

MORTALITY RECORDS AND MISCELLANEOUS TAGGINGS (MAY 1977 - April 1979)

G.H. BALAZS

REEL 3 - KAUAI - KURE/MIDWAY

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G.H. BALAZS

- EXPEDITION**
- Kure Midway, NW Banks - 5/25/77 - 6/7/77 pages 4-33
 - Appendix - whole juvenile from shark 6/24/77 - page 35
 - * Tiger Shark Turtle parts (PEH, FFS) - APRIL - MAY pages 36-41
 - Kailua Tumor Turtle dissection - 6/14/77 page 41
 - Sand Island FG confiscation Turtle Tagging - 6/17/77 page 43 (eggs 2201-2204)
 - R/V EASY RIDER SHARK FISHING CHARTS - pages 46-47
 - NLC Adult MALE Turtle - 7/6/77 - page 49 (2279-2280) Tagging
 - Dick Brock Juvenile capture (Kaneohe Bay) - 7/14/77 - page 50 (2326-2327)
 - Dead juvenile found at Midway - 7/12/77 - page 51
 - Waikiki Beach Adult (Tumor) Dissection - 7/19/77 - pages 41, 53-54
 - "ONE ARMED" TURTLE TAGGING - 7/18/77 - page 52 (2328) KAWAIILOA
 - ① Bellows Field capture (1) - 7/26/77 - pages 55 and 57 mortality
 - ② Bellows Field net capture (1) ^{8 1/2 hours} - 7/28/77 - page 58 (2329-2331)
 - ③ Bellows Field net capture (5) - 8/1 - 8/3/77 - pages 59-63 (2332-2341) Rock jetty #1 (36 hours)
 - ④ Bellows Field net capture (4) - 8/8 - 8/9/77 pages 64-67 (2343-2352) VERNON Rock jetty #2 (21 hours)
 - KAWAIILOA net (4) ^{13 hours} - 8/11 - 8/12/77 pages 68-71 (2353-2361) (Rock Reef) COMPOSITION BOOK • 9 1/2 IN. x 7 1/2 IN.

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⑤ BELL
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 5/1/77
 6/8/77

⑤ BELLOWS 12/18 - 12/19/77 (15 3/4 hours) (0) — page 84
Waikiki Aquarium Juvenile Donation 9/18/77 — page 72
Tagging Release (2376; 2379)

WAIKIKI AQUARIUM CAPTIVE RELEASES — pages 73-74
10/13/77 (2 Adults) (2406-2411)

HONOLOUA BAY, MAUI Juvenile tagging — page 75
By KAM 10/9/77 (2363-2364)

HONOKULU HARBOR JUVENILE
TAGGING 11/5/77 (1) — (2365-2366) page 76

Juvenile TMR
KANEHOHE (REDALJE) 11/25/77 — page 77

Intact but dead
KANEHOHE BAY JUVENILE (VERNON/SUZIE) 11/30/77 page 79

SA MINUS CARAPACE (By KINZIE'S HOUSE
COCONUT IS.) 10/28/77 page 81

Charlie Wong Dock recovery - hindquarters — page 83
from opening of Kalua Puhii Pond
(11/22/77)

TURTLE A, DIVISION OF FISH & GAME
CONFISCATION (Received 12/1/77) Kawaihoa pages 85-86

TURTLE B, DIVISION OF FISH & GAME
CONFISCATION (RECEIVED 12/1/77) Reef Runway pages 87-88

SAND IS. REEF FLAT - KANEHOHE BAY
NET CAPTURE (16 1/2 hours) plus
SCUBA capture same EXPEDITION (2) 4/26-4/27/78 — pages
Recapture of (2491-2494) 4/28/78 — page 91-93
4/27/78 2492 — page 94

5/1/78 Recapture of DEAD-BLOATED 2494 — page 95

6/8/78 TAGGING By KAM on KAUAI (2501-2502)
(Princerille) (2) (2503-2504) Page 96-97

TO CONTENTS
(CONTINUED)
NEXT PAGE

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7/11/78 "Kawelo" site, KANEHOHE BAY (2423-2425) pages 99-100
(SCUBA) 6516 capture

8/14/78 DICK BROCK capture/OUTSIDE KANEHOHE BAY (2476-2477) Page 102

9/1/78 PAUL TOKIEL/LOBSTER NET KANEHOHE BAY CAPTURE (2478-2479) Pages 104-106

⑥ 9/15/78 BELLOWS FIELD NET CAPTURE (2) (17 hours) (Recapture of 2340) (2935-2937) Pages 108-111

3/1/79 - Turtle Guts - Miranda's sons (COCONUT ISLAND) page 113

3/10/79 ^{Bellows-Waimanalo Beach Park} - Mortality - adult Male - COURTESY OF SLP page 115

⑦ 4/3-4/4/79 BELLOWS FIELD NET CAPTURE (2) (16 hours) (2992-2995) Page 117-119

11/78 Green Turtle Mortality - Waimanalo/STHEMERS AREA - COURTESY B. BURKE page 120

⑧ 4/17-4/18/79 BELLOWS FIELD (14 1/4 hours) no captures page 121

5/25/77
Wednesday

DEPART ~9:15 AM for Kure/Midway on 1342 C-130
w/ Lt. Mattingly, ^{CMR, SICKA FOOSE} ETV Ch II team and Public TV.

Photos over Pearl and Hermes w/ ELW-EL-PL.
Photos of Kure. + Bottomwood Dive group for pipeline.

Arrive Kure ~ 2 PM. New C.G. Mr. Bailey.

I called Midway - Curt - will stay overnight. Loaded up gear in backpack and walked along East side of island.

Monk seal man that stayed Kure ~ Feb-May - Jerry ~~Rabele~~ ^{Rabele} (?). Took many photos of seals - claimed ~ 12-15 pups, 50-60 total animals. (Alaska Fish and Game?)
WILDLIFE

Noted that water warm - saw two juvenile turtles on shallow reef flat just before beach house. Tied throw net but missed.

Arrived at South Point and noted that old reefs is gone and that West side now has long, narrow sand point projection. Saw small turtle in very close, but it moved out by the time I got net ready. Skin dive in first green area and saw turtle head out, in cave where I previously grabbed turtle. Not this same turtle. This

5/25

JAW

5/26
Thurs

5/25

one had small portions missing from ends of front flippers.

Walked out sand point projection - noted flat seal with small black pup. Noted turtle on lagoon side of sandpoint - threw net but missed - school of Ulua came through and four got gilled in net.

2 + 1 + 1 + 1 = total of 5 turtles seen. medium high, increasing tide, all afternoon. Collected purple shells at South point. Also noted that no codium on beach like in January - instead seemed to be a lot of Laurencia. NO Man-o-war jellyfish seen. Found very recent seal sprayings - Octopus - took 2 photos - collected roundworms - should send info to seal people. Information from USCG personnel indicate

1. Many turtles seen while skin diving off of wind sock.
2. Rat problem - killing - eating birds.
3. No SCUBA since I left.

Photos of Brown boobies at night.

5/26

Thurs.

awake at ~ 6:45, breakfast, walked to pier, to Windsock, around restricted end of island.

5/26 Thursday saw only one turtle - No of windsock -
in stronger current - relatively motionless.

Leave Kue about 9:15 AM; return ~ 1:30 PM.

180° at 29.45°N We crossed, going out.
30°10'N 180° Hancock Seamount position
30°25'N 178°05'E Cargo ship FLIAS Angeleko
Extended (As per orders)
SEARCH AREA - Rounded by triangle -

30°N 179°E
33°N 179°E
33°N 175°E

Singapura Kadua tanker
Singapore 176°45'E 32°55'N

Round trip - 930 miles
Rain/clouds

5/25-5/26
5/25-5/26
5/26-5/26
5/26-6/6
5/28-5/31
5/31-6/3
6/3-6/3
6/3-6/6
6/6-6/7

SAME LAST picture on rolls

- 5/25-5/26 Roll 1 - 64 ASA - EL
- 5/25-5/26 Roll 2 - 25 ASA - ELW ^{Return from} Kure Midway Bnks. ^{Brown} Booby chicks
- 5/26-5/28 Roll 3 - 64 ASA - EL ^{adults} white tern chick by BOG ^{midway} Adult in branches by BOG
- 5/26-6/6 Roll 4 - 25 ASA - ELW ^{adults} ♀ Aysan w/ ADULTS, FAIRY in tree, ^{midway} deform capture; ^{memorial photos}
- 5/28-5/30 Roll 5 - 64 ASA EL ^{Birds in flight} EASTERN, nearly all ^{taken 5/28} ALBINO NATAC; Baby BOB in
- 5/31-6/3 Roll 6 - 25 ASA EL ^{Fairy in tree}; CRAMWELL, ALBINO EASTERN ^{MAC} releasing turtle.
- 6/3-6/3 Roll 7 - 64 ASA EL ^{Sootys in flight} - Eastern ^{ALBATROSS} FEEDING; 1 shot large turtle
- 6/3-6/6 Roll 8 - 64 ASA EL ^{large turtle}; young gannet learning to fly - ^{pics off} memorial
- 6/6-6/7 Roll 9 64 ASA EL ^{250mm birds in ocean} (Tropic & ALBATROSSES); c 141's nobby

Thursday
5/26
~2 PM

Report — leader Fluddy
Bottomwood glivers outside channel
by Southpoint — Man in boat saw
15' shark.

5/26/
Thursday

Landed at Midway about 4 PM — Saw Gary and
Curt — Curt and Mac in trouble, due to
use of crane to bring out anchors — crane
fell over, damaged.

Told about Tiger shark capture recently.
Also man from Kansas (Mechanical
Engineer) who arrived yesterday to
collect skins from six adult albatrosses.

— Tag recovery made recently by KK.

— Also note that sometimes turtles are
caught, tags are noted, then turtle
is released because already tagged.

Saw Mr Henson, "Boats" (T.R. Michaels)
and other Kure 'CG' had drink at
club. given number 422-0531
EXT 625 tell operator I want KURE.

5/27
Friday

Told that men at Kure don't want shark
line off pier — attacks sharks close
to island in their opinion.

→ Report that seawater temperatures
are being taken regularly at Kure

Richard C. Birkebak
Professor and Director
Dept. of Graduate Studies
Mechanical Engineering
Univ Kentucky, Lexington 40506

5/26/77 Thursday - Went to school teacher party with Gary and Linda (Martinson?) ^{Dave and Jane McIlhenny}
 Told about many birds (50) being killed - Federal attorney not wanting to prosecute - man sent back to Midway - had been involved in bird kills, apparently several times. Also that little, if any, information ever comes out in news.

Report that Sekora is coming to Midway ~7-8th June to discuss helicopter landing, etc. Sekora previously gave talk in chapel (general audience or children?)

Steve LOESH - Pres. of Dive Club.

Captain Cory Schumacher - USAF Midway

5/27 Friday UP about ~8AM - to Cannon School, coffee with Linda Means; set up chairs, projector at consolidated club; introduction by student body president; talked and showed slides for about 1 hour to assembly (4th graders up + teachers), estimate ~80 people.

Had lunch with Gary and Linda. at ~1:15 PM departed for Eastern Island with teacher group for WORKSHOP. Some rain. Saw partial albino Gooberly ^{Dive, but no Turtles}

Return about 4 PM

Talked with girl who wants project - she had talked to Kinzie Devaney

5/27
FRIDAY

She would like to do something for me with turtles. NANCY CASEY

- HUSBAND - JEFF CASEY - Nominated for Audubon Represent.
- Note that Gary reported that Monk Seal team had not given Palmer full evidence of Helicopter violations at P & H.
 - also that "benefit" once a year is very limited.
 - Note - that some evidence of bird kill was seen on Eastern.
 - Note that high school student says a few turtles were taken by his family - they have the shells.
 - Note - Leave tags at KURE (?)

AIC = American International Contractors
refurbishing 5-6 units (including hobby shop) building
new #1 M dispensary; adding 6 lanes to bowling
alley.

KK President - Steve Loesh

Haney - housing B33 phone 533

6:15 PM

Dinner, bowling with Curt/Candi -
Telephone on this night for Navy
Relief (unknown what money is used for).
July 4 Sale bazaar - glass balls benefit

FR. DAY
5/27

air ops party fund, Girl Scouts only allowed to sell Cookies - no cards or other items, as per Condi.

- Note - People are generally not interested in turtles - How do you act effectively? How do you make an impression / do some good??

kk people have been diving outside reef by NAVFAC - cables and airplane.

- This evening I saw very small white fish being fed very large fish - took him a long time to get it down!

- Curt told me about "cay" under Fuel pier where "craters" are dug out where turtles sleep - same place where Bob Robbins caught turtle.

- Upon arriving at Eastern Island, saw local Hawaiians with throw net who had captured many, large mullet.

- Saw Curt Honey bronze buoy light - very nice.

* Possibilities for low recovery return of tagged nesters at FFS:

1. Tag falling off
2. Turtle only nests once
3. Turtle dead
4. Turtle nesting elsewhere

* Need dig
* Turtle slides f

5/28/
Saturday

upat ~ 9A
Breakfast
teacher
Series 1

Check # on
SHELF and
Ameson
numbers

TO Koral
Met
of reco
tog #
lots of
no bin
but at
photos in
noted. T
~15 lbs
ago.

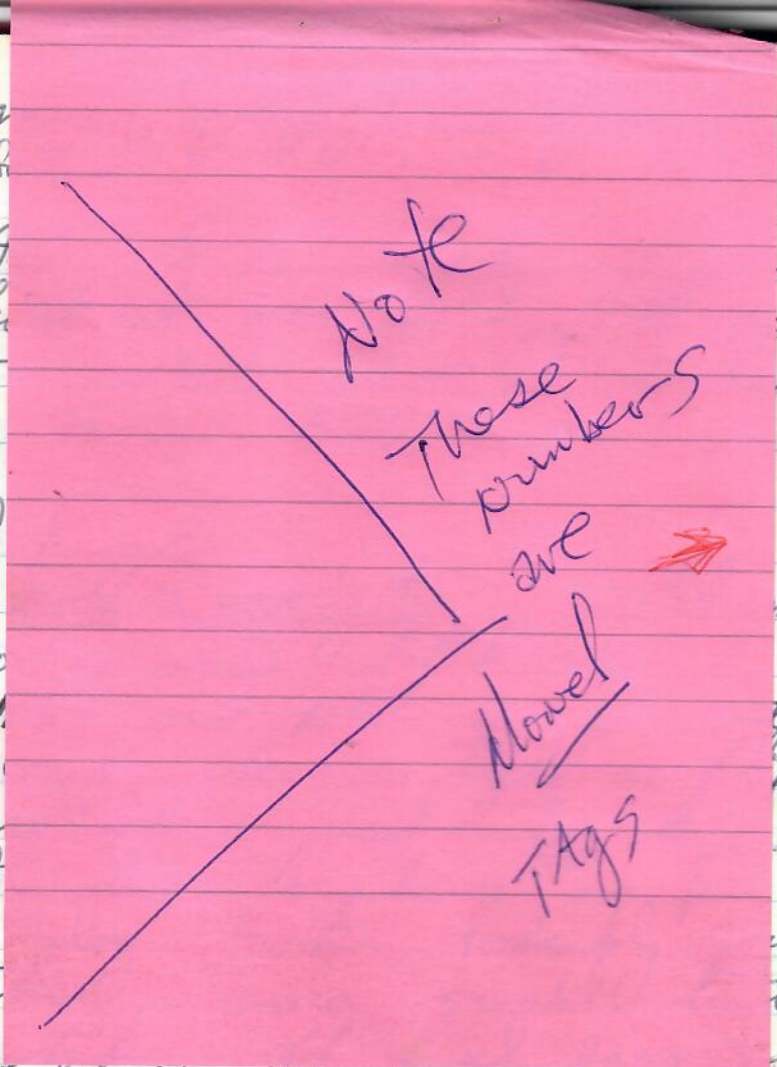
High school boy reports that at the club
seen for

Should
Call
me
286-2899

INCOVEL?

I suspect
so -

Please
check



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chool
ngl
ne
th
ffer,
tags,
ersion
the
weeks

TAG
1532-
1534-
1537-
1539-
1541-
1543-

2108
2109

old
Tagging copied from log

TAG NOS.	Curved	straight	PL	Tail	wt.	Date
1532-1533	$43.8 \times 40.0 \text{ cm}$ 17 1/4 x 16	$41.3 \times 34.3 \text{ cm}$ 16 1/4 x 13 1/2	32.4 12 3/4	7.3 2 7/8	24 lbs	9/4/76
at 20' resting near spits - Harey / means						
1534-1536	50.2×44.5 19 3/4 x 17 1/2	$41.9 \times 33.7 \text{ cm}$ 16 1/2 x 13 1/4	33.7 13 1/4	8.3 3 1/4	27 lbs	9/11/76
East of Eastern -- PEKELDER						
1537-1538	50.2×44.5 19 3/4 x 17 1/2	$47.0 \times 36.2 \text{ cm}$ 18 1/2 x 14 1/4	39.4 15 1/2	3.2 1 1/4	36 lbs	10/9/76
old tags (1478) - (1479) Fuel Pier - Harey / Kurishima						
1539-1540	$55.2 \times 49.5 \text{ cm}$ 21 3/4 x 19 1/2	52.1×40.0 20 1/2 x 15 3/4	44.4 17 1/2	3.8 1 1/2	45 lbs	10/9/76
old tags (1474) (1475) Fuel Pier - Harey / Kurishima						
1541-1542	43.2×40.6 17 x 16	41.3×34.9 16 1/4 x 13 3/4	35.6 14	3.2 1 1/4	25 lbs	4/23/77
Inner harbor - McFarland						
1543-1544	33.7×34.0 13 1/4 x 13 3/8	30.5×28.6 14 3/8 x 11 1/4	28.6 11 1/4	1.9 3/4	18 lbs	4/23/77
Inner harbor - McFarland						

took back MONEL 1546 - 1547 - 1548
1553 - 1575 LEFT AT KK = 2112 - 2122
1576 - 1600 Bad - 1545 and 1549

2108 RFL	40.0×35.6 15 3/4 x 14	37.5×30.2 14 3/4 x 11 7/8	29.8 11 3/4	2.07 2 1/8	17 lbs	5/28/77
2109 LFL	I caught behind Eastern on night skin dive					

Head width - 2 1/2" 6.4
Some dark, some gold in shell, clean shell.

* Need diagram/kits of tagging/measuring
 * Turtle slides for Gary

5/28/
 Saturday

Up at ~ 9 AM, to rummage/garage sale -
 Breakfast at KK cafe with school
 teacher - saw lens at Exchange
 Series 1 70-210 \$185.00.

TO Koral Kings -

Met Bob Weddington - Told me
 of recovery made by ^{MR.} Ross
 of tag # 113 and 114 covered with
 lots of mud, tag on tight on flipper,
 no inscription read - Big size tags,
 but at two locations as per
 photos in log book. possibly confusion
 noted. This was a small turtle
 ~15 lbs taken off fuel pier ~3 weeks
 ago.

High school boy reports that turtles/fish
 seen feeding in current of Green Light

Check # on
 STEIF and
 Amerson
 numbers

TAG M
 1532-1

1534-1

1537-1

1539-1

1541-1

1543-1

2108

2109

5/28
Saturday

~ 5 PM left for Eastern to set up camp for night dive - Curt, me, Jason McIlhenny, Worth's son, and two scabees. Curt saw 3 turtles in current coming around point to back side of Eastern. I saw several from shore shortly before dark.

Went into water in a cove about 10:30 AM incoming tide. Worth saw two juveniles reported sleeping on top of one another in canyon side partially under ledge. Chased but not caught. I saw another, but it swam off. Jason spotted ^{swimming} one which I caught & tagged 2108, 2109.

5/29
SUNDAY

Broke camp about 7:30 AM and shuttled back from Eastern to Sand. Saw ~ 5' white swimming slowly along near Eastern pier.

Dove with Curt, Seabee all along under fuel pier ~ 11:30 AM. - also out by range markers. Lots of Kumu and other fish.

~ 2 PM dove from boat with ^{Elaine} Roger Schmelz at "one mile marker". Lots of sand slope, some coral heads with "good" shelters with sand bottom. Lots of fish. Second half of dive off ^{near} Paoos where Gary took photo of Curt with turtle.

5/29
SUNDAY7 PM
11:

5/29
SUNDAY

Found very large Navy type anchors in sand; also pipe with fish.
Other person pliving saw larger turtle swimming; had longer tail; about 5' away.

Notes -

- Not ^{many} chicks seen on golf course ranges.
- Noted Eastern runway - still could be used for landing; asphalt about 6" thick - Curt suggested using "rake" on back of bulldozer
- noted big, hungry rats of Eastern.
- Found small pieces of Codium on Eastern South shore that had washed in.
- Places people have caught/seen turtles
 1. back side of Eastern
 2. ledges by Spit
 3. outside of inner harbor (large ones)

7 PM Dinner at Curt's.

11:15 PM Called Jim in Hono

Needed for Koral Kings -

1. New data forms with more space, etc.
2. Box or container for all turtle tagging gear
3. Turtle Sighting report forms / with desk holder
4. "Important Points about turtle tagging"
sealed in plastic sent 6/12/77
- * 5. Pliers (I.D. ed)
6. Diagram on how to measure
7. Note on shark stomach contents
8. Replace old tags; measure all turtles;
save ^{all} old tags; Reason(s) for doing
research. lock tags good, if bad,
use others, log all "bad" tags, and save
for me. Squeeze with pliers if needed; so
dead turtles; limo photo; call me;
9. Read inscription
10. Tell why we are tagging
11. Patches.
12. Turtle can be held in shade
13. Holder and instructions for sighting forms
14. Basting, sealed seaweed
15. Tag pit needed for people going to Eastern
16. Shark stomachs
17. Feeding observations
18. Squeeze slowly - Tag Diagram
19. Turtle slide for staining *
20. Turtle photos for club wall (frame) *
21. Stencil sent

Mapk?
UV

22. Turtle Diagrams to air operations -
 Nancy Butowski
 % Casey
 Box 14 US Naval Station
 FPO San Francisco CA 96614

sent
 drawing
 48 my booklet

23. More patches - specialized

A. Photo of Chris with Big turtle - Frame - Big Frame -
 many photos

Dive Log

Date	Location	Sightings
5/25/77 wed	Kure - E side 5PM	1 juv head out of cave
5/27 FRIDAY	EASTERN - S side (short) 3PM	No turtles seen
5/28 saturday	EASTERN - S side night 10:30 - 1AM	4 seen - 1 caught
① 5/29 sunday	FUEL PIER / RANGE MARKERS ^{11-12 noon} SCUBA w/schmeltz	NO turtles seen
② 5/29 sunday	ONE MILE MARKER / OFF CROSS SCUBA w/schmeltz	1 MADE SEEN OFF CROSS
③ 5/30 monday	OFF KK ramp to buoy SCUBA w/LINDA	Halophila located Report Memo sent to Kent Bridges 6/77
④ 6/1 wednesday	Between Welles Harbor and Hotel SCUBA w/ ED PAULINA	short time under pier Lots of Aspharogopsis, 1 - slipper lobster
⑤ 6/1 wed	By Buoy 12 and Spit Islands SCUBA w/PAULINA	Cliff w/caves - saw one turtle leaving; 1 spiny lobster
6/2 Thursday	Back side of Eastern Skin w/Paulina	Saw 4 swimming free, and one in cave - but left quick - upcoming tide
⑥ 6/2 Thursday	off KK ramp to coral head (head) where Mac caught turtle earlier w/schmeltz and Paulina SCUBA	saw - surveyed Halophila collected fuzzy algae and bright green

Day
6/3
FR

⑦ 6/4
FR

⑧ 6/5
Sat

⑨ 6/6
Sun

⑩ 6/7
Sun

⑪ 6/8
Mon

⑫ 6/9
Mon

Dive log (cont.)

19

Date

Location

sightings

6/3 Friday Back side of Eastern - SKIN w/ Schmetz - 1/2 foot Low tide - 11:30 AM
 1 small seen from shore - Schmetz saw it feeding.
 Two seen in water swimming.

⑦ 6/3 Friday Inner Harbor (KK) - along ledge SCUBA 6 PM High tide
 7 seen: 1 juv. caught in hole
 1 - adult on bottom

⑧ 6/4 Saturday Inner Harbor (KK advanced class) - along ledge SCUBA ~ 10 AM low tide
 ~ 4 seen - 2 caught

⑨ 6/5 ~~SUN~~ Fuel Pier/Cargo Pier SCUBA w/ Honey & others
 2 seen - 1 defecated
 caught

⑩ 6/5 ~~SUN~~ Cargo Pier / SCUBA w/ Honey & others
 no turtles seen

⑪ 6/6 MONDAY Welles Harbor - between mile marker and Reef Hotel - w/ Jason McElhoney SCUBA
 no turtles -
 Bombs & 3 sharks

⑫ 6/6 Monday Same general area as above; w/ Gary & Linda Means - Lots of junk - green algae
 sample
 and sponges

5/30
Monday
MEMORIAL
DAY

UP about 10:30 AM - coffee at KK -
visited with Gary Means, Linda -
SCUBA w/Linda off KK ramp to buoy. Found
Halophila growing. Saw many fish
under ramp. Palmer will visit
next week - suspect that Gary be there.
Apparently will talk about Helicopter visits
to Pearl and Hermes.
In afternoon went out toward NAVFAC
and photographed partial albino bird.
Came back to inner harbor where
"Joanna Marie" (San Diego) and other "Typhoon"
fishing boat were tying up. (Dayton, Oregon)

Notes -

- Blasting under cargo pier took place
about 2-3 weeks ago.
- Burke, fire marshall walks island
all the time - Pekarley works with him.
- Weddington noted turtle tracks up
and down beach by Navfac last
summer.
- Dead adult black footed on road to
NAVFAC 767-93035
- a "game" warden -
Ed Karlina
A40 539

Hamburgers at Gary and Linda's with
McILhaneys.

Cargo ship "American
Ruler" in port

5/31
TUES

5/31
Tuesday

Up about 8 AM - to school, presented 35 minute talks to kindergarden and 1st graders and also to remainder of elementary children (~250 total in school, 5 will graduate; 7 juniors). Lunch w/ Gary & Linda. To KH, talked to Mac, told of "Bunson, Cromwell" arrival in inner harbor. Visited ship - Reg Gooding head scientist - been in leeward chain for past several months trawling for lobster - worked Maro reef - he said it was "crawling" with lobsters; also at Kure they lost trawl - many sharks came when they entered water. Dabell aboard, signed on as employee for one year. Also Doug Davis and fellow who used to go to Coconut Island flew in today on fog flight to join ship. It will take 24 days to return to Honolulu. Will again visit Laysan, Pioneer Banks, Maro, etc. At Laysan Patty and Bryan Johnson came out to ship for shower, eggs, vegetables.

Between ~1 PM and 3 PM I motored around lagoon with Mac. Visited large shallow coral heads to the west of range markers; deep water adjacent. Off North side of Eastern Island we came upon juvenile in shallow (~3') water. I jumped on it from bow of boat.

5/31/77
Tuesday

Data taken at KK: released
from ramp (photo w/MAC) - Goldish
shell - lots of algal growth on head, shell,
limbs;

(Bot recovered in 1978
behind EASTERN)

AG NOS
2163 LFL

^{42.9}
516^{34.6}/₈ x 13^{45.7}/₈

^{40.3}
C 18 x 15^{7.6}/₈

2164 RF

^{34.6}
PL - 13^{7.6}/₈

^{7.6} TAIL - 3" ^{7.6} head - 3"

Weight = 25 lbs (KK scale)

During late afternoon I bicycled out
to green light - on the way I
saw juvenile turtle feeding in
inner harbor, right side. At
southeast corner of island I saw
larger (~28") turtle come up to
beach and then go down.

Dinner at Cornerstone

6/1/77
Wednesday

Two Scuba dives from KK1 with Ed
Pavina. Saw Turtle at ~30' by Buoy
12 coming out of shelter.
also tried to jump on turtle from
boat by sheet range - saw my tag,
but this was larger than turtle
caught yesterday.

6/1
Wedne

6/2
Thurda

6/1/77 Dinner at Curtis. Ken had the KK turtle talk
Wednesday announced on radio. Talk to Koral Kings
at 7PM meeting. Went well. Lots of questions
from Commander Wirth.

Curt mentioned that there are only a
few places where they regularly see
turtles; the rest are occasionally
seen at many places throughout the
lagoon.

Gary mentioned that in the past few
days ~50 tropic birds have been
killed on the beach in area 7. I
recommended that he call Sekora.

- Note - Sightings on Cromwell

6/2/77 Vup ~ 8:30 - to KK to meet
Thursday Ed and Suzette - Noted fishing boat
at Cargo pier - Taiwan Koral Boat -

NO. 2 HAI TIEN

Radio call XHT

Honolulu Rep - YEI KAI FOU

HAI TIEN Company, Hou, Makung
Reported working 35°N 174°N

(Memo report sent
to Iversen
6/77)

6/2
Thursday dragging for precious coral - stores on board. Navy man said 4 hee (two Japanese, two Taiwan) in fast two month. Captain tried to show white coral spray painted red. I have samples. Took on 2000 gal water. They saw some small turtles.

Motor in area of KK ramp and tried throw net on two turtles - too deep, doesn't sink fast enough.

By inner harbor entrance area I jumped on large male - couldn't restrain him.

Motor to Eastern - walked across island - Ed and I skin dive back side for 1-1/2 hours. Saw 4 total swimming and 1 under ledge that swam quickly away. Called fin from Eastern dock.

Returned to KK - Mac and class had caught turtle under ledge off KK ramp.

6/2/
Thurs

Tag

216

216

6/3/7

6/2/77
Thursday

Tag nos.

2165 LFL

S

46.4

39.7

$18\frac{1}{4} \times 15\frac{5}{8}$

49.2

45.1

C $19\frac{3}{8} \times 17\frac{3}{4}$

2166 R^F

PL -

37.8

$14\frac{7}{8}$

7.6

TAIL - 3"

7.0

head - $2\frac{3}{4}$ "

wt not taken

definite gold shell - clean

SCUBA dive w/ Rawlins and Roger Schmelz (wife Elaine) off ramp - algae, Carl moregrass sample collected.

Evening dinner at Rawlins - saw Suzette's fairy tern collection.

6/3/77 up ~ 7 AM - Breakfast at EM Mess - Mike boat to Eastern w/ Schmelz - he will be here 18 more months - new antennae to be constructed in Area 7. Saw albatross. Walked to back side for skin dive at low tide - 11:30 AM. Roger saw small turtle feeding - poss on Podina. also mentioned

6/3/79 ^{Charlie} Thomson will be taking one week off to go shark fishing off Eastern Island.
Friday Call to Jim on MARS

6 PM Dive by KK regulars in Inner Harbor, normally restricted side.

Chris Baird ^{Box 14 FPO SF 96614} caught small turtle, then large adult turtle.

2167L

S - ^{90.1} $35\frac{1}{2}$ x ^{72.7} $28\frac{7}{8}$

C - ^{96.5} 38 x ^{92.7} $36\frac{1}{2}$

2168R

PL - ^{70.8} $27\frac{7}{8}$

TAIL - ^{19.7} $7\frac{3}{4}$ (♀)

2169R

2170L

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

(clean gold) Brown shell - large barodes in skin,
photos - no copulation scars seen

6/3
FRID21
21

6/3/77
FRIDAY

2171 LF
2172 RF

^{50.2} S-19^{3/4} x ^{40.6} 16

^{53.0} C-20^{7/8} x ^{48.9} 19^{1/4}

^{40.3} PL-15^{7/8}

^{8.9} Tail-3^{1/2}

^{8.3} Head-3^{1/4}

weight- 43 lbs - (my scale / KK scale correct to within 1 lb)

Rusted fish hook in shoulder w/ lead -
removed - clean shell - darker
than others caught. photos

6/4 ~ 9AM Scuba dive along ledge of inner Saturday harbor w/ KK advanced diving class.

one turtle caught in hole sleeping by Roger Schmeltz and _____
I helped a little.



¹⁴⁷⁴
2173-

^{56.2} ○ $22\frac{1}{8}$ × ^{48.9} $19\frac{1}{4}$ ^{52.4} S $20\frac{5}{8}$ × ^{40.6} 16

2174-

PL - ^{42.5} $16\frac{3}{4}$ (using both ~~KK~~ & my calipers)
(KK was probably using tape for plastron)
tail - ^{8.6} $3\frac{3}{8}$ head - ^{7.9} $3\frac{1}{8}$

43 lbs

1539
1540

○ ID TAGS REMOVED ✓ C/SRATIO - 1.203

Injury on 1st & 2nd lateral right - and
centrals. ✓

6/4/77
Saturday

2175 R

C $23\frac{5}{8} \times 21\frac{1}{4}$ ^{60.0} ^{54.0} ^{57.2} ^{45.7}
S $22\frac{1}{2} \times 18$

2176 L

PL $17\frac{3}{8}$ (deformed R posterior) ^{44.1}

2177 L

Tail - $5''$ ^{12.7} head - $3\frac{1}{4}''$ ^{8.3}

Weight - 60 lbs c/s RATIO - 1/180

[1482
1484]

OLD TAGS REMOVED

4th central - small shell injury
photo

[This turtle caught again on 6/5 Sunday
resting by piling of ~~fruit~~ pier - by Steve Loesh.

See Midway Summary
for recovery info

6/4 Saturday Young seal roled on beach by local kids.
 Dinner party at Gary and Linda's -
 attempt to get on C-118 (4 engine prop) failed -
 got to bed about 3 AM -

6/5
SUND

6/5 SUNDAY
 Up at ~ 10 AM - breakfast at club - went
 to flea market sale - went to KK for
 two SCUBA dives under fuel pier - cargo pier -
 Curt caught deformed turtle - saw another
 small one - no turtles seen on second dive;
 Later Steve Joesh caught 2175-677 by
 fishing of cargo pier - also saw another larger one
 with tags.

2110 RFL

$$C \overset{44.4}{17\frac{1}{2}} \times \overset{39.4}{15\frac{1}{2}}$$

$$S \overset{41.6}{16\frac{3}{8}} \times \overset{33.7}{13\frac{1}{4}}$$

2111 LF

$$PL - 13\frac{5}{8} \overset{34.6}{}$$

c/s RATIO - 1.170

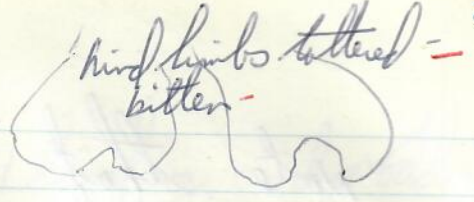
$$\text{Tail} - 2\frac{3}{8} \overset{6.8}{\text{in}} \text{ (poss. deformed)}$$

head - not taken

$$\text{Weight} - 24 \text{ lbs.}$$

width measurements taken at 7th marginal due to
 double deformity due to possible shark(?) bites.

6/5
SUNDAY



also front limbs have gashes close to body
likely due to monofilament.

Note: Linda/Gary suggested that Halophila may
occur off O - EM beach.

write to T.F.H. Publications, INC.
Box 27, Neptune, N.J. 07753
free catalog of 500 pet and nature books.

Dinner at Roger and Elaine Schmelty -
Cromwell will get shells (hermit crabs) for Rops.
Saw several charts of Midway.

Contact Alison Kay for Roger about

Cypraea Latia cowrie
Cromwell came back for short time - set lobster
traps around MIDWAY

6/6
MONDAY

note that KMTH has old WWII photos in their files - see a lieutenant in charge.

up ~ 8 AM - to PAC Terminal for ticket processing; photos of birds; talked to Chief Burke - been here 2 years - "fish balls" alot - 350 in collection. Has never seen turtle tracks - Sees most turtles (many big) between Dump and green light - has been feeding on Man-o-wars.

Lunch at Cornerstone w/Mac (McFarland) -

SCUBA dive with Jason - photos of Basman/Garys
SCUBA dive with Linda & Gary ^{in water}

Dinner at Linda and Garys

6/7
TUESDAY

Breakfast at George Cannon School - with Reid Swanson -

Examined East end of Island to dump - saw 2 juveniles in close to seawall.

Consider -

Some never grow any bigger than a juvenile size - some never mature.

6/7 Tuesday Photos with 250mm of C-141 landing and roddy on seawall.

~1: Palmer, Dillon and Hansen on flight-
DEPART MAC C141 for Honolulu.

NO NUMBER

10/9/77 Examination of material returned by DeJong -

1- left, 1-right humeri

1- Scapula/Acromion (2 prong only) LEFT -
Bigger than Kaulwa TMR tangle

NO HAIR

cleaned and retained in reference collect -
yellowish/acid attack evident.

examined
7/9/77

APPENDIX TO Report on turtle parts
recovered from shark stomachs -

Shark #9 (size -

Caught near Tern Island location 6/24/77
EASY RIDER expedition

Whole turtle - severed RFL

S(LW) $16\frac{1}{8} \times 13\frac{5}{8}$

C(LW) - $17\frac{1}{4} \times 15\frac{3}{4}$

weight - 18 lbs
C/S RATIO - 1.156

Plastron length - 13"

head width - $2\frac{3}{8}$ "

Whole animal preserved in formalin for drying

Photos taken w/ ~~100~~ 160 - Roll 20 - came out good

Consider variables of Time of year caught
and food competition (turtle for algae)

Stomach content preserved - ~~2~~ 2 jars - ① stomach
② strained intestines
coralline
algae;

Shark stomach also contained ribs and
some plates of large turtles as
follows: 36" - see odditorium
report.

36

Honolulu Aquarium June 10, 1977

Shark
NO:laminae
shields
scutes5 upper beaks
4 lower beaks

SP. 4

Apr. 1 20 (P+H) 2 Centrals 2 laterals

" 5 turtles possible? "

NO. 16

" (") distal portion of left front limb, flipper
"juvenile"

" 1 turtle possible? "

NO. 20

Apr. 21 (") 3/4 section of carapace + plastron, pelvic
section present guide

" 1 turtle possible? "

NO. 30

Apr. 23 (outside P+H) laminae (carapace) partially
digested, 1 rib bone

" 1 turtle possible? "

SP. 54

May 19 (FFS) laminae "plastron" "margins"
possible tail plate, scale

" 1 turtle possible? "

56

Carapace laminae and bone

" 2 turtles possible? " based on coloration

SP. 66

May 20 (FFS) 2 ^{intact} complete carapaces 2 heads

" 2 turtles possible? "

SP. 71

May 20 () section of carapace (ventrals)
plastral laminae

Daylight

" 1 turtle possible? "

14

possible turtles

Shark

SP. 4
FEMANO. 16
MAZ

Shark no.

SET 1

Hawaiana Bay tooth

Scale at tip of left limb

W. at claw $2 \frac{3}{4}$

Head width $2 \frac{1}{2}$

37
1 1/2

84 P&H

FEMALE

1st Central ^{lamina scute (sample saved)} long $3 \frac{1}{4}$ x $6 \frac{1}{4}$ wide

3rd Central \rightarrow long $4 \frac{3}{4}$

9 horns
Beaks in office -
(covering JAW?)

21" (53cm) 15 lbs

22" (56cm) 60

22" (56cm) 60

25" (64cm) 90

25" (64cm) 90

Total length - 374 cm

Mouth width - 37 cm

NO. 16 P&H

MALE

Scale at tip of l. limb - $1 \frac{3}{4}$ "

SET 4(?)

Width at l. limb at claw - 3"

Slightly larger than Hawaiana Bay tooth -

15" - 15 lbs
(38cm)

Total length - 288 cm

Mouth width - 29 cm

SET 2

Shark
NO.

NO. 20 P¹H
MALE

straight
S. Width - 13 1/4"

CW. - 16

2nd Lateral-Length 6 1/4 Width 3 3/8

3rd Central-Length 3 1/4

Lateral Sample retained for coloration

Total length - 368cm (16" - 25lbs)
(41cm)
Mouth width - 35cm

NO. 30 P¹H
FEMALE

2nd (op) 3rd Central - (L) 6"; posterior width 3 3/8

Canton turtle 3rd lateral = 7" length
posterior width 2 7/8

Kailua turtle 33" (CL) 2nd Central 6 3/8 (L)
posterior width 3 1/4

sample returned: central

29" 140lbs
(74cm)

Total length - 432cm
Mouth width - 51cm

Shark
SP 5
M

9/10
Exam

FEMALE
56
turtle
1
↑
equal
Waikeiki
Tumole
↓
turtle
2

bag

SET 9

Shank
no
SP 54 FFS
MALE

(humeral)
Rt. Plastron lamina anterior (L) 4 1/2 length
anterior diagonal 2 3/8

+ small package
2 - pieces of vertebrae (64cm)
1 - small rib end or piece of plostion bone. - Both (25 inches)
with hair imbedded 90 lbs

Total length - 280 cm
Mouth width - 25.5 cm

RIGHT bigger than Kigiloo TURTLE

9/10/77 material returned by DeLong - 1 - Scapula/Acromion process 3 PROMOS
examination of PLASTRON; 1 - piece of rib imbedded in cartilage
1 - piece of digit (4) - either front or hind limb.
All with hair imbedded.

FEMALE FFS
56

Turtle 1

equal TO WATIKI TURTLE

Turtle 2

1st Central - long: 4 3/4 x 9 1/4 wide (94cm) 37" - 275 lbs
5th Central - long: 8 1/8 x 9 1/4 wide 37" (94cm) - 275 lbs

Carbon turtle 1st Central 5 1/4 x 11 wide

Marginal lengths - 4 1/8, 4 1/8
Lateral length at margins 7 3/4."
sample returned * from both turtles

bag # 2

small pieces of reddish brown laminae ↑ poss same (53cm)
+ 1st lateral scute of juvenile + 21
45 lbs

Total length - 402.5 cm
mouth width - 33 cm

shark
no.SP 66 FFS
FemaleCarapace
a) (S) (C)SET 11
(38cm)
 $15 \frac{3}{8} \times 12 \frac{7}{8}$
 $16 \frac{1}{2} \times 14 \frac{1}{4}$ b) Carapace (S) (41cm)
 $16 \frac{1}{2} \times 13 \frac{1}{2}$ "light-colored shell"
(C) $18 \times 16 \frac{1}{4}$ head width (S) $2 \frac{5}{8}$ head width (C) $2 \frac{3}{8}$ Total length - 359cm
Mouth width - 35.5cmSP 71
FemaleSET 12
4th Central, r. posterior (diagonal) = 5
width: $6 \frac{1}{2}$

sample retained

Rt. plecton lamina anterior diagonal = 4

Bigger than Kailua Turtle; smaller
than Waikiki Tumor turtle.33" - 200 lbs
(84cm)Total length - 347
mouth width - 36cmP₁H - 16 total Tiger shark, but 1 head only ∴ 15 stomach exams
26.67%FFS - 18 total Tigers, but 1 excluded stomach ∴ 17 stomach exams
23.52%Written report prepared on this work - copy sent to L. Taylor and MAC office -
copy in my file.9/10/97 material retained by
DeLong - 2 1/2 pieces of
rostrals, Dorsals, (1 piece
vertebra
scapula
Kailua Tumor Turtle, NO HAIR

6/14

June 13th 1977

41

Delivered to C.I. by Ed Shallenberger,
if I remember correctly.

Dead
Kailua Turtle - C -

83.8cm

33 x 32 1/4

S - 30 7/8 x 23 1/8

PL - 21 7/8

78.4 cm

Head - 4 3/8

Weight - 95 lbs

43 kg

(Rt Humeral scute 3 1/4" diagonal
4 1/2")

TAIL - 6 1/4"

Adult Tumor Turtle
(Waikiki)

C - 39 x 35 1/2

S - 36 5/8 x 27 1/4

PL - 28 7/8

S 93.0cm

Head width: 2 3/4 4 7/8

Weight: 175 lbs. (79.5kg) continued on p. 53

6/14/77

KAILUA TURTLE - complete dissection and test
of stomach sampler. Photos of turtle and
head w/ tumors. Removed head w/ trachea
and esophagus intact - trachea opens in
floor of mouth behind tongue - appear to
be three sided valve. esophagus leads
back from roof of mouth. Photos -

Very small eggs/ovum/oocytes present.

Photos. eggs sit on top of
layered kidneys. Lungs are spongy
and full of air - look healthy.

Tumors cut off and preserved -
will send to Smithsonian (acquisition sheet on file
sent 6/77)

Stomach empty - but material in lower
intestines - sample of alga saved -
looks like Ulva sp.

bones, vertebrae, retained. Series of slides submitted -
ORIGINALS RETURNED.

washed up on Kailua Beach
Park - 7/25/77

KAILUA TURTLE NO HAIR

6/24-30/77
FFS

Sound

Spork fishing by Easy Riders resulted in the capture of Tigersharks.
Site N FFS - 1 with transmitter put on; 1 with stomach extruded; 1 with lobster; 1 with whole juvenile turtle and adult plates;

Right off East Island - 1 cut caudal and dorsal fins.

One of the set was off the SW reef of East - only resulted in the capture of one sandbar (*melbertii*) shark.

As I recall conversations about EASY RIDER, 18 Tigers caught at P&H; 16 caught at FFS. However, this may include a "head" only and some with stomach extruded. It is therefore important to determine the number of tiger stomachs examined at each location. Also there was a Tiger caught with trawl net, seal, turtle and bird parts. Obviously, Tiger feeding is a complex mechanism that I can not be easily explained.

6/17/77
FRIDAY

Sand Island FG turtle confiscated by warden from people's backyard where it was being held on its back (part of the time in sun) for three days in preparation for Kam Day cooking. Said to have been caught on ocean bottom off Barber's Point. Eyes swollen/dehydrated when confiscated. Left side flipper partially missing/damaged.

S- $3\frac{1}{4}$ x $2\frac{3}{8}$

88.6 - ~~88.6~~ 64.4 -

C- $33\frac{3}{4}$ x $30\frac{5}{8}$

85.7 - 77.8 -

PL- $25\frac{5}{8}$ 65.1 - Tail - 10"

C/S RATIO - 1.207

25.4 -

Head - $4\frac{1}{2}$ " (hole on left side - spear?)

2201 LF

2202 RF

2203 RF

2204 LF

photos taken with tape on back and with warden Harold (Mores) for use in court case. (Moniez)
Turtle released at ramp into Honolulu Harbor same day.

The Life History and Ecology of the Gray Whale (*Eschrichtius robustus*)

by Dale W. Rice and Allen A. Wolman
Special Pub. NO. 3 The American Society
of Mammalogists 30 April 1971

Introduction

Nomenclature

Field and Laboratory Procedures

Collection of specimens

Field observations

Seasonal Migratory Cycle

Food and Feeding

Age and Growth

Age determination

Growth

Puberty and sexual maturity

Physical maturity

Discussion and Conclusions

Female Reproductive Cycle

Male Reproductive Cycle

Predators

Parasites and Epizootics

Exoparasites

Endoparasites

Discussion and Conclusions

Population

Present numbers

Pop (cont.)

Population Trends

Density and Biomass

Population Structure

Population Dynamics

Discussion and Conclusions

Exploitation

Aboriginal whaling

Commercial whaling

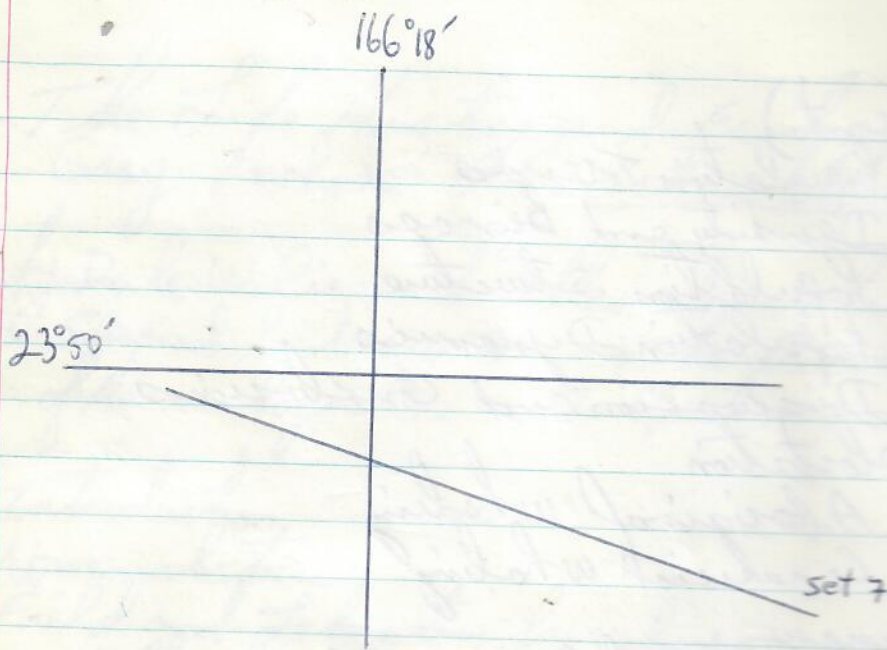
Summary

Literature Cited

Index

46

R/V Easy Rider Shark Fishing
April, May 1977
June



GIN

~~SET 12 (DAY)~~~~SET 9 (NIGHT)~~LITTLE
GIN~~SET 11 (NIGHT)~~ $23^{\circ}46'$ $166^{\circ}14'$

see computer sheet dated 7/7/77 for correlation analysis of total shark length, mouth width of shark, and straight carapace length of turtles in stomachs

1. Mouth width - straight carapace length $N=15$ d.f. = 13
 $r = .1129$ N.S.

2. shark length - straight carapace length $N=15$ d.f. = 13
 $r = .4032$ N.S.

3. shark length - mouth width $N=8$ d.f. = 6
 $r = .8339$.01 significant

It would seem logical to expect larger sharks to be capable of eating both large and small turtles. However, smaller sharks may not be capable of eating larger turtles \therefore can only eat smaller turtles.

\therefore data should show - smaller sharks with no big turtles, and larger sharks with both.
 Does it?

Ranking order	#	Shark length	SL length	shark length	SL length
1.	30	-432	-74	7.16-288	-38
2.	56	-403	-53, 94, 94	8.59-280	-64
3.	4	-374	-53, 56, 56, 64		
4.	20	-368	-41		
5.	66	-359	-38, 41		
6.	71	-347	-84		

or strictly size dependent - bigger sharks, bigger turtles
 smaller sharks, smaller turtles

NUC CAPTURE

7/6/77

89.5 / 35 $\frac{1}{4}$ " S Length
69.9 / 27 $\frac{1}{2}$ " S Width

95.3 / C 37 $\frac{1}{2}$ " X 35 $\frac{1}{2}$ "
90.2 /

HEAD - 4 $\frac{7}{8}$ " 12.4

C/S RATIO - 1.291

TAGS (2279 LFL
2280 RFL)

71.1 / 28" PLASTRON

43.2 / 17" TAIL

ADULT MALE

6/17/81 2280RFL 5446 LFL
NEW
NEP BASK EAST

Charlie (Wong Dock?) and Norman from NUC - near Buoy 5 where "crash boat" channel meets Sanpan Channel - ~ 15' water - brown limu reported on bottom. Head and flippers tangled in parachute cord of buoy. Red fluid came out of mouth. Bacteria sampled from skin and shell. Two leech-like parasites removed from slightly inside cloaca. Shell black speckles on yellow/tan. Thickened scoured areas of trailing edges of front limbs.

Released same day in Kaneohe Bay

7/14/77
Thursday

JULY 14th 1977
 (S) $15\frac{3}{8}$ x $12\frac{1}{2}$
 (C) $16\frac{1}{8}$ x $14\frac{1}{2}$
 PLASTER L $12\frac{5}{8}$
 TAIL $2\frac{5}{8}$
 HEAD $2\frac{7}{16}$
 C/S RATIO - 1/160

neck

Sample: Skin Barnacles

Polysiphonia on shoulders and hind flippers

Skin flap on Rt. flip, cut (area just before large scale) - healed

2326^{EF}

2327^{LFL}

Stomach sample taken with probe -
 injured slightly left side of jaw. - Appears
 to be cochium sp. - preserved w/neck barnacles.

Captured by Dick Brock in Kaneohe
 Bay - 6' water - alert on bottom -

tried to escape.

ASA
 LG
 #1-3

photos in Boston whales - released in
 CI lagoon 7/15/77

MIDWAY
MORTALITY

7/12/77 turtle found floating in/near inter harbor by MacFarland - Midway - dead - KK members measured it

S - $18\frac{1}{2}$ ^{47.0} x $14\frac{1}{4}$ ^{36.2}

C - $19\frac{1}{2}$ ^{49.5} x $17\frac{7}{8}$ ^{46.4} 32 lbs

PL - 15"^{38.1}
C/S RATIO - 1:254

TAIL - $\frac{3}{4}$ "^{1.9} (?) "retracted"

Brought to Honolulu on MAC flight by Curt and Cardi Haney - He removed and has Supper shell - remainder packed in ice.

Stomach - Intestines removed - contents preserved, two jars ① selected, less decomposed material from stomach ② all others (rinsed). Appears to be a quantity of "animal" material.

No obvious signs of cause of death. Note that left flip showed sign of dry-flap part missing.

Need to examine carapace for notches.

- plaston, skull, bones cleaned and retained

July 18th 19777/18/77 Green Sea Holothur (Kawailoa Beach - between Linaea and Chum's reef)

Carapace (C) $18 \frac{5}{8}$ ^{47.3} x 16 ^{40.6}
 (S) $17 \frac{3}{4}$ ^{45.1} x $14 \frac{1}{4}$ ^{36.2}

Tail 3 ^{7.6} - Weight: 25 lbs. ^{7.3}Plastron length $14 \frac{1}{8}$ ^{35.9} Head width: $2 \frac{7}{8}$

2328

Tag # **2328** left flap. C/S RATIO - 1/23

"Growth" Rings ^{Photos} present - also part of left flap
 missing - old TAG(?)
 infestation

Note: imbedded barnacles on shell and plastron
 * Missing ^{Photos} right flipper (whole), but healed well.

attempted to open mouth and insert probe - difficulty encountered - apparently ruptured external nares - moderate amount of blood came out -
 placed in floating cage - 7/19 - appears in condition;

7/21 - open mouth - all looks well. drove to Chum's reef and released turtles at water's edge - surveyed in ^{shore} water for short time - noted Sterocladia and Ulva on rocks near shore - lots of crabs offshore.

Skin and shell barnacles to Bill Cooke for I.D. 7/21.

TUESDAY
7/19/77

with C. Whitlow, C. Paganelli and R. Akerman

53

DISSECTION OF WAIKIKI ADULT TURTLE which
WAS ACQUIRED MAY 75 WASHING IN ON SURF OFF
WAIKIKI, - TAKEN INTO TOW BY SAILBOAT, PICKED UP BY JOHN
WHEELER AND PLACED IN LONG POND ON COCONUT IS. TRIED
TO FEED IT SQUID/FISH - NO INTEREST - ^{weak} COULD NOT DIVE -
FLOATING VERY HIGH IN HIND QUARTERS - DIFFICULTY IN GETTING
HEAD UP TO BREATHE AFTER 2-3 DAYS PUT IN FREEZER -
WHERE IT HAS BEEN EVER SINCE.

Removed plastron and took out stomach
and intestines - latter empty - look reduced -
mesenteries have yellowish fat - not abundant -
ant. "Stomach" seems to have two (2) sections
after papillae of esophagus there is a
compartment with large involutions (crop?) -
this contained sand material (coral?) and
some Mollusks (mussels?) - the second
compartment has smooth wall - contained
codium and (?) - material from each
section preserved in different bottles.
Also "stomachs" preserved along with
cut sections down the track.

Measured from lower part of stomach,
the intestine measured 38 feet. = 11.6 m

The lungs appeared proportionately
large compared to that seen in smaller
turtles - extended along underside of
coelomic space nearly entire distance,
stopped between 2nd - 3rd vertebrae
from posterior before spine leaves

GAs came out when first cut into.

MEASUREMENTS see page 41

ell.
in
st
o

fused ribs. At this point, kidneys appear and extend remainder of distance. There was a layer of green fat under carapace and thick pockets in pelvic muscle. However, there did not appear to be fat between lungs and carapace.

Ovaries contained very small eggs, similar to but not as many as Kailua Tumor turtle.

Tumors ^{(2) (STW gal)} large external and internal tumor on right shoulder area ^{(4) small Fibrous w/ lung tissue} infiltrates muscle - fibrous

need TAGS?
to ID

^{(6) (78)} (2) Two small tumors, one on each side of neck - only external; one small external tumor on right side of neck.

^{(1) (JAP)} (3) Medium to large internal fibrous tumor near midline of carapace extending out of right lung posterior.

^{(3) (JAP 2 gal)} (4) Medium to large fibrous TMR associated with ventral side of esophagus and trachea.

⁽⁵⁾ (5) TMR - fibrous mass attached to lower intestine. Consisted of a number of sacs filled with fluid.

All TMRs preserved for sending to Smithsonian
All bone material to be boiled - specimens to be saved.

Sent to Harschbarger
on 7/25/77
w/photo

7/26/77
TUESDAY

S-21 $\frac{1}{8}$ "^{53.7} x 16 $\frac{5}{8}$ "^{42.2}

C-22"^{55.9} x 20"^{50.8}

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

TAIL - 4 $\frac{1}{2}$ "^{11.4}

C/S RATIO - 1.203

47 lbs

RFL

lead tag
site?

polysiphonia sp. on hind quarters,
neck and shoulders

Complete G.I. tract - 11 lbs = 23.4%

Stomach seems to be located on left side of body cavity, - note that I made a slit in stomach when cutting around seam of plastron.

→ Mortality from two sections of net laid out from stream mouth at Ballows 7/25/77 night to morning 7/26. Smooth sand bottom going out - weighted outside with gal steel and one lead sinker - line to float and lead line broke probably after turtle got in. Leads of lead line had nothing to hold on to there, therefore net came into short with 1 turtle - possibly then caught on near shore rocks - drowning turtle. Also small eagle ray

7/26
(continued) in net - released unharmed (scrapped up).
Site where turtle drowned depends
on whether or not weights broke off
outside, or were dragged in close
by turtle, and then broke off.
Head removed and transported - T.N.I.
Carapace and plastron cleaned and retained -
Also all skeletal material -