

KAWELA

BARBER'S POINT, (WEST BEACH) 1985, 1987

MAUNALUA BAY
SANDY BEACH

LIBRARY OF

GEORGE H. BALAZS

BALAZS

1985

1987

[at NOV 10 1993]

2 OF 2

4-2-85
TUES.

5:45 on station, Barber's Pt. West Beach.
Robert, Alan and I hiked in while it was
still dark - 3 spotting positions taken along
the coastline.

7:15 still no turtles seen in my sector - west end.

7:30 walked back toward Alan's station -

Noted patchy Pterocladia ^{7:45 SPOTTING CLOSE TO HARBOR - NOTHING SEEN}

2 photos of pools near pill box.

~~No turtles seen by any of us.~~

Drove back out of harbor and down
guard road toward "Paradise Cove" (HVB sign
present). Parked at pill box and
entered water for coastal snorkel survey.

In 9:30am, out 10:40am (1 hour 10 min).

Found 2 water discharges by
red lush Pterocladia. This algae is
is very localized - right at shoreline
and surface (intertidal).

Note: Turtles need to regurg select
sites in order to create successful
habitat? Lots of acceptable food seems
to be available in many areas of Hawaii.

Intertidal extension of reef covered with
Pterocladia (photo eaten?). Ptero is
all yellow. From sun bleaching?

Very little algae away from shore.

Lots of rocks, relief topography.

Lots of lost fish lines - photos taken.

Departed ~ 11:30 for lab.

Water seen to be very turbid offshore -
Pterocladia with tide from discharge apparently.

4/24/85 Survey of Turtles at West Beach, Oahu - 8581

1700 Arrive at area of "Pillbox", where we went snorkeling and parked the van. High tide at 1926 (less 18 m. for Waianae) Two fisherman, directly fronting the 'pillbox' with three poles, dunking. One boat near can buoy (2 divers (snorkeling) + 2 on boat)

Condition of water: relatively calm, no wind chop making whitecaps, surge atop reef margin because of rising tide.

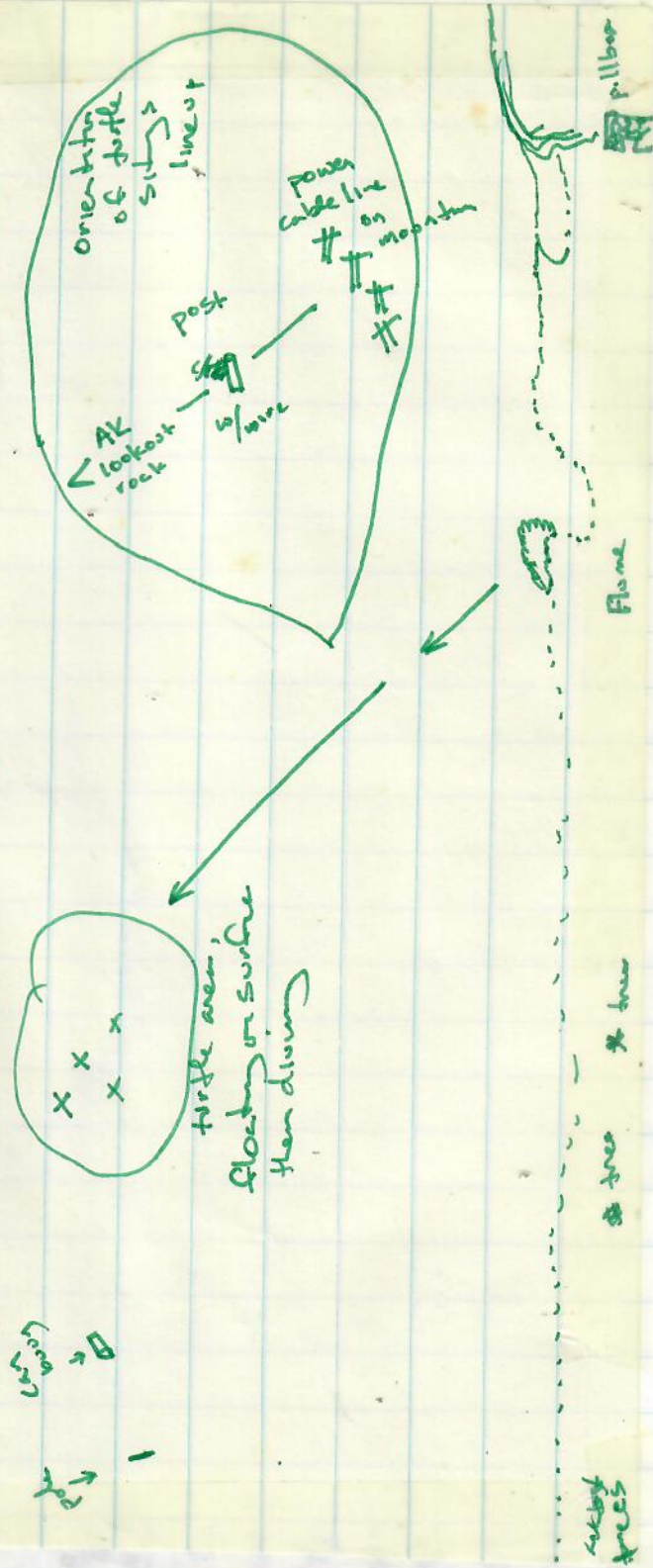
1730. 1 turtle observed ~ 2000' offshore towards harbor point + trees

1735 - 1 turtle, smaller same area

1740 - 1 turtle, med. size general area

1745 - move to ~~the~~ new observation spot by area where road comes out, more glare from setting sun

1815. move to AK lookout spot 'flume'



JUNE 11, 85-

NOTE: Photos taken of deepdraft harbor and West Beach from justwan's plane on the way to F3.

8/8/85 Thursday
 by Robert Forsyth
 We left Waianae Boat Harbor at 0915 on the Kaahela Ale. On Board were Jeff Koch, Gene Nitta, Lew Consigliere, John Naughton and Robert Forsyth.

We split into two dive teams. John Naughton and Robert Forsyth and Lew Consigliere and Jeff Koch.

We motored down to Browns camp, a 45 minute boat ride from Waianae.

John & I did the first dive starting just south of Browns Camp. The dive started at 1035 the duration was 25 min and maximum depth was 70'.

We started the dive on the 10 fathom ledge starting at 40' and going to the ledge and then heading south with the current. There were a few caves and some cut backs. A few spots looked like they would be good turtle sleeping areas. There was not much live coral

and the bulk of the bottom had rubble.
 No turtles were sighted on this dive.
 Time out 1100, Visibility 30'.

The 2nd dive started at 1121. Lew & Jeff started slightly north of the harbor entrance. The water depth on the ledge was 40'. At 1125 a med-large turtle was seen on the surface. These divers observed

several fissures, approx. 2' wide, several ledges with some coral coming down. A few ^w undercutts and a few caves. The bottom was 95% sand and 5% coral outcrop. They left the water at 1150, Maximum depth 64' 25 min.

The third dive started at 1222 straight out from several large petroleum tanks. We went in at 40' just ~~off~~ over the 10 fathom ledge. John and I saw a med-large (approx. 70-75 cm) turtle right

at the beginning of the dive. It was sleeping in a small cave at 55'-60' depth. John took a picture of it and then approached it at which time it awakened and swam away. After this we headed south along the ledge. There was not as much current on this dive and the visibility was better. There were a few cutbacks, but they were widely spaced. We came out of the water at 1245, Maximum depth 70' but most of dive done at 55'-60'. 23 MIN.

The 4th dive started at 1312 just south of Brown's camp and followed the ledge north. They saw some 20' cliffs but not as many nooks and crannies as on the 2nd dive. There were a few cutbacks. No turtles were sighted. The dive ended at 1334h, maximum depth was 60'. 22 MIN.

West Beach Dives (Turtle Surveys)

Aug. 8, 1985

Law, Consiglieri, Gus Nitta, Rob Forsyth, and Jeff Koch & Kaylston went out to Waianae SBT. Board RN/Kocheleale and underway for West Beach in strong trades.

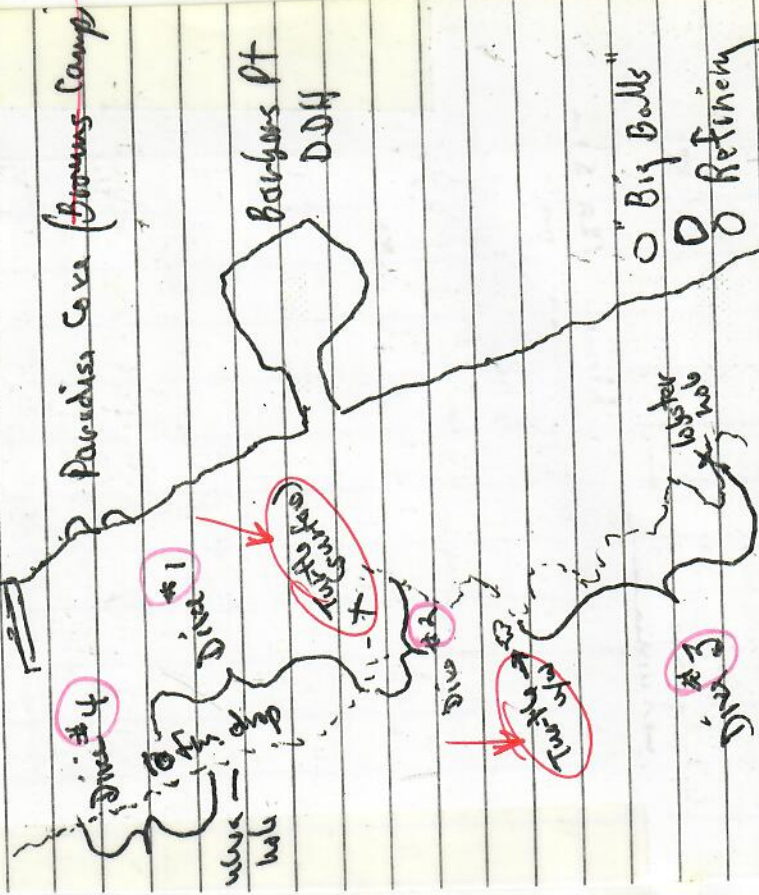
Rob and I made first dives from Browns camp all the way to Deep Draft through entrance, worked with me current along fun drop. Receive habitat but no turtles sighted. Several very nice caves on drop - one with several entrances and 4 or 5 nice wha in it. Found new soft coral samples. Max depth 70', BT 25 min.

Law and Jeff made next dive right off entrance of DDH. We saw burble at surface but they swam now below. Row into nice lobster hole. Current slackening off.

Rob and I made second dives south of DDH to PRT Refinery. Close water

and nice drop in much of area: 45' to 70'. Saw a nice size turtle in a tunnel. Found a pile of lobster in a crack but left frame - Max depth 70', BT 25 min. (photos y/c) Law & Jeff made last dive from Browns camp north a bit - No further.

☐ Kaha Power Plant



Habitat in remarkably good shape in dist proximity to DDH with little blasting & dredging

→ Ewa Beach Dives
(Turtle Surveys)

Aug 12, 1985

Cow Emisigiani, Gene Nitta, John Henderson, Jeff Koch, Eleanor Dyras, and Naughton departed Lab at 0800 for Wai'anae SBT.

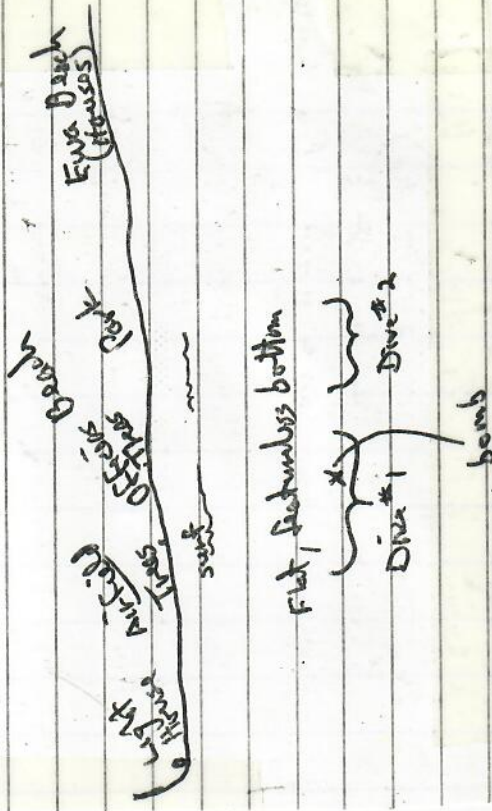
0930 Depart Wai'anae SBT aboard R/V Kahelele Ale

1130 Arrive off Ewa Marina site.

1141 - 1206 John Henderson and Naughton make drift dive to west from Office Beach to west (around Yami). Very gentle slope, only a few ledges but very relief. Basically flat bottom. Very clear water. No further. Max depth 80', BT 25 min.

1234 - 1258 Other three down off Ewa Marina site (near beach park). Came up early because bottom so flat. As with no tons of *Periwinkle spississima*. They saw no *astropus*. No turtles.

Decided to head around to west side of Barber's point for second series of dives. Between dives ran back & forth (in + out) off Ewa coastline - No sharp drop-off seen between 30'-80'. Slight drop at 70'-75' but very gradual compared to around corner (off new harbor). Found a large "bomb" on our dive.



8/12/85

1345-1414 John Henderson + Navy when
made Dive #3. (max depth 85', BT 29 min)
Started just south of big balls on beach
and worked with current along entire
refinery complex. beautiful high relief
bottom with many big caves and tunnels.
Nice clear water also. South current.

We found two turtles sleeping in a cave.
One was a big male, the other smaller with
tumors on the left eye and high on the
left front flipper.

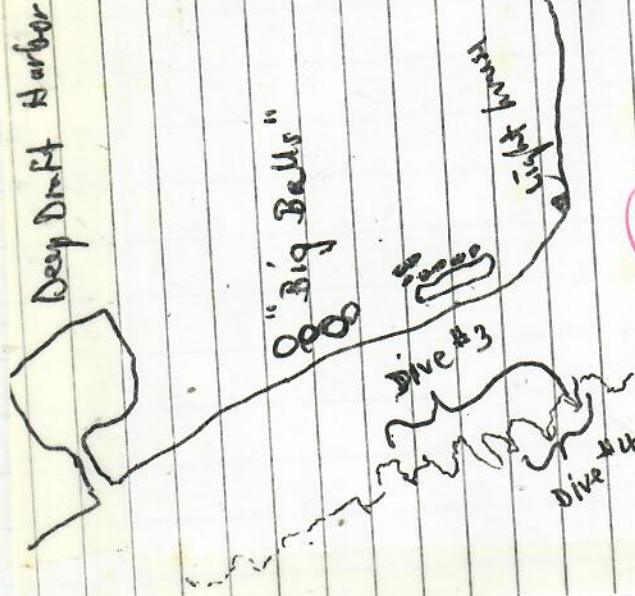
Cater saw another turtle slowly crossing
along bottom of the drop. (medium size)

great resting habitat all along the drop.
Very jagged drop ranging from ~45' to
80'. Several "off drop" pinnacles off
points on with a huge cave in it. Big
mussel colony inside - hi when surprisingly
fast covered with short gorgonian coral growth.

Got an invertebrate dead, especially at bottom
of drop which is mostly rubble. Very
much like windward side drop-off.

1429-1459 Other three went in for
dive #4. Jeff lost his weight belt
so kissed off dive. Tom and Ellen
waited on and worked around 300 meter station.

Deep Draft Harbor



They found one turtle sleeping in a depression
(side hole) on top of the drop-off. Only in
~40' of water. (Tom, John + I found
together were in 55').

Saw school of small snails + also ophi
on your dive. Also two lobsters.
(Amazed at how well habitat + biomass of
ref fish are in DDT area after construction)
On way back saw two big turkeys off
west beach and a school of spongers
off Kaha Power Plant.

1600 - Tid up at Winona 50ft.

many people
directed into
the new
area

Gene & I visited the site of the proposed
Eva Marina development this a.m. @ low tide. 8-1-85
The area is reminiscent of Kawela Bay, in that
limestone bank extends over along the entire area ($\approx 2/3$ mile),
& algae is quite abundant (lots of Ulva, mostly Acrostophora,
but many species present). A local guy stated that turtles
are often seen in 10-15', following channels that run
parallel to the beach & inside the break @ one of
the surfing areas. My evaluation is that the area probably
provides significant foraging habitat. If you, Rob, or Alan would
like to take a look (it would only take 3 hours) let me
know - I'll drive.

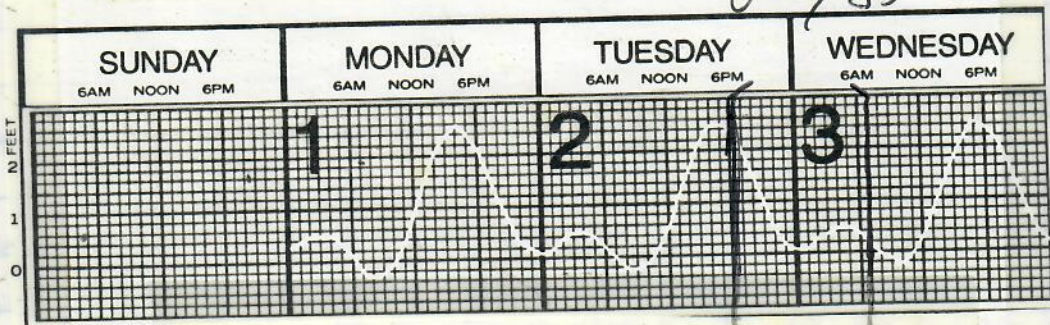
Below are some of the algae we picked.

I've got two NOAA certified divers ready to dive West Side /
Eva (John Naughton & Irene Byron).

LEW CONSIGLICKI

Full Moon
 July 2, 1985

JULY 85



6:30pm 6:30am

✓
 12 Hours NETTING
 6 CAPTURES, WITH 2 BEING
 RECAPTURES.

JUNE 28, 85
FRIDAY QUESTION: DOES ELECTRO. AID
IN OBTAINING BLOOD SAMPLES?
SEEMS SO. BUT NEED TO TRY AT
DIFFERENT AMPS (MORE AND LESS RIGID
MUSCLE).

Departed Kawela at 11 am.

BACKNOTE:

DON HO

[DON] HO ENTERPRISES

923-3981

3954 GAIL ST.

Secretary "HAUMOA"

HONOLULU, HI 96815

2 JULY 85 - TO Kawela Bay - depart ~ 4:30pm

TUESDAY 6:30pm 2 shallow joined pieces in the water - closer to coral plate, and more to the left, than last weeks trip.

Netting

Time = 12 hours

27°C recorded during snorkel. Randomly pulled up a piece of Hyperrea senwicornis. Again noted Ulva spiciata tangled in Acanthopora.

1st catch

Full Moon. Big splash at midsection.
9:45 → 8761 LFL . 8763 RFL RHIND MISSING
Recap 25.9°C deep body (healed piece missing)
Pierces of top site healed.

Small pieces of pink coralline on tops.

1205 → BIG SPLASH - PULL HARD BOTH ways
30 SECONDS LATER - NOTHING

2nd catch

1225 BIG SPLASH SAME SITE (1/2 way Along)
1st net piece.

26.3°C deep body
Tide dropping - surface water feels noticeably cold.

3rd & 4th

1:20am 2nd piece - but waited until recap.
2 am to get it out (Robt & I);

Also found a small juvenile in the 2nd piece

5th

2:30am 1st piece (Alan & Robt) 24.8°C

6th 4:45am

light in sky ~ 5:15am 2 more in net close to shore side.

7/2 - 7/3/85
 Summary of BLOOD SAMPLES COLLECTED
 THIS EXPEDITION:

TAG NO.	SL	SAMPLES FOR SEX DETERMINED	PACKED CELLS (FROZEN)	SAMPLES FOR BRADDON GALLOWAY
		SERUM		
8513	52.9 cm	1 vial	1	1 WHOLE BLOOD (FROZEN)
8511	50.2 cm	2 VIALS	1	1 whole blood "
8761	64.5 cm	2 vials	1	1 whole blood "
8778	54.6 cm	2 vials	1	1 whole blood "
8506	67.0 cm	2 vials	1	1 whole blood "
8508	43.4 cm	<u>NONE</u>		1 whole blood "

Another one hit here hard with a splash when there was plenty of twilight to see. Saw wake on the surface prior to "hit". Splashed and pulled back and forth for over a minute - then nothing - came loose. It would seem that the turtle had circled inside behind net, started to swim out, saw net and panicked into it. At ~ 6 am the turtle closest to shore got out, pushed on the net near the tangled 2nd turtle, then disappeared. Net taken out at 6:30 am. Data for each turtle worked up as follows.

803 JULY 85

WEDNESDAY

[30 NOV 10 1993]

Leu Consiglieri, Dale and 2 children came to observe.

Electro used with all - but the smallest.

9:45pm Capture #1 of the evening - leucite # 6 (light blue tag) (again)

TAG RECAPTURE

See pages 23 & 41

8761LFL

S-64.5 x 52.3

3/26/85

4/15/85

S-64.0cm

S-64.1cm

8763RFL

notch - 64.0

C-69.7 x 63.5

8505-LHIND
(new)

PL-51.6

HEAD-9.6

TAIL-13.2

RFF - N.T.

Blood - 2 tubes

Stomach sample

Skin larvae on neck & pelvis

Right Hind tag 8762 missing -
notch there healed.

How did it come off?

Deep body - 25.9°C

#8761 7-2-1985

Amansia glomerata

99%

Laurencia sp.

1%

Ulva reticulata

Trace

Amphipod

Capture #2 - Leucite #
0025 am

Deep body - 26.3°C

8506 RFL

S - 67.0 x 52.8

Notch - 66.9

8507 LHIND

C - 70.9 x 65.1

PL - 52.9

HEAD - 10.0

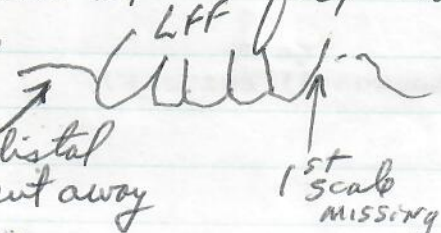
TAIL - 13.0

RFF - 11.2

#8506 Kawela 7-2-1985

Acanthophora spicifera
Dictyota acuteloba
Amansia glomerata
Ulva reticulata

99%
Trace
Trace
Trace

- ✓ Blood 2 tubes
 - ✓ Bone wedge taken 10th R MARGINAL
 - ✓ Stomach sample.
 - ✓ Pink coralline on carapace
 - ✓ Red algae neck & pelvis.
 - ✓ Distal end of right front Broken after capture.
 - ✓ Left front flipper has greatly reduced FL, ∴
 - ✓ no tag applied there. Reduction due to 1st large scalle being missing - a congenital (?) defect rather than injury.
- LFF
- 
- also distal here is cut away
- 1st scalle missing
- Gouge - Long scratch in carapace 2-3rd left lateral

82

7-3-85
- Wednesday

Capture #3 - Levate #8

TAG Recapture 3/27/85 p. 28
S-54.4 cm

8779 LFL

S-54.6 x 45.3

8780 RFL

notch - 54.3

8778 RHIND

C-58.5 x 54.0

PL-44.9

HEAD-9.2

TAIL-10.0

- ✓ partly scabbed/healed abrasions on trailing ventral surface of LFF.
- ✓ - pink coralline on carapace
- ✓ - blood sample - 2 tubes
- ✓ - stomach sample
- ✓ - red algae on skin & neck

#8778 Kawela 7-2-1985

Acanthophora spicifera
Microdictyon sp.
Polysiphonia sp.99%
Trace
Trace

7-3-85
Wednesday

83

Capture #4 - leucite #9

8508 LFL S - 43.4 x 33.8
notch - 43.0

8509 RFL C - 45.5 x 39.0

PL - 34.6

HEAD - 7.3

TAIL - 7.2

RFF - 7.2

- Blood ~ 1/2 tube for Braddon only
Stomach sample

- ✓ Skin barns on neck & pelvis
- ✓ Pink coralline on carapace & plastron
- ✓ 3rd lateral left scute lifting/peeling

#8508 Kawela 7-2-85

Acanthophora spicifera	99%
Laurencia nidifica	Trace
Amansia glomerata	Trace
Hypnea pannosa	Trace
Gelidium sp.	Trace
Casurina (ironwood tree)	Trace

84

3 JULY 85

WEDNESDAY



Capture #5
2:30am

✓ LEUCITE #10

8510 RFL S-50.2 x 40.2

notch-50.0

8511 LFL

C-53.0 x 47.1

PL-40.4

HEAD-7.8

TAIL-9.5

RFF-8.8

#8510 7-2-1;985

Acanthophora spicifera	99%
Jania capillacea	Trace
Amansia glomerata	Trace
Corallina sp.	Trace

- ✓ Blood - 2 TUBES
- Stomach - small amount only (hadn't fed yet?)
- ✓ red algae on pelvis
- ✓ pink coralline on carapace
- ✓ white hard scum again on carapace - like some of larger ones seen here - and also at Lualaba. Representative photos in files.
- ✓ Deep body 24.8°C

7-3-85

wednesday

85

[6660 NOV 10 1993]

CAPTURE #6 - ✓ LEUCITE #11

8512 LFL

S - 52.9 x 40.1

notch - 52.5

8513 RFL

C - 56.5 x 48.5

PL - 41.7

HEAD - 8.1

TAIL - 8.5

RFF - 8.7

✓ Blood - 2 TUBES

✓ Stomach Sample

✓ Pink coralline on carapace and plastron

✓ Red algae on neck & skin

#8512 7-2-1985

Acanthophora spicifera	99%
Laurencia nidifica	1%

Departed Hawela ~ 10:30am
after working up all turtles.

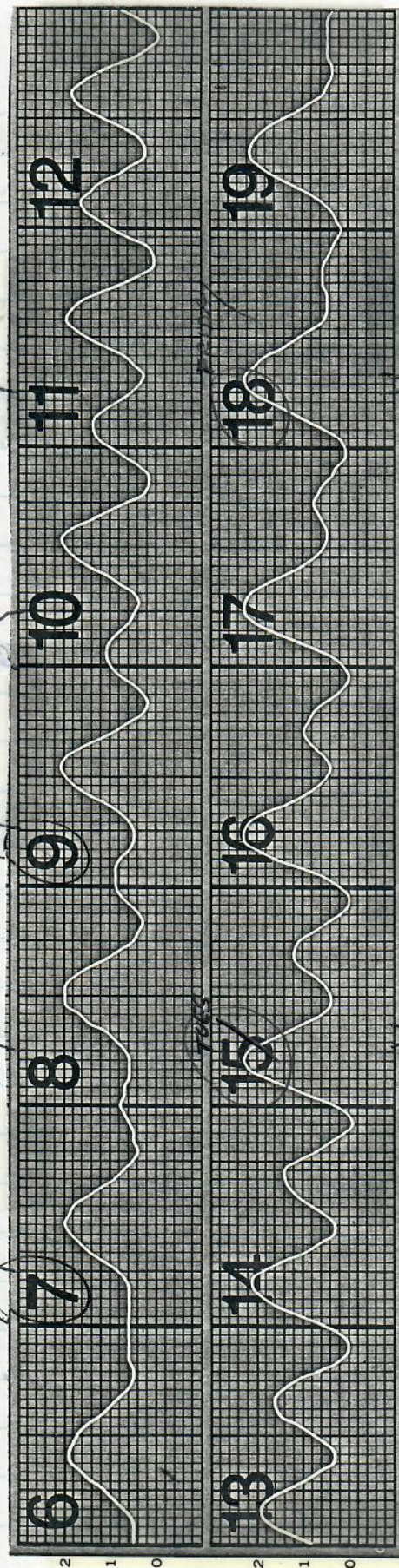
11 FROZEN WHOLE BLOOD SAMPLES FROM KAWELA BAY
SENT TO SYLVIA BRADDON GALLOWAY ON AUG 5, 85

--	8493	6/28	40.8	Kawela Bay, Oahu
--	8502	6/28	67.7	Kawela Bay, Oahu
(3)	8499	6/28	60.9	Kawela Bay, Oahu
(4)	8497	6/28	47.6	Kawela Bay, Oahu
(5)	8495	6/28	44.9	Kawela Bay, Oahu
--	8513	7/2	52.9	Kawela Bay, Oahu
--	8511	7/2	50.2	Kawela Bay, Oahu
--	8761	7/2	64.5	Kawela Bay, Oahu
--	8778	7/2	54.6	Kawela Bay, Oahu
--	8506	7/2	67.0	Kawela Bay, Oahu
--	8508	7/2	43.4	Kawela Bay, Oahu

Ferry Walker called me
and reported she had
found a turtle to see
from 7:15-7:45 am
15-100 yards offshore.
Turtles in front
of her house.
Sawal has an effect?

Norman &
Terry reported
seeing 45 heads
from 7:15-7:45 am
15-100 yards offshore.
Sawal has an effect?

OCTOBER 1985



BRAYS
by Terry's
POSSIBLY
BY POW
HOS.

KANAWA - 6:15 -
~ 8 AM
Spotting
HEIGHT OF OCT 15th
WAS ~ 3:30 AM
+ 2.4 ft.

KANAWA
6:03 - 6:35
we only sighting
terrys

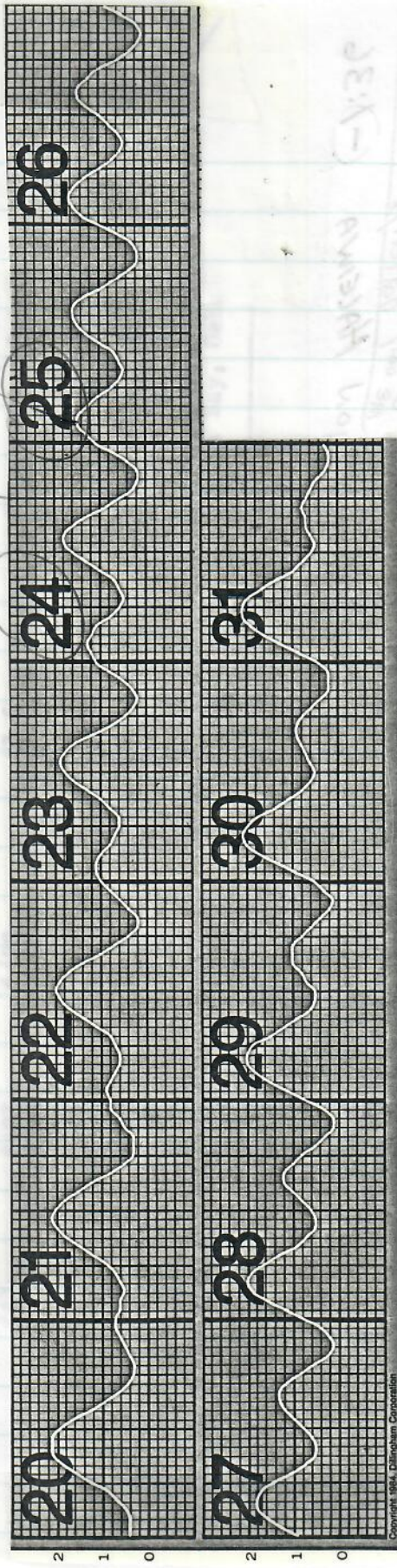
ION KALEWA (-):36

MOON PHASES			
LAST QUARTER OCT 6	NEW MOON OCT 13	FIRST QUARTER OCT 20	FULL MOON OCT 28

OCT. 85

*1 hour away from ...
Saw to Sylvia ...*

THURS. 6PM FEIDA
+ 1.5 fl. at
2 AM



-X:30

OCT 28 = FULL MOON

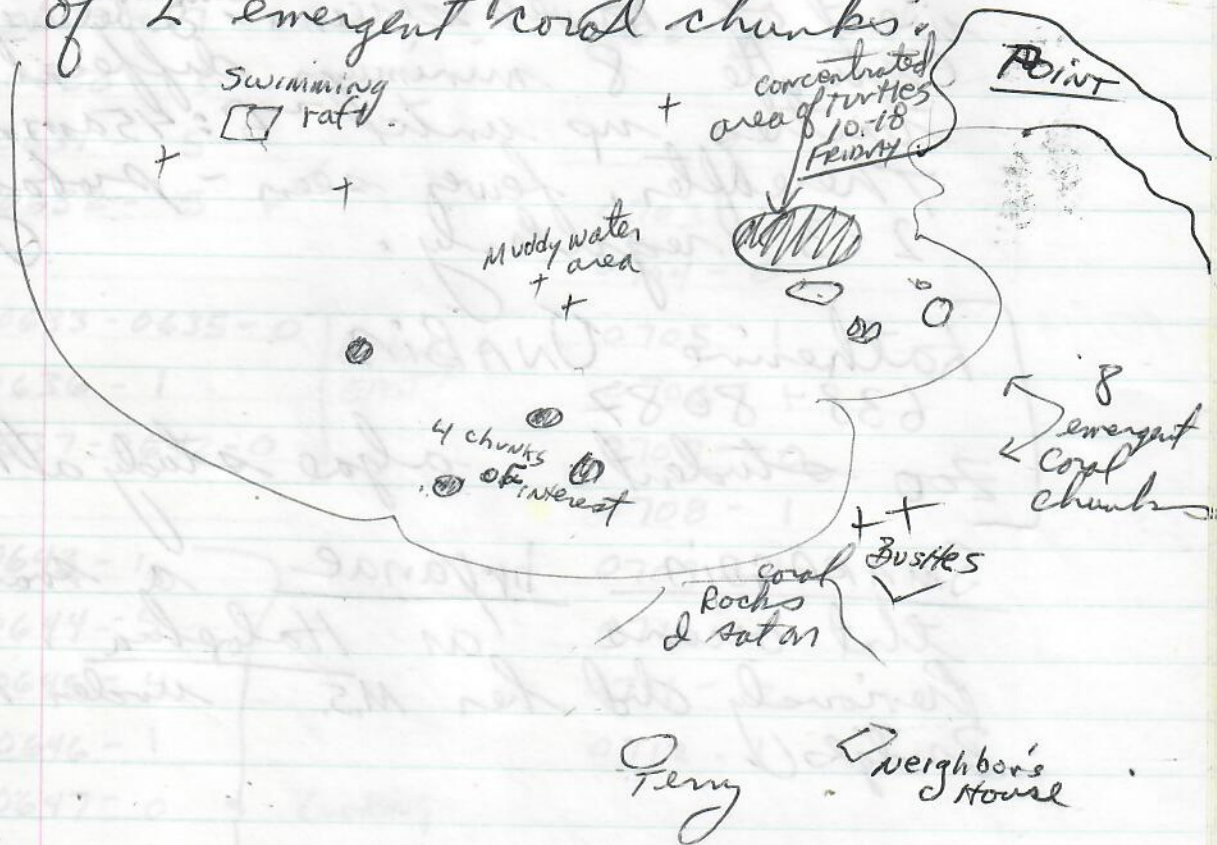
ON HALEIWA - \ominus 1:36

*THE ...
OCTOBER 1985*

Kawela Spotting

Oct 15, 85
TUES

6:10 pm arrive at Terry's house.
Robert walked to Don Ho's property.
Sunrise ~ 6:15 am according to the newspaper.
Immediately at 6:00 am saw heads surfacing 15-20 m. outside of 2 emergent coral chunks.



Also heads sighted near swimming raft, and further out off Terry's house.
Lots of limu along this least end of beach (for ~ 75 m stretch). Sample taken.

OCT. 15, 1985

TUESDAY

White clouds reflect back rising sun, creating some reflection on water's surface.

^{small} Gill net in the water to the west of Kawela stream. ^{Saw man checking it, I believe}
 Estimate 8 minimum different turtles up until ~6:45am. Thereafter, fewer seen - probably 2-3 regularly.

Katherine UNABIA

638-8087

Zoo student - algae study at Kawela.

SMARAGDIA bryanae a snail
 that occurs on Halophila.
 Previously did her M.S. under Kent Bridges.

Numbers of heads I saw seemed to decrease at ~6:45am - but heads representing 2-3 turtles were still seen when we left at 8am. Terry & Norman told about a net set from Ho's property and seemingly abandoned.

10-15-85 - Robert Forsyth from
Jon Ito's Property

91

0623 - 3

0624 - 3

0625 - 2

0626 - 2

0627 - 5

0628 - 2

0629 - 7

0630 - 3

0631 - 5

0632 - 5

0633 - 0635 - 0

0636 - 1

0637 - 0642 - 0

0643 - 1

0644 - 5

0645 - 4

0646 - 1

0647 - 0

0648 - 3

0649 - 7

0650 - 1

0651 - 0

0652 - 3

Looking
NORTH

Looking
EAST

Looking
NORTH

0653 - 0657 - 0

0658 - 1

0659 - 0

0700 - 1

0701 - 0

0702 - 0

0703 - 0

0704 - 0

0705 - 1

0706 - 1

0707 - 0

0708 - 1

0709 - 1

0710 - 1

0711 - 2

0712 - 1

Looking
EAST

Kawela
 OCT 15, 85
 TUESDAY morning

Jim Yarbrough confirmed this - said
 a local neighbor had done it - left
 it for 2+ weeks, only occasionally
 checked it for fish (and lobster, skipper?).

^{no turtle heads seen}
 Drove to Turtle Bay side. Noted old
 house with cars has been leveled
 and removed. Drove to Don Ho's property.
 Bright sun now ~ 8:30am; no turtle
 heads seen.

10/17 - Thursday - Terry reported seeing 31 turtle heads
 in 8 minutes (6:25 - 6:33) 3-40yds
 in front of ^{her} house.

OCT 18, 85

FRIDAY MORNING - Drove to Kawela by myself -
 arrive 6:03 AM -
 (transit time ~ 1:05 minutes). Sat on
 rocks in front of Terry's house -
 started counts at 6:09am -
 plenty of light to see heads (note -
 possible effect of my presence on the
 beach, as opposed to Terry inside on
 second floor?) Many turtles seen
 concentrated in an area just off
 nearby limestone point. See p 89 - 90

KAWELA
 (OFF TERRY'S
 HOUSE)
 Oct 18, 85
 FRIDAY
NO. Heads seen

6:09 - 1
 6:10 - 3
 11 - 2
 12 - 4 (SUN
 SHEEN ON
 WATER)
 13 - 1
 14 - 1
 15 - 6
 16 - 3
 17 - 6
 18 - 2
 19 - 3
 20 - 5
 21 - 7
 22 - 4 (1 head
 looked
 Big)
 23 - 5 (clusters
 off point)
 24 - 4
 25 - 4
 26 - 0
 27 - 11
 28 - 3
 29 - 1
 30 - 5
 31 - 4
 32 - 8 (several
 heads look
 very small)
 33 - 5 (one saw
 me)
 6:34 - 5

At 6:35 I drove to
 the Turtle Bay side -
 near "Wild Beach" end. Rough
 nearshore water on limestone
 bench. No abundance of algae
 seen. Glossy offshore, but
 several large swells seen.
 One broke by on shallow spot
 where we previously scuba and
 caught a small turtle.

AT 6:45am I saw
 a small turtle surface
 quickly over limestone. No
 others seen. Two photos
 taken of TB HILTON. Noted
 fence and fresh sign
 at beachrock point -
 blocks shoreline across -
 "NO TRES. PROPERTY OFF LIMITS"
 DOGS also there, and toward Hotel on beach.
 IMPOSSIBLE TO WALK. EGG DOG BY DOGS?
 Drove back to Terry's
 at 7am -

7:08 - 4
 7:09 - 3
 10 - 2
 11 - 0
 12 - 1
 13 - 2
 14 - 1
 15 - 0

NOT seen in
 cluster place, like
 earlier.
 Depart 7:20am.

- * Limestone outcrop by Moncrieffs - sample and ID "red algae" reported by Naughton.

Needs - 11/20 - turtle award poster
Award, or patch, to Terry,
(rec. team function?)

- Kokua line 10-17 HSB
- * - Call Paul Berger; Have him call property managers and caretaker
- Call Brock - 1) report latest findings
- 2) news? cc

NOV. 20, 1985 Drove w/ Robert to Terry's house, Northwell
WEDNESDAY ^{yesterday} - reported first big one this year.
Robert to DO Ho's property -

11/20 - 6:05 am station on limestone in front of Terry's.
6:12 - ^{dark} surface fairly visible

6:16 - first seen head close
(none seen in between)

none seen	6:21 - 2
	6:24 - 2
	6:25 - 2
	6:26 - 1

low wave break - right at the point (white crest over)
wavy calm inside there.

Same turtles?
6:32 - 2
6:32:42 (1) only 5-10m from shore
6:34:36 2
6:35:37 1
6:35:40 1
6:36:50 2
6:37:49 2
6:38:57 1 left
6:39:40 1

11-20-85
 Wednesday - 6:41 am sunrise?

63958 - 1 left
 (64029 - 2 (The twins)
 64141 - 2 " + 1
 64234 - 1 left small + 1
 64314 - 1
 64348 - 1 + 1
 64405 - 1
 64420 1

Sweet
 7:33 - 9 Terry,
 34 - 2 Norman,
 35 - 4 Robert &
 36 - 2 I
 37 6 counting
 38 3

Depart 748

645-3

646-3

647-5 (after a swell - more come in TUES)

NOVEMBER 1985
 WED NOON THURS.

Terry & Norman came

648 -

656 - 10

657 7

Terry Norman & I counting

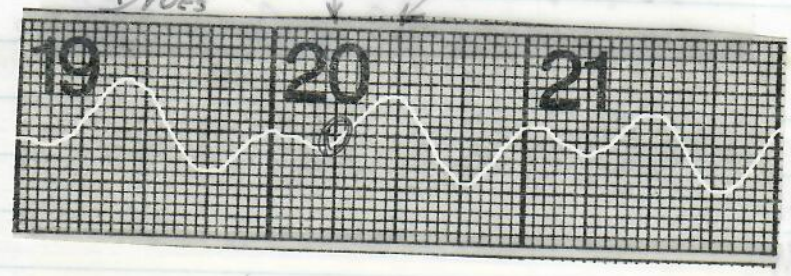
658 7

659 4

660 8

700 9

701 6



Terry Norman Robert & I counting

7 14 - 4

7 15 6

7 16 5

7 17 7

7 18 9

7 19 7

-1:36
 Holawa

Conclusions: Counts seemed to increase as it became later in the morning. No real decreases seen at the time of our departure 7:50 am. Terry reports seeing high number recently at 8:30 am even. Robert saw very few

96 11-20-85
WEDNESDAY

off Don Ho's property. (Counts taped in).
BELOW ↓

→ On 11/21 I heard that John Naughton, Bob Moncrief, FWS person had dove around the bay and found a pocket of muck by the swimming barge. John said that the "streams" (agricultural stream) will be diverted to the turtle bay side near limestone outcrop where Moncrief thinks turtles sometimes feed. John saw a red algae there 11/21.

11/20/85	0622 - 1	North
SIGHTINGS	0630 - 1	"
By	0633 - 1	"
Robt.	0636 - 1	East
FORSYTH	0638 - 1	North
FROM	0642 - 1	"
DON HO'S	0645 - 1	"
PROPERTY.	0646 - 1	"
	0648 - 1	East
	0649 - 1	"
	0650 - 1	"
	0654 - 1	North
	0655 - 1	"
	0658 - 2	"
	0659 - 1	"
	0700 - 1	"

Kam, Forsyth & Balays
 Trailered Zodiac to site

4-30-85 Scuba Dive at Maunaloa Bay - "Turtles"?

25' for 60 minutes ~ 100 yards right of marker #1. Lots of filefish everywhere.

7257 RFL I turtle seen swimming, one caught -

7258 LFL S- 39.2 x 34.8 ^{~15'} resting in sand depression between bottom outcrop.

Notch - 38.8

C - 41.0 x 40.0

PL - 31.1

TAIL - 7.0

RFL - 6.2

HEAD - 6.3

green algae on skin & PL; clean carapace.
 Food sample obtained - Codium. retained.

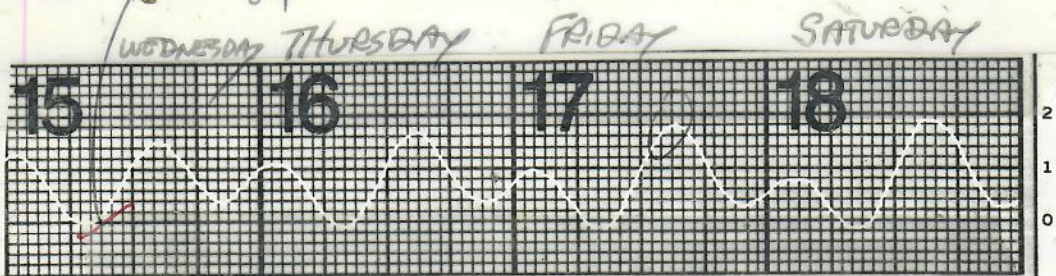
Sample No. 7257 4-30-1985 Hawaii Kai

Codium edule (two pieces)

Codium arabicum (one piece)

Turtle
CANYON^{ed}
MANAUA
BAY

MAY 85



W GREEN SKIN ALGAE SCRAPED FROM UNDERSIDE
OF FRONT FLIPPER

Sample No. 7273 5-15-1985 Hawaii Kai

Ectocarpus indicus



Plastic freezer Storage
need Containers for stomach
samples

✓ Water temp. 25°C

LF-7273

RF-7274

Caught by Alan Kam, resting on palm frond

P-34.3

H-6.6

RFF-7.1 ~30'

SC-41.7 X 34.5

CC-43.7 X 40.5

T-7.0

N-40.9

✓ Barnacles in seams of Plastron & Pelvis & Neck. (dugout - ~~STEPAN~~ ^{BARNACLE})
✓ Green algae on skin, sample taken from underside of flippers.

✓ White coralline specks on carapace

✓ Dull finish on Carapace

✓ 3 Amphipods in mouth corner - ^{WOULD HAVE BEEN A good photo}

Stomach pumped, water had reddish tinge & fuzballs possibly Codium

✓ Blood sample taken

"V" Section of shell from left side taken
" (10th marginal) - frozen ^{ZONE} _{BIOPSY}


5-15
~~WEDNESDAY~~

~~LOST ON
THE WAY IN~~

"Turtle
CAM/yon"

(Above) Alan, Robert & I departed in zodiac Hauaiikai Ramp at 10:40am - Aloha Dive Shop boat at anchor. Anchored in 35' sand area & swall to start of Reef. Alan immediately caught the above turtle. Diagonal series of ridgts. Saw heavy turbid areas. Saw 2 swimming, then 3 each at clearer water detached coral heads - soft sand all around. Clearing areas - stations? Saw an all black tiny picking on sand face. Also M. M. M. around detached heads.

Blood - 1 vial serum


 NOV 10 1993

56

"TURTLE
CANYON"

5-15-85

35'

60 minutes

7275 - RF

8451 - RHF

8452 - LF

SC - 62.2 x 49.2

N - 61.4

H - 9.6

RFF - 10.4

CC - 66.5 x 61.5

T - 13.0

P - 49.8

A few barnacles - skin barns

3 small growths on left eye membrane

Caught by R. Forsyth

1 growth on right eye & on right
ventral shoulder

Red skin algae on neck

2 small spots of pink coralline

Blood sample taken

Shell sample taken 10th Marginal on Right
Stomach sample not attempted.Above turtle seen at the surface when we surfaced,
Again swimming free. Robert grabbed it toward end of dive -
Head in hole right near ALAN'S CAPTURE.

Returned to ramp by 2 pm.

Blood - 2 vials serum

62

5-16-85

Thursday

TO Sandy Beach with Robert
and Alan at 1:50 pm -
follow-up on Greenwell's
description. just past culvert,
3 possible sites where surfers exit -
right to left #1 #2 & #3. #2
looks the most used, just to left of
offshore breaking (rock) spot.
Question: How far offshore did he see
the turtles on the bottom?
Eyes go at night?

Ulva on rocks at water's edge.

Photos of turtles.

2-3 small turtles close to shore,
trying to get at algae, starting at
2:20 pm.

Breath holds - 46, 3:15, 3:20, 2:40, 45,
15, 3:00, 56, 1:41, 1:41,
1:30, 59, 2:37, 58, 45

JUNE 1987 - WEST BEACH



THURS.

6/11/87 Thursday afternoon
 Departed lab in van at ~3:45pm
 w/ NINA MORISSETTE, MARTY FAST - stopped to
 pick up Kim CROZIER - but her father Mike wanted to
 go, so they drove separate.

Major movie filming going on in harbor -
 "Navy" war ship; "BIG MIKE" DRY DOCK BARGE.

Need -
 Photos of
Pterocladia
 "fingers"

Site of
 "Pill Box"
 on
 MAP

Paradise
 Cove;

682-2871

1580

MAHALOA
 Suite 1200
 945-3571

Parked AT west side of Harbor entrance.
 Almost no change in surrounding area of
 deep draft then when last here ~2 years ago.

Still just graded dirt. Walked
 along shoreline - noted moderate
 dug areas possibly behind lagoons "B"
 and "B" or "A." Set up observation
 posts as per map on p113. Croziers

and we by Lagoon A-B.
 First encountered 2 fishers on beach -
 Marty interviewed them - been there all
 day - saw 2 turtles this morning
 Stated "turtles were plentiful here
 during the winter."

Croziers & I noted 3 local fishers
 with throw nets at western end.
 Turtle in water seen with binoculars
 in front of them - appearance of trying
 to capture it. Mike walked down
 and talked to them to stop possibility.
 Confirmed they were trying for it.

Said "Area here 'infested' with
 turtles. one man's name Gomes.
 Kim later joined Mike to watch

center
 line
 stake

6/11/87
THURSDAY

at this site - Reported seeing 4 turtles close to shore, back and forth in choppy water, obviously feeding. 1 - >60 lbs 3 - under (smaller)
 Saw 1 turtle - small
 Watched from - 5:30 pm - 6:15 pm when we started to walk back to the van. Marty didn't see any turtles - Nisa saw 2 one very large >200 lbs + 1 smaller - ~50 yards or more offshore.

Question - Will lagoon channels get through "finger" extensions of Herichthys? More Aiguatera or beach algae from cuts/ blasting?

"Sea turtles and their Habitat are under attack throughout the Hawaiian Islands"

Note - Cautious nature of large green turtles foraging, as opposed to smaller, more inexperienced ones.

Walked out - 6:15 pm.

Back to HL lab - 7:30 pm.

Notes - "BEST AVAILABLE INFO" SAYS =

ALTERNATE SPECULATIVE THEORIES =

BACKNOTES

Bob Young - H₂O Quality Report 111
SIGHTINGS.

- ASK NAUGHTON WHAT THEY EAT.
- ASK LOCALS/OLD TIME COMMERCIAL FISHERS WHAT THEY EAT.

- Rough water -- more apt to come close to shore.

- ERP ON THE SIDE OF TURTLES

- Ciguatera aspect

- NIGHT Feeding.

- Possible "Opinion" Memo.

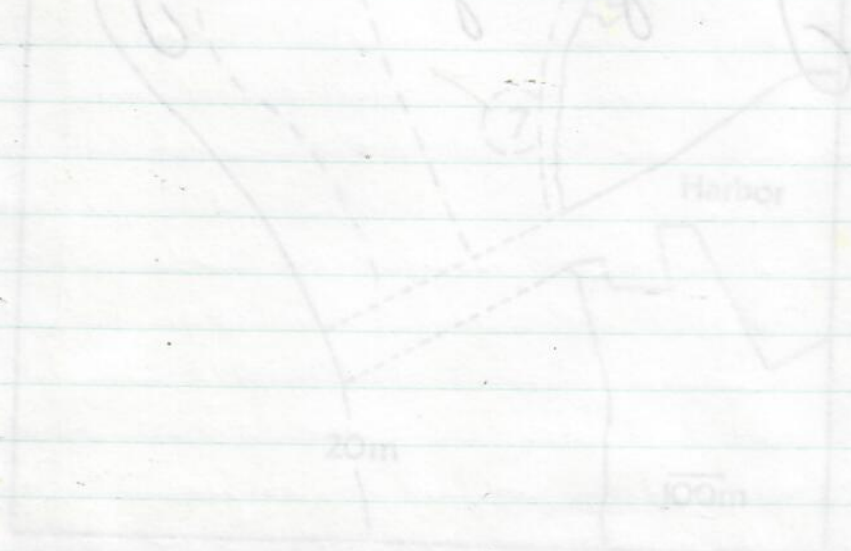


Figure 2. Approximate boundaries of the study area at West Beach, Oahu. The diagram shows the location of the study area relative to the harbor and the beach. The study area is divided into four quadrants, each representing a different depth and coral coverage. The legend indicates: 1-shallow low coral coverage; 2-shallow high coral coverage; 3-shallow of large boulders; 4-shallow of diverse high coral coverage. The diagram also shows the location of the study area relative to the harbor and the beach. The study area is divided into four quadrants, each representing a different depth and coral coverage. The legend indicates: 1-shallow low coral coverage; 2-shallow high coral coverage; 3-shallow of large boulders; 4-shallow of diverse high coral coverage.

14 JUNE 87 Drove to Harbor - West Beach
 Sunday late in the afternoon -
 Jim, me, Paul & Christian. Hiked
 out to 'about Lagoon "B" - sunset
 at 7:15 pm; stayed until 7:45 pm.
 only one head seen - vicinity of
 lagoon "A" (Crozier site last
 time) very bright light at "Big Mike" site.

See
 Tide
 Chart
 p. 114

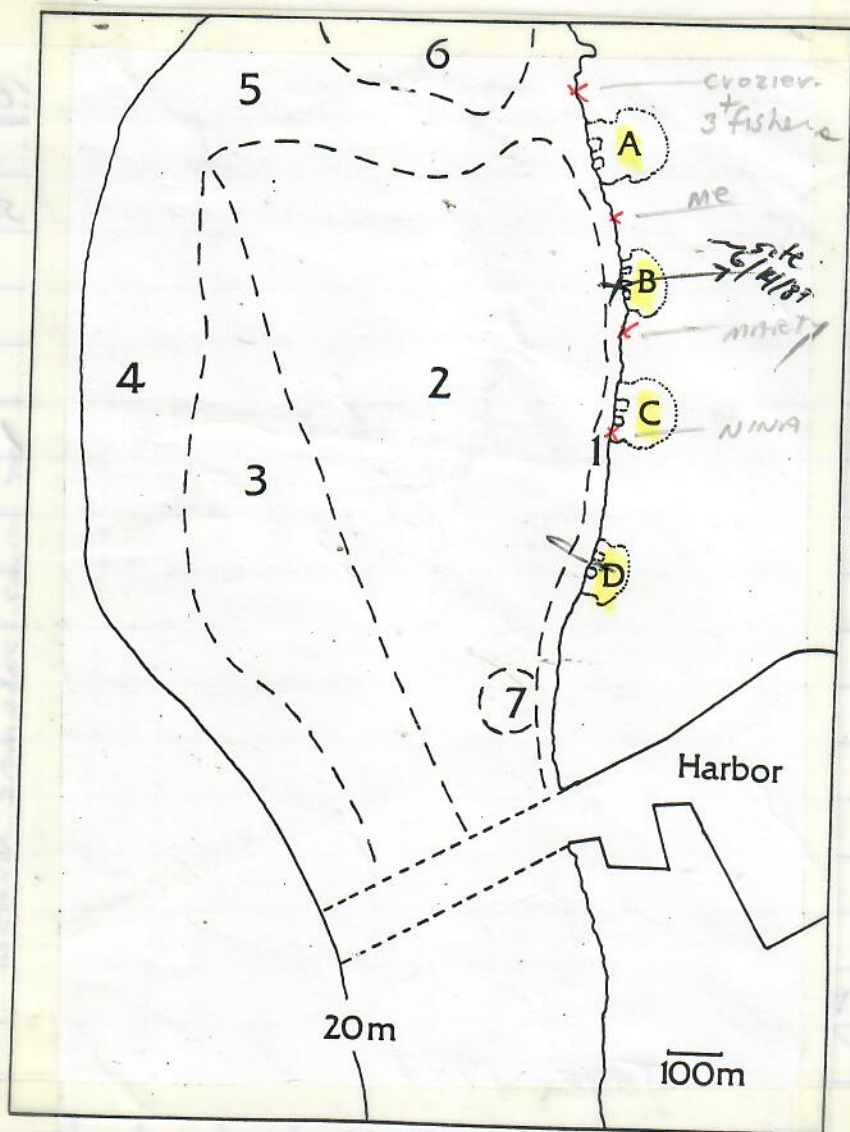
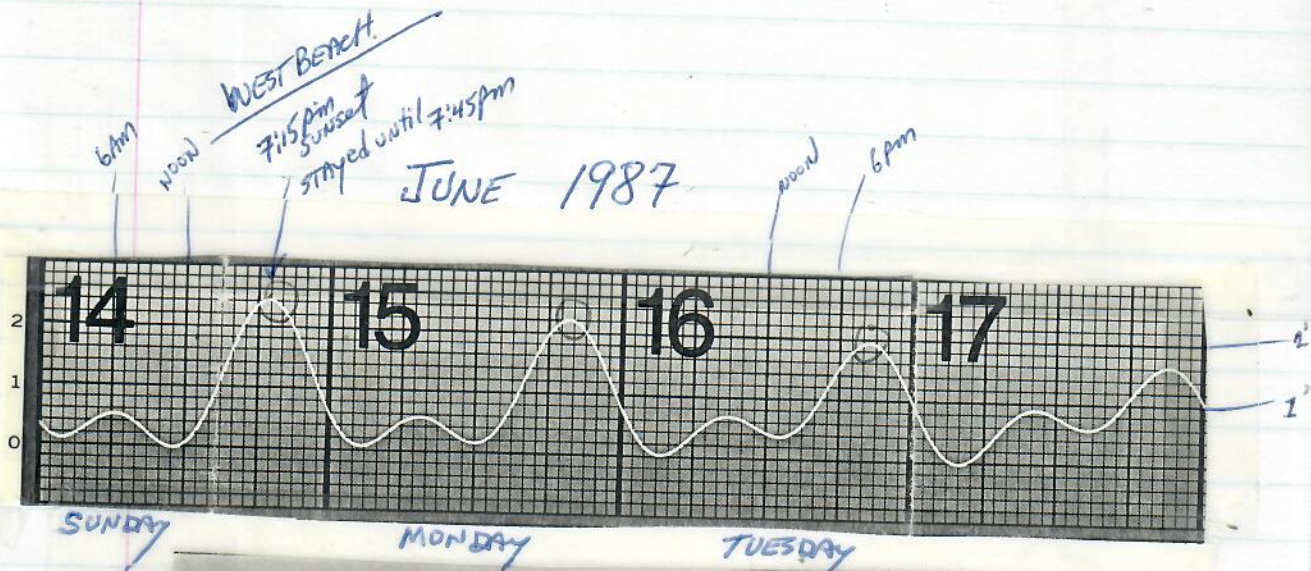


Figure 1. Approximate boundaries (heavy dashed lines) of seven biotopes recognized in this survey and that of Bienfang and Brock (1980) at West Beach, Oahu. These biotopes are named with respect to water depth, the amount of live coral, or by the dominant corals or substratum present. The biotopes are: 1-shallow low coral coverage biotope; 2-biotope of high coral coverage; 3-biotope of large *Porites lobata* colonies; 4-deep, low coral coverage biotope; 5-biotope of sandy channels; 6-biotope of diverse high coral coverage; and 7-biotope of *Porites compressa* ridges. The 20 m contour is shown on the left (solid line) and represents the seaward limit of this study. The four proposed lagoons are shown along the shoreline and are alphabetically marked A through D.

List of MISC. BLOOD SAMPLES

5-15-85 7273 TURTLE CANYON 1 serum vial
 5-15-85 7275)) 2 " vials
 6-19-85 8499 MAUI Power plant 1 serum vial



For tide time at following places, add or subtract from Honolulu time.

PORTS	Hrs. Mins.	PORTS	Hrs. Mins.
HANALEI BAY, KAUAI	-1 40	KAUNAKAKAI, MOLOKAI	-0 09
NAWILIWILI BAY, KAUAI	-0 32	KAHULUI, MAUI	-1 48
PORT ALLEN, KAUAI	-0 32	KIHEI, MAALAE A BAY, MAUI	-0 14
HALEIWA, OAHU	-1 36	HILO, HAWAII	-0 59
HANAUMA BAY, OAHU	-0 55	HONUAPO, HAWAII	-0 24
KANEHOE BAY, OAHU	-1 35	MAHUKONA, HAWAII	-0 24
LAIE, OAHU	-1 48	KEALAKEKUA BAY, HAWAII	-0 16
WAIANAE, OAHU	-0 15		
WAIMANALO, OAHU	-1 15		

MOON PHASES

FIRST QUARTER JUN 4	FULL MOON JUN 11
LAST QUARTER JUN 18	NEW MOON JUN 25

Kawela Bay, Oahu

SERUM SAMPLES SENT TO
THANE WIBBELS 2-10-86

Tag/Vial No.		Straight carapace length (cm)
1. 8761 (2)	7/2	64.0
2. 8506 (2)	7/2	67.0
3. 8778 (2)	7/2	54.4
4. 8511 (2)	7/2	50.2
5. 8513	7/2	52.9
6. 8806	4/15	61.9
7. 8802	4/15	54.0
8. 8810	4/15	67.6

NEEDS - ACTIVITIES

1. DIVE HALEIWA w/BARRY BLOOMFIELD + ^{AINA HAINA} KAHALA
2. WALK KAHUKU
3. DIVE KAILUA BEACH
4. DIVE ALAWAI BOAT HARBOR
5. Sandy Beach (PAUL BASS SIGHTINGS)
6. JEFF KOCH - BARBER'S PT DIVING
7. DIVE MAKAHA - AS PER S.S. AQUATICS
8. DIVE KANEOTE - NO SC
- ✓ 9. MAUNALUA Bay - MARKER #1 (See Daily Log)

"NEEDS"

1. Another Assistant for Kawela
2. Bill Cooke examine "spongy" meet - toxic?
- ✓ 3. Wet cell 12-V-WGG or Ray at Kawalo ^{ocean pro} _{Kawalo}
- ✓ 4. Specs to ship outboard to Molokai & Maui
- ✓ 5. Plastic case for blood sampling
- ✓ 6. Expansion XEROX MAPS
- ✓ 7. Toggles for wrist straps - Bike shop on King St.
- ✓ 8. JRH B.C. hose
9. Boothseas Aquatics - Mahaha site ~35' offshore-off pt. with hotel.
10. VINSECT STING FOR JELLY FISH STING + TENDERIZER
11. 12V Dry cell ?
- ✓ 12. Aquarium air hose for resuscitation
- ✓ 13. Crowbar for Kawela.
14. ^{MAP} Place name of Oahu
15. Small knit bag for algae (have?)
16. Mamma (Manana)
17. Slate UV (have)
- ✓ 18. Aerial photo taken of Kawela.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

1/10/85

To : GMB

From: WGG

Turtle Habitat \$:

1 x GS05 x 8mo.	22.8
1 x GS05 x 7mo.	

OB engine	2.1
-----------	-----

Boat repairs	1.3
--------------	-----

Aug 84⁵
ID? Contract (Turtle catcher, Molokai) 1.8

Expend. supplies	2.0
------------------	-----

Travel (add these \$\$ to salary 4.1 or OT if travel not avail.)	4.1
---	-----

OT	4.0
----	-----

\$ 38.1K

PSR 200/8K1B11EI

- AARONS DIVE SHOP \$377

- NBT - \$72

- STOCK BRANDS - \$433. + \$30 duty 8/85

EXPENDITURES

3/85 SEARS ~ \$109.92 cramping

3/85 PENNEY S ~ 159.98 TENTS

3/85 LANIKILA \$60 Lights, oil

3-29 KIDA, GEM, etc. \$23 VARATHANE, misc. Fishing

3-29 STAR \$41

2-26 Dennis Russell 420. SUPPLIES? CONSULTANCY

3/85 Robert 9.20 GARDEN HOSE

3/85 Robert 6.50 Wet Suit cements (2)

3/85 GSA \$120 [WGG project no.]

4/3/85 AARONS \$50 Booties, elastic, snorkel/tab.

4/8 Suntan + insect sting \$7. + 7 Foodland

4/15 Cinefor nets (KAM) \$22 KIDA

4/15 Tackel Box (BALARS) \$17 Sears

4/ Food \$9 Foodland

4/ Shovel \$6 ACAWAI MARINE

AS OF 4/28 EXCLUDING DENNIS RUSSELL - \$1446.00

4/30 Bettland \$4.14 Siphon

7/85 DACOR pouches \$17

6 & 7/85 Kawela Food \$18

7/85 D. Russell \$250

early 8/85 MISC \$30

(+) Medeiros - 1.8 in 2 PD's

120 [NOV 10 1993]

TAG NOS. 8491 - LFL

8492 - RFL

3.4 sec

3.4 sec

6-25
TUES

Kahalu stranding
Data at Kewalo

S-notch 58.9 x 45.5

C- 58.5
63.0 x 56.0

PL- NT

Head 8.8

Tail NT

RFF- 10.0

Spear hole: Puncture on ^(a) Rt. side of head and on ^(b) top of head

Lethargic, eyes do not open

63+ Turtle barnacles removed from carapace

Tumors: ventral flaps of FFL

Burrowing barnacles on forward edge of FFL

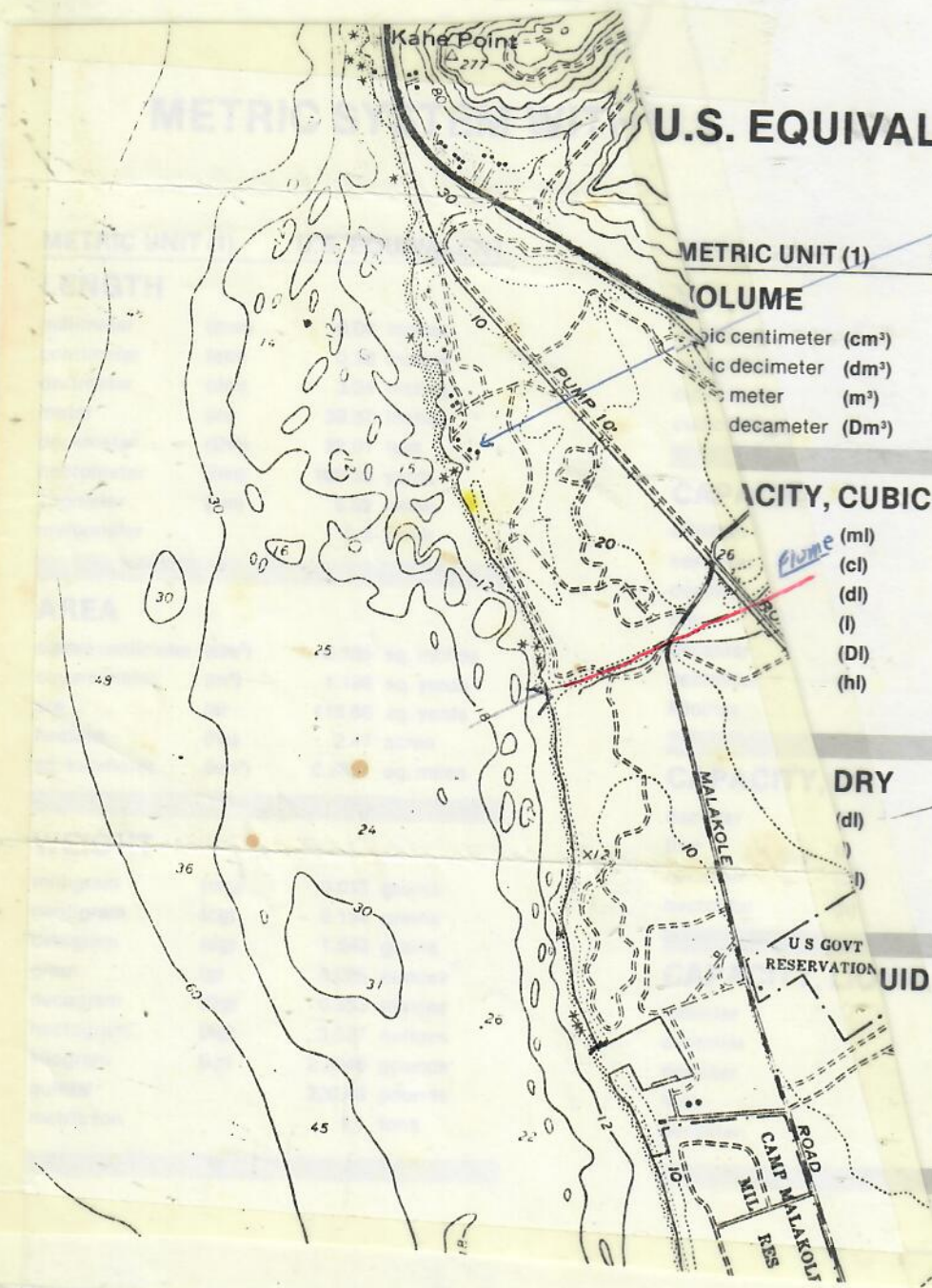
Tumors: neck region

silicon
sealant
applied

Skin barnacles on neck

Frozen one week later at A-2.

WEST BEACH



U.S. EQUIVALENTS

PARADISE COVE

METRIC UNIT (1) U.S. EQUIVALENT

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

(ml)	0.06 cubic inches
(cl)	0.6 cubic inches
(dl)	6.1 cubic inches
(l)	61.02 cubic inches
(Dl)	0.35 cubic feet
(hl)	3.53 cubic feet
	1.31 cubic yards

DRY

(dl)	0.18 pints
	0.908 quarts
	1.14 pecks
	2.84 bushels

FLUID

	0.27 fluidrams
	0.338 fluidounces
	0.21 pints
	1.057 quarts
	2.64 gallons

