

1 - BIG ISLAND 1983-84
G.H. BACAZS

PUNALU'U
HILO

1983-84

2 OF 2

p. 5

DIVE Duration of Dive - 45 min.

Location - Puhi Bay, Keaukaha

Date / Time - Dec. 3, 1983 ~~11:30 AM~~ 11:50 AM

DIVERS - Miles Kaichi, Hitoshi Ariga, Bob Laube, Will Orcutt

Boat tender - Lisa Hall, Sheila Mahony

Maximum depth - 60 ft

Average depth - 55 ft

Stage of tide - +.4

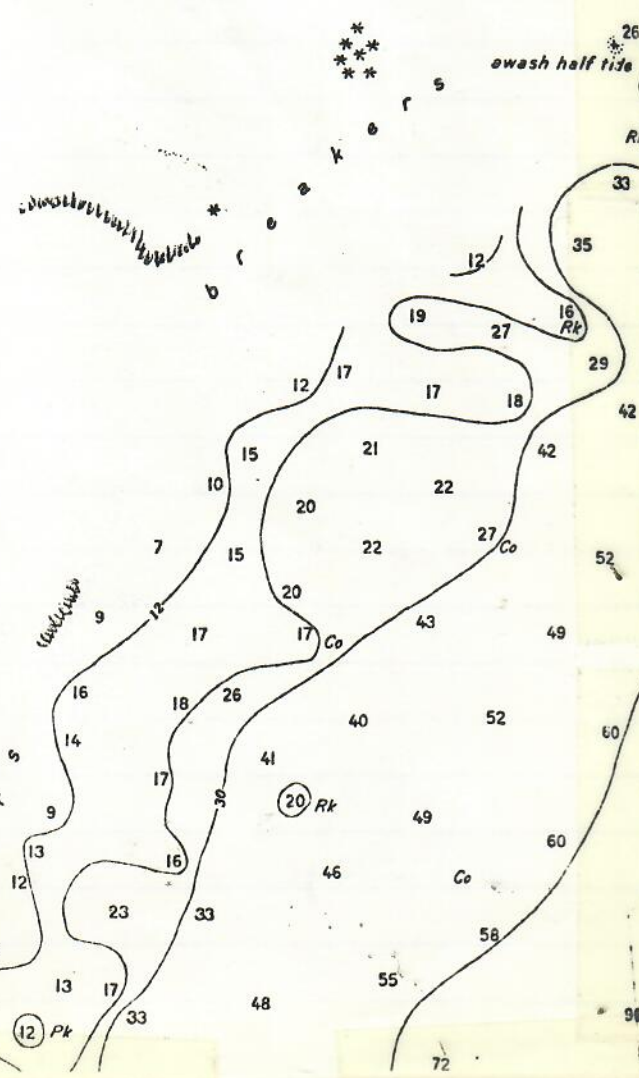
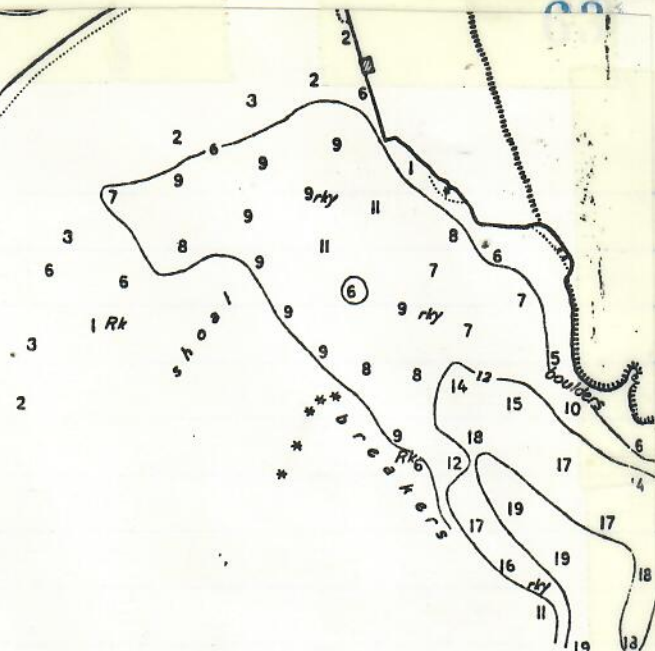
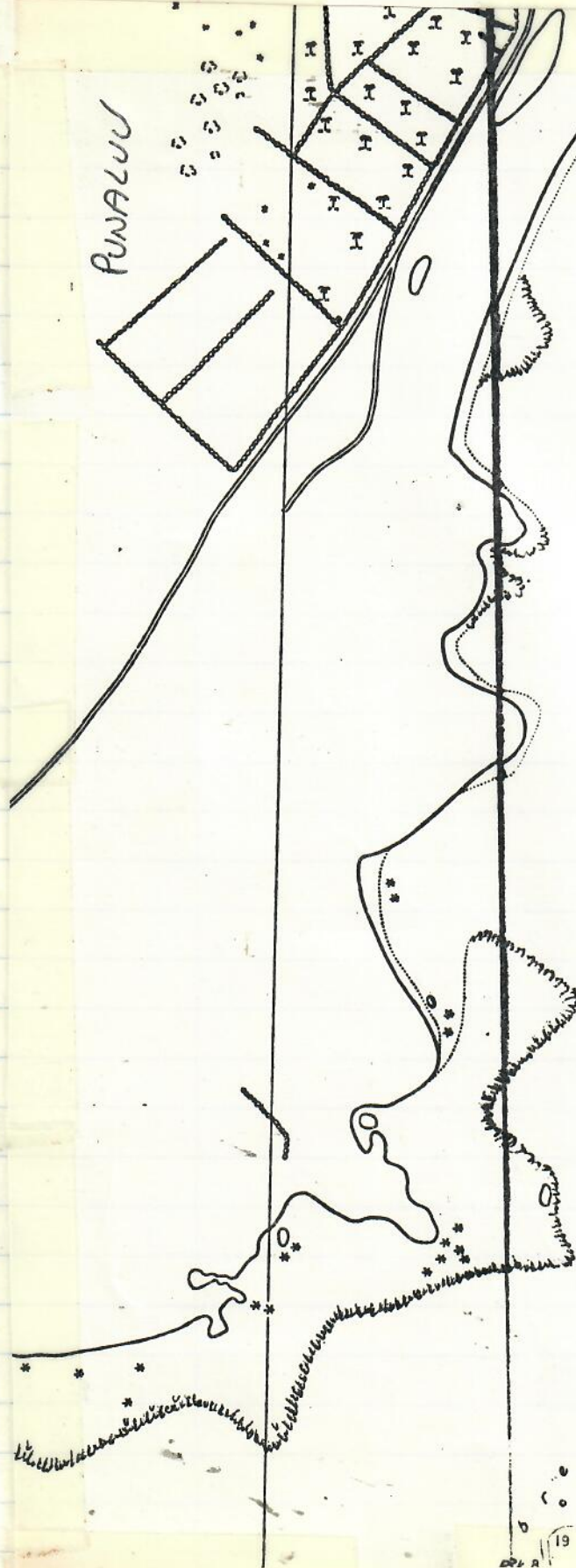
Habitat - Sea cliff, ledge with holes and small caves.

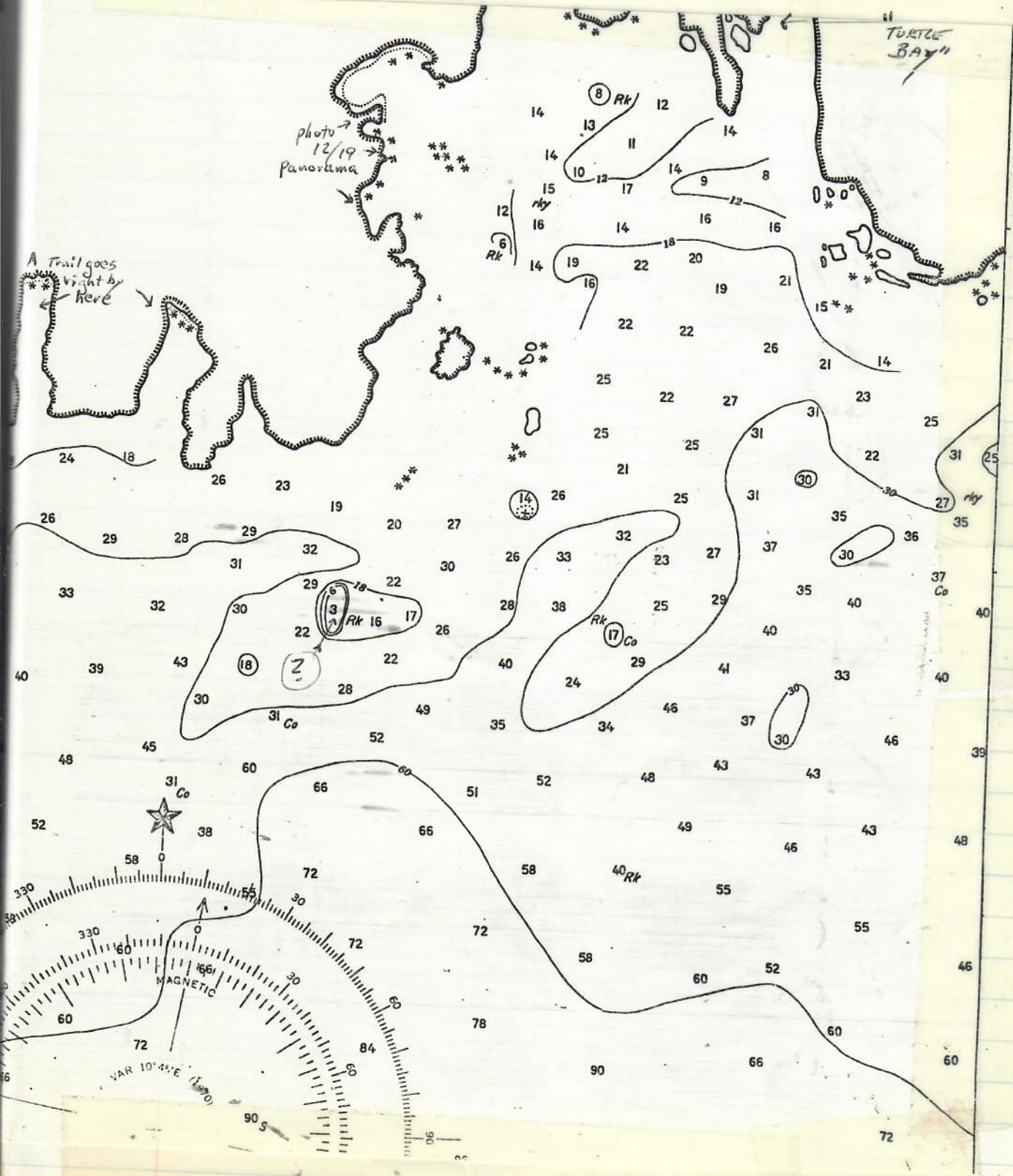
Water conditions - Seas small swell, visibility 50 ft

NO. of turtles seen, size, behavior - 1) Adult, 70 cm, swimming on the surface, 2) Adult, 90 cm, swimming on the surface.

NO. of turtles captured - NONE

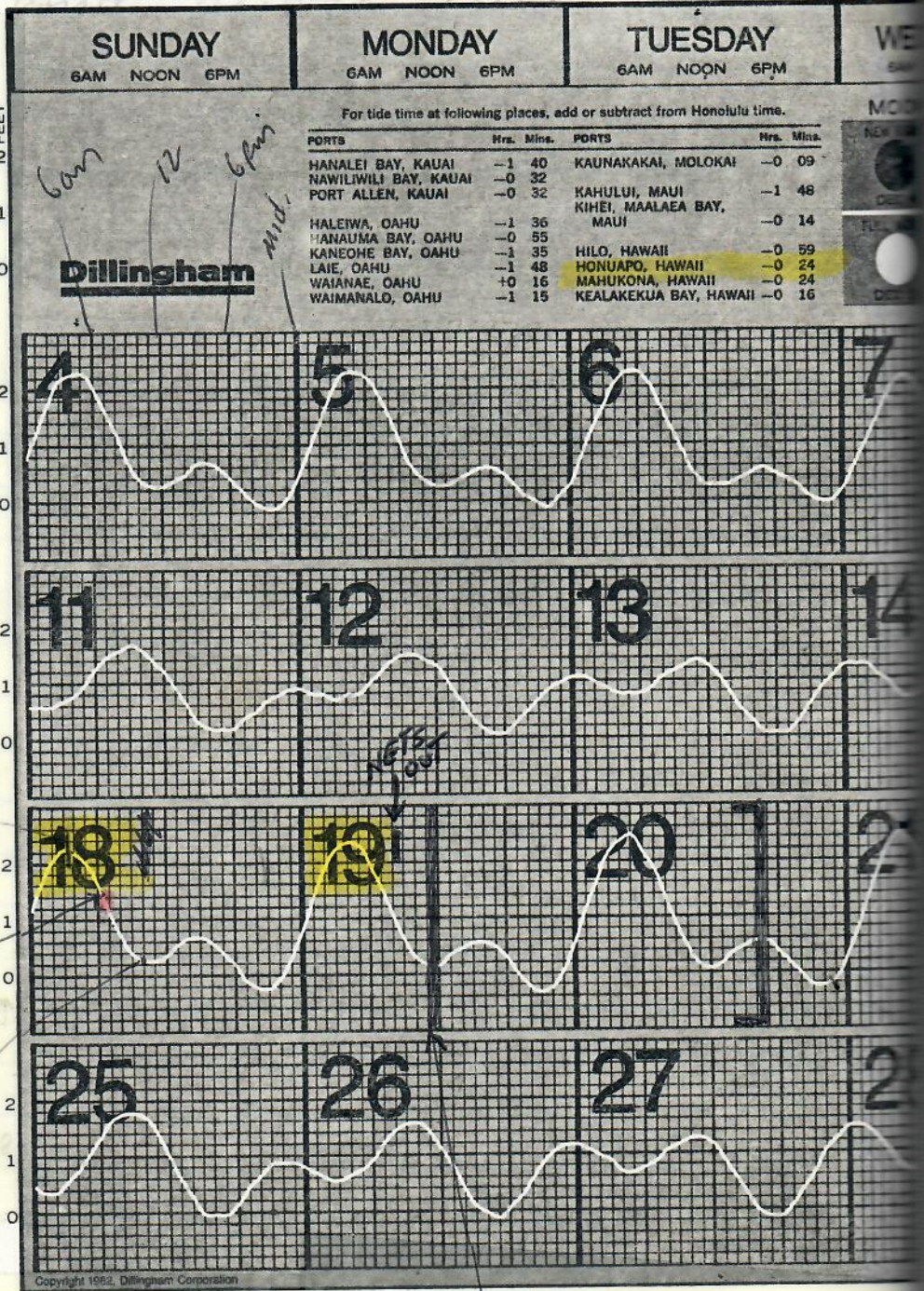
PUNALU





NEED MAP →
 showing more coastline

DECEMBER 1983



FEET

2

1

0

2

1

0

2

1

0

2

1

0

Copyright 1982, Dillingham Corporation

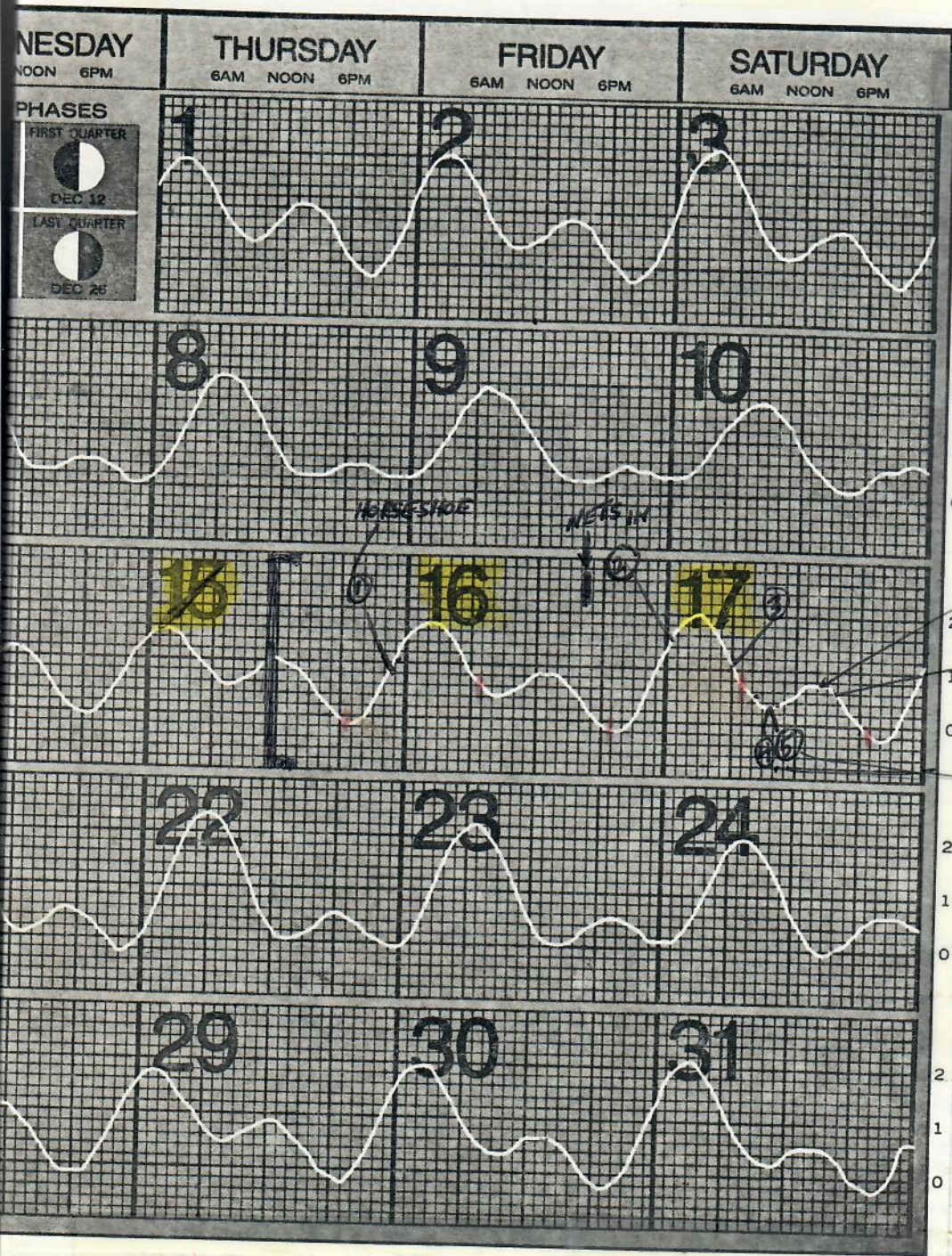
6am
12
6pm
mid.
Dillingham

3am

NET 7

Scuba
with tube
8 9

Depart Punaluu



Moved outside anchor of nets toward shore.

⑥ scuba

2 SCUBA captures right off Pavilion

68
DAY 1

Punaluu Reservations 729-7189
Pavillion

15 DEC 83

Thursday Arrive airport 9 am - 6 bags

for 10:10 am Mid Pac to Hilo
Cougar + 10 (+15 bags) ^{charge} for RT.

Bruce Carlson brought sawbill
found as hatchling in Puna (1976?) -
held at Lanewal Zoo (12-18 mos), then (1978?)
to the Waikiki Aquarium - 700
crowded in tank with shark exhibited
Bart Fredo KGB ^{ch. 9} came for story at
request of Keith Hanger, PR man.
I took 2 photos of turtle with 2 flight
attendants.

Depart after long delay - 12:10 pm.

Considers - Conservation - foundation for turtles,
established or contributed to by Mid Pacific.

Need - Turtle Measurements & Tag numbers + photos

promised Bart Fredo I would call him about
going on Big Is. field study in February.

Arrive in Hilo ~ 1:20 pm -

Picked up by Harper van #30 (cargo)
Drove to University. Conferred with
Walt - Diane - Will (loaded bottles,
gear, etc. Compressor at boat house.

Will, Bob and I ~~there~~
Drove to Punaluu - camped in pavillion #3

Perfect weather. WAIKIKI AQUARIUM

69
DAY 1

HAWKSBILL

15 DEC

Thursday

6pm release in front of pavilion - Luahine

3519 LFC

SL - 62.3 cm

Straight to the notch

58.9 cm

3520 1st R scale

Straight width - 44.9 cm

Both tags in good -

Swam slowly out - seen surfacing once quickly - then dove.

ORIGINAL DATA: 9/75 hatchling at Cape Kumukahi;
7-9-78 TO WAIKIKI AQUARIUM; 9-11-78 40.1 OCL; 4-20-81
56.3 SCL + TAGS; 1-21-83 59.1 SCL.

8 YEARS
3 MONTHS OLD.

Met

John Kalani - Kahala

Kau Sugar - mentored "sleeping holes"
in front of large pavilion between
"islands"

A - 10:30 pm Will & I swam
out at "Horseshoe" -
Turtle found ^{sleeping - head in} in "U" 8'-10' at base
of drop in "U". Lost my
weigh belt grabbing it.
Brought back in to shore - using
Bob's light as a guide - washed
over rock outcrop. Tried going
out again, but swells coming up
with tide. + entering at the wrong
site unknowingly.

70 DAY 1

12-15-83 Horseshoe turtle data - green turtle
Thursday - 1030 pm - Turtle No. 1 of this expedition

7529 R^{FL} S - 61.0 x 50.4
notch 60.9

7531 LFL C - 66.0 x 58.5

7532 L 3-4th .PL - 49.5
Head - 8.8
TAIL - 12.5

- Lots of skin barocles;
- no slimy algae;
- 2-3 patches of coralline pink
- Mostly heavy pigment to carapace; with light yellow-gold flecks.

No painted number or blood sample. Turtle processed on the rocks adjacent to Horseshoe. 2 small campsites in the area. Walter & Henry(?) camping with TV at pavillion 2. Friends of Ural Deadman

12-16-83

FRIDAY Found my weight belt ~ 7:30am

Drove to Waiohine to obtain key.
Moved from Pavilion 3 to 1.

Talked to Mr. Howard & Jeanette.
Walked out to Turtle Bay - remains.

Set net at 4:30 pm - 2 sections from
Pavilion-side rock outcrop toward channel of bay.
Students arrived ~ 6pm with Walt in Ultram.
Also Miles in truck pulling zodiac. Will watch TV

12-17
SAT.

Tog recovery - midnight - middle of nets
2877 LFL 2879 RFL 5-60.2
C-64.2

2nd ^{net} Turtle caught - middle of inside net
~ 5:30am. - first twilight.

Scuba divers out diving 9am - right
off Pavilion - 2^{10am} caught - previous
6711 large (♂) + Turtle no. "5", this expedition.
Pull cord on motor came off - paddled in.
6711 measured & released on beach.

~ 2pm Chris, Dean & I moved the net anchors
toward shore - more parallel, so float will be visible.
with light at night.

72 DAY 3

12-17
SAT.

2nd dive of the day -

Scuba divers - Will, Bob, Tosh, Miles.

(Lisa boat operator) out off
Pavilion ~ 3 pm. Starts spring,

problem. Will's ears wouldn't equalize ^{came back} immediat

Turtle no. 6 (Painted "4") caught
sleeping a ~ 35' off Pavilion. Diver
went down coast toward Horseshoe
saw 5-6 turtles. Couldn't get them to
use their CB. dive flag not upright; long hard swim
for Bob, Tosh, Miles to make it back to the Zodiac. They
did not sufficiently indicate distress when Joe noticed
by. I was able to get him to tow in Zodiac.
Large rain thereafter. Zodiac & motor pulled
up on the beach.

TURTLE NO. 2 12-17 0030 hours midsection
of net.

TAG RECOVERY

2877 LFL

S - 60.2 x 48.7

2879 RFL

notch - 60.0

7533 R3-4th

C - 64.2 x 57.4

PL - 48.3

HEAD - 8.8

TAIL - 13.5

WEIGHT - 69 lbs (31.4 kg)

Picked off burrowing barnacles on belly;

BND 9

Blood collected. TLEVEL 110.9

MALE

both tags thin coated with ~~pink~~ (dark red)
coralline algae. Photos of tags.

Painted white number "1"; whole-body photo?

5 yr

3.5 months

=

63.5 mo

18.9 cm

=

0.298 cm/mo

original data:

Caught by hand at "Horseshoe"

8/31/78

applied (41.3 cm WEIGHT - 20 lbs

2877

S - 16 1/4 x 13 5/8

(34.6 cm)

(9 kg)

2879

C - 17 1/4 x 15 1/2

(43.8 cm)

(39.4)

TAIL - 2 5/8 (6.7)

PL - 13 3/8 (34.0)

Head - 2 5/8 (6.7)

COLOR NOTED AS SUNBURST

TURTLE NO. 3

12-17-83
SAT.0600 capture in first net close to
shore buoy

7534 FL

S - 68.2 x 52.8

notch - 67.9

7535 FL

C - 73.5 x 65.5

7536 L 3-4th

PL - 52.5

HEAD - 10.4

TAIL - approx 10cm - deformed -
feels like missing vertebrae - or
curves to the left.

WEIGHT - 97 lbs (44.1 kg)

Blood collected.
Painted number "2"

BND - 80

TLEVEL - 8.8

FEMALESeen during scuba 12/18 off Pavillion.
photo

TURTLE NO. 4

12-17

Recovery from Nov. Thanksgiving trip -
 Saturday ^{10am} Scuba capture - brought to beach only - released there.
 while sleeping off pavillion.

SL- 80.3

6711

Notch-79.9

6712

CL- 85.5 x 79.5

6713

PL- 65.3

HEAD- 11.7

TAIL- 29.0

MALE - Adolescent

Rec. 7/9/86 EAST-N Marilyn Major
 see also page 51

TURTLE NO. 5

12-17-83 Scuba capture while "sleeping"
SAT. off Pavillion.

7537 LFL

S- 56.1 x 42.7

notch- 56.1

7538 RFL

C- 60.0 x 52.8

7539 L 2-3rd

PL- 43.5

HEAD- 8.8

TAIL- 11.0

WEIGHT - 54 lbs (24.5 kg)

BND- 32

Blood collected.

TLEVEL- 68.3

MACE

Painted number "3"

photo

4/14 Recaptured in Punaluu site #1 net

TURTLE NO. 6

12-17-83 2nd Scuba dive - 3 pm - captured "sleeping"
SAT. at ~ 35' depth off Pavillion

B

7540 LFL

S - 56.3 x 45.2

notch - 56.0

7541 RFL

C - 60.5 x 54.0

7542 R3-4th

PL - 44.2

HEAD - 9.0

TAIL - 11.5

WEIGHT - 40 lbs (18.2 kg)

Painted number "4"

- Blood collected

BND - 27

TLEVEL - 84.2

MACE

Seen by me while scuba diving off Pavillion
12/18.

78 Days 3-4

12-17 Leon Hallaker & ^{High School Teacher} Beale & ^{JOES} Purnell
SAT. Kim arrived ~ 4 pm after boat Stowed
zodiac in.

2-hour net shifts again established
only one turtle caught during the
night ~ 6 am - very first
twilight, 1.5th section of net.
TURTLE NO. 7

7543 LFL

S- 73.9 x 58.5

7544 RFL

notch- 73.1

7545 L3-4

C- 78.3 x 73.5

7546 R3-4

PL- 58.0

HEAD- 11.1

TAIL- 16

WEIGHT- 124 lbs (kg)

Wound in 3rd central - photo close up -
4 x 1" - bone showing; amphipod pulled
out & preserved.

PAINTED number "5" photos releasing

no blood collected - unsuccessful

12-18

SUNDAY

At 10am, 8 of us swam through channel, at low tide, in front of pavilion. 2 (#889) turtles caught "sleeping" in holes or under ledges. 4 of us returned - Miles & Leon with 1 turtle in tube; me & Toshi, each holding a flipper. Deeper section of "channel" here is right next to the rocks (to the left when looking out from pavilion). Sheila, Lin & Chris checked Horseshoe at this same low tide - nothing found.
Back in from scuba at 10:40am

Ralph stated that Joe told him he has 5-6 ^{recovered} tags. Will give them to me if I ask.

Question - ① Size class of PUNACU turtles increased since Wright/LAY study? from less fishing pressures? See their report for specific data.

② Catch per EFFORT increasing?

A) NETTING?

B) WITH SCUBA?

80 Day 4

12-18 TURTLE NO. 8
Sunday Scuba with Tube off Pavilion 10am -
low tide.

7547 RFL

S - 63.9 x 53.1

7548 LFL

notch - 63.3

7549 L3-4th

C - 68.8 x 64.7

PL - 49.0

HEAD - 9.3

TAIL - 14.5

WEIGHT - 88 lbs (kg)

Painted Number "6"

photos release

no blood collected - unsuccessful

Left front flipper anterior has a scale projection
deformity. (soft)

* All Turtles have lots of skin barns. no chelbonia

12-18-83 TURTLE NO. 9
SUNDAYScuba with tube - I helped catch.
Coming out from under a ledge.

7550 RFL

78.6cm

S - 66.4 x 52.0

7570 LFL

notch - 66.0

7571 L3-4th

83.0cm

C - 70.5 x 66.5

Recovered
4/9/90HAND
ANNALS
DAYTIME

6yr 4mo

PL - 50.0 59.2

HEAD - 9.9 11.0

TAIL - 15.5

WEIGHT - 88 lbs. (40.0 kg)

Plastron has a ~~slight~~ slightly
emaciated appearance.

PAINTED NUMBER 7

and blood collected

TLEVEL-91.1 BND-29 MALEAt least 16 burrowing barracks in
plastron (removed).Missing areas, on each
side of PC's.

82 DAY 5

net checked for catching on bottom after tide has started to RISE.

12-18 ^{SATI} spearing for fish off Pavilhoir - Will, Bob, Mike, Craig; ^{prop tank used.}
earlier, Walt went with Punchy.

12-19 ^{MONDAY} late periods of heavy rain in the afternoon & early night.

net checked every 30 minutes, instead of 10-15 as before.

~~7547~~ Captures # 10, 11 & 12 made at ^{MONDAY} ~ 1am, 2am & 4:30am.

TURTLE NO. 10 ~ 1am 12/19

inside panel - Diane & me. Large male caught only by (LH) deformity of LH L. Taps brought out - Held turtle still by grasping left flipper and holding tightly against tube.

7573 L

7574 L Tried untangling but couldn't, so cut free from net. Long thick tail.

TURTLE NO. 11

12-19-83 NET CAPTURE - ~ 2am -- Found.
 Monday after releasing NO. 10.
 DIANE, DARREZ & me

7575 R^{distal 3-4} put on in the water in case we
 couldn't get it into tube.

7576 R

S- 85.2 x 66.8

7577 L

notch- 85.2

7572 L 3-4th

C- NT

PC- 66.1

HEAD - 12.3

TAIL - 31.0 male adolescent

WEIGHT - 174 lbs. (kg)

Photos - released on the beach ~ 9am 12/19

84 Day 5

12-19 MONDAY
TURTLE NO. 12 - NET - near buoy
~ 4:30am. Kelvin Lau, Dean
and me. (Lisa refused to go in when awakened)

7578 RFL

S - 85.8 x 66.0

7579 LFL

notch 85.8

7580 L 3-4th

C - NT

PL - 67.4

HEAD - 11.9

TAIL - 22.5

apparent female.

WEIGHT - 190 lbs (86.4 kg)

Photos - released on beach.

5 burrowing barns removed from plostons.

3rd scale on RFF torn away - healed,
leaving a flap 1 inch long - ∴ gap
between 3-4th scale.

(Tag loss? - if so, there was no
sign of previous tag mark on FL's.)

12-19-83 MONDAY Nets taken out at ~9am:
 Very calm seas, again,
 no seawater taken. Certainly seems
 warm. Freshwater is cold, but
 doesn't seem as cold as earlier netting
 expeditions.

Gear packed, Pavilion cleaned, and
 nets untangled, stretched, gathered
 up, and washed/dried.

Departed Punaluu ~11am.
 Called "Parks & Recreation" 929-
 Kan Base yard.

Unloaded gear at HCC "Boat House".
 Dropped Scuba tanks off at Puvy's; drove
 Bob home; Checked into H-Lo Hotel;
 Ate at Kena after a 2 1/2 hour sleep.
 only had ~45 minutes sleep last night.

12/19

TAGS LEFT AT BOAT HOUSE:

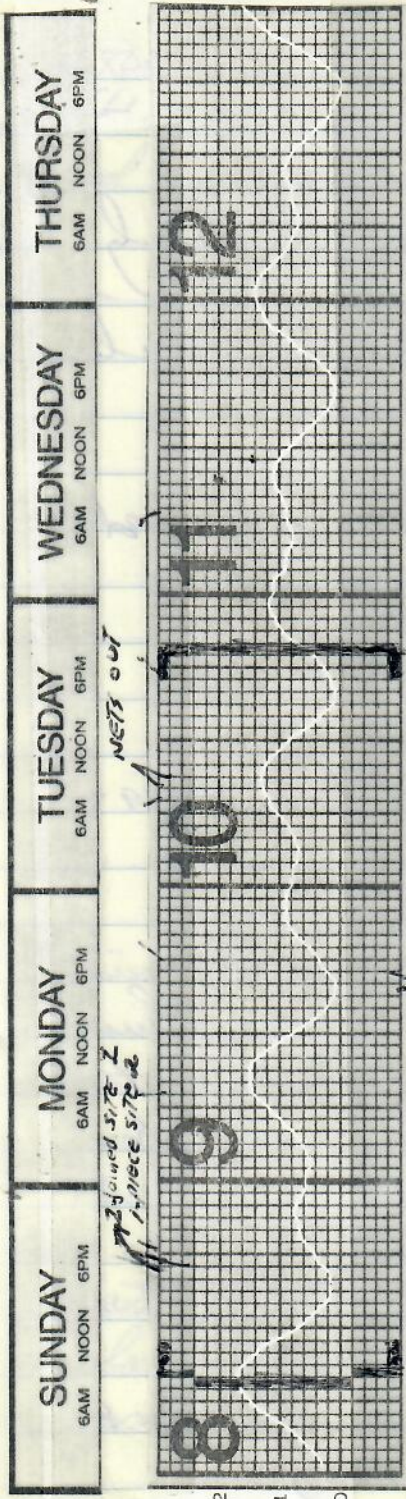
7581-7600 (20 TAGS)

(All used during 8-10 JAN 84 EXPEDITION
 TO PUNAEUU)

Blood collected from ① MALE 7550 ② MALE 7540 ③ MALE 7537
 ④ FEMALE 7534 ⑤ MALE 7533
 2877

PUNALOU

JANUARY 1984



1-piece site 1
1-piece site 2

MOON - 1st QUARTER

TIDE CORRECTION =
HOWAPO

-24 MINUTES

- ✓ - Food receipts + unspent money
- Miles gas receipts - no vehicle no. on receipt
- ✓ - 2 Dive lights - STORED AT MOP
- Outboard motor repair (Telephone Miles -) see about buying part
HCC I should repay to walt
- 2 rolls 20 exp. film
- Binoc. covers - Buy new - Big side
or check mine
- ✓ - Key to HCC BOAT HOUSE RETURNED
- Danell striped?

ACCOUNTABILITY for 2 components - MOP - WALT
GB - Turtle Project

- STUDENT COORDINATOR OF PROJECT
TO COORDINATE & COMMUNICATE
- W. Orcutt
 - Not good judgement - common sense
 - UNABLE TO follow orders
 - Unreliable
 - lack of leadership ability
 - questionable truthfulness
 - UNABLE TO work with him, in spite of effort over several months.
 - Not highly motivated
 - Lack of organization
 - Airline Coupons
 - "scrapped" tag
 - Diving times in book
 - As Dive master - incompetent
 - why appointed? 2nd dive (ears)
miles exp. MOP tank
 - Radio to shore during engine out
 - ~~Asked to get help from Joe during (?) - didn't go~~
 - Grease hub of trailer
 - TV sports
 - Flippant about data book
 - How reliable will data be that is gathered?
 - Tumble on rock (follow orders)
 - no example to other students
 - USE OF DRUGS (pot)
 - Leave for mainland during semester break - didn't notify me (or other divers?).
 - Zodiac floor boards incident
 - Didn't pass on info. & paper work to other students + didn't communicate my activities - efforts (gen. from MOP) to WALT.

- ✓ Coordinators of project - NANCY & DIANE.
 Reduce to \$50 month
 ✓ DIVE LEADER (MASTER) MILES (less able to participate next semester)
 Conditional - \$50 - drop if situation doesn't improve.
 ✓ - ALL DIVES sitting down together after dive make entries into data book.
 - Dive only HILO
 - NO field trips with me, better still WACT AND ME
 - NO P responsibility - NO DRUGS, USE of equipment, etc (not turtle project)
 - Netting & Scuba combined AT PUNALOU, but duty schedule carefully laid out.

(-self-starters/MOTIVATED)

- 5 MORE EXPEDITIONS like this ONE +
 - perhaps 1 to Kiholo & 1 to Shipment estate
 (need to telephone Mrs. HINE & Blackshear)

12-20-83

TU

After meeting with Walt, Nancy & Jim, I returned to Hotel and telephoned Diane, & Miles.
 Departed ~ 1:30 pm - checked in van - telephoned Safeway & KTA Market about UH P.O. - talked to "Curtis".
 Depart Mid-Pacific an ~ 3 pm

KAW PARKS & RECREATION - 929-7028

- 929-7189
12/20 Richard

Jenny (JANET)

89

DISCUSSION WITH WALT

① 8:45 - 11:15 am

6:30 - 11
8th, 9th, 10th 12-3

Talk to Miles, Nancy & Diane (Bob)
Chris, Will (Business major)

SUN DAY Monday Return
8th 9th 10th

Call Supermarket - P.O.'s (get one)

Feb 20th Washington's Birthday? 22nd wed

Nancy - 1st January return.

Waikoa Sheraton Village - Sheila need to contact her concerning JAW TRIP
Telephone no. in book?

Miles - gas receipts to WALT - directly

Soda needed - Diane

- Craig - include in expeditions as "community advisor" OR NMFS assistant to me.

Chris - address

1086 KINOOLE, H.I.L.O., HI 96720

OK KTA market 935-3751

Safeway - 935-6871 - 333 Kilavea
12/20 321 KEAWE
CURTIS - RAW
SATADA

12/21

7:45 pm

Walt ① - Call to Bob Laube

② - Stipend for Danell

③ - Soda

④ - Water Chemistry

⑤ - Invite Leon

⑥ Craig / Nancy's boyfriend

⑦ Drugs

⑧ Battery? wet cell 12V

12-20 AUTOS-WEST 839-0331 #13.50
TUESDAY

12/20 Bob Lambé 935-7350 9pm charged
to HUMB

12/21 961-7291 - called C. Supe DOCAEE
from NMFS

12/21 935-6987 Walt - to home - charged to HUMB

- 1) will buy cooking gear
- 2) Darrell on stipend
- 3) Downgrade Willy's stipend
- 4) He will call Han Parks & Recreation
- 5) I will buy battery (in Hilo) and small battery charger

12-27 MID-PACIFIC 800-367-7010 DEPART
RESERVATIONS JAN 8th SUNDAY 7:10am
JAN 11th Wed 2:45pm

12-27 P.O. sent to Sam for ① 12V SEARS DIEHARD (SEALED WATER)
Battery Size Group 24 - NO. 30; 36 or 40
~\$65 ② camp battery charges ~\$45
for 6 and 12 volt

PAID ON VISA - \$200+ ~ 12/21
\$60 1/6/84

8 JANUARY 84 DEPARTED MID-PACIFIC AIR FL 40 7:20am -
 SUNDAY / Jim drove me to the airport - Mileage =

passed over Lohiana beach on Lanai. Photos of
 Molokai & Lanai. Arrive Hilo 8:20am, picked
 up by Harper rental; Drove to McDonalds, then
 Long's for film, batteries & gloves; Arrived at MOP
 office at 9:30am. Went with Jane & Nancy to
 shop at KTA Market - \$168.00 - HUMB. P.O.; I returned
 to MOP office - loaded all gear - Chris and I departed
 for Punaluu; Walt in WH van - gear & students;
 Miles in his truck with zodiac.

Arrived at Pavilion 1 Punaluu ~ noon.
 Lots of boat trailers and beach goers. Henry
 Walter (Dave?) still at pavilions. Unloaded
 and set up camp site. Walt came late
 because he waited for Dean - who drove his
 own car later. Miles, Willie, Tosh,
 Bob and Cisa took zodiac out for
 a scuba off pavilion. At about the
 same time, 4-5 pm, Chris, — and I
 set the 2 set sections of net
 wood oval floats, at Site #1, anchor
 on rock outcrop closest to pavilion. 1-piece
 of net (red plastic floats - 8 wide net) set
 out from rock outcrop on gift-shop side
 of bay. Divers caught 1 turtle.
 Sears battery & seal beam light set up
 on beach top near foed; folding
 chairs used. Turtles caught during
 the night as follows:

8 JAN 84 Toshard Miles dove Horseshoe at
 SUNDAY ~ 9:30pm - Chris & I held the light;
 2 turtles caught - they saw another;
 Tosh sprained his thumb.

Clear skies during the night; cold when
 mountain wind comes up am; ^{the} 1/4 moon
 set early - midnight estimated. Seas
 have been calm all day - only moderate
 swell coming - this is, however, more than
 during last trip.

STUDENTS ON EXPEDITION: Walt, Nancy, Diane,
 Darrell, Miles, Toshi, Bob, Will, Dean, Lisa
 Chris, Punchy, ME

1-984 Site #1 2 pieces of net taken out with large
 female - 2am. All nets taken
 out after sunrise. Untangled -
 repaired - 4-5 pm - wood float oval
 single pieces put in at Sites #1 & 2.
 Anchors outside some close together
 near large cement block with iron hoop.
 Zodiac scuba #1 node 4-5 pm 1-8; #2
 ~ 11am 1-9; #3 ~ 9am 1-10 - all
 off Pavilion.

Nets taken out ~ 9am 1-10; on
 both 1-9 & 1-10 6:30-8am we saw
 3+ turtles feeding on Site #1 rock outcrop
 and rocks - boulders right in front of
 Site #1 black sand.

Notes - Punchy knows Joe well. Ralph didn't
 get tog numbers; need to walk to Turtle Bay +
 CONTINUED PAGE - 105

8 JAN. 84 ~ 4pm Scuba capture off Pavilion
 SUNDAY ORIG DATA: 2514 LFL 2515 RFL 2516 ~~LFL~~
 1/23/78 Scuba Ninole - Mono, deep cut in Right shoulder

RECOVERY

S - 78.0 x 61.8

Notch - 77.5

S - 57.2 x 45.1

20.8 cm increase in 5 yr 11.75 mo =
 0.289 cm/mo

C - 83.5 x 79.5

2515 RFL

dangling - close to edge (1/23/78 had been placed through existing hole - old tag?)

NEW
 PL - 62.3

7593 3-4th R

HEAD - 12.1

7594 3-4th L

TAIL - 20.0

WEIGHT - 148 lbs

1/23/78 WEIGHT - NT (kg)

5-6th Scale left 

wt. paint put on FFlippers for short-term marks.

burying barns in PL; lot of platy skin - same here for all others.

Photo w/ Diane taking off barns
 (Apparently no effort made to draw blood)

8 JAN 84

Sun. ~ 10pm Horseshoe - Miles & Tothi

7595 RFL

7596 LFL

S - 46.7 x 38.6
(notch - 46.3)

C - 49.5 x 44.5

PL - 37.0

HEAD - 7.7

TAIL - 7.5

WEIGHT - 37 lbs direct (16.8 kg)
34 lbs w/inner tube "tare."

Pink collagen on shell.

Blood drawn

TLEVEL - 40.0

BND - 44

MALE

8 JAN 84

SUN ~10pm Horehoe - Miles & Toshi

7597 LFL

S - 58.8 x 47.5
(notch 58.4)

7598 RFL

C - 64.0 x 62.5

PL - 45.8

HEAD - 9.2

TAIL - 14.0

WEIGHT - apparently not taken

Pink coralline on shell.

Blood drawn successfully,
T LEVEL - 73.3

BND - 30

MALEphoto of turtle crawling to ocean
with white paint on dorsal FF's.

8-9 JAN. 84 Net SLG #1 (2-pieces together)
 Sun - Mon ~ Midnight - caught in inside piece.
 (Mike & Daniel)

4966 RFL

S- 69.0 x 56.5
(notch-68.5)4967 3-4th R

4968 LFL

C- 73.5 x 71.5

4969 3-4th L

PL- 53.6

(all above applied

HEAD- 10.3

good with "old-style"

TAIL- 19.0

681 pliers obtained

on loan from NBT)

WEIGHT -

106 lbs
(48.2 kg)

BND 7

Blood drawn TLEVEL 110.9 MALE
 drip-paint marks on front flippers

9 JAN 84 ~ 0030 hours ^{immature} Male in site # 2
 Mon. single net - (Mc & Jarrell)

7589 RFL

S - ~~79.1~~ 79.1 x 63.6
 (notch - 78.9)

7590 3-4th R

C - 85.0 x 81.0

7591 LFL

7592 3-4th L

PL - 63.9

HEAD - NT ?

TAIL - 29.0

WEIGHT - 165/65

EYE SCALES - 4-4

FF Scales - 6-6

(Apparently no effort made to draw blood)

NO. 6

9 JAN 84

MON. - 0130 hours

SITE 1 Net - inside piece.

(Me, Dean & Nancy)

Large Fetrah - Turtle & entire net
brought in.

7585 RFL

S - 89.3 x ~~73.0~~

(Notch - 89.0)

7586 3-4th R

7587 LFL

C - 94.6 x 87.2

7588 3-4th L

PL - 72.8

HEAD - 13.3

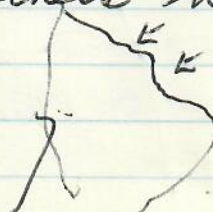
TAIL - 23.8

WEIGHT - 253 lbs.

2 burrowing barn on PL, 1 on carapace

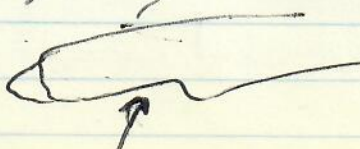
Heavy white scum on carapace -
Many others have this too.

Dorsal view:



left hind 1/2 amp. - head

Right FF



NO. 7

9 JAN 84
MON. ~ 4amSite #2 single net piece -
1mm, MALE Chris & Dainell (me)

7581 RFL

S - 81.2 x 63.3
(notch 81.0)7582 3-4th R

7583 LFL

C - 87.0 x 81.0

7584 3-4th L

PL - 65.2

HEAD - 11.2

TAIL - 27.2

WEIGHT - 181 lbs, (82.3 kg)

white hard scum on shell (from regularly
entering fresh water?)

long front claws.

3 burrowing barns on PL.
many plutelepas

9 JAN 84 - 4am ~~Site~~ Site # 2 net -
 MONDAY single piece: Parrell & Chris

RECOVERY from 12/17/83

7539 only weight recorded - 58 lbs direct
 7537 (26.4 kg)
 7538 58 lbs tubetare

Previous weight on 12/17/83 recorded as 54 lbs

12/17 capture was by scuba - sleeping off pavillion

Painted number "3" can still be seen
 as less white scum on shell,

What is "white scum"?

9 JAN 84 William off Pavillon - Scuba. Walt
 MONDAY took movie footage of capture -

7599 RFL

S - 51.6 x 42.0
 (notch 51.4)

7600 LFL

C - 54.2 x 50.1

PL - 40.5

HEAD - 8.7

TAIL - NT #

WEIGHT - 46 lbs (kg)

9 JAN 84

Monday ~ 10pm

Site #2 net - W. 11 & Bob
alone

ORIG. DATA:

RECOVERY

7/28/81

net at Punaluu

~ 2 yr smom = 29 months

5501 RFL

S- 75.3 x 61.8 ^{R scyle marginal}
~~deformed~~5502 2nd scale

S- 68.1 x 55.2

7.2 cm increase = 0.248 cm/mo

5503 LFL

C- 81.5 x 76.3

5504 2nd scale

PL - 61 cm

HEAD - 11.5

TAIL - 17

WEIGHT - 148 lbs

(67.3 kg)

Several burrowing barns on PL

Blood collected

TLEVEL - 9.0

BND - 91

FEMALE

Passing rain showers

no. 11

9 JAN 84 Site #2 net - will & Bob alone
Monday ~ 1030 pm

Recovery

7536
7535
7534

94 lbs -
weight as 97 lbs on 12/17/83
net capture

Painted no. "2" still visible; photos
with children

10 JAN 84 no. 12 Walt & me - ~ 0030 Site #1 net.
TUESDAY Span up outer end of net - wave action?
probably would have drowned in 1-2 hours.

7601 RFL

S - 62.8 x 49.0
(notch 62.5)

7602 3-4th R

C - 66.5 x 60.0

7603 LFL

PL - 49.5
HEAD - 9.3
TAIL - 13.5

WEIGHT - 75 lbs
(34.1 kg)

Blood collected

TLEVEL 9.0

BND - 83

FEMALE

10 JAN 84

TUES.

~ 10am Scuba #3 off Parthos -
Bob, Miles & Will

7604 LFL

S- 48.4 x 39.6

7605 RFL

71.9 57.3

C- 51.3 x 46.3

77.0 71.5

4/9/90

7/18/90

PL- 38.5 56.0

HEAD - 8.0 cm 10.8

TAIL - 10.0 cm 14.9

WEIGHT - 41 lbs.

(NT)

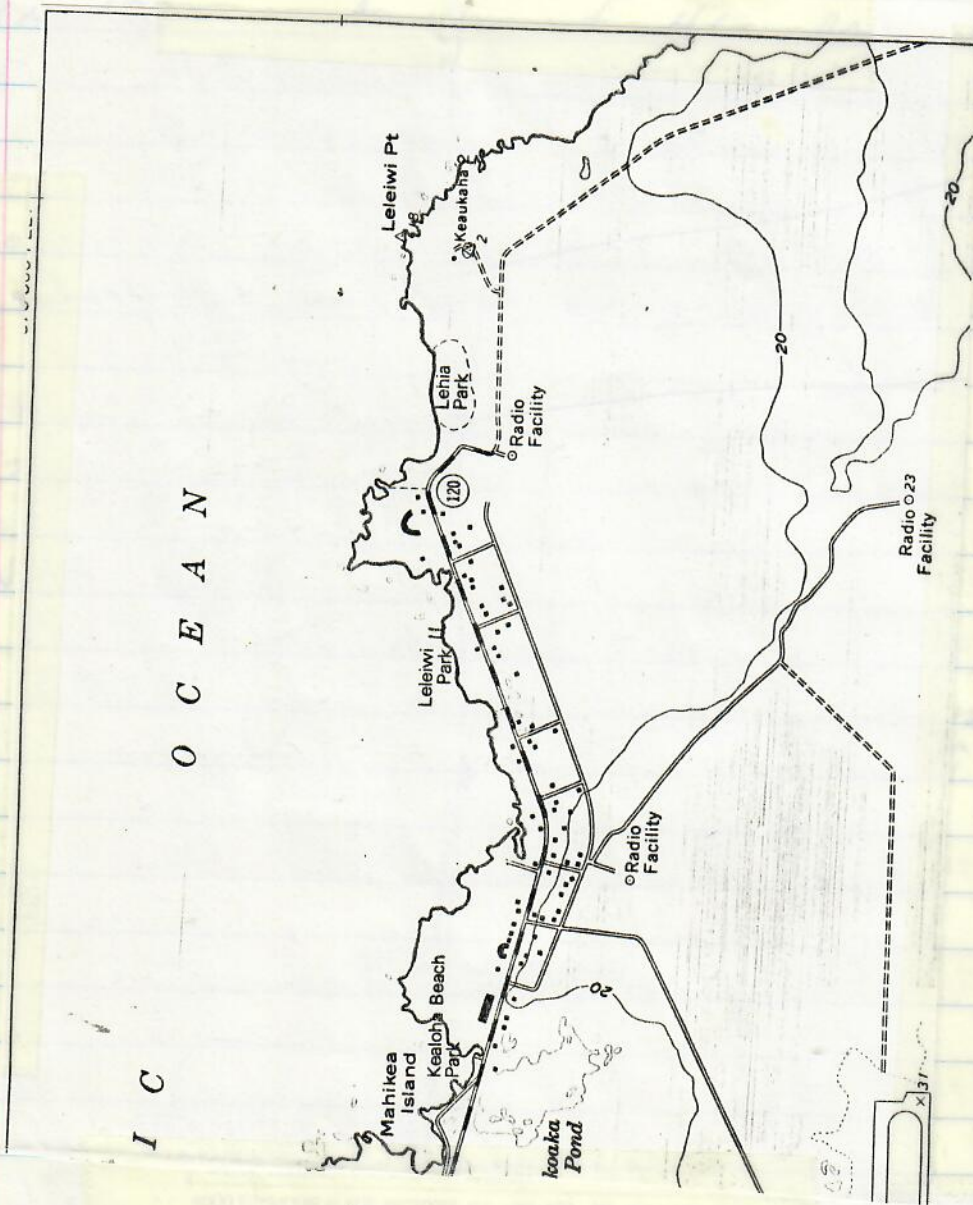
MOP - 7606 - 7625

Nelson Santa came by - mentioning about large turtle at
 Kamehame; + large flight in flipper - viva hook - haluana
 10 JAN 84 Departed Kaula - noon; Up loaded gear,
 TUES. spun blood, visited at Tosh's house,
 departed ALOHA at 5:30 via Mani -
 arrived Honolulu ~ 6:45 pm.

5 blood samples collected -

- ① 4966-69 ^{MALE} ② 7595-69 ^{MALE} ③ 7601-03 ^{FEMALE} ④ 7597-98 ^{MALE}
 ⑤ 5501-04 ^{FEMALE}

- Needs for Feb. exp. ① confirm Harper ^{P.O.?} ② Food P.O. ③ Reserve
 Pavilion 1 ④ Rags for net ⑤ ^{*} weather tube? ⑥ walkout turtle Bay
 ⑦ water parameters ⑧ T-shirt design ⑨ spray paint
 ⑩ Gloves as per Danell (+ stipend) ⑪ tarp ⑫ cargo net
 for weighing turtles ⑬ invite Bart Friesdo + Tribune Herald +
 Kaula news ⑭ larger turtle - research sign ⑮ Motel or walk
 to Kamehame + Kaula ⑯ More blood sampling + cooler
 ⑰ ^{call} invite Howards ⑱ state risk of working in project - health
 plans? ⑲ Anchor line & end lines for nets ⑳ buoys - anchors
 to set 3 pieces ㉑ call Shipman ㉒ charge-up battery
 ㉓ contact Bob Nishimoto & ^{Pete} Howard Takata ㉔ Make prints
 from slides - charge to project ㉕ Notify Supe - DOCAEE
 ㉖ Tag on the Hind Flipper too ㉗ Temperature profile of Bay
 ㉘ Label stipend 1-month ahead? ㉙ Tosh \$25 - next time
 ㉚ Change of amount, up or down, requires a change form



- PHOTO NEEDS -

- Rock outcrops where turtles feed
- Algae on rocks at low tide, close up
- Turtle in net - TOSHI flash.
- All RECOVERIES
- nest site across road + nest Horseshoe

- PHOTO LOG -

24-28 NOV 83 - Aerials of Hilo Bay when
departing on M.I. Pacific

15-20 DEC 83 - PUNACUW - (not in consecutive order)
Close-ups of wound; Platykepus skin barns; Red
algae of recovered tag -
Various views of turtles; turtles being released;
Turtle Bay; pavillion; 2 large turtles on the beach;

8-10 JAN 84 - PUNACUW

Roll 1 - 20 exp.

Remainder of from Calif. with Alligator farm
LAWAI, MOLOKAI,

Roll 2 - 36 exp.

Show 5501 TAG, recovery on beach; then TC 2
last trip with 2 children; then scuba caught 1-10
ON Grass and being released in "slot" in front
of pavillion.

W.C. (BILL) JACKSON
MANAGER, NETWORK COMMUNICATIONS SERVICES

BESC

BRITISH COLUMBIA SYSTEMS CORPORATION

4000 SEYMOUR PLACE, VICTORIA, B.C. V8X 4S8 TEL: (604) 389-3101
DIRECT TEL: (604) 389-3678

TAGGING SUMMARY

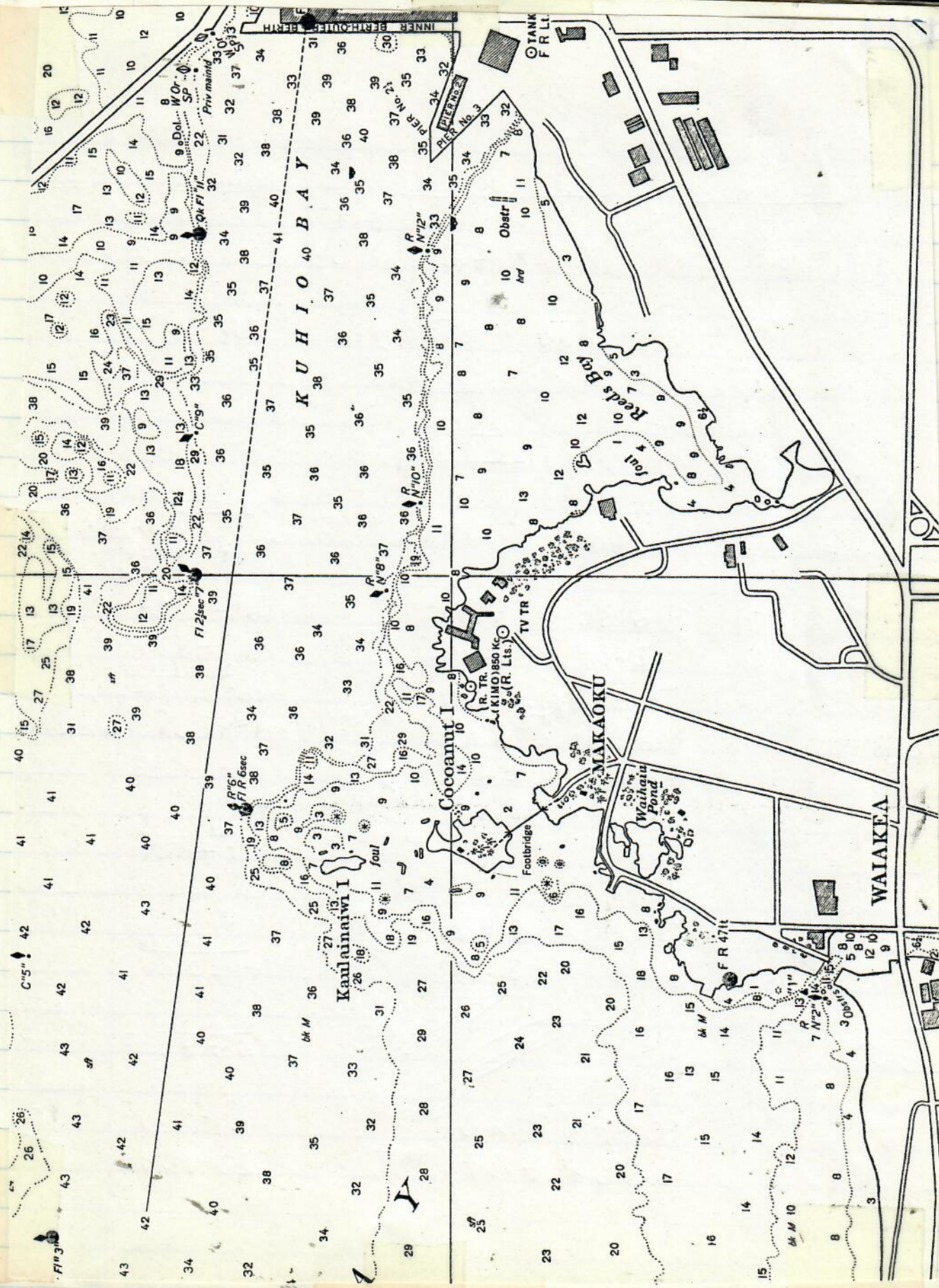
DATE	TAG NOS.	WEIGHT	SC x SW	CAPTURE LOCATION
	<u>PUNALUV</u>			
11/26/83	6714-17		71.1 x 56.3	SCUBA OFF NINOLE (PAVILLION)
"/26	6718-21		69.3 x 54.3	" " "
"/26	6711-13	♀	NT	" " "
	<u>PUNALUV*</u>			
12/15/83	7529, 31, 32	NT	61.0 x 50.4	HORSESHOE
12/17	2877, 79, 7533	RECOVERY 69 lbs 31.4 kg	60.2 x 48.7	NET - PUNALUV
* 12/17		DEIG. DATA =		
12/17	7534-36	97 lbs 44.1 kg	68.2 x 52.8	" "
12/17	6711-13	NT	80.3	(MULE) off PAVILLION
12/17	7537-39	54 lbs 24.5 kg	56.1 x 42.7	" "
12/17	7540-42	40 lbs 18.2 kg	56.3 x 45.2	" "
12/17	7543-46	124 lbs 56.4 kg	73.9 x 58.2	Net - Punaluv
12/18	7547-49	88 lbs 40 kg	63.9 x 53.1	off Pavillion
12/18	7550, 7570-71	88 lbs 40 kg	66.4 x 52.0	SCUBA (TUBE) off PAVILLION
12/19	7533-74	NT	Adult Male	NET
* 12/15	3519-20		62.3 x 58.9	HAWK'S BILL RELEASER AT THE AQUARIUM

DATE	TAG NOS.	WEIGHT	SL	X	SW	CAPTURE LOCATION
12/19	7575-77, 7572	174 lbs 79.1 kg	85.2	x	66.8	NET
12/19	7578-80	190 lbs 86.4 kg	85.8	x	66.0	"
SL $\bar{X} = 68.8$ cm (RANGE 56.1 - 85.8) N=11 WEIGHT $\bar{X} = 46.7$ kg (RANGE 18.2 - 86.4) N=9 (102.7 lbs) (RANGE 40.0 - 190 lbs)						
Punaluu						
1/8/84	RECOVERY 2514-15 7593-94	148 lbs	78.0	x	61.8	SCUBA - OFF PAVILLION
ORIG. DATA =						
1/8	7595-96	37 lbs	46.7	x	38.6	SNORKEL - HORSESHOE
1/8	7597-98	NT	58.8	x	47.5	"
1/8	4966-69	106 lbs	69.0	x	56.5	"
1/9	7589-92	165 lbs	79.1	x	63.6	NET # SITE 1
1/9	7585-88	253 lbs	89.3	x	73.0	NET #2
1/9	7581-84	181 lbs	81.2	x	63.3	NET #1
1/9	RECOVERY 7537-39	58 lbs				NET #2
ORIG. DATA =						
1/9	7599-7600	46 lbs	51.6	x	42.0	SCUBA OFF PAVILLION
1/9	RECOVERY 5501-5504	148 lbs	75.3	x	61.8	NET #2
ORIG. DATA =						
1/9	RECOVERY 7534-36	94 lbs				NET #2
ORIG. DATA =						
1/10	7601-03	75 lbs	62.8	x	49.0	NET #1
1/10	7604-05	41 lbs	48.4	x	39.6	SCUBA OFF PAVILLION

- Project NEEDS - STICKS

12-15/12-20

- ✓ - Swivels for net KAM *
- PRINTS of ^{TURTLES} ~~TURTLES~~
- ORDER forms for WCSTC - Sheila, Nancy & Kelvin
- STRF for Sheila
- ✓ ① - Supermarket P.O. (Gateway) (KTA)
- ✓ - Another anchor & float KAM OR in my office?
- ✓ - binoculars
- ✓ ② - Travel Completion forms
- Memo trip report to NMFS
- Wetsuit glue
- Turtle poster to Ralph ^{PO} ~~DEDMAN~~ (?) HFN ARTICLE
RALPH'S ADDRESS? check telephone book for spelling
- Communicate with Bob Nishimoto and Howard Takata
- ✓ - High powered light (12 V battery?)
- casio - watch for miles
- * - Dive hood / gloves / ^{FRANCINE?} ~~FRANCINE~~ TABIS
FIN'S AND OTHER DIVE GEAR
- Water Chemistry - Walt
- * - Note to Mrs. ^{2 MRS.} Howard / Punchy
- Stomach flushing gear? whereabouts?
- ✓ - Call Supe - DAR
- ✓ - ^{ELECTRICAL} Tape Buckets on FINS
^{MOTORCYCLE?}
- ✓ - 12 V battery / charges other one (sears) in box
- ✓ ③ - Call Parks & Recre
- ✓ ④ - Call Walt
- ✓ ⑤ - NMFS TRAVEL Request
- ✓ ⑥ - Tel. charges to HMB
- ⑦ Stipend changes
- ✓ ⑧ Recovery data *
- * Nanko - new Tabis
- ✓ ⑨ TIDE CHART - JANUARY



WAIAKEA

MAKAOKU

KUHIO BAY

Kaulainaiwi I

Coccaunui I

Waiakau Pond

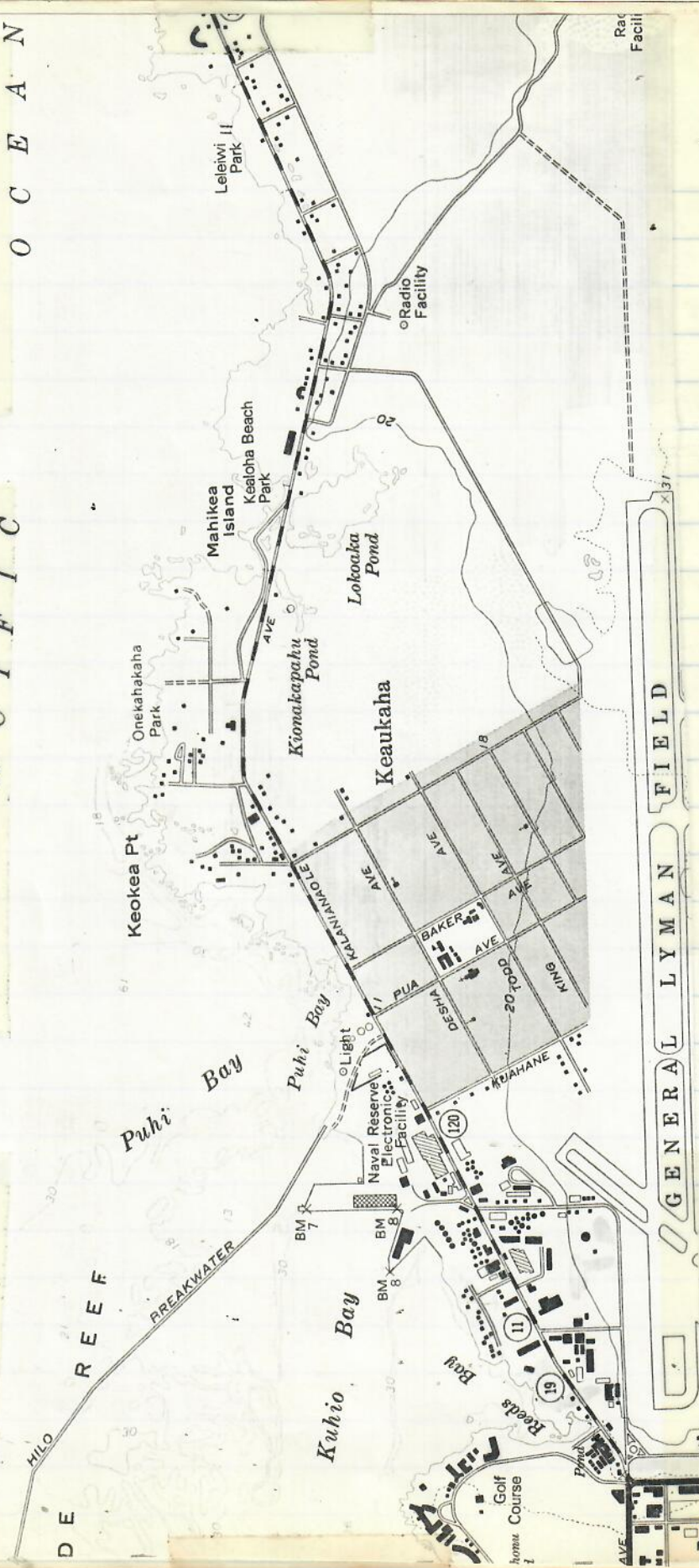
WAIAKEA



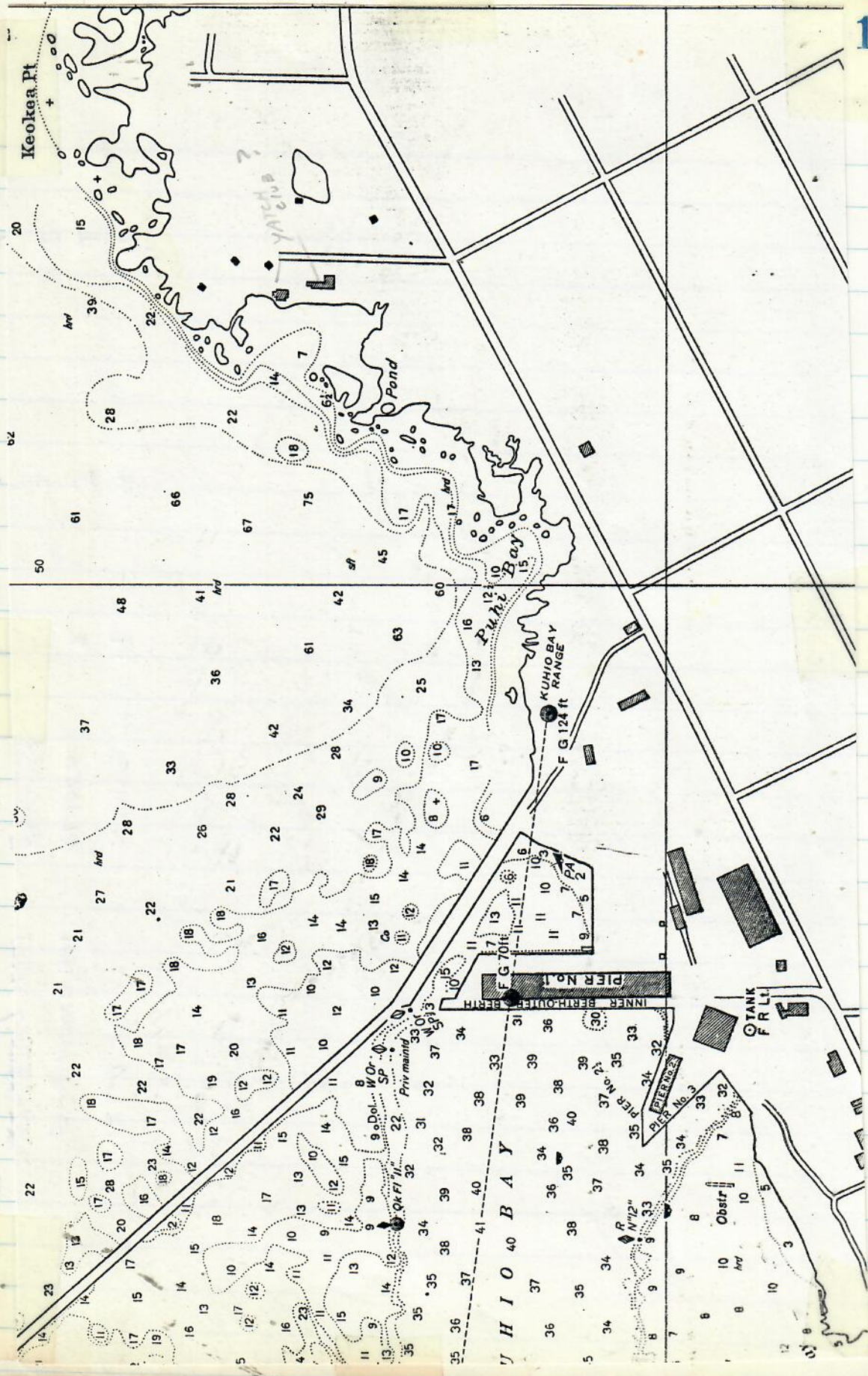
"FINGERS" REEF ?

P A C I F I C

O C E A N



Rac Facility



SUMMARY OF GREEN TURTLE TAGGINGS
ISLAND OF HAWAII

by
George H. Balazs
Hawaii Institute of Marine Biology

Dates	Location	Number captured	Number of tag recoveries	Total number newly tagged
13-15 May 1973	Kiholo	16	1	15
June-Sept. 1976	Punaluu	42	5	37
4-8 May 1977	Kaaluvalu Punaluu	13 3	1 0	12 3
19-27 January 1978	Kaaluvalu Punaluu	7 10	1 2	3 7
31 Aug.-6 Sept. 1978	Kaaluvalu Punaluu	6 11	2 1	4 10
18-22 March 1980	Kiholo	12	0	12
14-20 OCT 1980	KIHOLO	19	8	11
5-8 MARCH 1981	KIHOLO	7	5	2
22-25 JULY 1981	KAALUVALU	2	1	1
25-28 JULY 1981	Punaluu	7	0	7

*SAME EXPEDITION -
CHECK SUBSEQUENT*

124

17

17

DATE	LOCATION	NETS*	NETS	NETS
24 SEPT 1983	HILO (RICE HAYSTACK)	2	0	2
1983	HILO	2	0	2
26 NOV 1983	PUNACUU	3	0	3
27 NOV 1983	HILO (POINT)	1	0	0
15-19 DEC 1983	PUNACUU	12	2	10
8-10 JAN 1984	PUNACUU	13	4	9
17-19 FEB 1984	PUNACUU	12	2	10
23-28 MARCH 1984	PUNACUU	31	"	20
31 MARCH 1984	HONOOLII			

* CAPTURES OTHER THAN BY NETS INCLUDE SCUBA & SURFACE

Growth data for green turtles recaptured
at Kiholo Bay, Hawaii, during October 1980

by George H. Balazs

Tag no.	Straight carapace length, cm	Increase for 7 months March - October	Growth rate cm/month
3313	44.1	1.8	0.26
3315	46.0	3.1	0.44
3319	49.0	2.0	0.29
3317	53.0	3.6	0.51
3305	53.4	2.2	0.31
3303	53.6	2.0	0.29
3297	61.0	1.5	0.21
3311	63.0	1.0	0.14

$\bar{X} = 0.31$ $SD = 0.12$ RANGE = .14 - .51 $N = 8$

Growth data for green turtles recaptured at Kiholo Bay, Hawaii,
during March 1981

By George H. Balazs

Tag No.	Straight carapace length (cm)	Increase for 5 months October-March	Growth rate cm/month	cm/year
3481	45.3	1.1 cm	0.22	2.64
3319	50.6	1.0	0.20	2.40
3303	54.7	1.1	0.22	2.64
3297	62.0	1.0	0.20	2.40
3311	63.2	0.3	0.06	0.72

$\bar{X} = 0.18 \text{ cm/mo} ; 2.16 \text{ cm/year } N=5$

METRIC SYSTEM WITH U.S. EQUIVALENTS

METRIC UNIT (1) U.S. EQUIVALENT

LENGTH

millimeter	(mm)	0.04 inches
centimeter	(cm)	0.39 inches
decimeter	(dm)	3.94 inches
meter	(m)	39.37 inches
decameter	(Dm)	32.81 feet
hectometer	(hm)	109.36 yards
kilometer	(km)	0.62 miles
myriameter		6.2 miles

AREA

square centimeter	(cm ²)	0.155 sq. inches
square meter	(m ²)	1.196 sq. yards
are	(a)	119.60 sq. yards
hectare	(ha)	2.47 acres
sq. kilometer	(km ²)	0.3861 sq. miles

WEIGHT

milligram	(mg)	0.015 grains
centigram	(cg)	0.154 grains
decigram	(dg)	1.1543 grains
gram	(g)	0.035 ounces
decagram	(Dg)	0.353 ounces
hectogram	(hg)	3.527 ounces
kilogram	(kg)	2.2046 pounds
quintal		220.46 pounds
metric ton		1.1 tons

METRIC UNIT (1) U.S. EQUIVALENT

VOLUME

cubic centimeter	(cm ³)	0.061 cubic inches
cubic decimeter	(dm ³)	0.0353 cubic feet
cubic meter	(m ³)	1.31 cubic yards
cubic decameter	(Dm ³)	13.10 cubic yards

CAPACITY, CUBIC

milliliter	(ml)	0.06 cubic inches
centiliter	(cl)	0.6 cubic inches
deciliter	(dl)	6.1 cubic inches
liter	(l)	61.02 cubic inches
decaliter	(Dl)	0.35 cubic feet
hectoliter	(hl)	3.53 cubic feet
kiloliter		1.31 cubic yards

CAPACITY, DRY

deciliter	(dl)	0.18 pints
liter	(l)	0.908 quarts
decaliter	(Dl)	1.14 pecks
hectoliter	(h)	2.84 bushels

CAPACITY, LIQUID

milliliter		0.27 fluidrams
centiliter		0.338 fluidounces
deciliter		0.21 pints
liter		1.057 quarts
decaliter		2.64 gallons

