

1983

EXPEDITION 33 1983

(NARRATIVE)

BA-125
BOB 395-6409

2689

Book 2

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(and w-s nesters)

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~~Blind copy~~



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TO 6th SCALE POSTERIOR) p. 74

COMPOSITION BOOK

9 3/4 IN. x 7 1/2 IN. (24.8 cm x 19 cm)
NUMBER OF NESTERS SEEN EACH NIGHT DURING STUDY PERIOD (BAR GRAPH)

AVAILABLE AS:

- No. 09-9130 (1130) 60 SHEETS COLLEGE RULED & MARGIN
- No. 09-9132 (1130-P) 60 SHEETS COLLEGE RULED & MARGIN
- No. 09-9134 (1143-X) 100 SHEETS COLLEGE RULED & MARGIN
- No. 09-9132 (1130-P) NUMBERED PAGES

.. p. 100

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LIBRARY OF
GEORGE H. BALAZS

- SOME TAG NUMBERS -

TAG NUMBERS SENT TO FFS 4/83
VIA EASY RIDER:

3851 - 4250 (400 total)

TO FFS VIA SUE/JOHN HENDERSON 6651-6700
(50)

SENT TO LISIANSKI 4/83 WITH KAM/JOHANNOS:
6751 - 6950 (200)

TO CAYSAN 4/83 WITH DORIS ALCOEN:
6701 - 6750 (50)

TO P&H 4/83 Gilmartin
6951 - 7150 (200)

FOUND
ALL lost
LATE Summer 83-
in carton dropped
from C-130

TO KURE 4/83 with BOLBY
5957 - 5975 (19)

TAGS BROUGHT ^{AND USED BY} WITH ME TO FFS
ON 2 JUNE 83: 7151 - 7201 (51)

(6359; 6366 - 6375 (SUE))
BEING APPLIED AT W-S + ABOVE

W-S ACTUALLY APPLIED, AS OF MY DEPARTURE 6-22-83:
6651 - 6663

6359; 6367 - 6368; 6370 - 6375

(CONTINUED P2)

NARRATIVE (2-22 June 1983) exp. 33

BASKET TAGGINGS

6/22/83 - Pliers & Tags left with STEVE FAIRBANK?

7251 - 7275 (25)

6/22 to SRL for use on East IS:

7202 - 7250 (49)

6/28/83 Sent via MAC to Midway for P&H
(+ Pliers) 7351 - 7450 (100)

(7433-7450 returned at summer's end)

COMPOSITION BOOK

2 June 83

Thursday Depart ~ 6:45 am Hawaiian Sky Tours -
 Aboard - Gail Peterson, ^{ACOM} Seth and
 Therese Hayes, 2 other personnel
 of Craig Macdonald's lobster project and
 Steve Kramer in co-pilot's seat.
 Breakfast on Kawai at 7:30 am
 where I called Jim and Christian.

Arrive at Tern - Dave and
 Sue have been at east -
 FWS volunteer for sea birds - Scott
 Sue has spent only a few nights
 on W-S, only saw one turtle
 up.

At about sunset, we walked the north
 seawall - no turtles seen. She
 has only seen 1 juvenile along
 here, and that was from BW.
 Gail has a count of basking
 turtles on Tern - made
 every day while counting seals.

Bill called at ~ 8 pm - Said they
 had caught and tagged alot of
 turtles. But no nesting
 seen yet.

During the afternoon/evening I
 organized my gear, color-coded tent
 poles, etc.

Bill requested rough budget for Johnston Atoll project.

NOTE: In Tern Is. turtle log,
 - 10 June 1982 tag 5455 ^{NO. 95} MALE
 read on large basket on Tern
 photo ^{part} AU-16 1300h by R. ITHNER
 (missing LHL + piece of marginal)

ENT. # 218 - 28 Nov 1982 1600h ♀ basket
 → tagged 6358 Sec 03 Tern
 today by Andre

4/90
 PUNACUW
 KAU
 Recovery
 Hand capture

ENT. NO. 88 - 28 NOV-1982 tagged today 6360 LFF
 6361 RFF Sec 05 "FAIRAIZAL"

Sue reports staying on W-S May 31st - checked until ~ 1 am - nothing. However, in the morning she found 1 new big pit, plus saw a turtle laying on the beach - head facing the water.

TERN
1983

(1500-1600 Hours)
TURTLE SURVEY by GAIL FAIRHAZAK

4 FEB - 0
8 - 0
12 - 2 lg ♂
16 - 0
20 - 0
24 - 1 lg ♂
28 - 1 lg ♂
4 MAR - 0
8 - 0
12 - 0
16 - 0
24 - 1 med ♂
28 - 0
1 APR. - 0
5 - 0
9 - 0
13 - 0
17 - 0
21 - 0
25 - 1 A ♂
29 - 1 A ♂
3 MAY - 1 S ♂
7 - 0
11 - 0
15 - 0
19 - 1 A ♂
23 - 0
27 - 0
31 - 0

EAST-1983-BOOK 2

11-28-82	6358	7151	7256
11-28-82	6360	7155, 7194	7252
6-3-83	6359	7154	7251
6-3-83	6366, 6367	7152, 7153	+
6-5-83	7159, 7160	7156, 7158	
6-4-83	7156, 7158	7157	
6-4-83	5322, 5344	7161	
6-6-83	3135, 3136	7162, 7197	
6-10-83	3019, 54--	7163	
6-13-83	7166	7164, 7189	
6-21-83	5455	7165, 7190	
4-83	6362, 6363	7166, 7183	
	6364	7182	
	6359	7185	
	6366, 6367	7198	
		7253	

3 June 1983
FRIDAY

Depart for Trig, W-S with Sue
at about 1600 hours.

Island split at sand bar -
deep channel. Went ashore
and counted 8-9 digs total.
Probably only a couple have
eggs.

Baskets - 6 ♀ 4 ♂ 1 unkn = 11 total
one was ♂ 1214; + newly tagged
♀ (7151) -
NO copulation scars or scabs seen.

1830 - Motored to - W-S

7 total seen basking in favored
region; 1 in the water.

Log is stamped - A05 026 -

Small sand bar noted way off
W-S to the SE.

Seals & albatross young seems
few in number.

Juvenile turtle seen while

leaving Trig; Also NE W-S
on 6-4 Jam.

Sue's campsite is at the
NW end of W-S. Anchored
boat here.

At about 9:30 pm we walked

3 JUNE / around the island. on SW shore
 heading ^{to water} we found the first turtle -
 Sprayed 1 green. She had crawled
 along top of the sand bar - 5 est.
 a) Tagged 6359 RFL - doubt if it locked.
 Shortly thereafter on NW shore we
 found a second. Spray 2 greens;
 b) tags 6366 RFL; 6367 RFL -
 Neither of them seemed to look ~~like~~ ^{like} rising new
 pliers just received from the factory.
 Walked around again at 1 am
 and 3 am. Check also
 at 6:15 am. No other turtles
 seen, but several up-down
 tracks and superficial digging.
 Nothing appears very serious.
 on all of W-S I only saw one
 pit that could be said to
 have eggs.
 Night air was very cool. Water
 also seems cool, compared to
 other summers.

4 JUNE SAT.
 Returned to Tern ~ 10:30 am
 Assembled more gear for East.
 Slept from 2 - 3:30 pm.
 P-3 went over ~ 2000'. Gail F.
 mentioned low buzzing of runway.
 ~ 4:30 pm motored to W-S to f

23 AUG 2002

4 JUNE 83
SAT.

dropped off gear to Sue,
 proceeded to Round-Mullet
 where we got a radio from Stan
 Lobster project. Mullet long
 and distinct - just like the
 first time I ever saw it.
 Arrived at East - set up
 gear tent. Gail & Dave walked
 around island to look at seals.
 Few signs present. Bulldozer
 covered over and sand accreted
 in direction of juvenile feeding area.
 At ~1930, I walked
 around the island to tag
 baskets and count pits.

(See data tables)

Read in tent until 10:15pm -
 then circled island.

11pm, sprayed ~~TCT~~ by ~~AB~~
 machinery - already had tag

a) 7156 ~~RF~~ from earlier; applied
 7158 ~~RF~~ (new) - 54-89.8 cm

Circled again at 6-5 18am

after sleeping for 1 1/2 hours.

b) Found spider ~~2~~ in A14

near pyramid - tag recovery

5394 ~~RF~~ 5322 ~~RF~~

Circled again at 4:30am -

No turtles seen, but several
 sets of tracks - also on SF.

5 J
SUN7150
716

6/5

23 AUG 2002

5 JUNE 83 / woke up about 9am.
 Sunday Dave & Sue out by seals.
 Late report, dead newborn +
 mother without pup + double
 nursing. Lobster project boat engine
 failed - had to tow it back to
 Tern.

1800h

7150 FL

S - 44.3 x 36.8

7160 FL

PL - 33.7

EAST ROOF - SCOPNET

Some algae on canopy; 3 others seen - 1
 this size, and one much smaller.
 FOR 6/4 - 6/5. Sue reports 4 nesters
 up painted & tagged + 1 of two
 we marked 6/3 - 6/4. She watched
 one lay eggs. Tags seemed to go
 on O.K.

6/5 ~ 1800h noted ^{jointed} copulating pair off A12. Came to wave wash,
 separated. Male soon gave up. Female had 2 "barnacles".
 Checked island at 10:30 am; 12:30;

3:30 pm and 6 am. Only 2 -
 FC 1 and 2 again. But tagged

a female basked in A12

6 JUNE

TC 2 wandered a lot on the SP, with only a few pits dug. In the morning I photographed her tracks. In areas 4-6, several up-down tracks, but almost no digs.

Note - That for years, I have maintained only myself on East to tag turtles - kept a low profile; at times had to justify my presence amongst the seals. Camping not allowed on W-S. Now, however, seal activity allowed, with "hands-on" work on seals. Bleaching; movement of pups; approaching mothers and pups 2 at a time.

Need - Req. for island visitors to bring back all netting, line, etc. since we know this material occasionally entangles animals.

Management on what we know!
Bill 6/5pm to Gail - "do what you have to do".

Noted lots of vegetation around the cement chunk pyramid.
Apparently results from feces of

6 JUN
MOND

6/6/8

3135

3136

23 AUG 2002

6 JUNE
MONDAY

roosting birds.

Would it be possible to separate survival & recruitment confounding by size data of untagged turtles?

6/6/83 1400 hours (NO. 220 GRAY GROWTH RECORD BOOK FFS)
TAGS already expanded - JUVENILE EAST REEF - SCOOP NET
Look GREAT. [Caught again by me 6/13/83] Same SITE

3135 S-49.3 x 39.1

3136 PL-39.2

"VIGOROUS", BUT SWAM slowly to patch reef following release.
Sue - same Turtle: 5/4/83 - "49.2 x 39.2"

6/4/1981 - S-45.2 x 35.9 PL 36.3

6/14/1982 - S-47.8 x 37.8 PL-37.9
12 months (2.6cm or 0.216 cm/month)

6/6/1983 - S-49.3 x 39.1 PL-39.2
12 months (1.5cm or 0.125 cm/month)

Need - My "project idea" list.
i.e. slab, crabs, sharks, etc

Note - Condition of motors - All 25hp spare run in lowered condition due to bushing(?) evenude 65 bushing

very loose; can release defective.

6 JUNE 83 11am Dave & Gail came to East for 1 hour to see about moving pup - not done.

P-3 flew over ~2000' at 1400 hours. Scott uses bright light on Tem for plover work. Sue reports the following for 6/5-6/6 W-S:

6/5 ~ 4 baskers maximum; ~13 IW. ^{milling around}

6/5-6/6 4 total up for resting; 2 are repeats; none laid eggs that she knows of. one up at 3am stayed "notionless" in 1/2 dug pit until 10am! A different gullle did the same thing the night before. Both above the beach berm.

Stan reports finding a mangled lobster egg this morning - undoubtedly from a tiger shark (C?) or seal? Recall in a previous year that one of their cages was completely missing when they returned to set area.

Noted - Gail/Dave walked right out SNEP - Need - schedule of visits and overnights to east & W-S before I arrived.

6 Jun
Monday

6 JUNE 83

Monday

Data collection is needed for turtles to form basis for requests to take/eat turtles. Not so for seals, since no one wants to "take" them; no objection to their being protected.

Note: Low numbers at the breeding colony during the summer season suggest that numbers should be higher on the foraging pastures. More sightings will be reported this summer, on the abundance of turtles?

OBJECTIVES OF W-S MONITORING:

1. Determine degree of movement by emerged nesters on W-S (going to East; and on East going to W-S, within Season.
2. Determine numbers nesting per night. Level of nesting relative to East IS.
3. Determine fidelity of previously tagged turtles for the island they will rest on. Note: no tagged W-S turtles thus far found later on East; But how about East to W-S?
4. Size frequency of W-S nesters

7 JUNE 83
TUESDAY

Consider - my "annual" migration
to FFS as a wale research
of turtles. My migration in the
Oain.

Note - If "one-year" is the predominate
remigration cycle for males, then
more males should be evident in
the waters of the breeding colony.
(if sex ratio overall is indeed equal)

"Slow growth rates and high predation
as possible factors responsible
for non-viable aggregations of
green turtles"

Need a specific analysis of former
population estimates made
for FFS by Hendrickson
and Amerson.

7 JUN
TUES.

160

8 JUN
Wed.

7 JUNE 83
TUES.

Refuge regulations about motoring?
to the back side of W-S?

1600 Walk around. No baskets thus
far seen on SEP.

SEP - also off B-W anchorage. Male
here very insistent; "chased" the female
several times.

Noted 6/5 that Gail & Dave were
chased out of the water ^{by mother & pup} after going
in swimming by B-W.

Motorola radio wait transmit -
but still receives. Doubt if
Steve's "7-day battery life"
statement is valid.

8 JUNE
Wed.

Gail & Dave arrived - 9:30 am. Report
that yellow B-W gear box broke down
on Sunday. Lobster people only using
H/MB Ju/35HP outboard.

Proceeded to W-S to pick up
Sue. She reports:

- 1.) No nesters last night. 6/7-6/8
- 2.) Yesterday a nester from 6/6-6/7
stayed in its pit all day. At
the end of day, Sue urged it out.
This is the 13th turtle exhibited such behavior

PHOTO TAKEN
BY SUE

8 JUNE
Wed.

Talked to Lin and Christian on
channel 7 ("8A" ^{fishing boat} frequency) Good reception.
John reported getting "Atoll" budget from Bill.

Gail reports that Cromwell should beat
Pearl & Hermes this afternoon.

Returned to East via W-S at ~
5:30 pm. Gail reports 3 "abandoned"
pups now.

Sue says that prior to our
arrival on June 2, her and
John only made 2 overnights
to East Is.

Kam passed message that as of the
end of May, there were only
2 "nests" (digs, or with eggs?) for
Lisianski.

Suggested "transfer fee" to
3000 for work seal pup -
700 aid in support of research programs

Up ~ 1145 am

9 JUNE
Thursday

Dave & Gail left ~ noon. Their dome
tent left up.

Sue reports no nesters last night.
only one or two "up-down" tracks.

9 JUNE
Thursday

10 JUNE
FRIDAY

9 JUNE 83 At ~ 1530 I saw the small
Thursday turtle foraging on East Reef. Shortly
thereafter ~ 6:5' gray reefs swam
over the shallow reef, passing just
a few feet from the turtle. The
sharks seem to be playing "follow
the leader". Neither sharks or
turtle seemed to pay any attention
to each other.

Note, large number of bottles and
other debris on, and in, East Island.
Is East some sort of "convergence"
site of currents in French
Frigate Shoals? Is this why
the said island is here, for
this first place? Is this
also partly why the turtles
come here?

10 JUNE 83 Up ~ 11am
FRIDAY Concerning carapace measurement
- "Notch to notch" described by
Meylan, I need to check and
see if ♀ or ♂ adults at FFS
have rounded smooth PC's that lack
a notch.

Sue reports that last night there

10 JUNE 83

FRIDAY

was only 1 turtle found up on W-S nesting - a tag recovery 3019 and 5417, couldn't read last two numbers. 3019 is number #65 in #136 data sheets. Doesn't show a 5400 series attached, but possibly this was done when basking so that I failed to see existing tag 3019. Yesterday she reported that the twins on a seal were weaned.

Note - B/K having tag completely smooth and unreadable on the "number" side -- faint on the "address" side. Isn't this the same type of tag plastic in the seal tags from Temple Co. purchased by Bill?

Between ~ 3pm & 3:25 a Navy helicopter flew over east (circle perimeter once), near W-S and Trig, then circled over Temp, and back to east. Hovered low near Base - blowing up water. Surely drove off many seals or turtles that

10 JUNE
Friday

may have been on Bare. Several photos taken on Roll 2. Steve tried calling them, but no answer. Looking for glass balls? Dave reports it is Canadian - from "HMS Providence" written on the bottom.

* Try developing a formula for computing the number of nesters present in a season on East Island based the high-count number of baskers as an index.

Consider - Range of turtles at Pearl & Hermes Reef - seem perforated to Southeast, Little North & North Islets - Basking, feeding (?) and the little nesting going on. Is this the historic Orange? Consider counts by Carr. Was the islet names he gave correct?

At 6:30am this morning I watched a female (with coralline algae on posterior portion of her carapace) swim to wave-wash of phopline. A single male came behind her, smelling and circling. Apparently a decent copulator.

10 JUNE 83. Recall that Gail & Dave
 FRIDAY reported a net stuck on the reef
 near Round Is. was it
 removed?

Consider - Early weaning seen in seals
 may be from low food reserves as
 a result of reduced food supply
 on foraging areas. Recall Ft Nerbo
 Christmas Is. situation.

Today I noted for the first time
 an albatross chick in the water.

Noted female basker in A5 - had
 flippers closed to body - almost
 stuck up under. Very reduced
 exposure to solar radiation.
 Did Causey record this in our
 paper?

Reasons why "bored" staying on boat:

1. Limit activities during the day to reduce impacts
 on seals/turtles/birds
2. Not that much to research during the day -
 limited things to do even if constraints weren't there
3. Tick Bites
4. Low turtle nesting
5. No boat with transit opportunities -
 like I have had during all other years.

work every night.

Reasons for less-than-total coverage
at East Is. over the years:

1. For several initial & later years,
no funding / time allotment for the
work;
2. ^{but} Somewhat total coverage for 1973, 1974
& 1975;
3. One-man effort; low-keyed -- wanted
to keep it to a minimum
of manpower and time; due to work real;
4. Not interested in staying at FFS
for 2-3 months staying up every
night.

11 JUNE 83 ^{slept to 11:30 am.}
 SATURDAY 12 noon radio check, Gail
 said that: (1) Helicopter circled
 Laysan a day or so ago (2) Bill
 told Alan they found a "reef" off one of
 the island "loaded" with turtles--they
 were able to tag 7 of them.

Sue reports 2 nesters last night. Her
 TC 14 was tag recovery 5415 and 30.
 11th painted turtle since she's been there.
 (includes the 2 I painted during my night on W-5)

At 1400h I hauled net-rope scrapes
 to boat anchorage. Also, at SEP
 I saw the twin seal pups chase off
 a fasting turtle.
 Picked up iron debris and stacked it
 on top of bronze distiller.

Today started seeing more albatross
 castings. Found one
 with "physic" sticks inside.
 Will photograph. (11 sticks - 14cm long)

Note for Copeia or Herp. Review or J. Herp.:
 "Reproductive Cycles of Male green
 turtles at French Frigate Shoals"

12 JUNE
 SUNDAY

13 JUNE
 MONDAY

12 JUNE 83 Gail & Dave came to East at ~9:15am -
 SUNDAY I took boat to Tern after picking
 up Sue at W-S. She reports no
 nesters last night (up-down track only).
 At Tern Stan and Steve et al. took 2
 boats to La Perouse to dive. "our"
 boat quit at La Perouse - later also
 the spare 25hp. They returned about
 2pm. Talked to Bill at P&H
 between 3-3:30pm. 4:15 Stan
 and Al took us in the
 OH boat to W-S, and me
 to East. Slept from 6:30-9pm.
 Sue Fairyd reports a nest (dig)
 on Tern as of last night.
 Sue L. will count ghost crab holes
 on W-S.

13 JUNE ~~MONDAY~~ Reported to me at 8:15 that 7/66
 nesting by Dave & Gail's tent -
 Came up about 7am - dug 2 pits
 and laid eggs. Sprayed TC16. Bright
 sun up. Returned when I put
 2nd tag on.

At 1 noon, Sue reported 3 turtles
 up last night 6/12-6/13 on W-S.
 1 was a repeat, 2 were new. None
 laid eggs, as far as she could determine.

13 JUNE 83 Steve & Gail picked up Gail & Dave
 MONDAY at 4 pm. Gail will talk to John
 Henderson at 7:30 pm tonight.

Also Bill.

Checked for nesting turtles at
 9:30 pm, 11:45 pm, 2 am, 5:15 am -
 only one seen, for a short time on
 S.H. - TC 17 - but wet and slimy, so
 not painted.

Short rain at ~ 3 am.

14 JUNE 83 Stan & Theresa brought the BW
 TUES. to me at 9 am. Dropped them

off at the study area near
 "Near Island". Picked up Sue.
 Spent the day on Tern. Dave
 cooked a cooky "lemon chicken" dinner.

Talked to Bill / Rob Morrow at
 P&H at 5 pm. Rob relayed turtle
 tag recoveries they have made.

Report that they have seen / photographed
 basking turtles & seals on that
 shipwreck, also, about a mile
 from Southeast Is., bearing

20° heading toward North Is.,
 they have found a reef
 with lots of juvenile turtles.

Have been catching and tagging by
 poling the boat over and

14 JUNE 83
TUESDAY

25

scoop netting. just recently saw the first adult Other. Some have been "basking" dry on the coral heads. No nesting yet seen at P & H.

TAG NOS. Reported over the Radio: As of 6/1 Color-code

164 (FWS) ^{9/66 PH?} original DATA

T15 FWS ^{5/72 FFS?}

928 FWS

2969 + ^{WORN OUT} ¹⁹⁶⁶ ^{FFS} ^{NO. 153} ♀ ^{FFS}

3473 ¹⁹⁸⁰ ^{W-S} ^{Adult} ♀ ^{FFS} ^{NO. 151} ♀

5522

5532 R

5533 L

5546

5543

5562

5548

5569

5545

5571

5577

5580

5595

5598

As of 6/1 Color-code

518? ^{5-6/81 FFS} ORIGINAL DATA Adult ♀

5864

5867

5873

5865

6511

6512

6516 R

? L

6513

6518

14 JUNE 83

TUESDAY

Returned to East at 1830 after dropping off Sue at W-S. Flat calm weather.

Bill reported that up until about a week ago, 15+ baskers were regularly being seen in cove at North Island, and at SE Island. During past week there has been virtually none. They apparently haven't checked much for basking at night. I recommend that they do so.

15 Wed 83 ~ 800h started for Tern, but

WEDNESDAY main motor wouldn't start.

Noted on 25hp to Tern. Steve worked on engine during the afternoon, but was unsuccessful. Jim & Christina called - I could hear them, but they got me. Steve noted we back to East at ~ 1600h.

Question: Field camp radios can be heard clearly in Honolulu - elsewhere. Why not the Tern set-up? Antenna? Why no phone patch?!

15 June 83

Requirements for fieldwork henceforth:

1. Radio or telephone communications readily available and reliable.
2. Confirmed and dependable transportation out on a preset date agreeable to me, and cleared through me well beforehand.
3. Option available to depart at an earlier date should research activities, or some situation, warrant.
4. Maximum time away - 2 weeks.

16 JUNE 83 Sue at 12 noon radio check
Thursday reports that she had 2 up
last night; one new, one old.
Neither laid eggs. Also, she checked
5-6 night laskers; found 2 tag
recoverts but they were the same as
made earlier.

Allergies!

Steve reported over the radio that
Bob Justman was contacted and it's OK
for me on the 22 June flight.

6/17/83 ^{some} heavy rain showers passing during the
FRIDAY am hours.

At 12 noon Sue reported that
she had 2 up - one that
previously nested (TCWS) - 3?, and
1 new. Neither laid eggs.

At 2:30 pm walked out past SWEP
on reef flat - low tide. Went to
iron stake at the end. Found 3 weaned
and bleach-marked pups in a pool with
no surface connection to deep water. Photos.

NOTED Abundance of
closed bivalves (purple when specimen), +
Turbinaria

18 JUNE 83

SATURDAY

Strong trades. Steve picked us up at \sim 10 am. Did seal counts ("Atoll survey") at Bare Is., Round & Mullet, I picked up Sue at W-S. Her light blue painted number "15" was basking near her camp site. Motored behind the reef to Trig sand bar. 4

new digs there since Sue marked the single pit with a green bottle in early May. Doubt if any of the new pits are "good". Motored to Trig where Steve let us off to count seals and turtle pits. A single female basking there - tag recovery 5981. Found 3 new digs only since I was last there. One probably last night - on ord in the steep beach berm. Unknown if "good". Two others at high north end of the island are 3-4 days old. 1 good, the other "probable good".

On Tern until \sim 3:30 pm. Dave cooked omlettes, whole wheat bignits, cinnamon rolls.

Steve and Gail. drove us back to East (me & Dave), Sue to W-S.

18 JUNE 83
SAT.

While at TERN, Sue pointed out in Amerson's ARB that 2 "pigs" were reported 5 years after some ~~were~~ were reportedly released on "East". Pigs root around eat turtle eggs. But could these "pigs" have been seals??

Hard rain during the night at time.

19 JUNE 83

SUNDAY

Sue had 3 w/ last night on W-S; 2 previous, one new. One of the previous was a low number retester.

Within the past week, lots of albatross regurgitations have appeared. From flapping wings/advancing stage of maturity? Some are now flying off the island. Black footed are more advanced in development. The other day I broke open perhaps 100 pined carcasses. Probably half had no plastic-indigestibles in their body.

Would like to dissect a fresh dead bird to see how large crop - GI tract is to be able to hold squids and large chunks of squid I have seen

19 JUNE
SUNDAY

19-20
SUN.

19 JUNE 83

Sunday being transferred from the parents.

Note - Gail P. saw a
 ~ up to 10' shark in shallow water
 off the Sand Point on the morning of
 6/18 Sat. Fin/tail did not break
 water surface.

Battery needed for my strobe light:

"Battery Dry BA1574 U

NBA - 1574/U

DAAB07-76D 63- (?)

BREN-TRONICS

EAST NORTHPORT NY

1276 "

19-20 JUNE 83

SUN. - Monday

Noted increasing illumination
 from the moon - turtles are
 more sensitive to my movements -
 Certainly also the masked
 boobies with young, and the
 albatross young.

20 JUNE 83 Some heavy rain showers during
 MONDAY the A.M. hours, ^{but} Sunny
 starting about 10am.

20
 Mon

Items to send to Bill:

- 1.) Xerox of bar graphs - nos. per night
- 2.) Nos. of researchers on East, and durations,
 due to boat problems; Steve shuffling;
- 3.) Ticks / shoulder
- 4.) Very low numbers nesting - can be
 handled by Sue; More productive elsewhere;
- 5.) Number of nests marked;
- 6.) End of study period for Sue on W-5;
 objectives achieved;
- 7.) Only stay as long as I need to;

Project idea for Steve/Gail FWS personnel
 at rego - Undertake some
 nighttime monitoring of nesting
 turtles on W-5 while
 Sue is on East. Or Trig
 or Tern. (latter would seem
 fairly easy). Offer to Gail/Steve
 to spend night on East with me not taken up.

20 JUNE 83

MONDAY

Nets scraps piled up by
 BW mooring - only one chunk I thus
 far take back to Tern. Steve F.
 suggested dumping a gallon of gas on
 it and burning.
 Dave stated that he had an "arrangement" with
 Steve whereby Steve didn't "see them".
 Dave could take glass balls out. Note
 also that Steve gave Dave the glass ball
 I sent back from East. Consider and
 inquire about glass ball "case" against
 Rick Grigg.

Ideas concerning hatching-marking work:

- 1.) Type of glue for this year?
- 2.) Release points
- 3.) Work in tent?
- 4.) Don't do it during low-production years?
- 5.) Block tissue paper for white spot
- 6.) Considerations of taking hatchlings from eggs laid early in the season (June) vs. later. Time of emergence and current systems gotten in to.

20 JUNE 1983

MONDAY

12 room check - Sue reports

6 up on W-S last night; very little rain; 3 were new turtles, 2 reesters (2 & 3?), and one repeat.

How many laid eggs - ?

(If she has 20, and I have 26, total = 46
 $26 = 56.5\%$);

However TC W-S "2" can be counted as a "new one", since it was seen again after our 17-day/night study period started.

Sue reports that "2" was one that stayed in a pit all day; tags were checked and ~~one~~ was replaced.

Consider - Copper ion pollution of East Is., soil resulting from all the ground wires corroding.

21 JUNE

TUES

11:3

21 JUNE 83 Folded down tent & camp
 TUESDAY at 8am. Saw TC 1 bare on the
 reef off of Area 8. Painted number
 was worn, but still very readable. TC 1
 was not found up to nest this
 past night.

Steve F. picked Dave and I up
 at ~ 8:45 am and proceeded to W-S.
 Reasonably calm seas, but a light
 rain as we arrived at W-S. Motored
 through deep chaneland around to the
 back of the island to Sue's camp.
 Walked around W-S with Sue and
 Steve to look at various nesting
 areas recorded/seen by Sue. - 3 have
 been staked as containing eggs.

There are several questionable sites
 that way or way contain eggs. I
 recommended that she mark these
 for future checking to see the outcome -
 dig up later.

Proceeded to Tern; cleaned
 up and packed gear for the rest
 of the day. Had a lobster and subs
 dinner with Alan, Rod, Stan,
 Theresa, Scott (AWS volunteer)

11:30 pm - Walked Tern beach; lots of
 seal tracks, sleeping marks. No signs
 of recent nesting. ♂ 5455 found at east
 end - basking.

22 JUNE 83

WEDNESDAY

Justwan arrived ~ 11am;
 Went up twice for photo surveys.
 Slight SE wind, blowing
 10-15 kt.

Departed for Honolulu ~ 3:30pm

Gail F. reported turtle-like tracks on
 the runway. Need to inquire.

Arrive Honolulu ~ 7:30pm.

Bird Use of Slab area:

- 3 Laysan young
- 1 Black-footed
- 2 advanced stage Tropic chicks
- 17 Black noddies (on eggs?)
- 15 Shearwaters

Lots of large Cheropodium;
 Also all around base of Pyramid -
 Is this from fertilization by roosting
 frigate birds.

Backnote - Consider rainfall -
 should make nest excavation
 by turtles much easier.
 Also, consider great increase
 in the ^{TOTAL} weight of sand on
 the island due to "holding"
 of rainwater.

WHALE SKATE IS. FFS

1/4/84 [67]

Adult ♂ Δ HWS



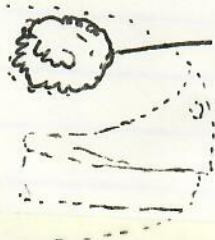
[no tags]

small tumor RFL
(prox. to body)

8-9
L. marginal
gouged

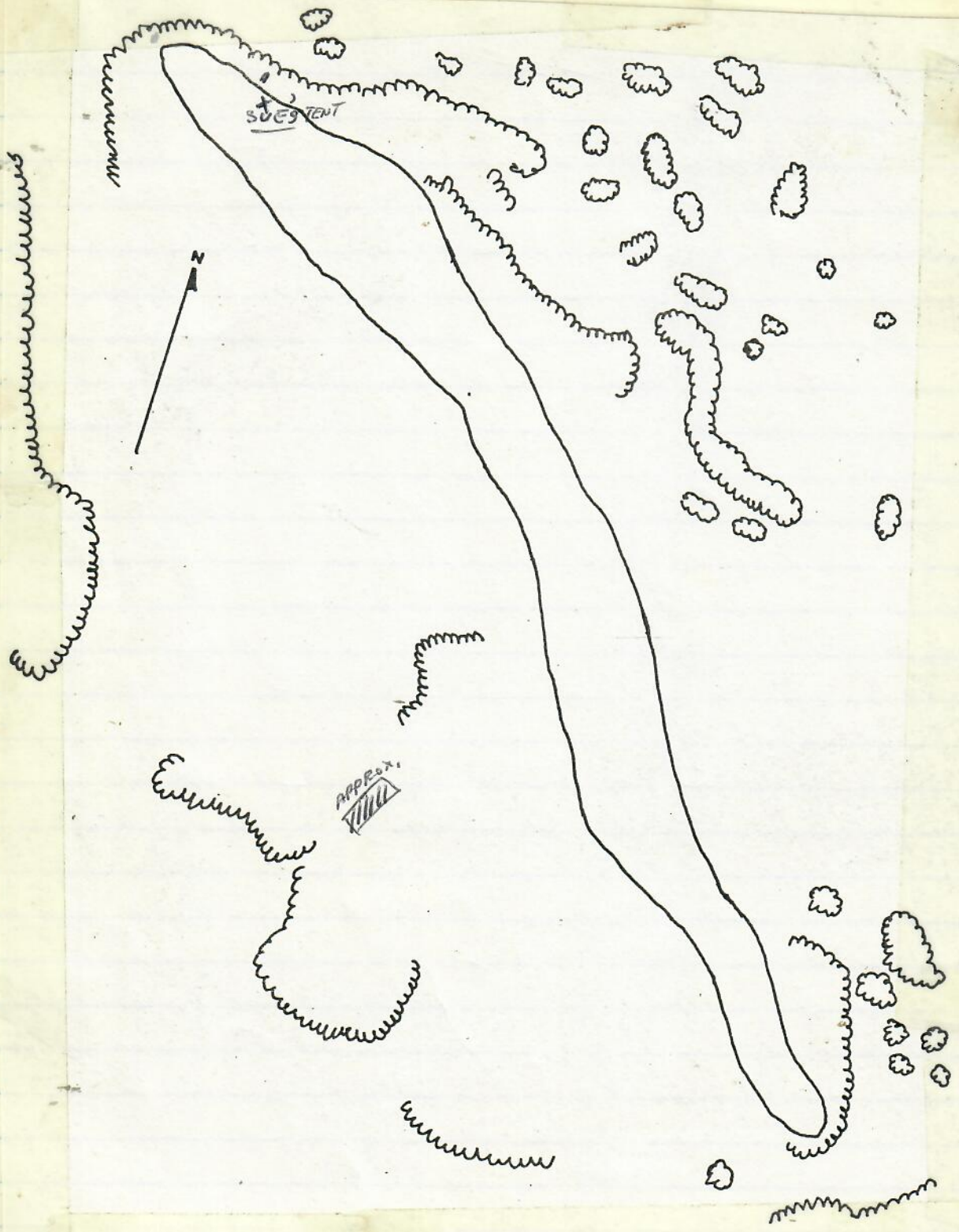


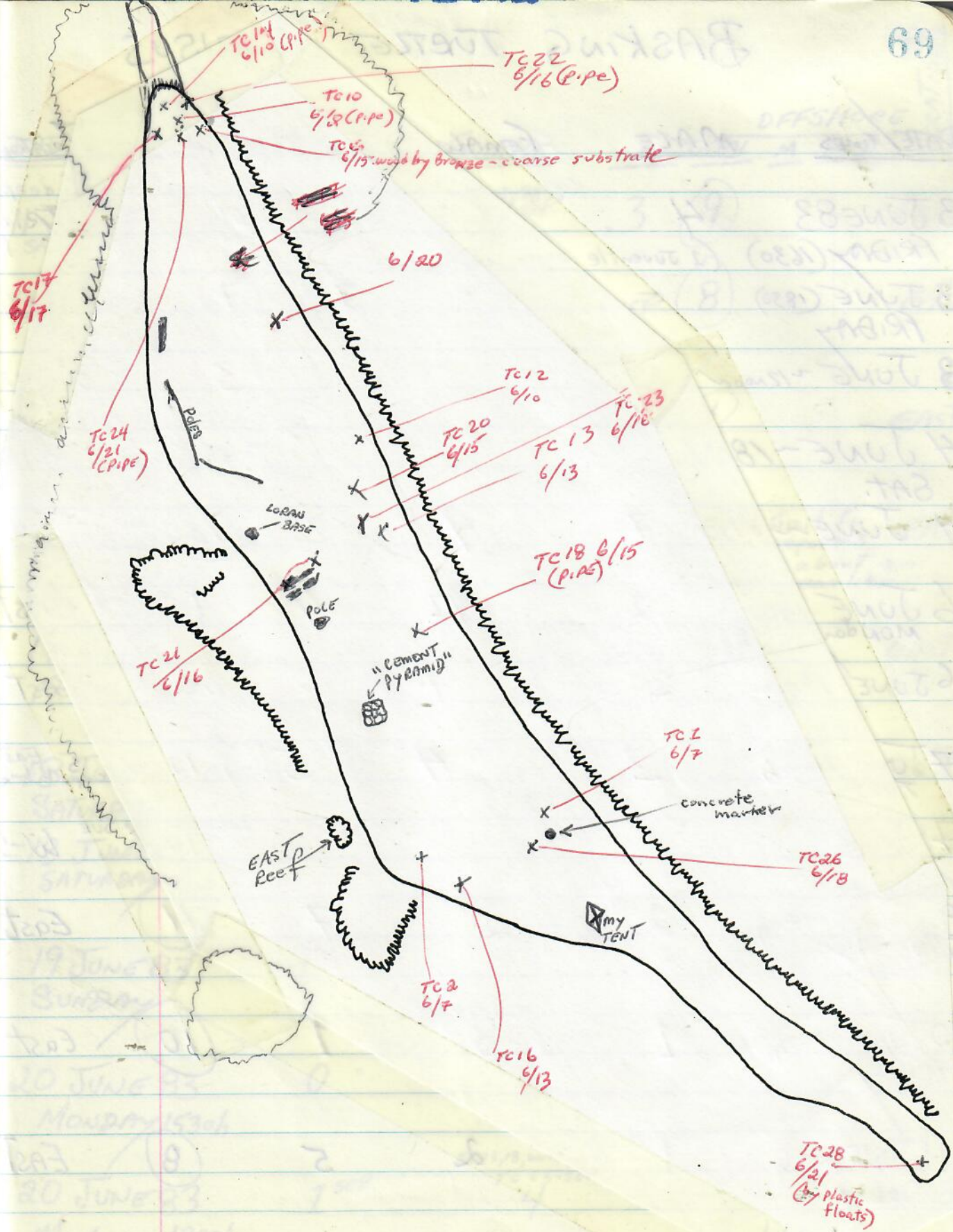
marks &
scratches
on carapace



RT. eye covered w/
tumorous growth

27 (26 DEC -
January 1984 expedition to FFS for seals
made by B. Gilchrist, Akam, John Henderson, and Sue, L.





As of 6/21 - 18 ID'd marked nests

BASKING TURTLE CENSUS

DATE/TIMES	MALE	FEMALE	I	OFFSHORE			LOCATION	DATE/TIME
				TOTAL	M	F		
3 JUNE 83 FRIDAY (1630)	4	6	1	(11)		(0)	TRIG	11 JUNE SATURDAY
	(1 juvenile seen North-offshore)							
3 JUNE (1830) FRIDAY	-	-	-	(7)		(1)	W-S	13 JUNE MONDAY
3 JUNE ~ 12 NOON	-	-	-	(3)		(3)	EAST	
4 JUNE ~ 1800h SAT.	-	-	-	(2)			19 Gail Dave EAST	14 JUNE TUESDAY
4 JUNE ~ 1930	7	4	2	(13)			me EAST	16 JUNE THURSDAY
6 JUNE 1400 MONDAY	2	1	4	(7)			several EAST	
6 JUNE 1800	3 ^(2 TAG rec. in A10)	7		(10)			EAST	17 JUNE FRIDAY
7 JUNE 1600h TUES.	3 ^(SEP)	4 ^(4-SEP)	5 ^{(4 NEP) (1 SEP)}	(12)			5 East caps last one	18 JUNE SATURDAY
7 JUNE							Reported by SUE 17 EAST	18 JUNE SATURDAY
9 JUNE ~ 1930h THURSDAY Thursday	2	2 ^{TC3, 11}	7	(11)			East	19 JUNE SUNDAY
10 JUNE 1730h FRIDAY	1	8 ^{TC 3, 9 SEP 19 AS 8 TO 12 NEP}	1	(10)			East	20 JUNE MONDAY
11 JUNE 1400h SATURDAY	1	2	5	(8)			EAST	20 JUNE MONDAY

DATE/TIMES	MALE	FEMALE	I	OFFSHORE			LOCATION
				TOTAL	M	F	
11 JUNE 83 SATURDAY 1800	2 ^{1 SEP} 1-A13	TC 3, 78 4 ^{SEP}	3	9			EAST
13 JUNE 83 1700h MONDAY	1 ^{SEP END} look very large	TC 11, 16, UNR. 7 ^{5 SEP 2 NEP}		8			EAST
14 JUNE 83 1830h TUESDAY	0	8, 11 SEP 4 ^{1-SEP 7165} 1-TIP 7185		4			EAST
16 JUNE 83 1630h Thursday	-	-		2			EAST Gail P. reported "8" about an hour earlier.
17 JUNE 83 1330h FRIDAY	1 ^{very} few	TC 22, 16, 18 6 + 1 ^{at SP}		8			EAST males being seen now (departed??)
18 JUNE 83 1700h SATURDAY	1 ^{Tag 5100} SP	SP-TC 19 SEP-3, 16, 7155 2 unread + 1 ♀	7	8			EAST
18 JUNE 83 1700h SATURDAY	7 (5171)	7 (5986)	4	18			EAST by SUB WJS ("9 of 11 ♀ were painted")
19 JUNE 83 1500 hours SUNDAY	2	TC 3, 19, 2, 18, 13, 23, 16 7		9			EAST
20 JUNE 83 MONDAY 1530h	0	SP NEP SEP TC 19, 18, UNR, 23 4		4			EAST
20 JUNE 83 MONDAY 1800h	1 ^{SEP}	TC 13, 18, UNR-NEP TC 23-SEP 4		5			EAST

NOTE: As study period progresses, basking females seen on East without tags have been tagged. These turtles invariably show up nests on East and receive a TC number.

19 SEP 2002

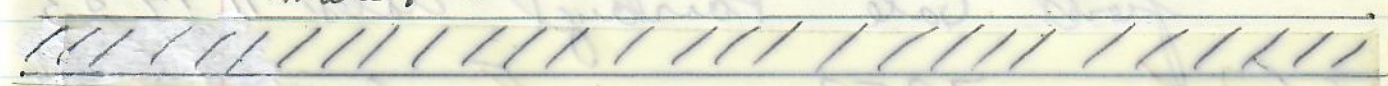
DATE/

BASKER TAGGINGS

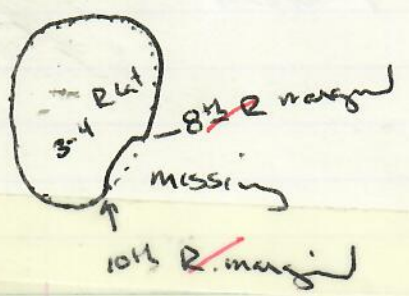
DATE/TIME	TAG NOS.	SEX	LOC. Remarks
3 JUN FRIE			"TRIGLEP/S
3 JUN FRI	4-28-83	6363 RFL; 6362 LFL (?)	(S-69.8 x 51.9)
3 JUN	5-3-83	6364 1st R	F? (S-78.2 x 58.5)
4 JUN SAT	6-3-83	6359 RFL	SPRAY Green "1" UP NESTING
4 JUN Friday-Sat.	6-3-83	6366 LFL; 6367 RFL	[ONE TAKEN OFF and REPLACED] SPRAY Green "2" UP nesting
6 JUN MON	6-3-83	7151 RFL	F GAB TR
6 JUN SAT	6-4-83	7155 RFL; 7194 LFL	Small F A-11 BAS
6 JUN SAT	6-4-1930	7154	Small M A-11 BAS
7 JUN TUE	6-4-1930	7152; 7153	M A-11 BAS
7 JUN	6-4-1930	7156 (7158)	F (TC-1) NCP BAS
9 JUN THURSDAY	6-4-1930	7157 RFL	M SEP BAS
10 JUN FRIDA	6-5-83 (1800h)	7161 FL	M A10 BAS
11 JUN SATURD	6-5-1800h	7162 RFL	M A9 BAS
11 JUN SATURD	6-5-1836h	7163 RFL	M SEP BAS
	6-5-1530h	7197 LFL	SEP BASK cop scabs & wounds

19 SEP 2002

DATE/TIME	TAG NOS.	SEX	Loc./Remarks
6/5/83 2230h SUNDAY	7164 LFL + 7189 TC22 6/16	F	A12 BASKER Recent copulator?
6/6/83 1800h MON	7165 RFL 6/14 TUES. 1830h SEP BASK; + 7190 TC23 6/16	F	Time between cop. & EGGS = 11 days Rec F 7/7/86 NEP BASK; defecation injury neck TMR; RFF
6/6/83 2130h	7166 LFL + 7183 TC16 6/13	F	SEP BASKER
6/8 2200h Possibly there most of night -- even after tagging! (>0430 6/9)	M	M	A13 7171 BASK - TOEN OUT RFL when applied
6/11/83 1730h SATURDAY	7182 RFL	M	A13 EAST
6/14 1830h TUES.	7185 LFL TC26 6/17	F	SEP very TIP; reddish in color EAST
6/20 2100h Monday	7198 LFL	M	Area V BASKER; EAST RFL had a fresh split. Have reported seeing a copulating pair off NEP before dark. Is this the male?



1/2/84 TRIG IS. FFS
1125 Adult ♂ Δ HWS Tag 7253 LFL w/



RIGHT HWO P.L.P. missing completed

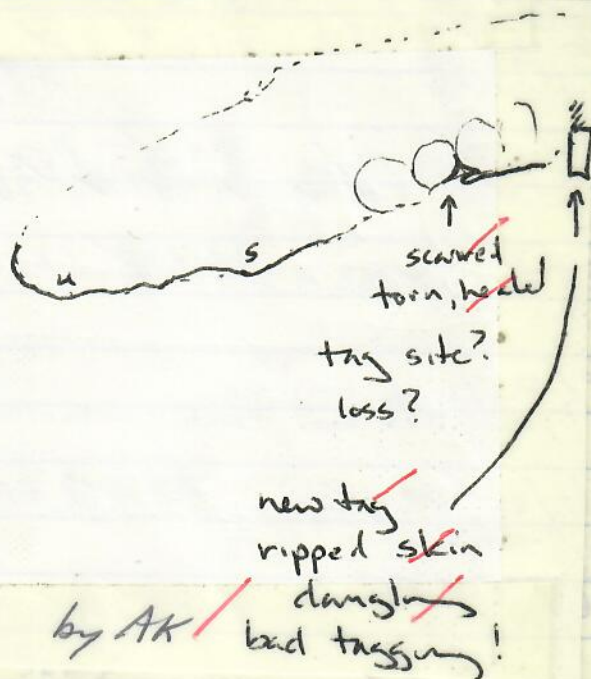
19 SEP 2002

DATE/TIME TAG NOS. SEX LOC./Remarks

TRIG ~~IS~~ FFL 1/16/84
 NEW TAG
 tag ~~7256~~ LFL Ad. ♀ ~~11~~
 high dome carapace



Rec 6/5/86
 TRIG-B
 ♂



The following transcribed from letter received
 from Gale Fairbairn dated 11-14-83

6/25/83	7252	Female	Presumably TERN
early July 7/1/85	7251	Female	//

NON-NESTING TURTLES TAGGED * / RECOVERED			
DATE	SEX	TAG L	TAG R
6/7	♂	6652	
	♂		6653
	♀		5417
6/8	SA ♀	6655	
6/12	♂	6658	
	♂		5236
6/15	♂	5237	5236
	♂	6658	
6/17	♂	6662	
	♂		5417
6/18	♂	5171	
6/19	♀		5986
6/20	♂		2400
	♀	3755	

1169
~~TAG RECOVERY~~
~~TAG RECOVERY~~
~~TAG RECOVERY - DIGITAL TO SIZE 49 TAG~~
~~TAG RECOVERY - RADIO TRACKING TURTLE - WILL TRY TO GET PILLS~~
~~TAG RECOVERY~~

* ALL TAGGED IN "FI" AREA
 AS OF 21 JUNE 1983

TABLE II

1983 French Frigate Shoals

GREEN TURTLE TAG RECOVERIES
BASKING TURTLES

Date	Location	Sex	Age class	Tag R	Tag L	st carapace meas (cm)		Observer
						length	width	
4-19	WS	F	A		2825			JH
4-24	TERN	M	A	6361		also recovered on 5-8		SHARK JH
5-3	WS	M	A		5171	also recovered on 5-12		6-16 TERN GR WS
5-4	EAST	U	SA	3136	3135	49.2	39.2	6-18 WS
						49.2	39.0	
5-7	WS	M	SA	3038	(6365)*	76.8		
5-13	LGIN	M	A	3024	stub L	foreflipper		
6-7	WS	M	A	5417		also recovered 6-17		WS
6-12	WS	M	A	5236	5237	also recovered 6-15		WS
6-15	WS	M	A		6658	tagged 6-12-83		
6-18	WS	F	A	5986	679	also recovered 7-6		WS, 7-17 WS
6-19	WS	M	A	2400				
6-20	WS	F	A		3755			
7-2	WS	M	A		960	#49-size tag		
7-3	WS	F	SA	(6666)*	6655	76.4	57.0	tagged 6-7-83
7-6	WS	F	A	(6667)*	6651	tagged 6-6-83; nested '83 season		
						also recovered 7-21		WS
7-7	TRIG	M	A	3066				RW
7-15	EAST	F	A		3846	nested '83 season		
7-15	EAST	F	A		7164	tagged '83; nested '83 season		
						also recovered 8-3		EAST
7-22	TRIG	M	A		5400			
7-25	EAST	F	A	3628		nested '83 season		
7-25	EAST	F	A		3228			
7-28	TRIG	F	A		5397			
7-28	TRIG	M	A		3277			

* () tag applied

6360, 61
(Y650)
PUNAWU #11
KAW
4/90
HAND capture

ENT
NO.
88

1100

959

3807

3607

6779

TURTLE TAG RECOVERIES

DATE	TAG NOS.	SEX	LOCATION/Remarks	DATE
4-19-83	2825 LFL ^{NO.88 (ENTERED)}	Female (JRH)	W-5 (B)	6-5 SUN
4-24-83	6361 RFL ^{NO.88 (ENTERED)}	M (SRL)	TERA (B)	6/6 MON
4-27-83	5917	?	Reported from Boris AT CAYSAN (B)	6/6 MON
5-3-83	5171 L ^{NO.89 (ENTERED)}	M (SRL)	W-5 (B)	6/9 THURSD
5-4-83	3134 ⁶ , 3135	Juvenile	(49.2 x 39.2) EAST (B)	
5-7-83	3038 RFL; 6365 LFL	M (SRL)	76.8 W-5	6/9 SAT
5-8-83	6361 RFL	M	Shark	6/7 SAT
5-13-83	3024	M (JRH)	L. BIN	6/11 SAT
6-3-83	1214	M	GMB, TRIG	
6-4-83	5061 LFL, 5067 RFL	M	AIO EAST	6/12 SUN
6-4-83	3627; 3628	F	NAP EAST	6/18 SAT
6-5-83	5100 RFL; 5178	M	AIO EAST	6-18 SAT

* N.I.D.S. = NOT IN DATA SHEETS

SRL = SUPER-Laughenlaughtes

25 SEP 2002

DATE	TAG NOS.	SEX	Loc / Remarks
6-5-83 SUN	5374L; 3225L	Male	AB EAST
6/6 mon.	Blk frearing - no. worn completely off. (2-3rd region);	Male	AB TIMRS EAST all over FL/Proximal Front Flippers - & eyes.
6/6/1800 mon.	3063RFL; 3177 LFL	M	NET EAST
6/9/83 Thursday	Blk frearing; all in TADORS (NEW) 7174R 4th Scale; (NEW) 7175L - between 4-5th Scales.	M	photos-R2 AB EAST (same as above)
6/9-6/10/83 W 331	3019; 5415 egg on W-S; (11th Suss NO. TC 14)	M	W-S
6/7/83	5417 (ENTERED NO. 217)	M	W-S
6/11/83 Saturday	3028RFL + L scale 5078; (3153?)	M	SEP EAST Both tags seen in TIMRS, like 3588
6/12-6/13 Sun. mon	5236 RFL + LFL	M	W-S
6/18 SAT.	5981 RFL	F	BASK TRIG
6-18-83 SAT.	5986 RF + 49 tag distal	F	BASK (sel) W-S

same as 3588 below

JUNE 1980

unreadable off (OFF) (OFF)
NO TIMRS WHEN TAGGED

NO. 70
in data sheets

photos-R2
AB EAST
(same as above)

NESTER reported by SUE
NO. 65
in data sheets
(ENTERED NO. 136)

NO. 217
BASK W-S
"FEMALE"

June 81 reported by SUE W-S

(ENTERED NO. 94) NIDS
6/2/81 EAST-BASK
6/3/81 GIN

reported by SUE W-S

(ENTERED NO. 215)

6/6/82 BASK - TRIG

464 FWS
679, 699

march 67 - TRIG
Oct 73 - W-S
JUNE 82 - W-S

(Resident ??)

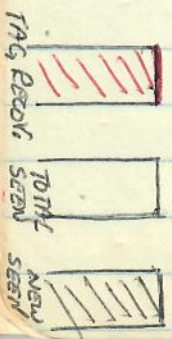
TAG RECOVERIES (CONTINUED)

25 SEP 2002

DATE	TAG NOS.	SEX	Location/Remarks
6/19/83 SUNDAY	1104 / 2400 (ENTERED) No. 7 (freq. 351)	M	Bask - W-S by SRL
6/20/83 MONDAY	3755 LFL ORIG. DATA = 6/9/80 3755	F NIDS (ENTERED) NO. 216 W-S BASKING	BASK W-S by SRL (no painted no. seen)
6/20 monday	BLUE PLASTIC TAG	F (possibly 2032) NO. 62	BASK W-S seen by SRL
6/21 TUES.	2300h / 5455 LFL 7201 PFL 4/24/82 by SA Tern	M NIDS (NEW) (ENTERED) NO. 95	NIGHT BASK TERN very end of South shore beach - East end.

|||||
1/2/84 5400 Entered NO. 76 M (entered in log 36) Basking TRIG Recovered by A. KAM

Number
of
NESTERS
1983
EAST Island



1983 NUMBER OF FEMALOS

(Night PM
TO AM)

PER NIGHT

(of new
obserr.)
NO. LONG TERM

DATE	NO. OBSERVED	OF THOSE NO. SUCCESSFUL	% SUCCESS.	NEW OBSER.	% NEW OBSER.	DAY RECOR.	(of new obserr.) NO. LONG TERM	pm-am DATE
6/3-6/4/83	2	(W-S)	0					6/17-6/18
6/4-6/5/83	2	(East)	0	2	100%	1	1	Friday-Saturday
6/5-6/6	2	East	0	0	0	2	0	SAT. - SUN.
6/6-6/7	6	East	^{1,2,3,5} 4	67%	^{3,4,5,6} 4	3	1	6/19-6/20
6/7-6/8	^{7,8,9} 3	East	0	0	^{7,8,9} 3	4	3	MON-TUE
6/8-6/9	^{10,11,7} 3	East	^{10,11} 2	67%	^{10,11} 2	5	1	Comp
6/9-6/10	^{9,6,4,12} 4	East	^{9,12} 2	50%	¹² 1	6	1	7
6/10-6/11	^{6,13,14,7} 4	East	^{14,13,7} 1	25%	^{13,14} 2	7	1	
6/11-6/12	^{6,7,15} 3	East	^{7,15} 2	67%	¹⁵ 1	8	1	
6/12-6/13	^{13,16} 2	East	^{13,16} 2	100%	¹⁶ 1	9	0	
6/13-6/14	¹⁷ 1	EAST	0	0	¹⁷ 1	10	0	
6/14-6/15	^{17,18,19,20} 4	EAST	^{17,18,20} 2	50%	^{18,19,20} 3	11	1	
6/15-6/16	^{6,21,17,19} 4	EAST	^{6,21,} 2	50%	^{21,} 1	12	1	
6/16-6/17	^{17,22,23} 3	EAST	^{17,22,23} 3	100%	^{22,23} 2	13	0	

(DAY "I" ON
WHALE-SKATE)

DATE	NO. OBSERVED	OF THOSE, NO. SUCCESSFUL	% SUCCESSFUL	NEW OBSER.	% OBSER.	DAY	LONG TERM RECOV	%
6/17 - 6/18 Friday - SAT.	^{19, 24, 25, 26} 4	EAST 1 ²⁶	25%	^{24, 25, 26} 3	75%	14	1	25%
6/18 - 6/19 SAT. - SUN	^{3, 24, 25} 3	EAST 1 ²⁵	33%	0	0	15	0	0
6/19 - 6/20 SUN. MON.	^{3, 24, UNK} 2	EAST 2 ^{3, UNK, TURTLE}	67%	0	0	16	0	0
6/20 - 6/21 MON - TUES.	^{2, 5, 11, 27, 28, 24} 6	EAST 2 ^{28, 24}	33%	^{27, 28} 2	33%	17	1	50%

Completion of 17 day of consecutive monitoring;
Also paired with SRL on Whale-Skate

$$\bar{x} = \frac{3.35}{\text{per night}}$$

$$\frac{43.18\%}{\text{Successful}}$$

28 in 17 nights,
or 1.65 per night

26 in 14 nights,
or 1.86 per night

15 New Taggings
13 long term Recov

28 Total in 17 days
Monitoring
6/4 - 6/20
1983

13 out of 28 = 46.43%
TAG RECOVERY

NUMBER OF TURTLES NESTING ON WHALE-SKATE BY SRL

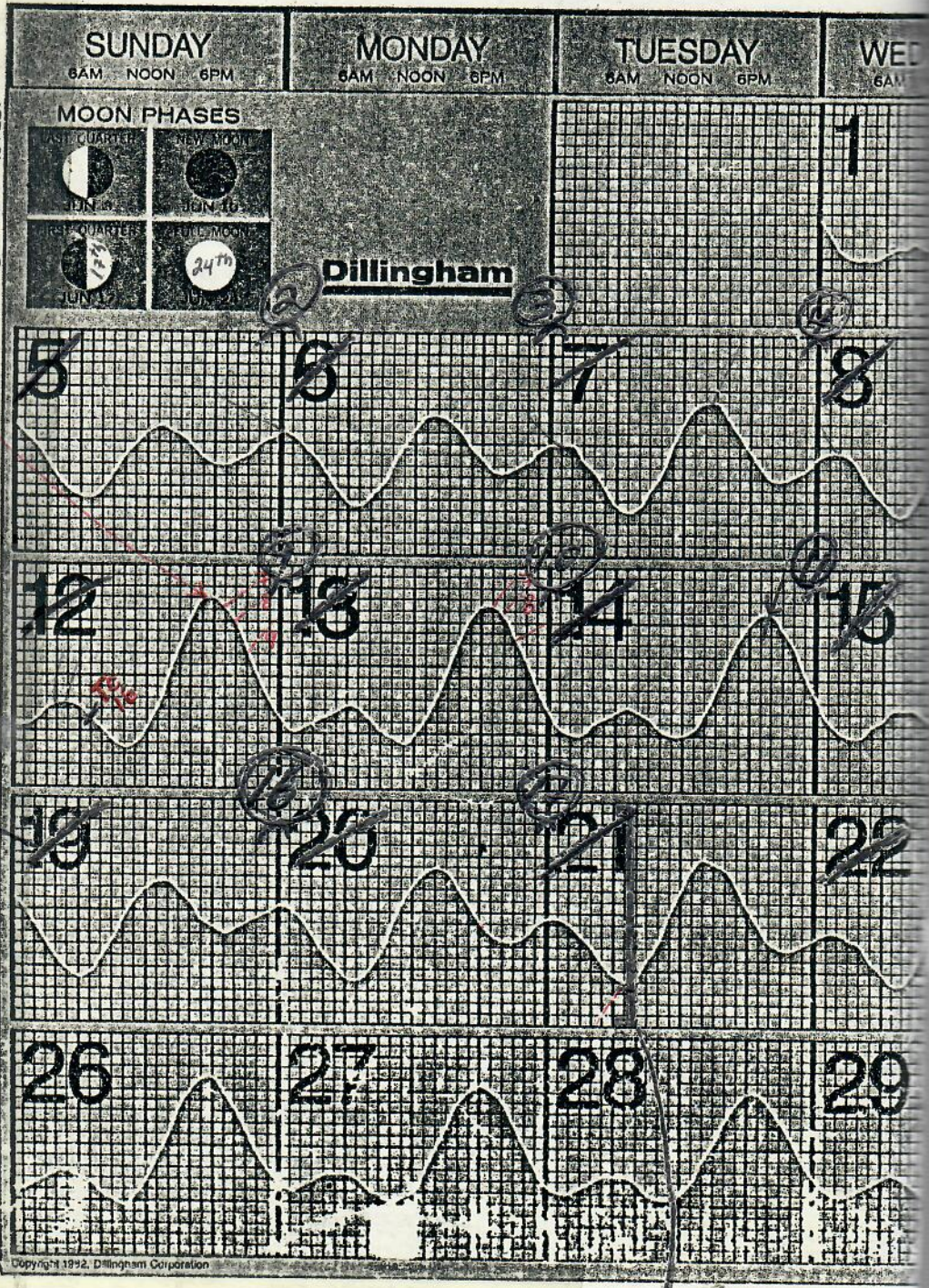
DATE PM - AM	TOTAL # PAINTED EGGS	# NEWLY SEEN/ PAINTED	# FROM PREVIOUS NIGHTS	# LAYING EGGS	# NEWLY SEEN TR (PREVIOUS SEASONS)	RUNNING TOTAL # TAGGED/TR
6/3-6/4	2	2	0	0	0	2 2
6/4-6/5	5	4	1	1	0	4 6
6/5-6/6	4	2	2	0	0	0 6
6/6-6/7	4	2	2	0	0	2 8
6/7-6/8	0	0	0	0	0	0 8
6/8-6/9	0	0	0	0	0	0 8
6/9-6/10	1	1	0	0	1	1 TR 9
6/10-6/11	2	1	1	1	0	1 10
6/11-6/12	0	0	0	0	0	0 10
6/12-6/13	3	2	1	0	0	1 11
6/13-6/14	2	1	1	1	0	1 12
6/14-6/15	0	0	0	0	0	0 12
6/15-6/16	2	1	1	0	0	1 13
6/16-6/17	2	0	2	0	0	0 13
6/17-6/18	1	1	0	0	0	0 13
6/18-6/19	3	1	2	0	0	0 13
6/19-6/20	6	3	3	1	0	1 14
6/20-6/21	5	0	5	0	0	0 14
	2.35 PER NIGHT	2.17 PER TR				
		1.24 PER NIGHT				

*

* BOTH T1 & T2 WERE OBSERVED DURING 6/14-6/20 STUDY PERIOD
SUBSEQUENTLY13 Tagged
1 Tag Return

JUNE 1983

looks like highest tide of the month + 2.4 feet

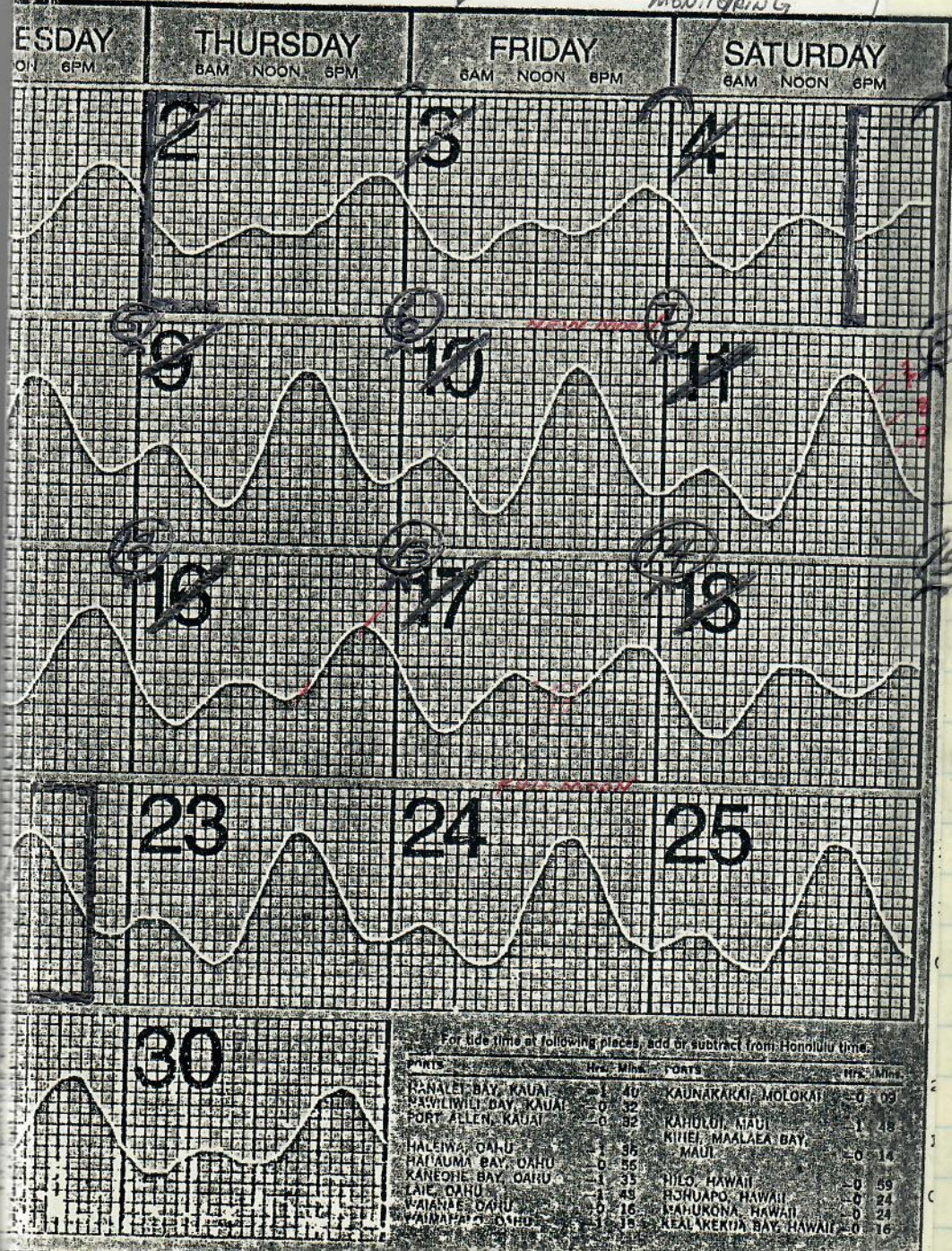


Patricia's Day

OFF EAST

Molokini Tropicals: Wimplefish (kihikihi) and Butterflyfish (lau wiliwili)

on Tern Is.
 overnight on W-S- DAY 1 of MONITORING
 START ON EAST



EAST Island +0.08 off Honolulu
 110E

hawaii's skies in june

The chart shows the sky from horizon to horizon as seen from the latitude of Hawaii during June in the early evening.

The table of dates and hours indicates when the chart will coincide with the sky. To use the chart, hold it overhead with horizon directions on the diagram corresponding with those of the true horizon.

Chart by E.H. Bryan Jr.; astronomical information by Walter Steiger, Hawaii Science Center, Bishop Museum.

Mercury is visible low in the east before sunrise, in the constellation Taurus.

Venus is the brilliant "evening star" within the constellation Cancer, in the western sky, setting about three hours after the sun.

Jupiter continues to reside in the constellation Scorpius, outshining the bright reddish star Antares nearby. Since Jupiter is almost directly opposite the sun, as seen from earth, it rises near sunset and can be seen throughout the night, traversing the sky from east to west.

Saturn continues to reside in the constellation Virgo. It rises more than two hours before Jupiter, and so is well up in the eastern sky by the time of sunset.

The Sunday Star-Bulletin & Advertiser

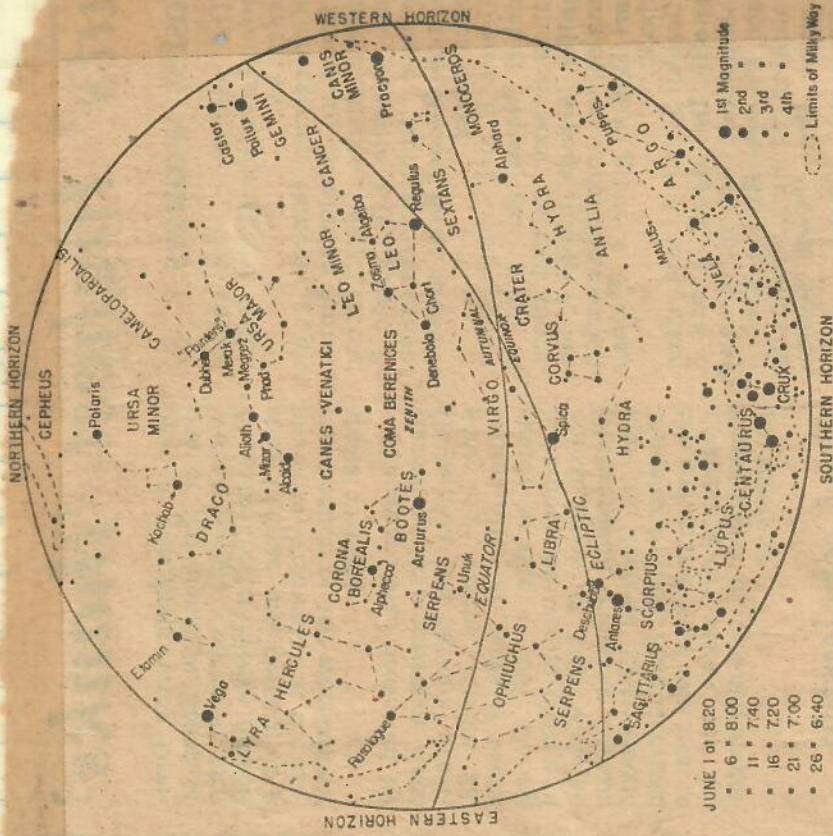
section

Honolulu, May 29, 1983

A total eclipse of the sun occurs on June 10, but no part of it will be visible from Hawaii. The eclipse will be visible beginning in the Indian Ocean, moving across the islands of Indonesia and New Guinea and ending in the South Pacific, for a total duration of a little over five hours.

A partial eclipse of the moon occurs on June 24. From Hawaii, the moon can be seen entering the shadow of the earth at 9:14 p.m. The middle of the eclipse occurs at 10:22 p.m. when only about a third of the moon will be in the shadow. Thereafter, the moon beings emerging from the shadow and is out at 11:30 p.m.

Summer solstice occurs on June 21 at 1 p.m. This is the moment when the sun reaches its northernmost position in the sky. For those of us living in Hawaii, it means that during the month of June, the noon-



JUNE 1 to 8:20

- 6 • 8:00
- 11 • 7:40
- 16 • 7:20
- 21 • 7:00
- 26 • 6:40

time sun casts a shadow to our south, the only place in the United States where this can occur.

Phases of the moon: last quarter, June 3; new moon, 6:37 p.m., June 10; first quarter, June 17; full moon, June 24.

Scheduled at the Bishop Museum Planetarium during the month of June is the show

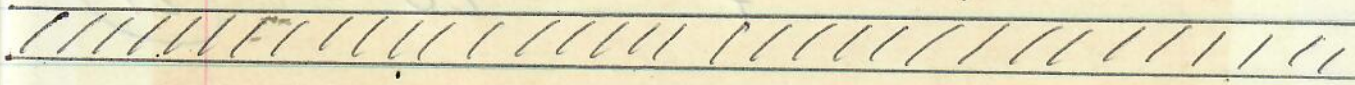
"Stars and Superstars," showing daily at 3:15 p.m. and additionally at 8 p.m. on Fridays and Saturdays. The show "Polynesian Skies" shows daily at 11 a.m.

The telescope in the observatory is available for public viewing, free of charge, before and after evening shows, weather permitting. For further information, call Bishop Museum, 847-3511.

CLIMATIC

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DATE	SEAWATER C°	OBSERVATIONS
6/2/83 Thurs.	—	Calm - very light
6/3 Friday	—	Calm - " "
6/4 Sat.	—	(START ON) Calm - " "
6/5 SUN	26.9°c	START EAST Light trades
6/6/83 Mon.	27.1°c	Light-Mod trades
6/7 TUES	27.8°c	Light trades; very light rain sprinkles am
6/8 WED.	not taken	day visit TO TREN Light to Mod. trades
6/9 Thurs.	27.5°c	Trades up - MODERATE-Brisk
6/10 Friday	—	moderate-Brisk Trades
6/11 Saturday	27.8°c	Light showers after sunrise Calm in the am - brisk Trades pm
6/12 SUN	—	Rain showers am Light - Mod. trades
6/13 Monday	27.0°c	Light trades - cool night hot, sunny
6/14 TUES.	—	Hot - sunny - short rain 3 am Nearby flat calm
6/15 WED.	—	Very calm - a few passing rain showers; clouds
6/16 Thurs.	—	trades up afternoon moderate to strong trades
6/17 Friday	26.0°c (10 Am)	Sunny some heavy passing rain; am
6/18 Saturday	—	SUNNY & Mod. STRONG TRADES - AFTERNOON RAIN SHOWERS
6/19 SUNDAY	—	SUNNY - STRONG trades - passing showers Heavy shower AM
6/20 Monday	27.1°c	SUNNY afternoon some clouds; strong trades AM heavy rain showers
6/21 TUES.	—	TRADES down quite a bit in the afternoon Light TRADES - Cloudy
6/22 wed	—	10-15 kt. out of SE; Pretty cloudy



PIT COUNTS

DATE LOCATION
The following ^{is} from Sue

5-9-83 EAST 27th of May, 2 pits (first seen)
(As of the ~~27th~~ of May, 21 total pits seen)

5-15 TRIG 1 pit
6/3/83 not more than 8-9 digs total "

5-17 TERN 2 pits "

5-11 ^{6/21-2 pits} W-S one pit already -

5-22 WHITE-SKATE 2 pits "
(As of 27th May, 10 total pits seen)

DATE	LOCATION	GOOD	APPARENTLY FALSE	TOTAL
6-4	EAST:			
SAT	SP.	2	7	9
	A2	.	2	2
	A5	2	1	3
	A7		5	5
	AB	2	4	6
	A11	1		1
	A17		1	1
		7	20	27

Substrayed overnight - DOG THAT NIGHT

6-18 SAT TRIG - 3 total since last visit;
1 recent in/on berm; 2 others
3-4 days old; -- 1 good, the other
probable good.

note:

Never got to Gin - L. Gin; Sue may
be able to count pits / baskers there
later on.

PHOTO LOG

- ROLL NO. DATES SUBJECTS
- Roll 1
~~ER-64~~ 6-1-83 Christian at SLP; 6-2 Barber Pt
 EXTACHROME 6/2 - W-S & TRIG; 6/6 - Tracks of TC2 - 117cm width
 6/6 250mm wean Bleach marks; 6/6 Tick bite on leg; 53mm Bleach marks;
 Green SA by rusted drum; Fish egg mass; 6/7 Noddy tern
 sitting on wood w/ droppings-line.
- Roll 2
 KODACHROME 6/9 Thursday: TC 11 covering nest in A4; Double tracks no TC Tag rec
 64 6/9 ^{Basket in A14;} Small basking ♀ SEP; Seal & Pup; Masked Booby & chick;
 bleach marked seal; ♂ 3588, 3673 with TMS; 6/10 am TC 12
 Tag 3628 ³⁶²⁷ flash covering nest; 6/10 1500h-1520 ^{NAVY} helicopter over ^{east} Bare
- Roll 3
 KODACHROME 6/3 Monday Area view of east ^{2 - ALBATROSS}
 64 "popstick" sticks - each measure 14cm long; NURSING pup; Regurgitation - 1 w/ 11
 of East (west looking east); Dead-decaying albatross; Castings w/ plastic; large
 piece of squid found up high - fresh; 6/16 Thursday Area view
 Mother/pup at NEP - 250mm; Twins nursing at SEP; Laysan
 Albatross feeding blk footed chick.
- ROLL 4 6/17 Friday -
 KODACHROME 64 3 weaned pups in pool on reef past SNEP; 6/19 Sunday - fresh
 bleached weaned pup; 6/20 Monday - dead albatross; albatross
 regurgitation containing squid pieces; Dave at SNEP; pile of net
 and line I have collected; 6/21 TUES. SRL at W-S landing;
 area views of W-S looking to the south;

Photo NEEDS/IDEAS: (Albatrosses)
 X Dead & drying wildlife of the NWR; X popstick sticks in regurgitation casting; X "AREA" views of east;
 Crab 1/2 in sand; BASKER w/ flipper tucked in; twin seals by basket
 [Area views of Tern - especially seals; - for Date.] Me in office? in tent

METRIC SYSTEM WITH U.S. EQUIVALENTS

METRIC UNIT (M)	U.S. EQUIVALENT	METRIC UNIT (M)	U.S. EQUIVALENT
LENGTH		VOLUME	
millimeter (mm)	0.04 inches	cubic centimeter (cc)	0.035 cubic inches
centimeter (cm)	0.4 inches	cubic decimeter (dm ³)	3.5 cubic inches
decimeter (dm)	3.94 inches	cubic meter (m ³)	3.27 cubic feet
meter (m)	39.37 inches		
kilometer (km)	32.81 feet	CAPACITY, CUBIC	
hectometer (hm)	109.36 yards	centiliter (cl)	0.35 cubic inches
kilometer (km)	0.62 miles	deciliter (dl)	0.35 cubic inches
		liter (l)	61 cubic inches
		hectoliter (hl)	61 cubic feet
AREA		CAPACITY, DRY	
square millimeter (mm ²)	0.155 sq. inches	gill (gi)	0.125 pints
square centimeter (cm ²)	1.55 sq. inches	peck (pk)	2.34 bushels
square decimeter (dm ²)	15.5 sq. inches		
square meter (m ²)	1.55 acres	CAPACITY, LIQUID	
square kilometer (km ²)	0.386 sq. miles	centiliter (cl)	0.0026 gallons
		deciliter (dl)	0.0026 gallons
		liter (l)	0.0026 gallons
WEIGHT			
milligram (mg)	0.002 grams		
centigram (cg)	0.014 grams		
decigram (dg)	0.071 grams		
gram (g)	0.035 ounces		
kilogram (kg)	2.205 pounds		
metric ton (t)	2,205 pounds		
tonne (T)	22.05 tons		

NEEDS - TC 17 (3628); Close-up of PC's;
NEAR IS. ; SRL tagging

METRIC SYSTEM WITH U.S. EQUIVALENTS

METRIC UNIT (1) U.S. EQUIVALENT

LENGTH

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

AREA

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

WEIGHT

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

METRIC UNIT (1) U.S. EQUIVALENT

VOLUME

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

CAPACITY, CUBIC

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

CAPACITY, DRY

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

CAPACITY, LIQUID

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

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BOOK 2

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