

SEA LIFE PARK

1975-1979

MAY 1973 - KINLO  
JUNE - JULY 1973 - FE

LIBRARY OF  
GEORGE H. BALAZS

BALAZS

TOC INDEX ON BACK PAGE

1/10/75

Sea Life Park

105  
Previous Record  
TAKEN 12/6/73

Need photos  
of Ploster

Toggin BY  
George BALAZS

EXISTING TAG NO.	NEW TAG NOS	SPECIES	Photo	STRAIGHT	CURVED	SEX	INTUR- ABNOR-
870, 871		G		20 5/8 16 3/4	21 3/4, 19 5/8		
872, 873		"		23 1/4, 18 1/4	24 1/2, 22		
874, 875		"		19 1/8, 15 1/2	20, 17 3/4		
876, 877		"		17 5/8, 14	18 1/2, 16 1/2		
878, <del>879</del>		"		22 1/2, 17 3/4	23 5/8, 20 1/4		
880, 881		"		21 1/2, 18 1/4	22, 20 3/4		
882, 883		"		19 1/4, 15 1/2	20, 18		
884, 885		"		23 3/8, 18 3/4	24 1/2, 21 3/4		
— all the above are released - Makai Pier							
886, 887		"		27, 21 1/2	28 1/2, 25	♀	4 inch tail
888, 889		"		28 1/4, 22 5/8	29 1/4, 26 3/4		Black w/ new growth ring
890, 891		"		24, 19 3/8	25 1/4, 22 3/4		
892, 893		"		27 1/4, 21	28 3/4, 26		
894,		"		18, 14 3/4	19, 17		
895,	684	"		37 1/2, 29 3/4	39 1/2, 36	♀	flaky shell
897	687	"		32 3/4, 26 1/4	34 1/4, 30 7/8	♂	tail 11 1/2
898	699	"		34 1/8, 27	35 1/2, 32 1/4	♀	2 small tumors under tail
<del>913</del>				38 1/4, 30 3/4	40, 37 1/2	♀	flaky shell
899, 900				36 1/2, 29 3/4	38, 34 1/2	♀	flaky shell
901, 902			2	25, 19 5/8	26 1/4, 22 1/2		flaky shell
903, 904				24 1/2, 19 3/4	25 1/2, 23 1/2		flaky shell
905, 906				30 3/4, 23 1/2	32 1/4, 29	♂	10 1/2 inch tail
907, 908				31, 23 1/2	32 1/2, 27 1/2		
909, <del>910</del>	695			32 5/8, 25 1/8	34, 29 1/4		
910, 911	<del>695</del>		1	34 1/8, 26 3/4	36 1/4, 37	♀	
<del>912</del>	No TAG			42, 32 1/2	43 1/2, 39 1/2		largest hind 1/2 right gone

Not on as good as should be

\* Being monitored  
By State Dept Health

for chlorine and pathogen outflow from tanks

Existing TAG NO. NEW TAG NOS SPECIES STRAIGHT CURVED SEX ABNOR INJ -


914 A ✓ 33½ 25⅝ 34¾ 29½

NO TAG # Hawk 34, 27¼ 35½, 33

Bad tags - 896 and 912

686 and 700 - on pond bottom - corroded off

## \* JANUARY 20 - 1975 WAIKIKI AQUARIUM TURTLES

NUMBER	Species	Straight	Curved	Sex	ABNOR- INJURIES
8X	 G	25½ x 20½		Tail Length 3" M	
(?)	G	28½ x 23			
1X	G	27½ x 23		5½" M	
31X	G	31½ x 24⅞			
3X	Hawk	27 x 19½			Left side indented
3X	G	34½ x 24¾		10½" M	
28X	G	31½ x 24½		10" M	
-	Hawk	21⅝ x 16⅞			
27X	G	30⅞ x 25¼			
34X	G	29½ x 24⅞			
-	G - Benedict	14¼ x 11¾			
-	G - Benedict	17¼ x 14¼			

Mostly Squid diet for all turtles.

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

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

Large defused shell (Hawk) not measured.

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

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

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

approx 10 years ago I got call from grand visited Fish Market - evacuated ~ 60/16 turtle, live, regurgitated part of spiny lobster, tentatively identified as Loggerhead - not positive. He speculated that 1) Ship dumped it overboard 2) Currents carried it here.

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

Thickness - (subject to dry deformities) - 7"  
 Straight length and width - 29" x 20<sup>3</sup>/<sub>4</sub>"  
 Curved " " - 22<sup>1</sup>/<sub>2</sub>" x 25" wide

Weight (vertebral column missing) -  
 Photos w/ ruler

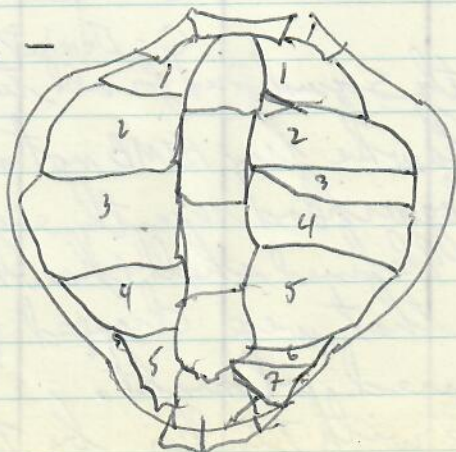
NO. marginals - left - 12 right - 13 (1<sup>st</sup> split)

NO. laterals - left - 5 right - 7

NO. Centrals - 5

2 - posts 1 pre central

Line Diagram -



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

# SEA LIFE PARK

## 1975-1979

3/6/75 SLP - (went) to check condition of tags, however,  
population(?) attempts to mount hotel early  
that morning - deferred draining tank.

19 Total - Hawk beak off  
Previous SLP Date - go to EAST ISLAND MAIN IS BOOK PAGE 105

moved out for painting and cleaning

Tuesday Oct 14, 75

Turtles transferred short tail

- Rotated 1509 RFL - medium green corrosion at flesh site
- 891 RFL - short tail - open - locking site
- 1502 LFlap - lock o.k. - same worn at flesh site
- RO 1506 LFlap <sup>big ♀</sup> Photo good tag - small corrosion
- RO 905 RFI <sup>big ♂</sup> Bridge corroded out photo
- RO <sup>squashed</sup> 687 RFI <sup>big ♂</sup> - block flesh at locking mechanism - longer front claws
- RO 902 RFI medium - number, locking mechanism corrosion
- RO 904 RFI <sup>525, 681</sup> medium - open - bridge corroded
- 1505 H - First scale - First number unreadable corroded
- 911 RFL appears good shape
- 910 came off in transfer process - other areas look good
- RO 684 RFI <sup>adult</sup> number some corrosion
- RO 908 RFI <sup>adult</sup> open - lock corroded out
- RO 1507 LFI looks good <sup>adult female</sup>

Small TMs both shoulders biggest ♀

(13 Total with tags still on)

~~82.6 x 101.1 x 63.5~~  
~~32 1/2 x 25~~ blond ♀ x  
~~38 x 30 1/4~~ speckled ♀ 913  
~~27 1/8 x 21 3/4~~ gold  
~~68.9 x 55.2~~

30 3/8 x 24 3/4 multi  
 77.2 x 62.9  
 33 3/4 x 27 1/8 Hawk  
 85.7 x 68.9

- 907 found tank bottom
- 915 tank bottom
- 973 tank bottom
- 1501 tank bottom

25 3/10  
25 7/10

30 7/8 x 23 1/8

37 1/8 x 30  
26 7/8 x 21

write to Nickie company  
makers of morels. 85

March 13, 75

Oct 14, 1975

10/17/75

915<sup>F</sup>-T

972-T

891<sup>RF</sup>-T

1501<sup>RF</sup>-T, 1502 (28 7/8 x 22 1/4)

891 - open locking site  
lock OK - some corrosion (1501 tank bottom)

measurements  
10/17  
know  
not  
there

Tank bottom

Missing

corroded at locking site

70.8 x 36.5

687, 1504<sup>LF</sup> (32 1/4 x 27 ♂)

83.2 x 68.6

1505<sup>LF</sup> (34 x 27 5/8 ♀)

687 "1" lost 5" unmeasurable

1506-T (36 3/8 x 30 ♀)

1505 small corrosion  
1506 looks good

902-T, 1503<sup>LF</sup> (27 x 21 1/8 multi)

902 open locking site  
severe corrosion 26 7/8 x 21  
Tail length

903<sup>F</sup>-T, 904-T (27 1/4 x 22 multi)

904 open, corroded  
bridge 69.2 x 55.9

906<sup>LF</sup>-T, 905 (30 1/2 x 23 3/4)

905 bride out 77.5 x 60.3

907<sup>LF</sup>-T, 908 (30 7/8 x 23 5/8)

908 open lock out (907 Tank bottom)

973<sup>RF</sup>-T

Tank bottom

1507-T (33 3/8 x 27 7/8 ♀)

1507 looks good

1508<sup>LF</sup>, 1509-T (25 1/2 x 19 3/8 multi)

1509 corroded at flesh 64.8 x 41.8

910, 911 (34 x 26 1/2 ♀)

911 good shape (910 off in transfer)

694 (37 1/8 x 30 ♀)

694 looks good

1195  
86.4 x 70.2  
91.4 x 76.2  
68.6 x 53.7  
84.8 x 70.8  
86.4 x 67.3  
94.3 x 76.2

Hawk NO TAG  
largest ♀ NO TAG

-

No Tag

-

No Tag

+ Jan 10, 75 Tag 913 apparent gone Mar 13, 75 - NO TAG

Total in Logon = 19

Rotating tag aids retention in that even when lock corrodes out, tag is not always lost.

Reef Tank - 2 captive hawks; 1 small green Toy 894



Sat.

11/15/75

FD by Russell of Botom - teruis Ref. is Holyberg 1968 Pac Sci V22  
 Polysiphonia  
 Visited SLP - plastic bags still on -  
 Examined Pacific valley found 11/14  
 in shallow water at Hahione  
 Beach park - ? ( )  
 RF limb missing - healed; red limba  
 on shell - sample taken for ID - also  
 sm Goose neck barnacles; Plaston sunken  
 in - emaciated - laminae soft -  
 snapped at water flow - try  
 feeding fish -

Schallerberger said that Fish?  
 Game warden had pickled hank  
 hatchling that was taken from  
 Kailua Bay approx Jan 1975

also that leatherlock was taken  
 Kaneohe Bay in fish trap -  
 early 1970s also off big  
 island in FISH TRAPS 500-600'  
 Lester MAX. fish trap size 4' x 6' x 8' -  
 previously bigger - deep for ulua, grouper,  
 etc.

11/26/75 Call from Steve Varti (548-5895) about ridges  
 talked to Fletcher Riggs - his wife found  
 Hawkbill - Kailua Beach

## 11/22/75 Sea Life Park Hawksbill observations

## General notes:

1. Hawk #1 obviously smaller than Hawk #2
2. Steve Kaiser - employee - possibly seen  
Hawk, each egg on <sup>big turtles previously held in</sup> neighbors pond - feed bread - papaya skin
3. Neck long, however can be pulled in somewhat
4. Consider bird eating, interaction with each other, other reef tank animals.
5. Pure yellow plastrons - whereas your Malekakaney Hawk has many black speckles.
6. Swimming has an appearance of being effortless
7. Small green turtle not carefully observed; resting location never found; largest hammerhead shark attached back of green, very rapid, quick-turn escape behavior. Green does not seem to stay deep like hawks.
8. Cave is <sup>near</sup> deepest site in tank
9. Tank Volume <sup>Sea water temperature -</sup> Measurements -
10. Tank lights on 11/22 - <sup>condition appears to</sup> vary, however when lights are on, shark predation on reef fish is higher.
11. During Hawk rest periods, nostrils are closed - open when active.
12. Greens in Turtle Lagoon pool on pond bottom - very little activity
13. Moon up about 10 PM - clear sky - some illumination from park lights on Turtle Lagoon - animals congregate to darker end?

14. Hard to tell if nostrils are closed while sleeping.
15. Hawks paid little attention to people outside of glass
16. Will have to take hawks out of reef tank due to breaking-up coral formation - scratch back from underneath and scratch ventral (plastron) with top of coral.
17. FEEDING SCHEDULE -
18. When not swimming, seem to have slightly positive buoyancy
19. Cave is dark - but not as dark as higher cave
20. Only time hawks are at surface is for breathing

TIME	Activity	TIME	Activity
8:06	IN CAVE	7:55	motionless by branched coral Near glass, possibly wedged
8:06	out - 4 breaths	7:55-8:08	out - breath
8:10	→ IN CAVE		
8:17	→ MOVE OUT Gliding	8:09	in cave - head down
8:20	2 breaths ✓ along glass spiral - scratching eye	8:10	head up - eyes open
8:25	tank center - bottom	8:14	sleeping
8:30	at least 1 breath gliding, bite at coral, "treading water"	8:22	eyes open and moving out cave
8:45	4 breaths, to cave, wedged IN	8:24	5 breaths
9:07	still motionless	8:27	biting at underside LFL
9:09	Move out of cave ✓	8:28	sitting on bottom near cave motionless
9:10	2 breaths	8:29	eyes closed
9:15	gliding	8:33	bit eel twice
9:18	to cave and out	8:35	"puffing"
9:21	3 breaths ✓	8:37	sleeping
9:23	to cave eel underturtle hibble eel	8:39	eyes open
9:35	head down - sleeping with conger	8:40	eyes closed
9:43	move out of cave ✓	8:43	moving out - up - Breaths
9:45	6 breaths	8:47	moving - gliding
9:48	poking around coral	8:54	resting on bottom on limbs - puffing head up
9:58	4 breaths	8:57	Moving slow - stopped
9:58	3 breaths	9:03	4 breaths
10:00	to cave	9:07	moving slow
10:18	move out of cave, 2 breaths ✓	9:08	3 breath
10:23	3 breaths	9:12	into cave
10:31	at least one breath	9:27	move out of cave
10:34	1 breath	9:30	4 breaths
10:39	2 breaths	9:38	moving - Scratch head LFL
10:40	to cave	9:41	4 breaths
		9:43	resting close to glass not wedged

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16. Will have to take hawks out of reef tank due to breaking-up coral formation - scratch back from underneath and scratch ventral (plastron) with top of coral.
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TIME	Activity	TIME	Activity
8:06	IN CAVE	7:55	motionless by branched coral Near glass, possibly wedged
8:06	out - 4 breaths <sup>5 sec intervals</sup>	7:55-8:00	out - breath
8:10	→ IN CAVE		
8:17	→ MOVE OUT Gliding	8:09	in cave - head down
8:20	2 breaths ✓ along glass spiral - scratching eye	8:10	head up - eyes open
8:25	at tank center - bottom	8:14	sleeping
8:30	at least 1 breath gliding, bite at coral, "treading water"	8:22	eyes open and moving out cave
8:45	4 breaths, to cave, wedged <sub>IN</sub>	8:24	5 breaths
9:07	still motionless	8:27	biting at underside LFL
9:09	Move out of cave ✓	8:28	sitting on bottom near cave <sup>motionless</sup>
9:10	2 breaths	8:29	eyes closed
9:15	gliding	8:33	bit eel twice
9:18	to cave and out	8:35	"puffing"
9:21	3 breaths ✓	8:37	sleeping
9:23	to cave <sup>eel underturtle</sup> <sup>hobble eel</sup>	8:39	eyes open
9:35	head down - <sup>sleeping with conger</sup>	8:40	eyes closed
9:43	move out of cave ✓	8:43	moving out - up - Breaths
9:45	6 breaths	8:47	moving - gliding
9:48	poking around coral	8:54	resting on bottom on limbs - <sup>head up</sup> puffing
9:56	4 breaths	8:57	Moving slow - stopped
9:58	3 breaths	9:03	4 breaths
10:00	to cave	9:07	moving slow
10:18	move out of cave, 2 breaths	9:08	3 breath
10:23	3 breaths	9:12	into cave
10:31	at least one breath	9:27	move out of cave
10:34	1 breath	9:30	4 breaths
10:39	2 breaths	9:38	moving - Scratch head LFL
10:40	to cave	9:41	4 breaths
		9:43	resting close to glass not wedged

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CONTINUED

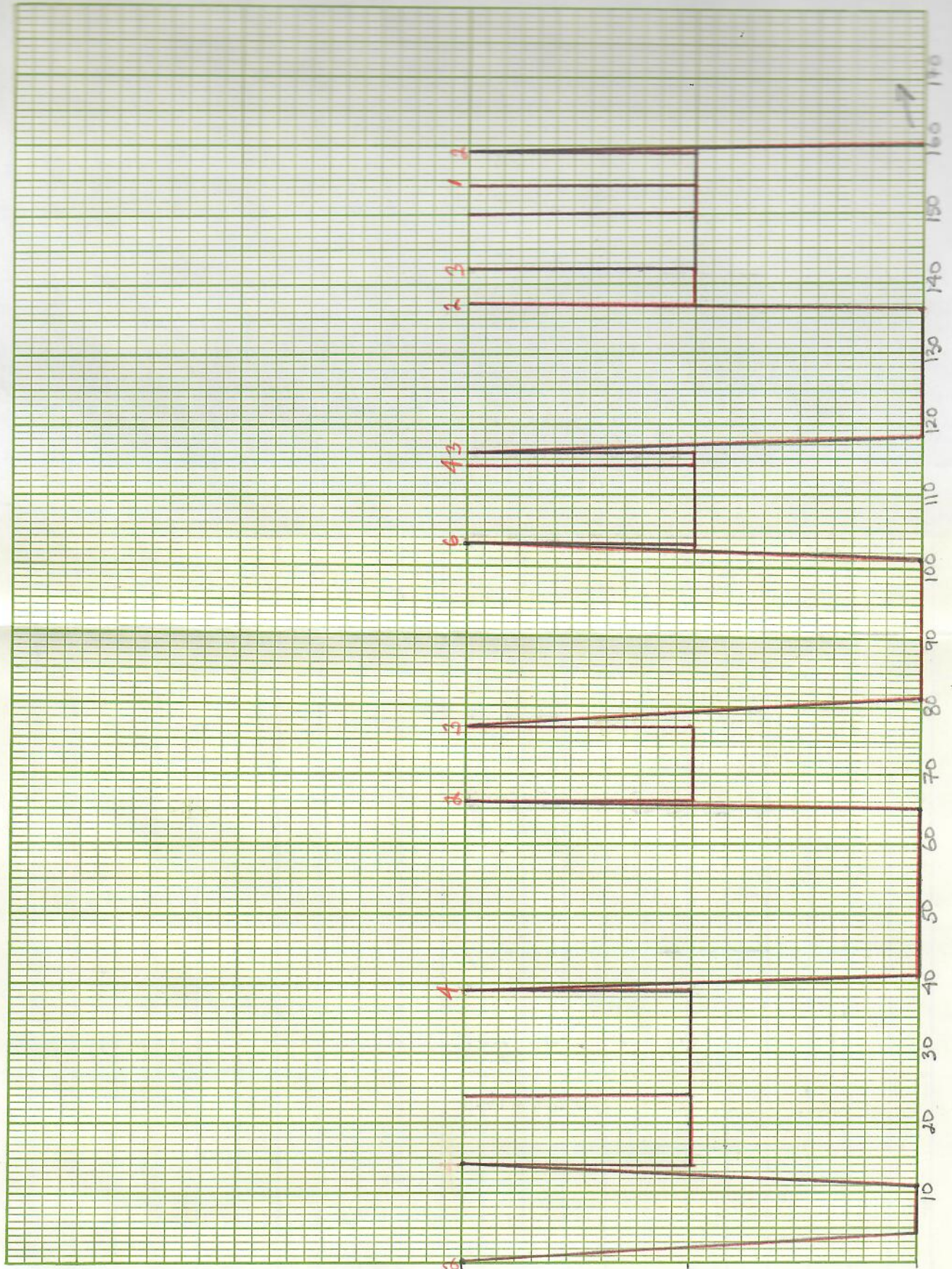
## Hawksbill #1

TIME	Activity
11:01	move out of cave
11:03	3 than 2 breaths
11:09	at least 1 breath
11:17	1 breath and to cave
11:33	move out of cave
11:34	3 breaths
11:37	to cave - <u>photos</u>

## Hawksbill #2

TIME	Activity
9:51	Bit left #2 Resting same place, head up lobster poked turtles left eye twice w/ antennae No response (eye open)
9:54	Hawk #1 Bite Hawk #2 Right + Limb #2 moving up, 2 breaths - disturbed -
9:58	Blowing small air bubbles while moving
9:59	into cave, head up <sup>then</sup> down occasional waking then back to sleep
10:19	moving out of cave - breath
10:24	2 breaths - slow swim
10:32	1 breath - slow moving
10:40	into cave
10:43	Big yawn - head down
11:00	putting
11:02	moving out of cave - breath
11:08	4 breaths
11:09	into cave, yawn, <sup>close eyes</sup>
11:33	out of cave
11:35	up for air - 5 breaths
11:42	4 breath
11:43	1 breath - down to eat sand - by glass
11:48	resting at same spot by glass

HawksBill #1  
11/22/75



TIME IN MINUTES

Breath

Activity

Rest



94

Dec. 27, 1975

## Hawksbill #1

Time	Activity
7:20 (arrive)	swimming
7:26	breath 2x
7:28	into cave
7:44	out of cave
7:45	breath - 7x
7:46	into cave
8:03	out of cave
8:05	breath - 7x
8:09	into cave
8:21	out of cave
8:22	breath - 8x
8:30	breath 4x
8:35	breath (?x)
8:36	into cave
8:54	out of cave - breath 2x
8:56	breath - 4x
8:58	breath
9:01	into cave
9:16	out of cave - breath 3x
9:20	into cave
9:33	out of cave - breath 8x

## Hawksbill #2 (large)

Time	Activity
7:22	into cave
7:36	out of cave - breath 5x
7:41	breath 4x
7:43	motionless on ledge
8:01	breath
8:04	into cave
8:16	out of cave - breath
8:20	into cave and out
8:25	into cave
8:40	out of cave - breath 7x
8:45	into cave
9:00	out and breath 5x
9:05	into cave
9:18	out and breath 6x
9:20	into cave
9:35	out of cave - 8x breath

Dec 27, 75 Sat SLP Hawksbill observations

Steve Kaiser (or Mike?) - Reef tank turn over time 2 hours  
Hawks have eaten octopus (3-4 lbs) on several occasions.  
Greenies never with hawks.

Observations from underneath show that eshale and inhale  
only takes place above water.

Why are turtles helpless in water when turned over?

White Ulva piloting on ray.

2/13/78 Talked to Gasman Wary. - They have just completed construction of wall around turtle area. Last month a turtle got out and went down to Wheeler's Cove. Ever since completion of ramp, turtles have been hauling out, sometimes seen in morning trying to get over rocks out of sand area.

On 2/4/78 at 0043h one large turtle reported walked over asphalt over low stone wall. Guard tried to get back in, but too heavy.

3/8/78 Visited SLP to see Loggerhead  
WEDNES. (see daily log for details) - observed for first time the new widened ramp (does not extend further in water though) - noted some plastic and metal toys still on turtles. Two loggerheads from AQUARIUM seem to be doing well. Noted surviving hawksbill still healthy. ~~Also~~ noted stone wall constructed around enlarged beach - about waist-high. Ed indicated that basking turtles are present almost every morning (IS NIGHT BASKING TAKING PLACE?). Fresh tracks were all over in sand beach. - noted <sup>chamber like</sup> excavation that was wet. Was this from a nesting turtle, or ~~from~~ maintenance person with a garden hose?

See page 99 - Daily Log 12/18/1/22/79 97  
for SLP measurements

Pond drained about one month later - no signs of parasites - as per Bourke and Kaiser -

And ~~at~~ no parasites noted

MARCH 79 - Post mortem on Adult green male found beached at Bellows - Waimanalo <sup>see other</sup> data books

5 April 1979

Thursday evening

Visited SLP during evening (5:30 PM) to give ~~lecture~~ to Docents - noted Tag 2026 LFL out basking on wooden structure - head facing to water; no corrosion noted on tag, however "color wave lines" <sup>from</sup> oil on tag surface ??

No previous tag no like this at SLP - read incorrectly?

19 April -

79

J. Wong reports that ♀ (good) loggerhead is sick - hasn't eaten for a week.

→ Report from Bourke that hawksbill in Reef tank died on 19 MARCH 1979. Water was lowered ~3' and turtle got stranded in diver entry area. Stress caused death??

7/24/79

Family visit to SLP in afternoon - noted untagged (fat) greens in reef

5/24/79 tank. Flippers perched out - tail higher  
 cont. than head - motionless - neck stretched out -  
 Convict Tang and bright yellow reef fish  
 (each) grazing on shell & neck - presumably  
 on algae.

Also in reef tank, "Po Mai Kai Hawkbill"  
 (fat).

- Bourke reported that: Waikiki Aquarium  
 loggerhead ♀ died about 3 weeks ago -  
 postmortem performed with vet ~~present~~ present -  
 they found some lesions in lungs - also  
 large abscess on posterior of one side -  
 Spallenberg indicated it "had eggs".

- See reports and correspondence in file

- Report that eggs were laid on beach;  
 largest female has been regularly out  
 at night (they see it returning in the morning)  
 This "nesting" is based on some  
 eggs being seen that were dug up by a  
 turtle.

- Noted copulation attempts (successful for  
 short periods?) among greens.

## SEA LIFE PARK

from Waikeiki  
Hawksbill Aquarium  
Died - 19 March  
1979

99

2 JUNE (S) 30  $\frac{3}{4}$  x 21  $\frac{7}{8}$   
1979 (C) 32  $\frac{3}{8}$  x 27  $\frac{1}{4}$

SATURDAY PL 22  $\frac{5}{8}$

HEAD 4  $\frac{1}{8}$

TAIL 11" # ~ 5-9

Photos taken; both front flippers bitten, on ends up  
also of fat inside to second nail. Larger tail (poss. w/ powder penis gut) but healed

Large quantities of internal fat; no "yellow" nodules noted in fat. Coagulated frozen blood filling up body cavity.

GI tract virtually empty; frozen water in stomach; Fat seems to have pushed in on all body organs - clustered together in center. Is sand swallowing a response to all of this fat, for buoyancy?

Section of liver preserved - appear to be mottling of fat in liver.

all material will be cleared and retained.

Waikiki Aquarium  
February 2, 1976Dead  
JAN 76  
FR 20N turtles?  
2 - 1 green  
1 CI hawk

## MEASUREMENTS

TAG	NUMBERS	CURVED	STRAIGHT	apparent SEX / TAIL LENGTH	PREVIOUS NUMBER CI (readable)	COMMENTS
	201 <sup>RF</sup>	10 1/2 9 1/2	9 1/2 7 7/8	?	<del>none</del>	Tuamotu green
RFL 150 TW 202	9th marg. → R	23 1/4 20 1/2	22 1/2 18 1/8	?	none	green
LF 2005 TW 203	(P) 11th marg. → R	34 1/4 32 3/4	32 1/4 26 5/8	Female	27 <del>none</del>	green Female ✓
TW 204 8th marg R	2006 RFL plastic	33 29 1/4	31 1/2 24 7/8	10" male	28	green ✓
TW 205 9th marg R	2007 LFL plastic	35 3/4 30 1/2	34 1/4 25 1/8	10 1/2" male	3	green ✓
TW 206 9th marg R	1751 LFL	29 27 1/2	27 1/2 23	6 3/4 male	1	green
TW 207 9th marg R	2008 LFL plastic	33 1/8 30 1/4	31 3/8 25	Female	31	green ✓
TW 208 8th marg R	1752 LFL	27 5/8 25	26 1/2 21 1/2	5" male	8	green
TW 209 9th marg R	1753 RFL	31 28 3/4	29 1/2 24 1/4	Female	34	green ✓
TW 210 9th marg R	1754 LFL	31 1/4 28 1/2	29 3/4 24 1/4	Female	none	Several marg. lar green peeling
TW 211 9th marg R	1755 LFL	24 1/4 20 1/4	23 1/8 16 7/8	?	1?	Lauksbill
TW 212 8th marg R	-	DEFORMED	30 1/8 24 1/8	Female	-	Deformed Sm HAWKSBILL EYE TAIL
TW 213 9th marg R	1756 LFL	20 17 5/8	19 1/8 16	?	-	Benedict GREEN
TW 214 9th marg R	-	29 1/4 24 1/2	27 3/4 19 1/2	?	3	TMR RIGHT HAWKSBILL C BILLS
NO TAG		-	-			Deformed shell ADULT Loggerhead
TW 215 marg R		-	34 1/2 27 3/4	Female		ADULT Loggerhead
inside Tank	Bitten by seals					CI Hawk
inside Tank	bitten					Benshit green

Keep for  
possible breeding

Sat  
1/14/76SLP - small Hawkbill  
Po-MAI-KAI

straight

length -  $8\frac{3}{4}$ "width -  $7\frac{5}{8}$ "

weight - 1670 grams

curved

length - 9"

width -  $8\frac{1}{2}$ "photosalso taken inside Reef Tank.Turtle Lagoon observations - only Black  
neoprene plastic tag observed.  
other hard plastics gone(?)

3/2/76

Pool at SLP drained - black  
tag and ~~three~~ two "yellow" plastic  
tags present.



3/14/76

Captiv Greens  
coconut island

TAG NOS		straight	curved	weight
176145	96 ✓	11 X 8 7/8	11 1/2 X 9 3/8	80 1/4
14497	- ✓	10 3/4 X 9	11 3/8 X 10 1/2	9 1/8
1001447	481 (off) ✓	16 3/4 X 13 1/4	18 X 16	26 1/2
1698	✓	14 1/2 X 12	15 1/4 X 14 1/4	17
1440	943 ✓	19 1/2 X 16 1/4	20 5/8 X 19 1/4	38 1/4
911443	384 ✓	19 3/4 X 15	20 3/4 X 18 3/8	40
1444	451 ✓	17 1/2 X 14	18 5/8 X 16 1/4	27 1/2

23°C sea water

## Sea life park

- copied from other 10/10/76  
 6/18/76 1400h - started digging in beach  
 1900h - I visited park - saw excavation  
 2130 - crawled out of pond toward reef tank -  
 put on plywood and carried back to pond.  
 6/19 6/20/21 apparently no activity reported  
 6/22 talked to Gasman - yellow tag turtle 1277  
 digging today none in park paying my attention  
 6/23 talked to Bob Burke - turtle out of pond  
 toward reef tank on 3 occasions - each  
 time brought back by workers. Sand  
 pile (if deep exists) behind reef tank.  
 Another excavation in art. beach.  
 Poss. some  $H_2S$  at bottom.  
 6/28-7/12 FFS trip

- 7/13 Call at home from Bob Burke.  
 Report that turtle with yellow tag (but no  
 number) laid ~70 eggs in 2<sup>nd</sup> pit  
 in art. beach last night (7/12).  
 On 7/6/76 a turtle (1277) dropped ~40  
 eggs in pond. The night before this (7/5)  
 she came out on sand. On July 9  
 turtle 1277 crawled behind reef tank.  
 Week of 7/5 report of copulation at  
 night. Presently lots of graytime  
 basking by ♂. Also report that big  
 male crawled out on asphalt.  
 2000h 7/13 visited SLP talked to Burke.  
 Eggs dropped in water are in styrofoam

by data sheet - 18 turtles now in SLP pond(?)

7/13 cont. ice chest. Dissected one egg - looks chunky.  
 ~70 eggs of 7/12 are in white plastic bucket with sand on bottom (~8") and wet rag on top. Bucket on top of small "culture" oven - holes in bottom. Thermometer in top shows 26°C - 2 feet in deeper. Burke reports that feeding rate was doubled from earlier amount - also 4-5 one a day vitamin pills are now put in fish-squid. Dealy reports that yellow tagged turtles will only eat squid.  
 3 turtles total w/ plastic tags -  
 076 7-1277 BFT - no number

### Shallenberger <sup>originally</sup> arrived at SLP 1970

7/20 Talked to Bob Burke - last night a "new" turtle (clean back) crawled all the way out and went around to sand pile behind reef tank (3 1/2' deep), dug hole, ~~the~~ turtle found at 0630 this morning by Burke's door. No eggs initially found.

7/23 Friday - Report from Gasman that turtle was out digging at 1330 - almost went over rocks several times - many visitors around - back into pond at 1530. out again before park closed(?)

7/24 Sat I arrived about 0900, turtle out

7/29

digging - photos taken - there is a size (68) <sup>to</sup> at left front flipper webbing and left rear (injury). Bob Burke and I dug up beach but did not find eggs. Bob reports that to his knowledge nobody has seen turtles locked in copulation. I saw large male with bite/scab marks on neck. He chased ~~a~~ a female but was rejected. Turtle with flaring 76 (underside) [This must be previously mentioned yellow tog no number] out basking - is not disturbed by anyone! Very large (st) green nervous - trying for long period to crawl out on lava rock at opposite end of pond. Also later by and swimming nervously back and forth. Bob reports that several days ago ~~a~~ an unidentified turtle crawled on beach and dug around.

Examination of eggs in styrofoam container taken from pond indicated dark spots on some. all were cut open (total examined = 35). H<sub>2</sub>S in some. No signs of development. Seven (7) were then taken from clutch and laid in sand but now in plastic bucket. Bob is ~~not~~ maintaining moisture content regularly. Temperature near center indicated 29°C. 4 of seven

7/24 Sat showed very small blood spot. all consisted of yolk that appeared broken down and some chunky/cloudy.

7/26 Mond. talked to Josway and Burke - possibly same turtle came out last night, dug, constructed nice rear limb egg chamber, - but did not lay.

7/27 Tues This morning 17 eggs were found in pond - Bob indicates they had thin walls. 1277 was out digging today -

also a turtle at early evening (same one?) yes 1277 - Bob stayed about 1/2 hours that night - she dug nice flyer chamber, but stopped when she hit dark soil.

7/28 wed Bob Bourke called at 0830 to report that very largest green was "grunting and groaning" laying eggs. by 0930 report that finished - but chased her back to pond in process of trying to lay. She laid 107 total - but 2 go to freezer (1 small, one broken). Male "went after her" as soon as she returned to water.

7/28 wed I went to SLP at 1145. Turtle that laid was resting in water close by ramp. Light colored shell with healed scuffing on hind limbs. I attempted to tag by cutting twice into webbing of distal left front limb. In process of holding plumb, male tried to mount. Bob reports that 76 was basking while turtle was laying this morning. Report shallow egg chamber.

wed  
7/28

61 eggs to C.I. and stocked evenly in thick sided styrofoam containers - placed in lock storkrooms. Damp towels on top of egg. One egg large and oblong. Bob Bourke placed 44 eggs in thin walled styrofoam with apparently lots of sand on the bottom.

8/7/76  
8/10 ~~DATE~~

Bourke reports stult out digging (daytime?) - put on by 2009(?)<sup>??</sup>

8/12 Bourke reports 2009 laid 68<sup>??</sup> eggs - transferred to styrofoam.

Monday  
8/16

Bob reports 1277 has been out digging for past two nights.

Monday afternoon - went to SLP Bob not in.

Note left that he had dissected one of his 42<sup>??</sup> eggs (second batch) - doesn't look good. Jo saw reported that turtles have been crawling out of nesting area at night. Small barbed wire set up.

8/18/76 Cut open 2 eggs of my 61.

wed Not fertilization apparent.

8/21/76 Cut open remainder of my eggs - no development seen.

8/25 This date Bourke found his 44 from split clutch to be infertile. I also Group one had 36 infertile, 29 small red dot, 1 slightly larger. of 3rd group (67 total) <sup>with 2009</sup> two were examined - blood spots present the size of a mill.

8/25/76 Bob says turtle activity slow -  
 night before last one came out, dug around,  
 "white" back is description given.

9/7/76 Tuesday Called Bob (after my return) - no more  
 eggs have, as yet <sup>from M.D.W.M.</sup> been examined -  
 a <sup>large</sup> turtle was out several nights (?)  
 ago digging around - one apparently with  
 bogged hind limbs (?). Bob put a  
 log on (?).

9/10/76 Tuesday Talked Bob Boyrke - <sup>(From lost & remaining clutch)</sup> he offered two  
 one nothing (no devel) - one embryo  
 about 8mm long - no apparent movement.

9/21/76 Tuesday Visted SEA LIFE Park. INFORMED THAT ON 9/20 Mon  
 at 1000AM a healthy hatchling found in shaded  
 cement area behind reef tank.

Probably  
 from  
 the observation  
 preserved

We scouted entire area and found 2 partially  
 eaten hatchlings (nongoose, rats, cats?). Sand  
 pile behind reef tank methodically excavated -  
 found hatched nest - not more than 1'-1 1/2"  
 below surface. 36 empty shell and 9 NO  
 development (total 45). Water (salt?) from  
 leaky tank may have kept sand moist.

Concerning clutch of 8/10 (turtle 2009) in styrofoam  
 box covered with towels - examined one  
 egg and found embryo alive ~~about~~ about  
 1 1/4" long (total length) preserved.

Continued

9/21/76 Note from Bob Bourke = "Between 9/8 - 9/20 a turtle came out to dig on several occasions (2-3x week) (Hatched flipper turtle?) she was tagged #2012. On 9/20 morning ~80 eggs were found in pool bottom" I examined 2 - no signs of fertility.

9/28 Bourke indicates he took a "bad" egg w/holes out of remaining clutch #2009 67 eggs. Lots of cover over styrofoam containers.

9/29 ~12:05 "turtle up on sand laying in hole" 02:27/02:59 → back in water. #tag unknown - This turtle ran into incubating clutch - broke eggs and scattered about - Developing embryos roted - ants into nest, also

Mongoose trying to dig in.

9/30 Call from Bourke - count of excavated material 9/29 EVENING - 24 no development; 9 good (to containers); 3 unknown broken; 1 early stage (bad); 1 advanced stage dead (pukled); 2 small size (middle) dead, 1 quarter size ~~stage~~ - Eggs was about 1"8" down.

New clutch discovered resultant from nest 9/29 12:05 - 114 EGGS placed in container on morning of 9/30.

10/5/76 Call from Bob indicated that Debby says nesting turtle was blue tag (2009)



# from 2009

10/6/76 Escamil ~~1~~ eggs from 8/10 67 clutch -  
 turgid - embryo - measurement = 26.5 cm  
 BIK carapace - all parts developed, but small.

also 3 from 2009 - NO Dev. appear dehydrated

10/15/76 34 hatchlings from artificial beach  
 photo in 10/18/76 S-B

10/21 Bob Boumke says 41 turtles out of nest - saved dead materials - some hatchlings

10/24 ~ 10/21 1<sup>st</sup> in batch of 9 hatched  
 SUNDAY 10/22 crawled out - I saw hatchling - still came  
 Today - 2<sup>nd</sup> egg of 9 peeping through  
 Another egg of 9 previously opened too soon by Bob - about a week ago -  
 This leaves a total of 6 yet to peep.

Visited SLP to see hatchling 8 on display in Tank

The 10/15 hatch 41 alive;  
 30 total ~~eggs~~ (6 that were broken - unable to determine if devel or no devel - bugs)  
 23 no develop; 2 develop - very <sup>Blood</sup> little;  
 2 - 1/2" embryos; 1 - 1" embryo; 2 - 1 1/2" embryos (one of these preserved); 1 - pea egg  
 2 1/8" long; 1 1/16" width - means

10/24/76 5 weights -

29.4; 32.4; 30.8; 32.1; 27.2 -

Picked  
↓114 Eggs from 9/30 2009 (dehyd)  
all cut open - NO Development seen.laying  
of 8/10  
STYROFOAM containers  
2009

1 cut - no Develop

Remainder has ants and cockroaches -  
but turgid - <sup>MOST</sup> look alright.

	Length	width		L	W
42 live hatchlings	5.84	4.83	18	596	492
from 2	6.02	5.04	19	585	495
10/15/76 3	5.81	4.81	20	567	456
4	6.16	5.09	21	607	487
Sand beach Hatch 5	6.07	5.08	22	597	509
6	6.04	5.08	23	615	518
7	5.34	4.54	24	565	472
8	5.73	4.82	25	572	496
9	5.97	5.07	26	602	480
10	5.88	4.86	27	574	479 - split scale
11	5.90	5.04	28	568	479
12	5.85	5.00	29	609	501
13	5.95	4.88	30	594	489
14	5.83	4.88	31	584	476
15	5.75	4.88	32	585	504
16	5.52	4.47	33	569	461
17	5.94	4.87	34	590	491

turtles from Hga #1

8 ↓ ~~Indusplay~~ TANK

35	598	478
36	596	488
37	546	456
38	586	468
39	581	482
40	596	495
41	605	492
42	562	466

also noted -  
turtles "crush down"  
pointed coral -  
make place to sleep?  
as per bombe

Bob has blue tags on 3 turtles in Porel.

10/25  
Lined out  
went to  
sh  
10/29 photos  
2100

3 days ago new coral head was put in reef tank - hawk now sleeps under it - other in cave - green by window.

Photo #23 -

#25	Bounce at F4	Hawk
26	Direct F4-5.6	w/red FISH
27	" "	
28	" 5.6	
29	" 5.6-8	
30	<del>5.6-4</del> Bounce	
31	5.6-8 "	
32	" 5.6-8	
33	" 3.5-5.6	
34	<del>3.5</del> "	
35	<del>5.6-8</del> "	
36	" 8	
37	" 8-11	
38	Hatchling " 5.6-8	

Micro	Direct	5.6-8	
1	"	5.6	
2	"	5.6	Bourne
4	"	5.6-7.9	"
5	<del>Direct</del>	<del>5.6</del>	
6	Direct	5.6-7.9	Bourne
7		3.5	
8		3.5-5.6	"
9		5.6	"
10			"
11		3.5-5.6	"
12		5.6	"
13		5.6-8	"
wide angle	Dried	5.6-8	
16		5.6	
17			
18			
19			
26		2.8	
27	dried	4	
28		5.6	
29		8	

10/25/76 Call from Bob Bourke -  
 Mongoose got into Eggs 8/10 2009  
 by eating into styrofoam bottom -  
 10 with only egg shells remaining  
 3 rotten w/ devel  
 3 partial devel rotten (just Blood, 3/4" embryo)  
 3 embryos inside - shell broke - put in with separate.

10/26/76 Bourke reports that Mongoose again got in - this time into box of 9 - ate all young.

10/28 - More young are hatching - 11 ~~eggs~~ removed live in 8/10 #2009 box.

spt  
10/30

13 live healthy hatchlings were found from unknown nest in artificial beach this morning. 3 found dead in drain. One seen being carried away by Mongoose. Excavation revealed ~ 25 empty shells; 4 well advanced embryos in egg (one cut) put in containers. 43 no develop. 1 very slight development. Total  $(78)$

25

Some of the live were found in pool from 8/10 #2009 in artificial containers - there are now ~~of~~ about 15 hatched and transferred to second box this far.

10/30

I had a long talk with Shallenberger, Bourke. He wants to give 20-30 away, keep 10 permanently, keep 10 for raising for future release. As of this date there are  $43 + (13) = 56$  live

swimming hatchlings. plan to let  $8 + 7$  Saturday go tonight at Makopuu. (Let Go)

11/1/76 Report that one more hatchling found in rocks - makes total now  $(4)$

11/2/76 Bourke came by at ~ 2200 and said he had received a call that a ~~see~~ another nest in art. beach emptied - 10 out.

11/3 Bourke came by in evening - said  
 lost night's emergence to take 48 <sup>nest</sup> <sup>17</sup> <sup>70</sup>  
 with also <sup>19</sup> total <sup>49</sup> <sup>58</sup> <sup>3 part</sup> <sup>found in</sup>  
 Whalers Cove - chewed up by Dolphin - <sup>need</sup> <sup>details</sup>  
 19 total <sup>egg</sup> <sup>size</sup> - <sup>total</sup> <sup>eggs</sup>  
 Number of clutches deposited in sand 9 - <sup>no</sup> <sup>clutches</sup> <sup>resulting</sup> <sup>hatchlings</sup>  
 Number of times eggs released in pond 3 - 132 eggs  
 Total no. Females thought to be involved 3-4?

Total turtles in pond

Those thought to be adults - <sup>size</sup>

black and white photo, needed of facility  
 total number of hatchling produced -

square feet in beach; square feet in pond;  
 volume, depth, history?

11/5 SLP series of events as per Stollenberger  
 "Turtles with 4 seals in 'seal' tank  
 up until Dec 1972; at that time SLP  
 got 10-15 more sea lions due to forthcoming  
 MMPA implementation. - After Dec 1972  
 moved to present turtle pond, which has  
 been there since park opened, but used  
 for other animals. In spring of 1973  
 copulation noted, followed immediately  
 by eggs being dropped in tank. Nest

11/5/76 (as per Shallenbeger)  
 day copulation again - so Ed (he)  
 took turtle over to seal  
 tank where at that time there  
 was a sand beach. Didn't work.  
 Eggs put in sand for incubation  
 but no development.

In December, 1973 I measured  
 turtles for the first time. at that  
 time ramp constructed and pond painted  
 with Vinyl Cop(?). Turtles bork  
 in by end of December but sand not  
 put in / constructed until \_\_\_\_\_ later on.

Questions - Was copulation noted Spring  
 of 1974 or Spring of 1975?

11/5/76 10 PM received call from Bob, report of  
 hatching by guard - Went to Park -  
 hatching already in box-bucket - 44 -  
 Excavated nest, found 3 live (1 w/ imbedded  
 put in incubator) 30 INFER - NO DEVEL;  
 12 PART DEVEL (6 early, 6 late all dead)  
 Counted about 43 shells - so it matches  
 pretty well. total clutch size - (89)  
 Nest depth = 19" I released  
 41 at Makapu beach.

Recorded  
 11/7  
 copulation  
 summary  
 1976

from Bob and Debbie -  
 Since before first nesting - lots of  
 attempted mating, but no  
 locked copulation ever noted.

I seem to recall 3/13/75 pool clean's delayed due to Cop observation

11/8/76  
 TO SLP with Bob at 1945, for release  
 of turtles at Sandy Beach

By	Dates	Releases
all	2009 8/10	- 20
Retain 11/8/76	11/8	
(3)	(25) 10/15	- 43    08 <sup>10</sup> / <sub>30</sub> ⊖ 4 <sup>10/10/2</sup> ⊖ dead
(5)	(2) 10/30	- 14    07 <sup>10</sup> / <sub>30</sub>
	(24) 11/2	- 49    025 <sup>11</sup> / <sub>4</sub>
(5)	(1) 11/5	- 47    041 <sup>11</sup> / <sub>5</sub>
		<u>81</u>

11/8 Total release (52) calculated,  
 but only (51) counted

Total Release (132)

Pool drained 11/1/76 -  
 Togs found on bottom - 2012 and 1506



11/8/76

SLP

Tag no present	New Tag	Apparent sex	SL-SW	comment
1. Hawk 2. Large green				
3. 902	2014 RF	♂	23 1/8	14" tail
4. 905	2015 RF	♂	23 3/8	14 1/2" tail
5. 911	2013 RF	♀	26 3/4	
6. 734 / 76	EGGS yellow plastic	♀	37 1/8	30 3/8
7. 1502	2057 RF / 2058 LF	♀	31 1/2	23 3/8 RELEASE
8. Bold tag missing	2016 / 2059		97.2 38 1/8	30 3/4 Light shell
9. RF hole	2017 / 2060		93.0 36 5/8	30 1/2 feathered flipper tag hole RF
10. LF	2018 / 2061	♂	80.3 31 5/8	26 0 13" tail
11. 1277 yellow	2062		33 3/4	26 1/4 Great up shell gone showing
12. 687	2019 /	♂	33 1/4	27 0 18 3/4" tail
13. removed	2063 - 2064		79.1 31 1/8	63.5 25 0 RELEASE
14. 1509	2065 - 2066		29 0	22 3/8 RELEASE
15. corrosion	2067 / 2068	♀? Twisted STRANGE	49.4 31 1/8	63.8 25 1/8 9 1/2" Tail
16. removed RF bent	2069 LF / 2020 LF	♂	31 1/4	23 3/8 16" Tail
17. 2009 LF	EGGS 2070 RF		83.8 33 0	64.8 25 1/2
18. BLACK TAG	2071 LF		33 3/8	27 5/8
19. 1505	2021 L		34 1/8	28 0

19 total - 4 Makai pier = 15 Remaining

- 902 14" tail
- 905 14 1/2"
- 2018 13"
- 2019 18 3/4"
- 2020 16"

9 adult females, 3 adult males  
Subadults - 4 unknown, 2 males

Type of sand Schallenburgers - weed  
 11/27 81 total Hatchlings - vol Sea water  
 Evening - hatching  
 fowl by pearl factory at SLP -  
 Steve had already dug up  
 major portion of sand - found nothing.  
 Small fence was down. Mokapu

11/30 Bourke reports that ~~77~~ <sup>9 inf 1 fert</sup> 77 total hatchlings 66 Mokapu  
 fowl in/on sand beach at 7:30 this evening - 5 unhatched 4 now  
 all but 5 released at Mokapu Beach. 1 blood  
 24 unhatched (advanced but rotten) (1 fertile) (21 infertile)

12/11/76 call from Bourke - he indicated  
 that ♀ 2021 and ♂ 2015 seen  
 copulating for 4-5 minutes today.

12/19/76 call from Bourke 9:30 PM - Guard  
 report about 40 hatching shells Mokapu  
 found. - 1 HBD 17 No Development  
 2 full devel but dead

12/21 call from Bourke - They excavated entire sand beach -  
 found a clutch of rotten eggs (infertile?).

Thursday - Visited SLP - Two Hawks in Reef  
12/23/76 Tank were being transferred to pond - Measurements -  
tagged 216FL (smaller) C  $30\frac{1}{2} \times 23\frac{3}{4}$  (photos w/Debbie)  
217FL (Flat top) C  $31\frac{1}{2} \times 26\frac{3}{4}$

Shortly after placing in pond, what looked like  
younger males chased, mounted (photos) - hawks  
hind flippers "folded" together.

"POMAKAI" was moved to Reef Tank 2 weeks  
ago. Hawks from <sup>Waikiki</sup> Aquarium will be moved  
there (Reef tank) on 12/27/76. doing good on  
1/29/77

- Examined greens that have been returned -  
some nipping on hind flippers - "continually  
hungry" - a couple much larger than others -  
in small reef tank display shelf.  
Small tags 218, 219, 220 and 221 put on 4  
identifiable from 2009 ♀.

ENTANGLEMENT  
\* Examined small green - C  $13\frac{1}{2} \times 12\frac{7}{8}$   
that was turned in (22 wks ago) SLP, recovered by  
women Waitohu/Waikane(?) wrapped in "rope" -  
Extremely EMACIATED hardly any cartilage in  
plostion "cellaphane wrap". Right front limb has  
healed notch where tag may have been.  
Turtle needs to be force fed - rubber  
tubs. Animal's health actually now seems better.  
Need FUNDERS TELEPHONE NUMBER -

12/30/76 Call from Bob Bourke stating the  
one of Hawksbills transferred to pool  
was found dead - no apparent external  
injuries. *subsequently dissected - see other  
book.* Lots of INTERNAL FAT - shell cleaned  
out - plates taken  
OFF

2/11/77 on this visit to measure and tag turned-in  
green, I was informed that single egg was found  
in pool on 2/6/77. No others seen. Also that  
2105 does a lot of basking - opinion that it is  
hard to get out on ramp - slippery. Also  
that on occasion over the past few weeks males  
have been seen (mornings) attempting to mount  
females, but rejection occurred. The by males  
have been trying to mount males. My observations of  
hatchlings being used indicates that many have bites,  
white excretion - one very severe - may die -  
lots of variation in size.

4/17/77 Bourke reports that last week he saw copulating pair - observed  
locked together for 5 minutes - also they are now digging  
out sand beach. called about tagging young turtles -  
estimate weigh 800 grams - stopped biting one another  
Diet -

6/15 - In recent weeks the turtle pool was drained and  
cleaned and painted numbers put on turtles' backs -  
NO. 7 has been basking a lot - no resting. 6/16 - 6:57 AM attempts  
during morning - my hawk & Aquarium hawk are now in hold in tank.

9/28/77 - Shallenberger reported that yesterday two groups of  
eggs were found in pool 42 and 170 - I advised  
that fertility be checked. (but it wasn't)

10/4/77 call from Bourke - reports that ↑ was 10 eggs found early  
morning 32-40 plates - 10:15 later - all put in sand. Two small captivity  
hatchlings have been accumulated to reef tank recently - now in all the  
time; 1 of 4 saved stuck in drain dead; stolen long time ago - one returned  
sprung; Big W. Storm Hawk in pool and seems O.K. - nothing more  
FROM KAHALA H. 1/ton. GET ① stuck in drain  
② RIDLEY SHELL

9696

