Book 3

1 set tracks
 no pits

2 ♀ seen offshore - 1 golden.

Brief Descriptions of whale-skate, Trig, Round, Mullet, Tern

7/14

4:15 PM

whale skate

Turtles

♂

♀

Boskers 1 4

IW 1

Pits 8

1 ♂ seen from boat off shore.

6:00 PM East

Turtles - TS 14

Seal SA or adult(?) 923

9:00 AM Turtle on sand point - entered S. side -
 in 1 pit - moved toward ocean when approached -
 NO TS or tags - measured, turned, tagged -

Subsequently
 SRM 1575

Straight CL 38

CW 29 1/4

Curved CL 40 1/2

CW 35 1/2

CI 680

FW 282

10: AM

(Several tracks and 2 pits new seen on sand point)
 Full Moon TS 7^{SC} (or 11?) FW tag already
 present, may have CI) in 1 pit area 15.
 1 track in out area 7.

Turtle up area 6, all the way across to
 other side, 1 pit - turned and crawled along
 parallel to beach log to diagonal log, in edge
 pit along side this log, wire overhead, TS 4[♀] (?),
 left this pit (saw us?).

1 tracks in out area 6.

2 " " " area 5.

11:15 PM

Turtle up area 5 in 1 pit.

area 1 turtle in 2nd pit, no TS apparent.

TS 14 up in 1 pit area 16.

TS 71 down area 15.

TS 47 ^{2nd} pit inland area 5.

tracks in out area 6.

JULY 15, 73

1:15 AM

TS 44, area 5, in through cable on beach - no pits yet.

TS 14 in 2nd pit area 16

area 1 turtle out of 3rd pit and wandering in area 16 from area 1 near TS 14.

3:00 AM

area 1 turtle sprayed TS 74 - tag reads C1035
is TS 8 - Total 5 pits. Curved CL 37¹/₄
CW 35¹/₄

TS 14 down - total 3 pits.

TS 44 1st pit by junk metal area 12, down and up again, area 12, in 2nd pit by diagonal log.

TS 47 nested area 5, 3 pits total 2 pit good for photo.

Turned for FW 279 tag.

TS 73^{5c} (left hind/missing) area 9 1 pit resprayed.

Tracks, up area 9, down area 8.

1 tracks in out area 8.

STAYING ON East JULY 15, SUNDAY
Light wind, sunny, calm seas.

12:45 PM

Walked island noting adjustments to chart.

Notes:

Move log pier further South.

^{stamps} Matsuda, 1966 - algae
 poles ABCDEF left to right facing island from south.

Stake 3 to 4 - pole B in center, O.K.

Pole C out from stake 4, O.K.

Pole D out from stake 5, O.K.

Pole E coordinated with stake 10.

Stake 9, O.K.

Move Stake 7 toward South.

Stake 11 almost center of parallel log.

Stake 13, pole B, directly in, O.K.

Stake 15 has been right on point by engine block.

Stake 16 just past whaler mooring.

Stake 17 by tent.

Tent should be slightly further west?.

Miss my Linty.

12:45 PM

Baskers - Climbed pole - took photo (500)

TS 72, 54, 11 and 10!

1:45 PM

Small turtle (5-10 lb) by boat.

Mottled around island observing turtles.

Saw TS 23, 72, 4(?) and 4 other S point
 S side on shallow reef area.

TS 70 off shore N side S point.

2:45 PM

TO

Round and Mullet -
 Mullet gone.

anchored off Round - $\frac{A}{4}$ $\frac{SA}{1}$ $\frac{P}{13}$

1 A ready to P(?).

2 A with with young pups.

Caught 2 ULVA on way back - Saved one specimen - 22".

- ↓ EAST 7-15-73
 6:15 PM Basking Turtles TS 22, 72^{SC}, 44^{SC}, 54^{SC}, 49^{SC}
- 9:15 PM Seals Tags SA906; SA1045
 Turtle up and in 1 pit, area 15.
- 10:15 PM TS 73^{SC} South side sand point, 1 pit and down.
 Turtle / some algae (CI680) sand point in
 1 pit - sprayed TS 75.
 area 15 turtle doing good, has TS, can't read.
 1 in out, area 8.
 area 6, TS 4(?) in 1 pit.
 2 in out area 6.
 1 in out area 4.
 1 up down area 3.
- 11:30 PM TS 74 area 3, inland, 1 pit.
 TS 71 (?) is area 15 turtle in 2nd pit -
 1st look very good (photo of Chan beside). 2nd right
 next to seal on beach veg. w/ bite. May be
- July 16, 1973 same seal as seen a while at beginning
 of study.
- 2:00 AM Caught 1 59" shark on hook w/ 1/4 head.
 Area 15 turtle down, total 2 pits.
 1 up down moderate cliff, area 12.
 1 up down area 9, 1 pit, right through junk
 and machinery on beach.
 TS 74 down - nested - 1 large pit.
 TS 73 moving south in water by shore - area 3. ^{coming} out area 4.
- 2:55 AM no sign of TS 73.
- 5:00 AM 1 in out area 1.
- 10:00 AM TO TERN

variant Montgomery -
 officer JARVIS -
 on East 1947

7-16
 4:15pm

To whale - Skate

movies taken.

	A	SA	P
Seals	40	11	13

Togs A-907, 922, 766 SA-1036, 1090

2 Adults to pup(?) - 1 Subadult w/ face bite

Turtles ♂ UNKNOWN

Bask 4 (1w/ neck tumor) 8

IW 1

Pits 8

2 updown tracks by tower - 2 pits.

1 set tracks - 3 pits.

2 Adult seals.

July 16,
 Tern

6:00pm

To East. Southerly swell and high tide create high surf. Water had been to fire place and entered tent whaler surging. Decision made to return to Tern - Essential items taken - Tent, sleeping bags, food moved to high ground.

Moved N side - talked to GG personnel.

1 pair Copulating turtles seen at 4:00pm - East

JUL 17

12:01am

end of Tern:
 Walked Tern beach - no sign of turtle activity.

9:00am

Swell and surf high - whaler o.k.
 cleaned room, straightened togs, etc.

Photos from P. Aldman of
EAST BEFORE CLEAN-UP

67

July 17

Give him ARB 7L info

Seal Tag compilation from 6-27 to day ^{Termination} - 7-18

<u>Date</u>	<u>Island</u>	<u>Type</u>	<u>TAG NO.</u>
6-28	W	A	(W) 794
6-28	W	A skull injury	212*
6-28	W	SA	915*
6-28	W	SA	1036*
6-28	E	A	(E) 451
7-2	W		757*
7-2	W		(W) 1036
7-2	W		1100*
7-3	E		923*
7-7	Trig	SA	971*
7-7	Ter	SA	(E) 923
7-7	W	A	(W) 798
7-7	W	SA	(W) 903*
7-7	W	SA	1032*
7-7	W	SA	(W) 915
7-10	Trig	A	(W) 794
7-10	Trig	A	785*
7-10	Trig	SA	(W) 1093
7-10	W	SA	914*
7-10	W	SA	(W) 1036
7-10	W	SA	1094*
7-10	W	SA	(W) 757
7-10	W	A	926*
7-10	E	A	(E) 786
7-10	E	SA	(E) 1045
7-11	E	A	(E) 786

July 17

Summary of ...

TAR no.	...	...	...
1038	W	...	...
1037	W	...	...
1036	W	...	...
1035	W	...	...
1034	W	...	...
1033	W	...	...
1032	W	...	...
1031	W	...	...
1030	W	...	...
1029	W	...	...
1028	W	...	...
1027	W	...	...
1026	W	...	...
1025	W	...	...
1024	W	...	...
1023	W	...	...
1022	W	...	...
1021	W	...	...
1020	W	...	...
1019	W	...	...
1018	W	...	...
1017	W	...	...
1016	W	...	...
1015	W	...	...
1014	W	...	...
1013	W	...	...
1012	W	...	...
1011	W	...	...
1010	W	...	...
1009	W	...	...
1008	W	...	...
1007	W	...	...
1006	W	...	...
1005	W	...	...
1004	W	...	...
1003	W	...	...
1002	W	...	...
1001	W	...	...
1000	W	...	...

<u>Date</u>	<u>Island</u>	<u>Type</u>	<u>Tag No.</u>
7-11	E	SA	954*
7-11	E	SA	(E) 1034
7-11	E	SA	1044*
7-12	W	A	920*
7-12	W	SA	(M) 754
7-12	W	SA	(W) 903
7-12	E	SA	(E) 954
7-12	E	SA	(W) 757
7-12	E	A	(E) 786
7-13	E	A	(E) 451
7-13	E	A	(E) 786
7-13	E	SA	(E) 1045
7-14	E	SA	(TRN) 923
7-15	E	SA	906*
7-15	E	SA	(E) 1045
7-16	W	A	(W) 907
7-16	W	A	922*
7-16	W	A	766*
7-16	W	SA	(W) 1036
7-16	W	SA	1090*
7-18	E	SA	(E) 1034
7-18	E	SA	(E) 1098
7-18	E	SA	956*
7-18	E	SA	(W) 915
7-18	E	A	(E) 786

JULY 17

NWS

12:00 Noon

Seas from the South (swell) 5' -
Hono caution for small boats -
normal seas 5' with East, NE 12-15kN

3:00 PM

Tern - 1 small turtle (5-10lb) IW E end N side
3 adult turtle IW E end S side.
3 A Seals, no tags.

It. caught same type of shark - 5' 2" 4-6 young
w/ cord connection - 1 in alcohol - cut out jaws.
 $\frac{1}{2}$ UVA(?) digested in stomach + 2 hooks w/ leader.

JULY 18

6:30 AM

To East by whale skate and around
round and Mullet - swell still apparent
outside, however good by this route.
hiked up gear and secured

9:00

Seals	A	SA	P
	17	4	13

1 adult to pup. SA - include 1034; 1098
Some still in $\frac{1}{2}$ A include - 786

of molt. Unknown whether A or SA - 956; 915

1 set tracks, area 16, 3 pits, 1 good
" " " , area 15, 1 pit, 1 pit in coke box

" " " , area 14,

" " " , area 12,

" " " , area 4,

" " " , area 5,

" " " , area 17,

IN out on S side of sand point

Sandpoint had water wash up almost completely.
 Returned via whale skate - swell not
 bad but not possible to put whale nose
 in on beach.

Hauled boat out at 3:00 PM after much
 trouble.

Checked Tern beach each night at 10:30-12:01,
 no signs of turtle activity.

Loam communications on 4.050 mhz night
 9.630 mhz day

Organization Manual approx. 125PP
 CG Horsta French Frigate Shoals
 Department of Transportation
 VSCG CG-3329 (Rev. 4-67)

page

67 (not to last page)

630 Vegetation

No person shall disturb, harm, kill, or
 remove any vegetation on any island in FFS
 without authorization from proper authority.

631 Visitors

1. Entry to all FFS is prohibited except
 by permit from the U.S. Dept of
 Interior, BSW. In addition, entry
 of Tern Island of FFS must also be
 approved by the Commander, 4th CGD.

(Visitors cont.)

5. Visitors on this station shall be accorded every possible courtesy subject to the above restrictions.

6-8 page (last page)

635 Wildlife

1. all wildlife on Tern Island and in the H I N W R are not to be disturbed, harassed, harmed, maimed, or killed in any manner by any individual without authorization by the proper authority.

2. Trespass on any of the other islands in FFS is prohibited without the authorization from proper authority except in emergency situations.

3. Fishing in any manner is prohibited in the U N W R.

4. Vehicles on Tern Island may not be operated on the beaches or in the vicinity of wildlife areas without the permission of the commanding officer.

WININGER

Pauley

Gay

Wilson

Maskee

Estrada

White

Loehrs

Denny

Thompson

Huser

Colley

Stokes

Hitt

AULTMAN

Rowland

Heiden

ABRAHAMSON

July 19

Return to Hono - full plane -
stopped at Barking Sands for refueling.

Total gasoline 435 gal
pints of oil 73

1974 estimate
700 gal
100 pints oil

From Dave -

Hatch on Tern July 26 -

50+ found on run way -

Some partially eaten by ghost crabs

September
4/73

Visited Kaneohe Marine Corp air
Station with Ralph Small. Photo taken
of Mokuau white sand beach -
many foot prints - life Guard tower -
beach vegetation - scaevola, beach
morning glory - tufts of bunch grass like
material. No evidence of nesting.
Lester saw turtles 1936 - Bose
started about 1938. Previously
horse ranch - some farmers
growing watermelons, etc. Very
little beach on East side
of peninsula.

LANAI SURVEY

Sept 7 Report from Honolulu for Lanai via Molokai
at 13:15 PM. 20mph trades - white caps -
some clouds - Lanai 3:55

9-8-73 Drove to Lapki 8:45 - stuck in sand.
11:20 Pohakuloa Pt.
narrow sand-red dirt beach with sand
dune vegetated cliffs. Fringing reef offshore
fairly shallow with dirty water.
Much Limu along beach - red, green,
sargassum, etc.
Less reef apparent after Pohakuloa Pt.
Awahua onward - some sandy coves, but
also steep bank with thick Keawe
vegetation in some places. Wind eroded soil,
also picks up sand.
Several small white with black spotted birds
seen on beach.
Some areas with beach and lava
rock at H₂O edge.
Lots of small drift wood, litter (plastic,
glass, wood from wrecks, etc.)
1:00 PM Nice sand cove with steep bank -
lava rock point on West end, thereafter frequent
lava rocks on beach.
1:10 Another sand cove w/ big lava rocks.
Small Frigate seen in the air!

Some plants ($\frac{1}{2}$ Flower) but seems like smoother leaves. - beach morning glory, koa haole.

Pohihua - about 10 yards wide at most places. Thick vegetation keawe and koa haole - lots of litter in veg. zone. Western end - lava rock again. 2 people on beach fishing. 2 dead small sharks on beach. 1 Ray caught. School of Akule seen off beach. 1 Turtle seen offshore (100lbs?+).

Robert - saw turtle at H₂O edge from boat last year.

Joe - remembers catching turtles on beach in 1920s.

→ Fisherman - saw seal at West end last year.

Kaupiki -

Seems to be some sentiment against taking turtles on Lanai due to Maui people coming over taking for commercial use.

Dove for bottles at Harbor.

9-9-73

Drove to Keomoku - went diving to reef - Robert saw one small turtle -

Dove at second location - no turtle.

Robert says that many turtles have been seen here. Talked to Elaine Kaupiki - her father dug for eggs and turned turtles at Pohihua about 1915-1920.

3:35 PM

Depart for HONO via Maui

TO TERN

Thursday
10-4-73

TO FAA Terminal - out on runway when flight canceled due to wet runway at Tern - Heavy rain - strong variable winds reported.

FRIDAY
10-5-73

TO FAA - Flight canceled again - low depression giving strong wind/rain west/south west direction

Thursday
10-11-73

Departed FAA terminal with John Wheeler at 8:15 AM - Refueled Kawai depart 9:30 AM some white caps - little overcast generally good ~~the~~ weather.

- Objectives -
- ① Censur bosky turtles going in.
 - ② Censur seals & turtles on as many islands as possible for several days.
 - ③ Make notes on Bird life.
 - ④ Locate nests - dig and count dead hatchlings and eggs.
 - ⑤ Make notes and record numbers of hatchlings on surface.
 - ⑥ Record tag numbers on seals and turtles.

Necker - North side 11:10 - 11:15 AM. 1 photo
Arrive ~ 11:45 AM
Plane departed 1:30 PM

Walked Tern - 3 pups North Cove, 1 adult South
Put motor on boat - made general repairs. Need shifter corrections ^{NO}

October 11, 73 By Air Census

	B. Turtle	Seal
Disappearing -	↑	42-50
Little GIN -		9
GIN -		12
Sand spits -		4
East -	N	16-19-24
Base -	NONE	
Round -		2?
Mullet -		gone
Whale-skate -		32
Trip -		50-55
Shank -	↓	19

FRIDAY

10-12-73

Launched boat -
TO whale-skate at 12:00 noon
Slight W SW swell.

	A	SA	P
Seal Count as follows	18	16	8

Some molting - SA - 757; A928

Fur looks dark - A A13

West shore eroded - apparently washed
by waves over past months.

Turtle pits all smoothed off -
very little pitting as last time.

Some vegetation may have washed away.

Birds:

Noddy chicks $\frac{1}{2}$ grown; Frigates almost all
grown; several Noddy eggs; No sootys;
 $\frac{1}{2}$ grown shearwaters; many blue face
boobies; plovers; Brown Boobies ??

cont.
10-12

Several Tropic bird chicks; USCGS marker
W side just before S end.

Photo of SA - fore healed. ^{same area} near ^{wamita} line.

TURTLES: 1 ♂ basker NW end - photos

NESTO

1 Nest found W side - S end
0 rotten 80 shells, 9 whole - photos

TRIG 1:45 PM

family calm
Seals - $\frac{A}{45}$ $\frac{SA}{.7}$ $\frac{PUPS}{1}$
molts noted

TAGS Adult 509; A903; A215

BIRDS: only 1 sooty tern - Blue face
boobies. Veg. very green and full.

1 ♀ turtle basker w/seals N side.
Small 2 carapace length.

SHARK - ~ 3:00 PM - one faint Turtle Track
Hard to get in - all sand -
concrete junk on N bay.

Seals $\frac{A}{16}$ $\frac{SA}{6}$ $\frac{PUPS}{5}$

adult TAG A795

Return - pull boat out 4:00 PM.

Tern -

1 SA N side - one faint Turtle Track

S beach -

Dug for egg shells - found 6 and 2 whole.
Report of 3 batches hatched since end July.

Tow Nest
↙

SATURDAY

10-13

To East - Motor missing -

10:00 AM

- Sand point changed about $\frac{1}{2}$ gone. Few birds - some noddy terns w/ chicks - eggs. Red foot Bobby w/ chicks - Shearwaters w/ chicks -

Seals	A	SA	P
	9	11	1

TAG(SA) A1098; A775 dug in; molts

2 small (~20lb) in water

Fresh digging area 10 (7-10 days) - hit ground wire.
Digging by pole N side.

Nest 1
29" to bottom area 1

8 eggs not hatched
1 white deformed embryo
2 hatched rotten dead
5 dead not rotten
44 Live

Released 11:30 AM area 1 South Side. all moved in West direction along shore.
Hatchlings appear emaciated. Very doubtful in any would have made it to surface.

NEST 2

area 3 1 live at top - left alone - marked to check at a latter date.

Turtle pits all fairly leveled out - veg green - mostly tubulars.

FIRST TIME TO → KIHULO

	TAG NO.	C.L.	C.W.
5-9-73 7:20 AM HIMB	601	14 $\frac{3}{4}$ IN 37.5	12 $\frac{1}{4}$ " 31.1
from Sand Island - released from Valiant Maid on 5-10 near Koko			
5-10-73	(VIA AIRLINE) 5:00 PM Hauaunna Bay left for Kamehameha - took BIK & WHT photos of Molokai, Lanai AT KAWAII HAF		
5-12-73	AM Checked net in evening - nothing. Moved net further south of harbor - Turtle in Harbor Went hunting on Mouna Kea.		
5-13-73	Checked net AM - 1 spotted mantaray. ^{EMERALD RAY?} Caught turtle near harbor entrance by hand. Died at 11:00 PM - Sick. Dissected, photographed - Salted head, ^{C.L.} 17 lb, ^{C.W.} 15 $\frac{3}{4}$ 40.0 12 $\frac{1}{4}$ 1-front 1-rear flipper.		
① 5-14-73	Kiholo 602	STRAIGHT CARAPACE LENGTH 20 $\frac{5}{8}$ (52.1cm)	STRAIGHT WIDTH 15 $\frac{15}{16}$
② 7-8 AM	603	16 $\frac{1}{2}$ (41.9cm)	12 $\frac{3}{4}$
③ (recaptured)	604	18 (45.7cm)	14 $\frac{1}{8}$
④	605	24 (66.0cm)	20 $\frac{5}{16}$
	606 no TAG work		
⑤ 2:00 PM	607	18 $\frac{3}{4}$ (47.6cm)	15 $\frac{1}{8}$
		19 $\frac{9}{14}$ (49.7cm)	16 $\frac{1}{2}$
⑥	608		

- Green shell
 ③ alge or 609 $14\frac{1}{16}$ (37.3cm) $12\frac{5}{8}$
- ③ Light Brown 610 $16\frac{7}{8}$ (42.9cm) $13\frac{7}{16}$
- ③ Blind in left eye 611 Dark
 Has mouth will bite $16\frac{1}{4}$ (41.3cm) $13\frac{1}{8}$
 7:00 PM ↑
- 604 caught again
- ⑩ 612 $18\frac{3}{4}$ (47.6cm) $13\frac{7}{8}$
- 613 no work
- ⑪ ~~613~~ 614 - $24\frac{7}{8}$ (63.2cm) $19\frac{3}{4}$
- ⑫ ~~615~~ 615 - $19\frac{7}{8}$ (50.5cm) $15\frac{3}{4}$
 5-15-73
 7:30 AM
- ⑬ 616 - $25\frac{1}{4}$ (64.1cm) $18\frac{7}{8}$
- ⑭ 617 $19\frac{9}{16}$ (44.6cm) $14\frac{1}{2}$
- ⑮ 618 - $17\frac{1}{8}$ (43.5cm) $15\frac{3}{16}$


water samples taken - 1 surface 7 pp/1000 ⁸⁻³⁻⁷³ warm
 1 - 8-ft. low tide 28 pp/1000

Gill net -
 Mullet - 5 oca - 1
 moi - 2 Lar - 4
 aholebe - 3 mantled sting 1
 Squid - 2
 menpotehi - 1
 wechi - 1
 papio 9

P.M. - Powered to
 Keahou

5-16-73 Talked to Bob ^{Lesely} ~~Stacy~~ (M)
 about commercial fishing - turtles -
 ? - (red turtles) - Leather boots attached
 to floats. Whales too. to boat.
 Returned on aloha via Maui to Hono
 at 11:00 AM.
 Turtles at Honouua, Kealahoua -
Koloa - Molokai

5-30-73 Green Turtles caught in Kaneohe Bay -
 Dissected - Kim Hollander
weight straight C.L. straight C.W.

48 lb		21 ³ / ₄ "	17 ¹ / ₄ "
20 lb		17 ¹ / ₄ "	13 ¹⁵ / ₁₆ "

Intestines and stomach packed with
 lime. Body fat samples taken.

David Hoshimoto has one of these shells

SAT-
10-B
CONTNEST 3- area 6
34 dead-rotten

2 eggs no development

1 barely alive in shell-

Held for short time till eyes open then released.

NEST 4 - area 1

17 dead-rotten

2 eggs no develop

NEST 5

2 live released - appear very healthy.

Marked nest with stake to check another day. Area 6

4:00PM Returned to Tern via Round-
Blue face boobies on Round + ~5 seals

2 PUPS ON TERN N gave

PARTS needed for whaler -

1. Shorten sling 1 1/2' - 2' each strap.

2. Plastic insert for throttle control.

3. Steering cable (bad joint).

4. Extra spark plugs (#

5. spark plug wrench?

6. Gas lines extra

7. Insert for drain

8. Small spare motor

9. Good life preservers

⑩ Gas Can

⑪ mixing container

⑫ Prop

⑬ mooring line

10-14-73

SUNDAY

To Little Gin 11:10 - IN Transit 1h 10m
Blue face and Brown(?) Boobies

cont.
10-14

Seals $\begin{matrix} A \\ 9 \end{matrix}$ | $\begin{matrix} SA \\ 7 \end{matrix}$ | $\begin{matrix} P \\ 0 \end{matrix}$
 Faint Turtle Tracks - 17 pits visible
NEST 6

'Rock' mark by large hole -
 28" dug down - 14 in original complement - photo
 42 LIVE
 White sand 29 NO DEVELOPMENT
 14 Dead Embryos - latter stages

38 ^{12:30 PM} released west cove - all swan out

Abnormal ^{laminar} plate counts - 4 held - 1 1/2 fore flaps
 3 lots of yolk.



Many hatchlings down deep -
 doubtful if would have
 made it to surface in
 unaided.

	central	laterals	sides
	5	5	4
	4	5	4
	6	5	4
	5	5	6
	5	4	5
	6	4	4
	6	6	5

Normal:
 centrals - 5
 laterals 4

GIN 1:15 PM sand spit on sand. Hard to get in.
 BF: B Boobies Seals A SA P
 TAGS (SA) 2 8 1
 A916; A768; A958
 1091

No Turtle pits visible however fresh tracks (basher?)
 1 small turtle seen ⁱⁿ ~ 10 lbs.

EAST 2:00 PM 2 small turtles seen ^{20-40 lbs} IW

Seals $\begin{matrix} A \\ 7 \end{matrix}$ | $\begin{matrix} SA \\ 10 \end{matrix}$ | $\begin{matrix} P \\ 6 \end{matrix}$ (pups w/ green algae already?)
 TAG (SA) A954; A775; A754

area 8 40⁰⁰ - all by same turtle
 fresh pits dug last night. 1 looks
 complete - tracks look narrow - $35\frac{1}{2}$ "
 one bigger turtle NW by boat - sex? Could
 be reproductive size.

Nest 2 revisited, area 3 / on top gone

Dug down to cluster - complement - 10 indiv.

Total 24 live 28-30"

Some deep - may not
 have made it. 2 no developed

only 30-35 shells apparent.

Released 3:45 South side - animals swam
 both directions along shoreline - followed
 and seen in water. Several fish came
 out as if to bite at animals. Lots of
 Frigates on island but none seen to
 attack. Hatchling moving as fast as slowly
 walked. at each breath, animal may have seen me -
 appeared to dive down a bit. black heads
 easy to see.

Whale - Skate 4:30 PM

1 small turtle IW West shore 20-30 lbs

Seals $\frac{A}{15}$ $\frac{SA}{18}$ $\frac{P}{9}$

Toqs adult 4926; SubA 909; 1032; 1029
 Hard to tell SA from P - lips may be green already.
 seals dug in sand frequently.

Lots of Frigates almost grown.

* Report that large turtle came up on beach at night
 one week ago.

Photograph
 turtle for ID?

If it doesn't INVOLVE SEAL OR TURTLES -
It can probably be done elsewhere.
* - aid hatchlings getting out of nest.

c.g. * Handling large turtle.
* Tracks on beach.

MONDAY 10-15 11:00 AM
TO EAST via Round with ET Gay Lochrs
Survey Reefs from boat.

	A	SA	P
Seals	12	12	3

TAGS (SA) A1045; 775; A754; 1098; A787

Marked area 8 nest that was laid last night -
dove 4 iron stakes into ground.

NEST 8 area 6 revisited - one found
dead on surface upside down - eyes gone
and embelical scar peck? gone.

Excavated - 8-10 in first compliment.

Total 53 LIVE (Includes 2 previously)
9 DEAD

6 No development

A shovel deep ^{28"-29"} to blade-organic line 19"
Many large coral pieces and shell in
nest. Some hatchlings under these. Sand
hard and hatchlings in tight.

Released at 1:15 PM South Side of log
outfall - In water at time of release.
Current flowing west - swam with
turtles. Fish & some large - appear
uninterested. Breathe (or look around)
about every 6-10 seconds. Easy to
spot in water from top because they
are so black. Swam up to and I
caught two - they made no effort to

* - Include small shark catch program in next season's study.

10-15 -73

Gary states he saw plover pecking and throwing hatchling in the air.

get away. went limp for a few seconds after letting go. Current carried them way down and across to other side of the sand point - lost sight of them. ^{John reported turnstones going for several hatchlings that came back to beach.} To whale-skate 2:45

Fecal Sample TAKEN	A	SA	PUP
SEALS	12	21	5
TAGS (A)	907; 914; 795	(SA)	A1048

NEST 7

South west side

15 dead rotten

7 EGG No development

4 dead embryos

1 fairly fresh hatchling - eyes out - found in crab hole.

One that look like, adult seen ⁱⁿ Whale-skate Cove. Tumor Neck ♂ ^{Basber} ^{NE Shore} seen on East side - Photo ^{almost same location as post summer} seems like ^{same} place seen post summer.

TRIG	4:45	A	SA	P
Seals		37	4	1
TAG (SA)		A975; A769		

will bite turtle

Male Basber TAG ^{photo} Howo 747 turned

Straight	Width	25 5/8
"	Length	32 1/2
Curved	Width	34 1/2
"	Length	34

Hard point or end of tail

* No egg ever found which was alive and still developing.

Mon. 10-15 Trig cont. 2nd ♂ Basher also on N side -
 No tag - left alone, looks almost like
 2 Bannipiles on right side. (Subsequently tagged
 same one seen on W side several days ago - not sure
 CI683)

Tuesday 10-16 lightning and thunder last night - some rain.
 AM 11:00 Smooth Seas - light South west wind

Round
 Seals $\frac{A}{4}$ $\frac{SA}{4}$ $\frac{P}{1}$

TAG (SA) A754

11:30 AM East Diving at North East end.

Lots of fish - not much live coral -

Surveyed East Reef from boat.

one large female ^{Turtle} seen FW by NW Reef.

Steel track in water just east of engine block (a small Cat tractor).

Turnstones and plovers peck on dead bird carcass, also kitchen waste (fat).

Two ^{small} turtles seen in water.

Seals $\frac{A}{8}$ $\frac{SA}{11}$ $\frac{P}{1}$

TAGS (SA) 1034; 1098

young blue face - 3 people score ^{seals} more than 2??

NEST 8 area 6 near Nest 5

28"-30" to bottom

21 EGGS NO DEVELOP.

1 PARTIAL DEVELOP

14 hatched - dead rotten

In all nests - many egg shells found in layer at very bottom of nest.

green

(P) previously observed
 = during summer
 investigation

Seal Tag Summary Oct. 1 - 17
 [Denoting specific observations]

IS Abbreviations

(E) = previously
 observed upon
 during present invest.

Date	Island	Type	Tag No.
10-12	WS	SA	P 757*
12	WS	SA	928*-
12	WS	A	A13*-
12	Tr	A	509*-
12	Tr	A	P A903*
12	Tr	A	A215*-
12	S	A	A795*-
10-13	E	SA	P A1098*
13	E	SA	A775*-
10-14	G	SA	A916*-
10-14	G	SA	A768*-
14	G	SA	P A958*
14	G	SA	1091*-
14	E	SA	P A954*
14	E	SA	(E) A775—
14	E	SA	P A754*
14	WS	A	P A926*
14	WS	SA	909*-
14	WS	SA	P 1032*
14	WS	SA	1029*-
10-15	E	SA	P A1045*
15	E	SA	(E) 775—
15	E	SA	(E) A754—
15	E	SA	(E) 1098—
15	E	SA	787*-
15	WS	A	P 907*
15	WS	A	(P) 914*
15	WS	A	(E) 795—
15	WS	SA	A1048*-

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organize TAG data
after ARB - Birds FFS
or Pritchard
HARB Journal

Seal Tag Summary Oct 11-17th

Date	Island	Type	Tag NO.
10-15	Tr	SA	A0975*
15	Tr	SA	A769*-
10-16	R	SA	(F) A754 —
16	E	SA	(P) 1034*
16	E	SA	(E) 1098 —
16	E	SA	902*
16	Tr	A	A19*

Baskers - Turtle TAG Summary Oct 11-17th

Date	No. & sex	Area	Island	TAG
10-12	1 ♂ Adult	NW	WS	NONE apparent
10-12	1 ♀ Small 26 [±] ?	N	TRig	NONE apparent
10-15	1 ♂ Neck Tumor	NE	WS	NONE apparent
10-15	1 ♂ Measured	N	TRig	His Wild Horns 747 SL 32 1/2 CL 34 SW 25 5/8 CW 34
10-15	1 ♂ 2 Barnacles	N	TRig	new CI 699 NONE came off
10-16	1 ♀ Measured	NW	WS	CI 679 Wild Horns 764 SL 34 3/4 CL 34 SW 26 3/8 CW 34
10-16	1 ♂ 2 Barnacles	N	TRig	CI 683 NEW
10-16	1 ♂ Adult	N	TRig	NONE apparent
10-16	1 ♂ Adult	N	TRig	None apparent

IW Summary Oct 11-17th

10-13	2 small 20lb?	N	East
10-14	1 small 10lb?	W	GIN
10-14	2 small 20lb	-	East
10-14	1 adult sex unknown	N	East
10-14	1 small 20lb-30lb?	W	WS
10-15	1 adult sex unknown	W	WS
10-15	1 small	S	TERN
10-16	adult ♀	NW	East
10-16	2 small 20lb	N	East

Tuesday
10-16

EAST cont.

NEST 9 area 6 ~ 10 feet from nest 8
shallower - less distance to sand line.
Shell started about 14-21 ". 4 Live - Toward ^{bottom}

3 released 1:15 PM SW end.

no current today - swam out.

one too weak saved.

10 ~~No~~ DEVELOP.
8 partially ^{dead} Develop.
2 whole hatched rotten
(these patchy appeared)
(larger than others)

NEST 10

By whaler area 15
mooring - not much
organic matter - mostly sand. - Not quite as
deep as other nests.

(None of live ones would have
made it - stuck in sand.
(5 dead when arriving at NS))

10 Live (very weak)

1 Egg NO DEVELOP.

14 Dead Rotten

7 Red foot boobie chicks in bushes on East.

4 Sooty Terns in air - Lots of Frigate on East

WHALE - Skate 3:30 PM

Stopped at barge - many small fish schools.

Seals

A
18SA
24P
4

(female) TAG (SA) 902

female ♀ busher NW shore turned

Tag already present U.S. Wilb. Hono 464

almost bent off - removed

CI 699 CI 679

Straight Length - $34\frac{3}{4}$ " Width $26\frac{7}{8}$

Curved length - couldn't get -

" width $34\frac{1}{2}$

NEST 11 SW shore - sand nest - very little organic

^{3/4} 45 21" deep
 5 Dead hatched complete rotten
 14 Live (vigorous) released SW shore ^W/₅ east -
 3 Partial devel swam out 4:45 PM
 3 No devel

photo's before & After

TRIG 5:30 PM

	A	SA	P
Seals	37	9	1

JAG(A) A19
 Subadult with Face bite seen - also SA with flipper ^{photo}
 USCGS marker west Trig

3 Male ^{adult} boskers along N shore - one with
 2 barnacles on right side of carapace.
 Right flipper CI 683 - did not turn.
 2 dead partly eaten hatchlings found.

Last night

* Rain seemed to have assisted in the
 location of nests today - possibly several
 hatched out after the rain because
 pock mark and little digging area was
 found. on one occasion bird foot
 print were found on this spot.

10:00 PM Released 3 hatchlings at Tern beach
 save 2 - Anzels - not affected by light
 crawled into light surf.

* small nests - hatched
 found pointing straight up. Leads were

Hotchly found by boat house 9:00 a.m.
saved with other 2.

93

10-17

Bulays - 4B 7Lunch 6Dinner

wheeler - 5B 7Lunch 6Dinner

50.25 Total

Lt. Ramsey - Replaced Miner and Shaw.

Depart FFS for Hono 1:30 P.M.

check into State F&G Tour of Kure Is.

*Propose study for January - Investigate possible funding for FFS work.

Green in Sand?

Algae of seal fur? many days at sea?

arrive Hono 4:30 P.M. - picked up by Randy.

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Summary
 Due to decomposition, separation into many pieces, - no. of egg shells present
 could not be accurately determined.

assume

eggs laid.

<u>NEST NO.</u>	<u>Loc.</u>	<u>Area</u>	<u>NO DEVEL.</u>	<u>DEAD PARTIAL EMBRYO</u>	<u>Hatched wt DEAD</u>	<u>LIVE</u>
0	WS'	SWshore	9	0	0	0
1	EAST	A1	8	1	7	44
2	EAST	A3	2	0	0	24
3	EAST	A6	2	0	34	1
4	EAST	A1	2	0	17	0
5	EAST	A6	6	0	9	53
6	LGIN'	SEshore	29	14	0	42
7	WS'	SWshore	7	4	15	0
8	EAST	A6	21	1	14	0
9	EAST	A6	10	8	2	4
10	EAST	A15	1	0	14	10
11	WS'	SWshore	3	3	5	14

♂ F₁W

747 June 14, 1968 East

Oct 1973

SL

32

Trig

SW 27

CL

34½

CW 34

(32½) (25½)
(34½) (34)

all buried deep - appear weak
no initial compliment.

♀ F₁W 464 ~~March~~ March 16, 1967 Trig

CL 34½

CW 31¾

(CL missing)

(34½)

11 in original compliment - cluster ✓
many others deep

live found at very bottom -
weak

8-10 first compliment ✓
around in tight and deep

14 close to surface in original compliment. ✓
many scattered deep - doubtful if would have made it.

at bottom - may have been larger.

very weak - 5 died in 1 hour

deep but vigorous ^{some} may have
hatched (emerged) last night. photos before and after.

3/10/74 Sunday - Surveyed Kaneohe Bay - Chiraman's Hat - collected algae - saw Carl Glerum - turtle fishermen - Ching, Skipper (Hugh) - Go out ~ 3:00 PM - set net North side of sand Island, More turtles in Bay during Fall? Ralph Bower's friend reported seeing 15-20 ~ 5/16 turtles by Chiraman's Hat - also ^{Jerry} McTool report second haul "flotilla" off Lanikai?

4/18/74 Depart Hono 8:30 AM FAA for FFS - oil slick in P.H. seen.
9:15 AM Laid Kawaii - Nihoa - sand beaches - West, also N and E

Raymond Erikson new man FFS

Depart FFS - 1:25 PM or 1 page per animal?
* Note - Use cards for recording each turtle.
Dead turtles → freeze. ^{write to co - send literature} also weather data
Two boobies seen on Tern South last wk
Tern colony on Tern SE end - many eggs.
Dense vegetation - looks like much rain.
Names - addresses of Wake, Kure, Midway
Loran Station people. Eastern Marshalls?
Map of Pacific - Nat. Geo.
End of East - more of a sand spit.
West end looks normal.

Disappearing - small color

Many photos of Disappearing, GIN - L.GIN, East,
Whale Skate & Trig -

Mullet - small strip -

Round - Fog missing?

~ 11:45 AM

Basking ^{Thursday} April 18, 1974
Turtles

Seals

Disappearing	None observed 0	31
Sand Spits	?	?
Little GIN	3	30
GIN	2	
East	8	23
Round	2 NOT observable	~ 8
Mullet	2 NOT observable	~ 3
Whale Skate	6	10
Trig	6	11
Shark	NOT counted	NOT counted
Tern	0	33 ^{2. 1 year} Adult prog.
Total	25	119

Several turtles seen to be males - however difficult to identify.

Build gray dodger for whaler?
Button wood offshore.

Recharge Fire
extinguisher.

Two subadults - ? yearling pup seen on Tern in
Good conformation. Albatross on Tern w/
Large chick w/down - several black foot
Albatross - some water dances.

Fairy Tern (220 total) Several Tropic -
Wedge Tail Shear water now ^{coming} in.

Red foot boobies in Meserschmidt on W. end.

Black Foot Albatross (?) colony on
Little Gin.

Make copies of slides for pilots - OK.

Return Hono 5:00 PM - Left engine
out 15 miles before arrival.

Long nails on FFS males?

♂ flatter - difference conformation or color?
Differences in nesting and basking preferences?

Return from FFS with gas lines; wind
shield; cement block; check drain insert
check tool inventory; Battery; Terminals -
Wood supply

5/2/74 May 2, Thursday Depart FAA w/Palmer FFS.
100PM Circled Lehua Rock (Photo B/k & wt)
after barking sands take-off.

Marion David } pilots
Tom ~~_____~~
Rose

Hiatl

11:35 AM NECKER

5-2-74

	in ^{BASKING} Turtles	Seals
Disappearing	0	27
Little Gin	3	
Gin	8 few in H ₂ O	
East	25 few in H ₂ O	
Reveret-Mullet	2	
Whale Skate	13 many in H ₂ O	
Trig	9 few in H ₂ O	
Shark	0	
Tern	0	3-SA

(clusters) Groups of turtles congregated around favorite basking areas on East, Whale Skate, Trig - I.W. appeared to be copulating. why these specific sites? Letter to Rollison about project, Monk seals. _{proposal.} at Kapahulu

1 anchor - but no chain or line. Need stern anchor
 Need spark plug wrench. - Molding for sub rail?
 extra spark plugs - ROTAR cap?
 cable around cinder blocks? shackles?
 Salt Squid.

Local Conservation groups for low level funds?
 Gloves. USBFW Tags and Pliers.
 outboard motor oil - gasoline

5/9/74

John W. Caught Turtle off Hono Harbor -
 tag ^{HIMP} 713 CL-20³/₄ | SL-19³/₄ growth on right eye
 CW-18⁷/₈ | SW-16¹/₄

Released few days later

Palmer aerial recon 5/16/74

Turtles

Disappearing	0
Little Gin	2
Gin	3
Fast	38
Whale-Skate	26
Tig	8
Shark	17 ←
Tern	3 North side by steel abutments

seal census
not communicated

97 Total

19 May 1300hr ~ 200 lb? 350 lb? Turtle found on Alakoa Beach
by Sgs. Clark and Simpson - neck bones
shiny - tail post carapace 10".
Visited dump - already buried Pfc. Osborn
also observed. Shell cracked at back,
decomposed

KM CAS

43

26

28

Depart Hono 5/30/74 with Coconut Tree for Tern Is. after
unsuccessful try on 5/23/74 (0830).

Note: Effect of Seal activity on Turtle pits - tracks in report.
Pit markers.

Photos from Dave - copulating, bite at L. Gin, 3 flippers missing.
Sand point description in report. also periodic
surveys with changes in topography.

Sierra Club woman about turtles at Ni'ihau
Litter on beaches - plb. Emergence before darkness plb.
BK & white of nesting are T&Ib. Bird species and abundance
by Island - Effect of turtles on birds.
Write to Barking land people.

* Element for glass bowl

Proportion of ♂ to ♀ boskers - 1973 report

Left Barking lands late - 9:55 AM -

Note: Late ♀ arrivals not fertilized(?) therefore non-fertile clutches during subsequent season?

FFS ↔ Necker ↔ Johnson

shallow area off Necker?

Disappearing
sand spitTurtles

0

2

2

Seals

41 (1 tuna)

> 14

Gin
sand spits

16

2

East

24

47

Round

0

should have
good photos

> 25

Mullet

3

Whale-shake

17

30

Trig

2

13

Shark

0 ←

21

Tern

0

3

68

Boskers congregated at favorite areas -
 Not much copulation observable such as during
 5/2 recon.

73 reports suggests that multiple island nestings
 occurs - (?) or doesn't occur (?).

P. 102 - 104 BLANK

G. BALAZS

August 21, 2019

J SCANNED
THIS BOOK

1/10/75

Sea Life Park
Toggling

Previous Record
TAKEN 12/6/73

105

Need photos
of photos

EXISTING TAG NO.	NEW TAG NOS	SPECIES	SEX	STRAIGHT	CURVED	SEX	INJUR- ABNOR-
870, 871		G		20 ⁵ / ₈ 16 ³ / ₄	21 ³ / ₄ , 19 ⁵ / ₈		
872, 873		"		23 ¹ / ₄ , 18 ¹ / ₄	24 ¹ / ₂ , 22		
874, 875		"		19 ¹ / ₈ , 15 ¹ / ₂	20, 17 ³ / ₄		
876, 877		"		17 ⁵ / ₈ , 14	18 ¹ / ₂ , 16 ¹ / ₂		
878, 879		"		22 ¹ / ₂ , 17 ³ / ₄	23 ⁵ / ₈ , 20 ¹ / ₄		
880, 881		"		21 ¹ / ₂ , 18 ¹ / ₄	22, 20 ³ / ₄		
882, 883		"		19 ¹ / ₄ , 15 ¹ / ₂	20, 18		
884, 885		"		23 ³ / ₈ , 18 ³ / ₄	24 ¹ / ₂ , 21 ³ / ₄		
— all the above were released - Makai Pier							
886, 887		"		27, 21 ¹ / ₂	28 ¹ / ₂ , 25	♀	4 inch tail
888, 889		"		28 ¹ / ₄ , 22 ⁵ / ₈	29 ¹ / ₄ , 26 ³ / ₄		Black w/ new growth ring
890, 891		"		24, 19 ³ / ₈	25 ¹ / ₄ , 22 ³ / ₄		
892, 893		"		27 ¹ / ₄ , 21	28 ³ / ₄ , 26		
894,		"		18, 14 ³ / ₄	19, 17		
895,	684	"		37 ¹ / ₂ , 29 ³ / ₄	39 ¹ / ₂ , 36	♀	fleshy shell
897	687	"		32 ³ / ₄ , 26 ¹ / ₄	34 ¹ / ₄ , 30 ⁷ / ₈	♂	tail 11 ¹ / ₂
898	699	"		34 ¹ / ₈ , 27	35 ¹ / ₂ , 32 ¹ / ₄	♀	1.5 inch tail
899 913 ^F	Not on log good as should be	"		38 ¹ / ₄ , 30 ³ / ₄	40, 37 ¹ / ₂	♀	2 small tumor under tail
899, 900		"		36 ¹ / ₂ , 29 ³ / ₄	38, 34 ¹ / ₂	♀	fleshy shell
901, 902		"	2	25, 19 ⁵ / ₈	26 ¹ / ₄ , 22 ¹ / ₂		
903, 904		"		24 ¹ / ₂ , 19 ³ / ₄	25 ¹ / ₂ , 23 ¹ / ₂		fleshy shell
905, 906		"		30 ³ / ₄ , 23 ¹ / ₂	32 ¹ / ₄ , 29	♂	fleshy shell 10 ¹ / ₂ inch tail
907, 908		"		31, 23 ¹ / ₂	32 ¹ / ₂ , 27 ¹ / ₂		
909, 910	695	"		32 ⁵ / ₈ , 25 ⁵ / ₈	34, 29 ¹ / ₄		
910, 911	695	"	1	34 ¹ / ₈ , 26 ³ / ₄	36 ¹ / ₄ , 37	♀	
912, 913	NO TAG	"		42, 32 ¹ / ₂	43 ¹ / ₂ , 39 ¹ / ₂		longest hind 1/2 right gone

TAKE 12/17
6:30
10/11

Topping

10/11



DATE	TIME	LOCATION	DEPTH	TEMP	WIND	WAVE	SEA	REMARKS
10/11	06:30	...	...	...	...	...	...	...
10/11	07:00	...	...	...	...	...	...	...
10/11	07:30	...	...	...	...	...	...	...
10/11	08:00	...	...	...	...	...	...	...
10/11	08:30	...	...	...	...	...	...	...
10/11	09:00	...	...	...	...	...	...	...
10/11	09:30	...	...	...	...	...	...	...
10/11	10:00	...	...	...	...	...	...	...
10/11	10:30	...	...	...	...	...	...	...
10/11	11:00	...	...	...	...	...	...	...
10/11	11:30	...	...	...	...	...	...	...
10/11	12:00	...	...	...	...	...	...	...
10/11	12:30	...	...	...	...	...	...	...
10/11	13:00	...	...	...	...	...	...	...
10/11	13:30	...	...	...	...	...	...	...
10/11	14:00	...	...	...	...	...	...	...
10/11	14:30	...	...	...	...	...	...	...
10/11	15:00	...	...	...	...	...	...	...
10/11	15:30	...	...	...	...	...	...	...
10/11	16:00	...	...	...	...	...	...	...
10/11	16:30	...	...	...	...	...	...	...
10/11	17:00	...	...	...	...	...	...	...
10/11	17:30	...	...	...	...	...	...	...
10/11	18:00	...	...	...	...	...	...	...
10/11	18:30	...	...	...	...	...	...	...
10/11	19:00	...	...	...	...	...	...	...
10/11	19:30	...	...	...	...	...	...	...
10/11	20:00	...	...	...	...	...	...	...
10/11	20:30	...	...	...	...	...	...	...
10/11	21:00	...	...	...	...	...	...	...
10/11	21:30	...	...	...	...	...	...	...
10/11	22:00	...	...	...	...	...	...	...
10/11	22:30	...	...	...	...	...	...	...
10/11	23:00	...	...	...	...	...	...	...
10/11	23:30	...	...	...	...	...	...	...

All the above were taken at the same time

* Being monitored
By State Dept Health

Existing TAG NO.	NEW TAG NOS	SPECIES	outflow from tanks		SEX	ABNOR INJ -
			Straight	Curved		

914 ~~✓~~

33 1/2 25 5/8 34 3/4 29 1/2

NO TAG

Hawk

34, 27 1/4 35 1/2, 33

Bad tags - 896 and 912

686 and 700 - on pond bottom - corroded off

* JANUARY 20 - 1975 WAIKIKI AQUARIUM TURTLES

NUMBER	Species	Straight	Curved	Sex	ABNOR- INJURIES
8X	G	25 1/2 x 20 1/2		Tail Length 3" M	
(?)	G	28 1/2 x 23			
1X	G	27 1/2 x 23		5 1/2" M	
31X	G	31 1/4 x 24 3/8			
3X	Hawk	27 x 19 1/2			Left side indented
3X	G	34 1/2 x 24 3/4		10 1/2" M	
28X	G	31 1/2 x 24 1/2		10" M	
-	Hawk	21 5/8 x 16 1/8			
27X	G	30 7/8 x 25 1/4			
34X	G	29 1/4 x 24 1/8			
-	G - Benedict	14 1/4 x 11 3/4			
-	G - Benedict	17 1/4 x 14 1/4			

Mostly Squid diet for all turtles.

Two Hawks from HIMB not measured - taken out for lesion treatment.

First time?

Two Loggerhead recently engaged in mating (?) activity. (not measured)

Large deformed shell Hawk not measured.

Eggs that were dropped previous years by greens only occurred at night.

Spoke with Tinker by telephone - he believes two types of greens are present - however, his description mostly

seemed to be based on color, and indentation above neck in shell, and shape of shell - oval vs round.

approx 10 years ago I he got coll from god visited Fish Market - evacuated ~ 60/6 turtle, live, regurgitated part of spiny lobster, tentatively identified as Loggerhead - not positive. He speculated that 1) Ship dumped it overboard 2) Currents carried it here.

Ridley (?) story narrated by Jack Brock (quit ~ 1 year ago) Inframarginals were right number w/ pores - Brought ^{dead} in 1971-1973 by fisherman off big sampan - believed to have been taken far out. Shell found and given to me for I.D.

Thickness - (subject to dry deformities) - 7"
 Straight length and width - 21" x 20 3/4"
 Curved " " - 22 1/2" x 25" wide

Weight (vertebral column missing) -

Photos w/ ruler

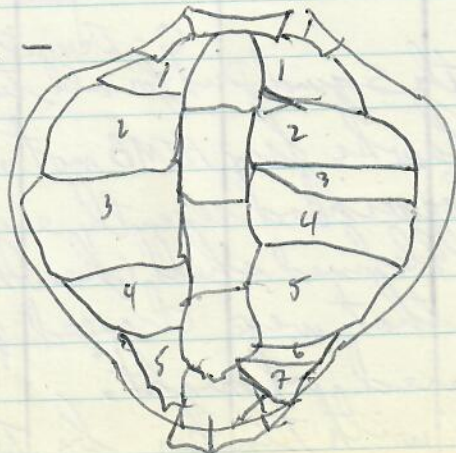
no. marginals - left - 12 right - 13 (1st split)

no. laterals - left - 5 right - 7

no. centrals - 5

2 - posts 1 pre central

Line Diagram -



Sea Gipe Park 3/6/75
- To check condition of logs, however,
copulation (?) attempt to mount noted
early that morning. Deferred draining tank.

	<u>East - TOTAL NO.</u>	<u>Number Successful</u>	<u>Number Newly observed</u>
6/3-6/4 |||| 1973	5	0	|||| 5
6/4-6/5 ||||	5	|||| 4	|| 2
6/5-6/6 ||	2	0	|| 2
6/6-6/7 ||||	3	① 1	0
6/7-6/8 |||	3	|| 2	||| 3
6/8-6/9 |||	3	1 1	||| 3
6/9-6/10 ||	2	|| 2	|| 2
6/10-6/11 ||	2	0	0
6/11-6/12 ||||	4	|| 2	|||| 4
6/12-6/13 ||	2	0	0
6/13-6/14 |||	3	0	|| 2
6/14-6/15 ||||	5	1 1	||| 3
6/15-6/16 ||||	4	1 1	|| 2
6/16-6/17 ||||	6	1 1	|||| 4

TOTAL
14 days - 32

PAGES 110-111 + 115, 116, 117, 119 & 120

	TOTAL	Successful	new
6/17-6/18	9	1	1
6/18-6/19	7	2	0
6/19-6/20	7	1	1
6/20-6/21	8	0	1
6/21-6/22	5	1	1
6/22-6/23	5	1	1
6/23-6/24	5	0	0
6/24-6/25	2	0	0
6/25-6/26	4	2	1
6/26-6/27	4	2	0
6/27-6/28	5	0	4
6/28-6/29	1	0	0
6/29-6/30	5	2	0
6/30-7/1	4	3	1
7/1-7/2	4	1	1
7/2-7/3	3	0	0

BLANK

DATE	TOTAL	SUCCESSFUL	NEW
7/3-7/4 IIII	6	II 2	I 1
7/4-7/5 III IIII	9	III 3	II 2
7/5-7/6 III	5	I 1	0
7/6-7/7 III	5	I 1	0
7/7-7/8 III II	7	III 3	I 1
7/8-7/9 III I	6	II 2	I 1
7/9-7/10 IIII	4	II 2	I 1
7/10-7/11 III	3	I 1	0
7/11-7/12 IIII	4	III 3	0
7/12-7/13 III	3	I 1	0
7/13-7/14 III 3	3	I 1	I 1
7/14-7/15 III 3	3	I 1	I 1
7/15-7/16 III 3	3	I 1	0

~~43 DAYS~~

TOTAL-

Holiday mart Real Turtle Soup
Clear Product of France net wt. 14-³/₄oz
ingredients: Turtle stock, Maderia wine, alsace wine,
Turtle meat, Salt, Spice
Packed by Louis Henry
Strasbourg (France) #1.83

Safeway Real Turtle Soup Concentrate
Holly World Foods Inc.
San Francisco 94107
Fanifood Brand of Australia 284grams

- 9/4/73 - Visit to KMCAAS w/R. Small - page 73
- 9/7/73 - Lanai/Polihua survey - page 74
- 10/11/73 - Expedition to FFS - page 76
- 5/9/73 - 5/15/73 - Tagging expedition
at Kiholo w/Valiant
(Tagata) Maid - Page 80
- 5/16/73 - interview w/Bob Lesely - page 82
- 5/30/73 - Dissection of green turtles
caught in Kaneohe Bay - page 82
- 3/10/74 - interview w/C. Glerum -
net setting in Kaneohe Bay - page 96
- 4/18/74 - Turn-around to FFS - page 96
- 5/2/74 - Turn-around to FFS
w/Sekora (circled Lehua) - page 98
- 5/9/74 - Turtle tagging - John Wheeler
capture off Honolulu harbor - page 99
- 5/16/74 - Sekora aerial survey at FFS
(Turtles) - page 100
- 5/30/74 - depart on expedition to FFS
(aerial turtle survey) - page 100
- 1/10/75 - Tagging and measurements at SLP - page 105
- 1/20/75 - Measurements of turtles at Waikiki
Aquarium - page 107
- 1/20/75 - Interview with Tinker
and notes of captive laying, loggerhead,
and ridley occurrences - page 108
- Addresses of 2 brands of turtle soup - page 118

Turtle
CI 648
FW 362

LANIKAI -
Sept 12, 1973
Caught

LIBRARY OF
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