

MORTALITY RECOVERIES AND MISCELLANEOUS TAGGINGS (MAY 1977 - APRIL 1979)
RECOVERIES - KAWAIILOA - KURE/MIDWAY

G.H. BALAZS

2 of 2

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LIBRARY OF
GEORGE H. BALAZS

PLEASE

①

/ 0630-

7/28/77 Set two sections of cotton net at
 Thursday Bellows off rock finger-angle toward
 8 1/2 hours Twin Islands.

At ~1330 observed turtle slowly
 swim into net - no panic - kept swimming
 slowly.

S - $23\frac{3}{8}$ ^{59.4} x $18\frac{5}{8}$ ^{39.7}

C - $24\frac{3}{4}$ ^{62.9} x $22\frac{3}{4}$ ^{57.5}

PL - $18\frac{1}{2}$ ^{47.0}

TAIL - 4 ^{10.2}

Weight - 61 lbs

HEAD - $3\frac{1}{4}$ ^{8.3}

C/S RATIO - 1.221

2329 LF

2330 LFL

2331 RFL

Stomach sampled 5x

Nose slightly bruised w/ ^{bright} green stains -
 also on fore-edge of plastron.
 Head has brown with black patches.
 Posterior of carapace looks tapered.
 A few patches of coralline algae (pink
 and white) on carapace.
 No skin or neck barrocks - no
Polysiphonia apparent.

Removed nets ~ 1500

②

Turtle #1 8/1 7:15 PM cotton-left of Rocks Jetty #1

8/1/77 -

8/3/77

(36 hours)

2-2 section sets

S - $18\frac{3}{8}$ ^{40.7} x 15 ^{38.1}C - $19\frac{1}{8}$ ^{48.5} x $17\frac{3}{4}$ ^{45.1}PL - $15\frac{1}{8}$ ^{38.4}TAIL - $3\frac{7}{8}$ ^{9.8}HEAD - 3 ^{7.6}

C/S RATIO - 1.183

Weight - 30 lbs

2335 RFL

2336 LFL

Little or no polysiphonia - 1 neck, 2 hind
barnacles collected - photos; and food
sample (sx)

LHL
Healed

LFL HEALED

← OLD TAG?

60 BELLows (CONTINUED)

③

Turtle #2

8/2/77 / 5:30 AM cotton - left of rocks

S - $22\frac{1}{2}$ ^{57.2} x $18\frac{3}{8}$ ^{46.7}C - 24^{61.0} x $22\frac{3}{4}$ ^{57.8}PL - 18^{45.7}TAIL - $4\frac{3}{4}$ ^{12.1}HEAD - $3\frac{3}{8}$ ^{8.6}

weight - 57 lbs

abundant Polysiphonia, neck barnacles;
 Coralline algae on shell - small copepod/or
 Amphipod recovered from neck.

photos; also close up of neck barnacles and
 new growth(?) plates. Tube into stomach

- nothing but liquid; probe into stomach -

some blood - Consider this stomach
 empty (?)

2332 RFL

2333 LFL

2334 LF

233

233

(4)

8/2/77 Turtle #3
1:00 PM Nylon, Right of rocks -

S- ^{51.1 -} 20 ^{42.9 -} / 8 x 16 ^{42.9 -} / 8

C- ^{54.3 -} 21 ^{51.1 -} / 8 x 20 ^{51.1 -} / 8

PL- 16 ^{42.5 -} / 4

TAIL- 3 ^{8.9 -} / 2

HEAD- 3 ^{7.9 -} / 8

WEIGHT - 42 lbs

2337 LFL

2338 RFL

coralline algae on shell; a few
skin barnacles
Stomach samples 5x
PHOTOS

lbs
of
and
stomach
ach-

62 Bellows (cont.)

SUNSET - 7:00 PM
SUNRISE 8/3 - 6:06 AM

(5)

Turtle #4

8/2/77 6:55 PM - left of rocks - cotton

S - $22\frac{3}{8}$ ^{56.8} x 18^{45.7}

C - $23\frac{7}{8}$ ^{60.6} x $21\frac{3}{4}$ ^{55.2}

PL - $17\frac{3}{4}$ ^{45.1}
TAIL ~~3~~ $4\frac{1}{4}$ ^{10.8}
HEAD - $3\frac{3}{8}$ ^{8.6}

2339 RFL

WEIGHT - 52 lbs

LFL completely missing - healed -
R JAW at articulation old split but healed -
food sample 5x - (large quantity)
photos

⑥

8/3
Wed.

Turtle #5

6:30 AM - left of rocks - cotton

S - $17\frac{3}{8}$ ^{44.1} x $14\frac{1}{4}$ ^{36.2}C - $18\frac{5}{8}$ ^{47.3} x $17\frac{1}{8}$ ^{43.5}PL - $13\frac{3}{4}$ ^{34.9}TAIL - $3\frac{1}{8}$ ^{7.9}HEAD - $2\frac{5}{8}$ ^{6.7}

lbs

2340 CFL

2341 RFL

Weight - 25 lbs

Coralline algae on right postcentral -
 Stomach sample 5x - (small quantity)
 photos of plastic jar neck around
 turtle's neck - had to saw off -
 bought to GI. - returned to Bellows
 same day.

⑥

Turtle #5

8/3
Wed.

6:30 AM - left of rocks - cotton

S - $17\frac{3}{8}$ ^{44.1} x $14\frac{1}{4}$ ^{36.2}C - $18\frac{5}{8}$ ^{47.3} x $17\frac{1}{8}$ ^{43.5}PL - $13\frac{3}{4}$ ^{34.9}TAIL - $3\frac{1}{8}$ ^{7.9}HEAD - $2\frac{5}{8}$ ^{6.7}

lbs

weight - 25 lbs

2340 CFL

2341 RFL

Coralline algae on right postcentral -
 Stomach sample 5x - (small quantity)
 photos of plastic jar neck around
 turtle's neck - had to saw off -
 brought to GI. - returned to Bellows
 same day.

64

⑦

8/8/77 3 sections to left of Jetty #2 - no water at 6 PM
 (21 hour set)

6:45 PM 8/8 Turtle #1

S - $21\frac{3}{4}$ x $18\frac{3}{4}$
 65.2 / 87.0

C - $23\frac{3}{8}$ x $22\frac{1}{2}$
 59.4 / 58.2

PL - $17\frac{7}{8}$ 45.4

TAIL - 4 10.2

Head - $3\frac{3}{8}$ 8.0

2343 RFL

2344 LFL

2345 LFL

weight - 55 lbs

Coralline algae on Central
 Stomach sample attempted, but nothing
 obtained (?), only small quantity obtained - Neck BARN
 Released from rock jetty no. 1 at 10 PM

with MARG left

6 PM

8/9/77 (8) 6:30 AM Turtle #2
Tuesday

S - 24^{61.0} x 19^{48.6}^{1/8}

C - 25^{64.1}^{1/4} x 23^{58.7}^{1/8}

PL - 19^{49.2}^{3/8}

TAIL - 4^{10.5}^{1/8}

HEAD - 3^{9.2}^{5/8}

2346 LFL

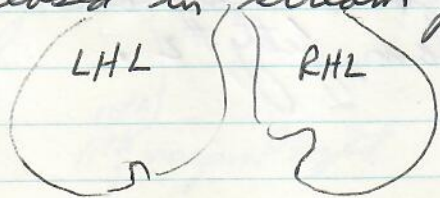
2347 RFL

2348 RFL

Weight - 70 lbs

BARNACKS

Polysiphonia on hindquarters -
Stomach sampling produced some blood - no
food obtained - clean shell -
released in stream jetty #3



66

8/9 (9) 6:30 Am Turtle #3

S - $18\frac{7}{8}$ ^{47.9} x $15\frac{1}{2}$ ^{39.4}C - 20 ^{50.8} x $18\frac{1}{2}$ ^{47.0}PL - ~~15~~ $15\frac{3}{8}$ ^{39.1}TAIL - ~~3~~ $3\frac{5}{8}$ ^{9.2}HEAD - ~~3~~ 3 ^{7.6}

2349 LFL

2350 RFL

weight - 36 lbs

photos - w/kam and alone -
 Food samples recovered - also neck barnacles
 Polysiphonia present;
 pink coralline algae on centrals - clean shell
 released in stream, jetty #2.

(10)
8/9/77 7:35 AM Turtle #4 (close to shore)
- 1st net
- 3' depth

S - $15^{38.1}$ X $12^{31.4}$ 31.4 -

C - $15^{39.7}$ $5/8$ X $14^{37.5}$ $3/4$ -

PL - $12^{31.1}$ $1/4$ -

TAIL - $2^{5.4}$ $1/8$ -

HEAD - $2^{6.4}$ $1/2$ -

2351 RFE
2352 LFL

weight - $16^{1/2}$ lbs

coralline algae on shell; photos w/me;
in AMTRAC track.
3x stomach sampling - no food obtained;
slight indentation at 10th - 11th marg R.

10th
11th marginal Right -

les;
shell;

8/11 - KAIWAILOA - Rod Miller, Jr. ^{stereocaudis} ~8PM - 9AM - 13 hours
 Two sections of Cotton
 8/12/77 net set from rock reef - some surf and current -
 during night anchor broke and net swung in parallel
 to shore - At ~4:30 - 5:30 AM 4 turtles caught -
 all black coloration - clean. No "growth" rings
 noted.

8/12 5:30 AM Turtle #1 KAWAILOA

S - $21\frac{7}{8}$ ^{55.6} x $17\frac{1}{2}$ ⁴⁵

C - $23\frac{1}{8}$ ^{58.7} x $20\frac{7}{8}$ ^{53.0}

PL - $17\frac{3}{8}$ ^{44.1}

TAIL - $3\frac{3}{4}$ ^{9.5}

HEAD - $3\frac{1}{4}$ ^{8.3}

2353 LFL

2354 RFL

weight - 51 lbs

photo

Food Sample

8/12 ✓ 5:30 AM Turtle #2 KAWAĪLOA

S - $25\frac{3}{8}$ ^{64.5} x $20\frac{1}{8}$ ^{51.1}

C - $27\frac{3}{8}$ ^{69.5} x $23\frac{1}{4}$ ^{59.1}

PL - $20\frac{1}{4}$ ^{51.4}

TAIL - $5\frac{1}{2}$ ^{14.0}

HEAD - $3\frac{7}{8}$ ^{9.8}

2355 LFL

2356 RFL

2357 RF ✓

weight - 84 lbs

V-notch upper jaw edge

very small piece of UIVg recovered in
stomach sampling. - NOT RETAINED
Photo ✓

8 8/12/77 / 5:30 AM Turtle #3 KAEWAILOA

S - $18\frac{1}{2}$ $\xleftrightarrow{47.0}$ x $22\frac{1}{4}$ 95

C - $23\frac{5}{8}$ 60.0 x $21\frac{1}{2}$ 96

PL - 18 45.7

TAIL - $4\frac{3}{8}$ 11.1

HEAD - $3\frac{5}{8}$ 9.2

2358 RFL

2359 LFL

Weight - 62 lbs

Cutin left marginal 11th

Photo -
Food sample

8/12/77 5:30 AM TURTLE #4 KAWAIILOA

S - $19\frac{1}{8}$ ^{48.6} x $15\frac{1}{2}$ ^{39.4}

C - $20\frac{3}{8}$ ^{51.8} x $17\frac{3}{4}$ ^{45.1}

PL - $14\frac{7}{8}$ ^{37.8}

TAIL - $3\frac{3}{4}$ ^{9.5}

HEAD - 3^{7.6}

2360 RFL

2361 LFL

Weight - 35 lbs

Clear spot on 3rd Lat Right.
Photo -

Food sample

9/18/77 WAIKIKI DONATION -

SUNDAY

Turned in a few days ago by man
requested that no questions be asked.
Eyes were reported to be dried out
considerably. Hooked fire on this date -

2376 RFL

C - $16\frac{3}{8}$ ^{46"} x $14\frac{1}{2}$ ^{36.8"}

2379 LFL

S - $15\frac{5}{8}$ ^{32"} x $12\frac{5}{8}$ ^{32.1"} (Measured V-stick)

PL (with tape) - $12\frac{3}{4}$ ^{32.4"}

TAIL - 3" ^{7.6"}

C/S RATIO - 1.149

- no scar on foremargin of left front limb
- Tattered but healed right hind limb.
- Fresh spear hole in dorsal neck -
appears to have penetrated only under skin
also possible spear bar on carapace -
Clean, gold shell - no algae -
very white and clean plastron.
photos on asphalt.

Released this evening by Ralph Alexander
off Waikiki Aquarium.

10/13/77 Thursday Waikiki Aquarium turtles (last two adults) - have been held at Sand Island Station for past several months along with adult male and female loggerheads. Both released on beach off Aquarium at ~9 AM. They moved very slowly off shore.

♀

2406 LFL 2008 Blue plastic tag removed from LFL,
 2407 RFL 2406 put in existing healed hole.
 2408 LF Apparently swollen distal portions of front flippers - possibly from injury during transit.

S - 32^{81.3} x 25¹/₄^{64.1} -

C - 33¹/₂^{85.1} x 30³/₄^{78.1} -

PL - 26³/₄^{67.9} -

HEAD - 5^{12.7} -

TAIL - 10¹/₄^{26.0} -

C/S RATIO - 1.218

- Number 31 etched in right postcentral
- Drill hole in 9th marginal Right

10/13/77 Waikiki Aquarium RELEASE, CONTINUED -

♂

2409 LFL (Through existing hole)

2410 RFL

2411 RF

S - $34\frac{3}{8}$ ^{87.3} x $25\frac{1}{4}$ ^{64.1}

C - 36 ^{91.4} x $33\frac{3}{4}$ ^{85.7}

PL - $26\frac{3}{4}$ ^{67.9}

HEAD - $4\frac{3}{4}$ ^{12.1}

TAIL - $17\frac{1}{2}$ ^{44.5}

C/S RATIO - 1.337

June 78 Observed by me basking in ~ Area 5-6 East Island
read tag 2411^{RF}.

also seen on July 78 Area 8.

No copulation scars - scabs noted; however looked in fine shape - reacted to me in same general manner as other "wild" baskers - retreated when he saw me.

10/9/77 HONOLUA BAY, MAUI JUVENILE TAGGING
 BY ALAN KAM -
 on Machias dive trip -

C - $17\frac{1}{2}$ ^{44.5 -} x $15\frac{1}{4}$ ^{38.7 -}

2363^{RFL}

2364^{LFL}

PL - 14" ^{35.4 -} (curved)

TAIL - $2\frac{1}{2}$ " ^{6.4 -}

captured sleeping under ledge in approx. 25'
 water at 29 PM.

Barnacles on pelvic girdle - also
~~polysiphonia~~ ^{Fungal} patch of coralline algae
 on PC's and 10-11th marginals.

Written report with drawings in Kam file.

Island

kept
 nearly
 ated

11/5/77 Juvenile capture and tagging near entrance to Honolulu Harbor (see page 110, log). Caught by Kam inside hole with sand on bottom - NEAR Buoy #1 Black. ~30' water.

2365 RFL

2366 LFL

S-16 x 13^{3/8}C-16^{3/4} x 15^{3/4}17^{1/2} lbshead - 2^{1/2}"

C/SRATIO - 1.178

PL - 12^{3/4}TAIL - 2^{3/4}"

AFEW SKIN BARNACLES present and collected. Polysiphonia on skin, central plates have a few patches of pink coralline algae. Shell - head is brownish gold - very white plastron.

Two stomach samples taken - Jellyfish (?) glob and tentacle (?) - and green alga - stringy Ulva

11/25/77 Juvenile green recovered by Don Redolje from Kaneohe Bay - weak, floating and covered with tumors - many barnacles, ulva, ^{CRABS} encrustation on carapace and plastron. Series of photos taken. Soft marginals, shell-easy to cut.

S - $18\frac{3}{4}$ ^{47.0} x $14\frac{3}{4}$ ^{37.5}
 Head - $2\frac{7}{8}$ " ^{7.3}

Algae/CONTENTS
 SAMPLE
 RETAINED

WT - 27 lbs. (includes wt. of Barnacles)

Stomach contents - 533 g
 Stomach tissue - 232 g TOTAL - 756.

Apparently only one stomach compartment visible.

BARNACLE Counts - Carapace - (150)

	HEAD - 12
FRONT R. ventral - 6 Big	FRONT R. D. Limb - 9
- 6 small	L. D. Limb - 4
L ventral - 10 Big	
- 8 small	REAR L Dorsal Limb - 9
REAR R. ventral - 18 Big	R Dorsal " - 4
- 10 small	
L. ventral - 2	

ventral surfaces of marginals - 32

Plastron proper - 115 TOTAL - 335

Some TMRs appear to go into bones.

All quarters of limbs, head, heart (small white fibrous tumor inside), and (small Btk ground) portion of lung - Sent to Smithsonian 12/11/75

Stomach and intestines contain algae despite extensive TMRs on eyes. Apparently normal fat layer - turtle not emaciated. Possible edema in tissue under carapace -

PLASTRON BONES RETAINED - CLEANED

11/30/77 • Vernon and Suzie intact juvenile green found
floating in Kaneohe Bay during calm, kona weather.
Photos taken (Red juice (blood?) coming out of mouth.

S - $15\frac{3}{8}$ ^{39.1} x $13\frac{1}{8}$ ^{33.3}

C - $16\frac{1}{4}$ ^{41.3} x $15\frac{3}{4}$ ^{40.0}

PL - $12\frac{1}{4}$ "^{31.1} TAIL - 3"^{7.6}

WT - $16\frac{1}{2}$ lbs C/S RATIO - 1,200

Gill or lobster
Net mortality?

Test of stomach samples resulted in 11 inch penetration.
This animal may not have been dead for more
than several hours.

1/7/78
Dissection - excised flesh - noted large quantity of fat around
hindquarters - stomach/intestines are reasonably full - no
clue of cause of death.

Flesh from left front - 603g ~ 1.31b
bones/flipper " " - 348

2.71b = 16.4%

Flesh from right front - 643g ~ 1.41b
bones/flipper " " - 336

Flesh/fat hind - 167g = ~.41b = 2.4%
all hind bones - 433
Head/neck - 500

(cont)

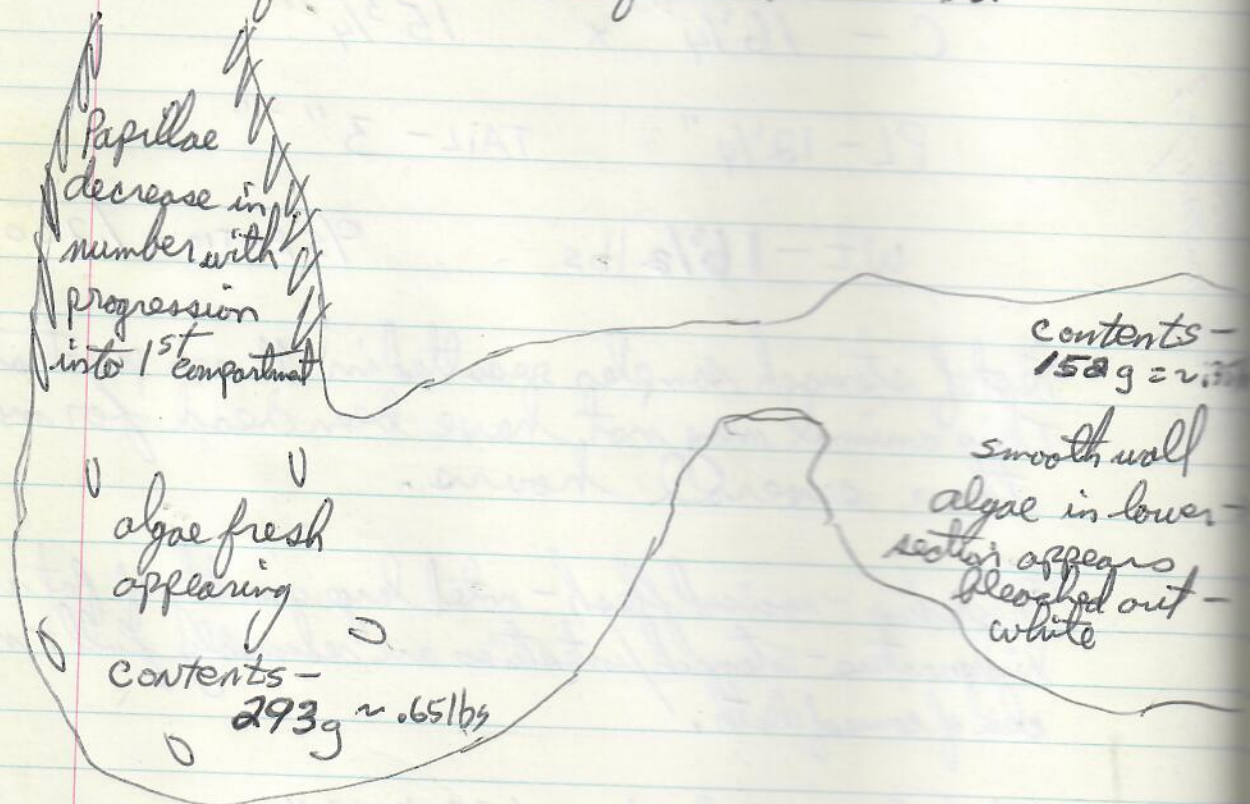
Total = 18.8% Flesh

see page 9 / daily log book 1/7/78

Vernon / Suzie Kaneohe Bay recovery (cont.)

total length of stomach and intestines - 18 feet ^{= 5.5m}

Entrance of first "stomach" to entrance of second "stomach" - 9
Entrance of second to exit of second - 12"



Intestines with contents plus stomachs plus food - 1115g
~ 2.5lbs
~ 15.2%

10/28/77 5 Adult TURTLE MINUS CARAPACE WASHED ASHORE IN FRONT OF KINZIES HOUSE ON COCONUT ISLAND. Some decomposition. SMALL TMR NOTED ON RIGHT side of head - Series of photos.

PL - 19" ^{48.3} = ~24 SL, 70lbs on per p65
 HEAD - 3 1/2" ^{8.9} ~ 61.0

GILL OR LOBSTER NET
 MORTALITY - MEAT WAS
 BAD, BUT SHELL TAKEN
 FOR ORNAMENT?

Skull, mandible, humeri cleaned and saved -
 Remainder buried near hawk's bill carcass on
 Coconut Is. Sample of skin from limb collected
 which contain embedded barnacle - to Cooke
 for I.D.
 Stomach and intestines present - collected
 stomach sample.

15g

"/22/77 Charlie Wong Dock of NUC recovered portion of ^{ON BEACH} butchered green (hind flippers, plastron, intestines) at opening of Kaluapuhi Pond (Mokapu, Kailua Bay). Series of photos.

Stomach(?) sample collected - looked through intestines. Some black animal (sponge?) material observed.

Charlie thought that turtle was taken in immediate vicinity - also that he has seen a number of turtles in the area of Mokolea Rock (from the air).

PL - 15 3/8 " 39.1

BELLOWS 12/18-12/19/77

JETTY #1 - 1 nylon, 2 cotton sections in ~~5:15~~ 5:15 PM - low tide, strong gusty trades - strong current toward Waimanalo Beach. Partly cloudy, half full moon. air temperature upper 60's to low 80's. N-NE swells 7', diminishing tonight.

Seawater - 23°C.

Nets out at 9:30 AM - nothing captured but one Man-o-war. First light occurred about 6:15-6:30 AM.

Estimate only about 10 Man-o-war per 100 yards of beach. Alan Ham collected some Janthina. No turtle feces seen.

Received
12/1/77

Series of photos taken.
 Turtle A from Division of FG - left, CONFISCATION
 Puncture in 2nd marginal recovered
 paralyzed - later frozen, apparently alive.
 Harold Moraes, arresting officer reports
 turtle taken perpendicular to Meadow
 Gold Dairy - off Kawailoa Beach, 9/11/77.
 "when ^{boat} approached by FG, the people tossed
 over the paralyzed turtle into water. FG
 recovered turtle in 30-40' - occupants
 cited - they had been SCUBA diving and
 spear fishing. Prosecution of illegal
 activity - \$25 fine.

carapace returned to FG

(NO)

$$S - 14\frac{5}{8}^{37.1} \times 12\frac{5}{8}^{32.1}$$

$$C - 15\frac{1}{4}^{38.7} \times 14\frac{3}{8}^{36.5}$$

$$PL - 11\frac{5}{8}^{29.5} \quad HEAD - 2\frac{3}{8}^{6.0}$$

$$TAIL - 2\frac{3}{4}^{7.0}$$

$$C/S RATIO - 1.139$$

$$WT - 16\frac{1}{2} \text{ lbs}$$

Weight of excised GI tract w/ contents	1383g ^{3lbs} _{18.2%}
G.I. Tract minus food -	350g
contents -	1033g ^{2.3lbs}
	= (13.9%)

Total length of GI tract - 15 1/2 feet = 4.7m
 Entrance 1st stomach Compartment to
 exit 2nd stomach compartment - 1'
 small intestine - 6'8" large - 7'10"

Turtle A (CONTINUED)

Complete G.I. contents saved - Divided into five bottles: 1) 1st stomach 2) 2nd stomach
3) small intestine 4) first 3'4" large intestine 5) remaining 4'6" of large intestine.

moist weight of Carapace - 1014g ~ 2.2 lbs.
" " plastron - 468g ~ 1 lb.

Weight of all edible ^{muscle} meat - 1353g ~ 3 lbs.
= 18.2% of total

Weight of Right flipper - pectoral bones - 309g
" " left " - " " - 314g

Weight of head/neck - 487.0

Weight hind limbs/pelvic bones - 369g

Received
12/1/77

TURTLE B from Division of FG - CONFISCATION
Series of Photos taken.

Large puncture in 2nd lateral right-
epist (partial) between 3-4th plastron
plate left. 1/11/76

Confiscated¹ during a "random, routine"
search of boat. Found dead-
occupants had been SCUBA diving
off the Reef Runway.

Prosecution of Illegal activity: party
had an earlier arrest for using
illegal chemicals for fishing. Judge
charged him on that account and
illegal turtle fishing was dismissed.

dehydrated
TMRs - 3 med, 2 small Left ventral shoulder; 1 med dorsal of Rhind;
2 med near tail/coaca; 1 small R dorsal shoulder; 1 med between 3-4th marg left.

S - $17\frac{3}{4}$ x $14\frac{1}{8}$ 35.9
(45.1 cm)

C - $18\frac{3}{4}$ x $16\frac{1}{2}$ 41.9
47.4

HEAD - $2\frac{3}{4}$ PL - $14\frac{3}{8}$ 36.5
7.0

TAIL - BADLY dehydrated

WT - 23 lbs
(dehydrated)

Weight of Carapace - 1285 g
" " Plastron - 631 g

Carapace returned to FG
(1/10)

TURTLE B (continued)

Total length of intestines and stomach $\rightarrow 23\frac{1}{2}$ ft

" " Stomach - $1\frac{1}{2}$ ft
 Two compartments of stomach not readily defined - for second compartment I may be looking at bolus of food in ^{section of} small intestine. ~~scraped~~

Total Weight of G.I. w/contents - 2341 g = ≈ 5.2 lbs =
 " " stomach alone w/contents - 603 g
 " " intestines " " " - 1732 g
 Total wt. of GI food - 1799 = ≈ 4 lbs 17.49%

Weight stomach minus food - 134 g
 " intestines " " - 408 g
542 g

Edible meat left front - 1374 g
 " " Right " - 1205 g
 Total edible meat front - 2579 g

Total Edible meat hind - 235 g

Total Front + Hind edible ^{muscle} \rightarrow 2814 g ≈ 6.2 lbs
 = $\frac{27\%}{\text{Total}}$

Weight of Right flipper/pectoral bones - 355 g
 " " Left " " " - 361 g

Weight hind limbs/pelvic bones - 592 g

Weight head/neck - 550 g

26 April
1978

WEDNESDAY

Four joined sections of net set at 6 AM in second sand channel Chinaman's Hat side of Ahu Ohak (sand Is). Stomps used as base + 169" Boston Whaley anchored nearby. No floaters down all night. At ~7 AM noted small turtle surface twice near end of near, seemed to be alarmed by boat. Before midnight we observed small boat in first sand channel pulling up gill net(?). Estimated to be 1000'. At 9 AM we swam net and found small juvenile caught by left limb - no floater down - turtle limp. Took back to boat, turned on back, and gressed to revive. Gave mouth to mouth - but suspected air was only going into stomach - consider possibility of resuscitation tube(?) and advisability of placing turtle on back - vs - belly. Turtle took single breath after awhile - spaced about 2 minutes apart - then decreased. Limbs were still "paralyzed" at this point. Restoring - irritating turtle seemed to help. Increased respiration rate. Turtle taken back to lab HMB, data worked up, and returned to capture location by Kam about 3 PM -

Following page -

NET out at 10:30 AM - 16 1/2 ^{hours} Total

27 April 1978
Thursday

Net caught, nearly expired Turtle -

S - $14\frac{3}{8}$ ^{36.5} x $12\frac{1}{4}$ ^{31.1}

C - $15\frac{1}{4}$ ^{38.7} x $14\frac{1}{2}$ ^{36.8}

PL - $11\frac{5}{8}$ "^{29.5} HEAD - $2\frac{1}{2}$ ^{6.4}

TAIL - $2\frac{3}{4}$ ^{7.0}
C/S RATIO - 1.184

WEIGHT - 17 lbs

2493 LFL

Black carapace - limbs - coralline algae
on carapace (collected). Two small barnacles
collected from carapace. Many skin barnacles
(collected). Stomach tube sample (1) - large
volume, collected - pH 6 liquid - (Codium)
3 photos with ASA24 along side calipers.

2494 BFL

Clean, "new growth" lines bands

27 April 1978 Caught on SCUBA at ~30' along channel edge - lots of pointer corals. Observed a total of 4 in short area - 3 this size, 1 ~23" with coralline algae. Transported to Lab - returned and released by Kam ~3 AM. Goldish in color.

S - $16\frac{1}{4}$ ^{41.3} x 13 ^{33.0}

2491 LFL

C - $17\frac{1}{4}$ ^{43.8} x $15\frac{3}{8}$ ^{39.1}

2492 RFL

HEAD - $2\frac{3}{4}$ ^{7.0} TAIL - $2\frac{5}{8}$ ^{6.7}

PL - 13 ^{33.0}

C/S RATIO - 1.183

WEIGHT - $22\frac{1}{4}$ lbs

"Coralline" algae on carapace (collected). 1
"different" barnacle collected from carapace.
Many skin barnacles on shoulder, neck
area. "New growth" clean bands on
carapace.

Two stomach tube samples taken (Cochium)
pH 7.

3 photos with ASA 25 along side
calipers.

28 April
1978
FRIDAY

Approx. 1 hour SCUBA w/ Kam along same channel as yesterday - kam recaptured 2492 asleep in 20' water in small depression of Porites compressa. After reading and releasing it swam to bottom, bumped into several coral heads, and settled into small overhang, head ~~in~~ in.

2 May 78 Report to Kam at 8:15 AM that George Kawelo Sr.
TUESDAY (60+) 47-266 Kam Hwy, TEL. 239-7162 found
floating dead turtle while trolling inside
channel (waves) between KUALA PARK and
WAIKANE. ^{5/1/78} He called FG, and they told
him to call HIMB. Turtle was left
near shore on night of 5/1/78. Tags 2493
and 2494 were put off and returned.
Turtle severely bloated - plates starting to
lift. An injury puncture near pre-
central - depth unknown. Plates are
definitely golden - lighter in color ~~than~~
than when photo taken on 5/1/78.
~~Pages through 97 reserved for post mortem~~
~~data.~~ See below

Local knowledge from GB in Kam file.

30 May 78 Thawed bloated turtle, and
photographed - head, major limb
bones, and a few laminae cleared
and retained.
Two sections of stomach - material
preserved and saved for I.D.
Number GB ~~161~~ 161
Hole on precentral did not
penetrate through underlying membrane
∴ not assumed to be cause of
death.

8 June
1977

Princeville, Kauai - trip by Kam
and Mark, Scheele -
~ 40' - See trip report in file.

2501 RFL

2502 RF

Caught by M.S. - Kam
grabbed left limb and heard
"pop" (dislocation or fracture?)

C - 17^{43.2} x 15^{38.1}

TAIL - 3-3/8^{8.0}
"clean shell, no barnacles, no
skin barnacles - when released
swam quickly away"

8 JUNE - (Same Princeville location) -
78

Caught by Kam -

2503 RFL

2504 LFL

clean shell, between 4-5
'marginals right' there is an
indentation.

"Amphipod" - recovered from
healing wound on left hind flippers -
to Bill Cooke on 6/10/78 for I.D.

C - $18\frac{7}{8}$ ^{47.9} x $17\frac{5}{8}$ ^{44.8}

TAIL - $3\frac{1}{8}$ ^{7.9}

7/11/78 SCUBA dive capture by Kam (and me) at Kawefo
 Tuesday site, Kaneohe Bay (see slides of area taken
 on 7/9/78)

Dive between ~11:15AM - 12:30PM - Turtle
 sleeping soundly in ~20' water - along side coral spot
 - closest to CH. Mammal's Boat.
 Weight - 65 lbs

2423 LFL

60.3 -
 S - $23\frac{3}{4}$ x $18\frac{1}{2}$ 47.0

2424 RFL

63.5 -
 C - 25 x $22\frac{1}{4}$ 50.5 -

2425 LFL

HEAD - $3\frac{5}{8}$ " 9.2 - TAIL - $4\frac{3}{4}$ 12.1 -

PL - $19\frac{1}{4}$ 48.9 - C/S RATIO - 1.203

skin barnacles collected; also barnacles from
 between scales on fore-margin of front limbs
 proximal - picked out with knife.
 No algae on carapace or plastron.

Noted strong smell of breath - characteristic of
Codium. Two stomach samples w/ large
 diameter tube - Codium + very small red filaments.

all
 removed

7 Barns - on ~~right~~ 2nd Lat left

1 - " 1st Lat. Right

1 - " 3rd Lat. Right

4th and 5th Central, 4th laterals L & R - colline algae.

2 barns on plastron; 1 small on R side of head.

When removed, Barns had (cont. next page)

7/11/78

TUESDAY

Small amounts of laminae-like pieces found
by kam/himpus in depression on
O corals.

Took small barnacles on barnacles.

Photos taken w/ 55mm standard lens - 4W.
ASA 64.

Turtles returned to same area and
released at ~ 1500h same day.

8/14/78
MONDAY

juvenile green caught by Dick Brock in
approximately 35' outside Kapapa IS -
slightly to the north. Three turtles
seen resting on bottom - two departed very
quickly. Brock was being towed behind
Boston whaler.

2476 LFL

S - $15\frac{3}{8}$ ^{39.1} x $12\frac{5}{8}$ ^{32.1}

2477 RFL

C - $16\frac{1}{8}$ ^{41.0} x $14\frac{1}{2}$ ^{36.8}PL - $12\frac{3}{8}$ ^{31.4}HEAD - $2\frac{3}{8}$ ^{6.0}TAIL - $3\frac{1}{2}$ ^{9.0} (sharp pointed on the end)

C/SPATIO - 1.148

WEIGHT - $17\frac{1}{2}$ lbs -

small
Stomach content obtained - some water flushing.
Small filaments obtained -

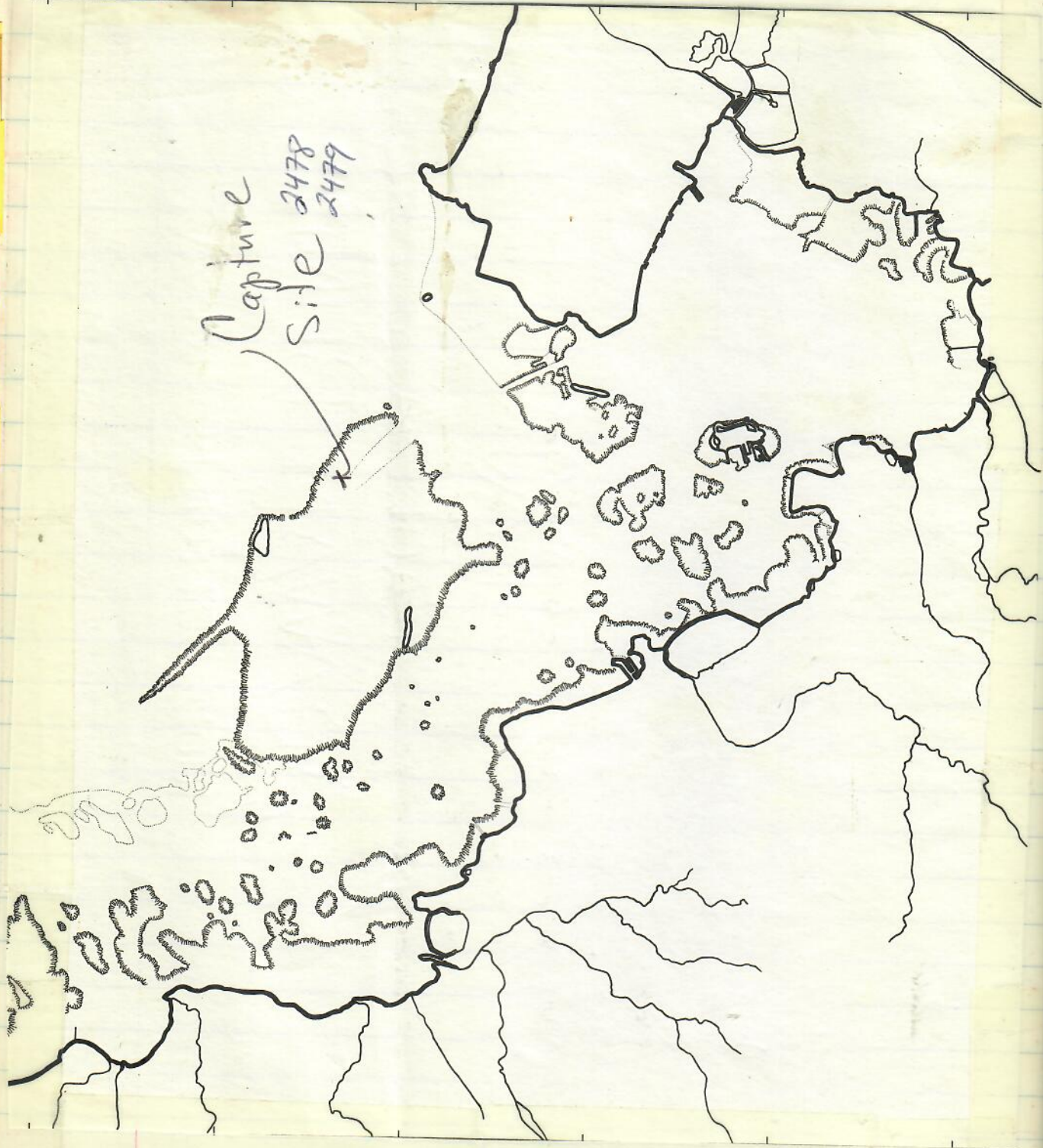
Tip of Right PC slightly missing.
Indentation between 10-11th Marg. R. (healed)
Right hind limb pieces missing, but healed.

RAZ

Photos taken ASA 64
EZU midate -

Released East side
of COLONNETTS.

Capture
site 2478
2479



University of Hawaii at Manoa

Hawaii Institute of Marine Biology

MEMORANDUM

George:

The small turtle in your turtle pen was captured at 0800, 1 Sept. 1978 in the shallows behind the breakers along the Kaneohe Bay Barrier Reef.

The net was one that I purchased from Don Kinsey and is quite shallow - it is only about 18 inches high. The animal was able to lift the net to the surface and appeared to be in very good condition when captured.

Paul Obirel

9/1/78 Kameohe Bay capture in Paul Jobiel's
lobster net. In my pen for 6 days.

S - $15\frac{1}{2}$ ^{39.4} x $13\frac{1}{4}$ ^{33.7}

2478 LFL

C - $16\frac{1}{8}$ ^{41.0} x 15 ^{38.1}

2479 RFL

PL - $12\frac{3}{8}$ ^{31.4}

HEAD - $2\frac{3}{8}$ ^{6.0}

TAIL - 3 ^{7.4}

e/s RATIO - 1.132

WT - $14\frac{1}{2}$ lbs

Feet thin.

Photos # 18 and 19 ^{NO 25} ^{EV} (lost roll of Aug-Sep KAU)

pink coralline on shell.

Red and green algae on plecton.

No skin barbs.

Stomach Tube - small pieces obtained.

Released off point of C. ISLAND ^{COAST}

9/14/78
Thursday

1500h

TO Bellow's FIELD Rock JETTY #1 -

Could not put net in water until 1830 due to man and woman fishing (beligerent).

TOTAL TIME
IN WATER =
17 hours

At ~ 9 PM noted 2-3 juveniles quickly surfacing at mouth of stream - water is very cloudy with suspended sand.

Two sections of net ^(inside narrow floating; outside cottage) set out at a slight angle from end of jetty toward river mouth.

Sunset at ~ 630 PM. Checked net periodically throughout the night. Between

9/15

0815 - 845

Friday

notified by a fisherman cottage user that turtle(s) in net - found

one entangled near float line right by inside orange float. Second turtle also by float line about half way out along first net. Were both turtles heading for river mouth to feed? Nets taken out of water about 1130 AM. One hour before this time and shortly after, a turtle was seen feeding at the river mouth (rapid surfacing of head).

Data for the two turtles are as follows:

9/15/78 JETTY #2
FRIDAY

out 1/2 way on 1st net

RECAPTURE

(see p. 63 8/3/77 Bellows Jetty I)

2340 ^{13 months}
^{12 days}

S - 18 1/2 ^{47.0} - x 14 3/4 ^{37.5} -
+ 1 1/8 + 1/2
(0.21 cm per month growth rate)

2341

Both left on turtle

C - 19 3/4 ^{50.2} - x 18 1/8 ^{46.0} -
+ 1 1/8 + 1

PL - 14 1/2 ^{36.8} -
+ 3/4

HEAD - 3 ^{7.6} -
+ 3/8

TAIL - 3 1/8 ^{7.9} -
same

+ 3 lbs

Wt. - 28 lbs

Tags look excellent - coralline algae scraped off and tags rounded slightly using handle of pliers.

Stomach Tube - fluid and small particles retained. GB-402

Goldish ^{yellowish} colored shell - photos ASA 25 #25, 26, 27.

Coralline algae along seams of laminae of saropace. No skin barnacles noted.

Black particles on roof of mouth - possibly tar globules.

Green alga on plastron.

Some remnants of red (?) alga on skin of neck, but certainly not very prominent.

Note - Drowning of turtles certainly possible with heavy lead weights or catching on bottom preventing turtle from rising to surface to breathe.

However, entanglement of flippers ^{to such an extent} could occur that would cause drowning.

(12)

Bellows

9/15/78 Jetty #1 - caught close to inside orange
Friday

2935 RFL

S - 21 $\frac{1}{4}$ ^{54.0} x 16 $\frac{3}{4}$ ^{42.5}

2936 LFL

C - 22 $\frac{5}{8}$ ^{57.5} x 20 ^{50.0}

2937

in triangular
hole in Right
post central
(natural, or
tether site?)

PL - 17 ^{43.2}HEAD - 3 $\frac{1}{4}$ ^{8.3}TAIL - 4 $\frac{1}{4}$ ^{10.8}WT - 47 $\frac{1}{2}$ lbs

Fecal pellet extruded in float-tube while waiting to
be weighed, tagged, measured.

Goldish/yellowish color to shell, ASA 25
photos #23, 24.

Small amount of pink coralline alga on carapace.
Black particles (possibly tar) ^{stuck} on roof of mouth.
Two skin barnacles on shoulders - removed.

Some green alga on plastron.

Skin alga - same comments - as other turtle.
Slight indentation at 6th marginal right - should
slightly affect width measurement.

STOMACH TUBE - 4x - fluid and small particles
(some red) retained. Released on beach - became
disoriented and returned to beach - ~~turned~~ and went out
again - may swimmers in water. ^{BB-491}

8/7/79 - Reported dead on beach by
Steve Ritterbush - "gash" - or
"was crushed"

1 March 1979 Thursday
 Three of Miranda sons killed a juvenile Ogreen, apparently while setting gill net - reportedly in ~15' water near sampan channel. Broke turtle's neck - taken just for shell, but meat saved to eat also. Retrieved viscera and guts from water in front of their house where it had been thrown - floating. Heart still beating -
 Removed portion of neck bone, liver, fat, some flesh - stored in plastic bag -
 Freezer. + Tail = cloaca to tip - 1 1/4"

GI tract = just under 3 lbs.

"Upper" and "lower" compartments are distinct -
 upper - 7" long; lower - 11" long
 + Intestines - ~ 167" (13' 11").

Preserved in formalin - two stomachs and section of upper intestine (small int.)
 Separate compartments of stomach (filaments and codium - very fresh)

Same material noted all through intestines; however in some "pocket bulges" there was almost pure bunches of filaments.
~~SOAPY~~ "SOAPY" hands from handling intestinal contents - Ph paper seemed to be ~ 6

10 MARCH 1979 WAIMANALO MORTALITY - ADULT MALE
COURTESY OF SEA LIFE PARK:

Duplicate original
in diary log

Turtle reported to SLP at 4:30 AM as being beached at new Waimanalo Bellows Beach Park. Reported found by local people who were walking along beach. They tried to return the turtle to the sea, but it came back unto the beach. Died just before SLP person (Spence) arrived to take it away. Still not yet set in when I arrived at ~9 AM. I removed plastron - first put in seam resulted in lots of blood flowing out. Thick layers of fat on underside of carapace. Lungs are fully inflated with air. Stomachs only slightly full of food. Retained:

1. Stomachs
2. Section of intestine
3. ^{Preserved} Gonad with vas deferens (LARGE-PAIRED)
4. Fat sample - labeled and in freezer drawer.

NOTED - 1) jelly-like substance on outside surface of stomach;
2) Sand packed ~ 1/4 way down esophagus

No external injuries noted.
apparently Discard by SLP

3 April → All parts, except plastron & carapace, were

transferred to HAMB. Alan boiled out head for M. LEE, SLP, - I retained hyoid (Actually hard bone - calcified) and ear bones - all other bones will eventually be cleared and retained.

Dissection of 1st stomach: small food sample present - retained ^{sample ①}
(Amansia?)

All stomach and intestinal tissue discarded

2nd Stomach - nothing inside

Section of small intestine saved: ^{sample ②}
Codium and partially digested Slurry - sample retained.

During 10 march dissection I noted a moderate amount of contents present in lower intestine.

C - $36\frac{1}{4}$ ^{92.1} x $33\frac{3}{4}$ ^{85.7}

PL - $27\frac{1}{2}$ ^{70.9}
TAIL - $18''$ ^{45.7} Penis hanging out

4/3-4/4/79 BELLOW'S NETTING

TUES-WED (17 HOURS TOTAL)

Two floating net sections in water at 6:30PM off end of Jetty #1, Turtle seen in turbid water to the north - one right by end of net at 7:00PM, Calm has prevailed for several days, but wind started last night - All water very turbid. - Photos of area ASA 25 EL, Turtle captures as follows:

Sometime between 8¹⁵AM; beginning second ~~part~~ section; at join:

2992RFL	S	-	17 ¹ / ₈ ^{43.5}	x	14 ⁵ / ₈ ^{37.1}
2993LFL	C	-	18 ¹ / ₄ ^{46.4}	x	16 ⁷ / ₈ ^{42.9}

PL - 14^{35.4}
 HEAD - 2⁷/₈^{7.3} WT. - 30lbs
 TAIL - 3¹/₄^{8.3}

Stomach tube 3X - ulva + red or brown alga.
 Tan stains/globulette in mouth GB-409
 No skin barnacles
 Calcareous algae on postcentrals
 Photos with ASA 25, EL
 Release in drainage ditch

4/3-4/4/79 BELLows, (continued)

Caught between 3-5 AM - beginning of first net section:

2994 LFL S - $23\frac{1}{8}$ " x $1\frac{1}{8}$ "
58.7 cm / 45.7 cm /2995 RFL C - 25 " x $21\frac{5}{8}$ "
63.5 cm / 54.9 cm /PL - $18\frac{1}{4}$ " 46.4 cm /HEAD - $3\frac{3}{8}$ " 8.6 cm /TAIL - $4\frac{3}{4}$ " 12.1 cm / WT - $6\frac{1}{2}$ lbs
kg - 29.1

Big skin barnacles on neck region
 Stomach tube - 5X ⁴⁵⁻⁴¹⁰ only small particles retained
 - Amphipod from mouth retained
 - diluted flood in tube.

Pink & white coralline on tail(?) and shell.
 Small TMR on R side of head.

Photos ASA 25 /

Tag 2995 found 9/3/88 Bellows near Jetty
 in sand. checked by Robin & Robb Ford - 524-6078

9/3-9/4/79

Also notes for Bellows -

Two AMTRAE practicing in area on morning of 4/4. ^{845 AM} Passed a few hundred yards outside of net. Lots of spray thrown up from propellers. Turtles seen feeding in turbid water before and after AMTRAE's passed.

No feces noted on beach.

A few Man-o-war noted; Recall that Man-o-war have not been found in stomach samplings

8 NOVEMBER DISSECTION OF GREEN TURTLE RECENTLY
1978 FOUND By Bob Bourke near "Turtle Pond"
Shrine's Home, Wainaralo.

Mouth-nose-forearea of skull destroyed
and partly missing - suggested of being hit
with fowlerhead. If so, this would mean
that turtle may have continued swimming and
escaped attacker - but later died and washed
ashore.

Originally determined by Bourke to be a
"Hawksbill Turtle" based on color of shell
and "scarrations". Only mild decomposition apparent.
Photos taken - EL remainder of roll from
Maro-LISI trip.

DATA:

S - $21\frac{1}{4}$ ^{54.0} x $17\frac{3}{8}$ ^{44.1}

C - $22\frac{1}{8}$ ^{56.2} x $20\frac{1}{8}$ ^{51.1}

HEAD - $3\frac{3}{8}$ " ^{8.6}

TAIL - $2\frac{1}{4}$ " ^{5.7}

PLASTON - $16\frac{7}{8}$ " ^{42.9}

Stomach and intestines full. WT - 44 lbs.

All Bones and shell cleaned and retained
No reproductive organs visible;

Stomach GB-331 by J. Russell

Coolium edule

17-18 April 1979 BELLOWS FIELD WORK

121

(Tues - wed)

Very calm seas, light south wind, some rain showers - clear water - good visibility

Two sections of net set angling toward stream mouth.

Seawater - 26.5°C at surface; 25.5°C on bottom

(14¼h)

in 6 PM; out 8:15 AM -

3-4 Turtles seen feeding (?) in areas.

During morning, one "bit" net, but did not get caught.

Noted Hyacinth and terrestrial plants on beach - washed out by stream.

Also recalled that Tyan caught turtles with squid baited hook - should I tie some squid to net?

Noted turbid, upwells and areas - turtles frequently seem to be near these.

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Coconut Island - P. O. Box 1346 - Kaneohe, Hawaii 96741

[Faint, mostly illegible handwritten notes in pencil, possibly describing biological observations or field notes.]

LIBRARY OF
GEORGE H. BALAZS

**ALL SEA TURTLES
FULLY PROTECTED
IN HAWAII**

LIBRARY OF
GEORGE H. PALATZ

