

1982

Rite in the Rain
WEATHERPROOF



LEVEL

NOTEBOOK NO. 311

Jern Island-East I

turtle grafting

log book

3 August 82

3507710

\$1256

a product of

J. L. DARLING CORPORATION

TACOMA, WASHINGTON 98421 U.S.A.

island	till 12 mid- night date collected	# nest total #	date / punched # Released		
East (15)	8/3	1/74	8/4 34	8/5 3	8/6 HOLD 7
"		1shay - 9/5 1			8/6 22
" (71)	8/4	1/71	8/5 71		
Tern (2)	8/7	1/2	icu		8/9 (R) 10 from I.C.U.
East (149)	8/7	1/1			8/9
		1/13			9/8 (R)
		1/21			6 HOLD "2"
(-1)		1/18+2		8/9	2 died weak already
		1/22	1 died		1 ghost al got
		1/12	2/2 60		
		1/15			
East 309	8/8	Straw ? / 45			8/9 TOTAL - 101 (R)
		4-5 / 12			
Tern (40)	8/9	1/34	3rd hill - very weak		
		5 ⁰⁰ 6	4 dead - 2 icu		
Tern (13)	8/10 am				
1					
East (85)	8/10 pm	1/48	1/2 17		
(9)	8/11 am	1/9			

Tues
3 Aug 82

left Honolulu 0830
arrive Seem 1140

East pm

left for East 3:40 engine
arrive 5:10 pm

1745

town is. w/ George

57

1845 - George activated
dutch

62

about 10 hatching - in intensive
care

(74)

approx. 75 total - dug out

1945 East ss. - in 1/4's -
ea. walking 1/4 of beach

Full moon - cloud cover until
2115 -

Ruth found ① stray on beach

8/14/82 - Wednesday - Eastam

0745 - Balaga found 2 hatchlings near surface - we dug out clutch
71 healthy hatchlings -
no late hatches -

0805 - folded down tent - secured gear inside tent - cots, bags, etc.

0830 - head for Tern - w/25 hp engine -

0845 - sails hit - very heavy squall.

0940 - arrived Tern

Turtles secured in transit wing room - Covered and dark - 4-5 boxes.

1130 - began work on turtles -

1st problem - how deep!

2 - no scalpel light.

3 - not clean - have to wash -

4 - sorting by "age".

Yolk sac size / for early release

Open ground down scapel handle for us - Scooper.

8/14 wed.

8/15 30 - total - 19 turtles

7:50-9 - worked on grafting - completed 13/16

Had some that probably would not work due to learning technique

9:20 took to slope of beach to fuel tank end of island -

(R) Release 34 hatchlings -

most begin to move w/in 5-6 mins - 10 or 12 were slow to go - 3 never would go - (45 min)

Returned these 3 to box.

* Next release will try to "activate" before taking to

beach - whether or something - so they're moving a little.

Although it was @ full moon heavy clouds blocked out all light.

Back to punching procedures -

we're using semi - assembly line

Amey + I the punching +

Miriam is gluing

Our procedure is still slow & the work is hard on your eyes & back - require frequent (hourly or so) breaks - I feel it would be extremely difficult @ this point to attempt to work in the field - especially in these weather conditions.

5 August 82 - Thursday Term

0815 - checked area under pulpit - 2 nest were laid here. Areas are enclosed w/ 1/4" chicken wire - monitored early am & 2-3 times in p.m. due to great crabs - no luck.

915 - Amy "volunteered" via her seasickness to be our Jean island nest patrol - mostly setting up wire and digging out 2nd complements of turtles - etc. Both took Amy on a trip down the beach & showed her the possible nest sight.

5 Aug

Miriam & I cleaned & rebrained turtles & separated as to release time - 72 - ready to punch & release - 29 - " " - marginal release - 1-2 days - 9-9 - I.O.U. - still have yolk sac, etc. - on ^{Monday} island - will not punch yet

Clean & reorganized - Ready to punch!

11am - 1:30

group 1 20 animals punched -

averaging 7-8 min per animal - about 5 were abnormal in

plate counts - all on left side lateral & ~~low~~ dorsal center oar space, some B+W photo -

3:10 - 4:30 - group 2

Punched - 21 total - took some photos - going much faster - changed to all acid tuble - sharper - the turtles are a little "tougher" as they dry - not as pliable as yesterday.

Thurs. 5 Aug

6:45 - 8:00 pm - 25 punched - group 3 going faster.

8:25 - took 29 turtles to beach crest - group 1 - (3) from wind.
R (23) entered water or were on their way by 8:45.

9:15 (29) return 1 to group 2

group 2 - (21) + 7 from group 3 -

photo) group 2 was slow to leave

beach very few were active @ all (Minion felt w/ box on way to beach)

9:30 - added last (18) of group 3 to

beach crest - very slow also - but more entered water than 1/2 (transport ok.)

finally - submerged slow ones in 4:30 - this stimulated most of them - eventually all entered the water

pan - 11:15 - pm

will try some alternate holding methods -

today's groups were all dug out Wed am:

1 - held in tray w/ sand after punching

2 - cardboard bin

3 - cardboard box

all that remains (29 marginal) - are in a tray w/ moist burlap bag their shells have not dried - rewet bag - 23:15 hrs

Total - 72 punched
75 released

moon up but cloudy until later

? for Beugs - 7:30 am Radio call -

1.) holding too long

2.) water activating

3.) punching O.K.

need more slaps -

in Bills cabinet - key location

- his. instrum juv.

74) Wed released - 34 } 109 to date
Thurs " } 75

6 Aug 82 - Fri - Term
got up @ 15 - for George's 0730 call & she
called @ 0700.

John had given him the messages
Amy checked the fuel tank nest - no
hatchlings - but wire was down -
I repaired that while she checked
rest of Tern.

The seim is out for the 18th time
may stay clear -
10⁹ - 12 - punched 29 marginals
should be OK for release tonight.
shells had remained moist -
Put in tray w/ sand + moist
burlap over.

Turtle crew took the afternoon off -
Amy - pictures
Miriam's some sew + reading
Kail - writing + snorkeling

We plan to pack + be ready to go
to East Is. @ 1400 hrs. ^{5:30} Ruth, Miriam
& I. Amy will man Tern so
will release 2^A after dark -
hold 7 for graft control.

Radio call - George - 8:44 pm
Bill - received package - 6 Aug 82

Spt 3-4 - Sea Grant - George
ft.

Water-cooling effect

6 DOD recorders on
5 - adult males
1 - juv male

8³⁰ pm

(22R)

Release OK - only 2 of 2^A
had to be H2O "Retarded".
held 7 for control of
graft growth -

Will ~~sp~~ ^{sp} 7 in H2O holding
tank in a.m.

Pool Hall was open tonight -
GP

7 Aug 82 - Saturday - East pm

Ruth dug out 2 hatchlings from a nest that hatched 2 August.

Amy checked beach - no hatchlings -

10:30 - Cleaned area + put 7 ^{marked} hatchlings in holding tank - w/ 3/4 inches water - tank $\approx 2 \times 4$

Doing fine -

Should leave for East ≈ 1430 hrs. left for East 1434

arrived 1534

Setup camp.

1600 Ruth overtook work

Miriam + I checked beach rest for eruptions, etc.

4:15 - 1st likely site - 1 tubbles

2nd " - 13

3rd site - 21 + 1 dead -

Ruth - 18

4:45 Total @ 6:25 = 53

(Females 2 or 3 digging tonight)

1st ones $\approx 9:05$

2 dug out $\approx 12:12$
Nest - straps - 40

pm. $\approx 7:4$ by 10:15
 ≈ 22 til 12 midnight - 1 dug out (15)

total ≈ 149

8 Aug - Sun - East am

will search for last wbb. eruptions

4⁵ nest only ≈ 12 hatchlings

Will total ct on Jen - ≈ 161
leave $\approx 10:15$ arrive Tern 11AM ^{correct}

6-8 were found dead re. crabs

2⁴⁵ - 4:30 - cleaned, washed, punched 30 turtles

5¹⁵ - 7 - cleaned, washed, punched 30 more turtles

Will release after sunset

Hold nest till tomorrow.

1 turtle found upside down +
A dead in tray w/ sand.
unmarked - holding to punch
(from East today)

Will try to feed turtles being
held tomorrow.

NOTE - Turtles being held
group were not treated as their
counterparts - (Held overnight
on sand until a.m. before on
H₂O - glue had extra - 1/2 hrs
before H₂O.

Group I will put these tomorrow
in water @ same time as
released ones.

8:55 pm - 1st batch in water -
all but 1 right away - all
w/in 30 mins.

10:00 - 2nd group punched today!
all in water by 10:15
Very active -

holding time ~ 24 hrs.

Released to date 191 total M
Punch dead beach - None today

9 August - Mon. Team

No turtles on a.m. check -

10⁰⁰ - 12⁰⁰ - punched 40 turtles -
39 were Harold

avg. as "team" 20 per hr.

Army punches + glue over

↓ punch - Miriam glues mine

(10 of this batch were from I.C.U.)
should have 110 to release tonight.

12⁰⁰ - 3⁰⁰ - 36 turtles punched -
45 min ~ 3 min each

4³⁰ - 6 pm - 34 turtles "

110 total punched today

9 pm - group release

total 40 - 10 were Harold - no graft ✓

2 ea) held for kevalo ✓

1 dead @ sevice - weak when

punched - frozen

R (31) released w/ Harolds

1 R 1 R 1 R 1 R

* 1959 * 1 found great crab w/ marked crab!

8/19.

group 2 - 2 held - "2"

10pm (31) R

1 weak, 1 ill - found dead am 8/10
34 total group 2

group 3 - 36 total

2 held "2"

34 (R)

10pm - Amy found 3 turtles that crabs had - 6 straps -

searched only found 6 straps -
Found older nest - but's going through erupted opening - 8-10 dead - ants - dug out (34) very heavy coral - smelly!!
Very weak - bony - deformed.

Found 3 more straps but never found nest.

of 6 straps - 4 dead by a.m. - 2 health but still had yolk sac

Total 8 straps - 4 dead
310 10
310 10

8/10 - Tues

East pm

Am Tern Search - several possible dig - very difficult to follow contours of nest.

1 dig - 13 healthy - still w/yolk sac - 1 egg - whole moving

34 dug out Mon pm -

2 dead @ 8:10 am

14 marked

14 too thin to punch

did 4 probably will die by pm

10 dead 42

Amy to release Terns pm - Tern started to feed turtles
Go to East this pm around 3

To date (362) collected

includes those that crashed

(292) Released w/marks

1 wend Harold - R no "

13 HOLD For Kevalo

32 - HOLD For R - 8:10 pm

20 - I.C.U.

102
34
109

Terns = 14 marked (R)
12 unmarked (R)
2 plain (M)
2 dead

8/19.

group 2 - 2 held - "2"

10pm (31) R

1 weak - I call - found dead am 8/10
34 total group 2

group 3 - 36 total

2 held "2"

34 (R)

10pm - Amy found 3 turtles that crabs had - strap -

searched only found 6 straps -
Found older nest - butts going through erupted opening - 8-10
dead - ants - dug out (34) very heavy coral - smelly!!

Very weak - bony - deformed.

Found 3 more straps but never found nest.

of 6 straps - 4 dead by a.m. - 2 health but still had yolk sac

Total 8 straps - 4 dead
3/10 (R)

8/10 - Tues

East pm

Am Tern Search - several possible dig - very difficult to follow contours of nest -

1 dig - 13 healthy - still w/yolk sac - 1 egg - whole - moving

34 dug out Mon pm -

2 dead @ 8/10 am

14 marked

14 too thin to punch

did 4 probably will die by pm

10 dead of 42

Amy to release Tues pm - Tern started to feed turtles go to East this pm around 3

To date (362) collected

includes those that crabs had

(292) Released w/mark

1 wend Harold - R no "

13 HOLD for Kewalo

32 - HOLD for R - 8/10 pm

20 - I.C.U.

102
54
48

Terns: 14 marked (R)
12 unmarked (R)
2 plain (NR)
2 dead

8/10 - arrive East @ 4pm -

1st evening search - no luck - 4³⁰-6
6³⁰-7³⁰ - 1st nest - 20
2nd " - 48

after sunset - only 17 stray - never
found nest (85)

wed East arm
8/11 - Ritt found 1 eruption (9 only
returned 10³⁰ -

3pm - punched 26 turtles - will
release all tonight
68 hold for Thurs. to punch -

As of 6pm - 11 Aug -

306 - R - marked

26 - to be R - 11 Aug marked

13 - R - unmarked

13 - HOLD (Kewalo)

68 - to be punched

18 - I.C.U.

20 - dead - 12 collected alive + 8 bodies

464 total

456 - C alive

8 - bodies

Wed 11 Aug
9¹⁵ - 10³⁰ - 26^(P)
pm

experimented w/ attracting
turtles to lights - broad
beam ^(6 ft) worked fairly well -
turtles w/in circle of light
from 30+ ft in 3-5 min -
walked around area for
at least 5 more min.
Probably will work OK.
of 6 turtles (2 trials of 3)
4 came to light -
1 to water
1 no movement in time allotted

Thurs 12 Aug 82 Passed these
messages to Bill via

John 17-1 John
20-2 via
Bob
Bill

~~B~~ Turtles (marked @
Kewalo) How many?
8-10-20

~~X~~ Airdrop - OK 8/10/82

~~A~~ 3.) scapel blades - ^{Bill's} cabinet

~~X~~ Ride home for
Miriam - check w/
Bob F. for date

* ~~X~~ lights on East

~~X~~ Sheridan - scale
bleached

~~B~~ collected - 456 turtles
332 - marked + (P)
+ 86 to do today
[418]

Thurs 12 Aug - Tern
Amy's - a.m. check - no eruptions

10⁵⁵ - 11⁵⁰ - 34 turtles punched
75 min - 2.2 min avg. as team

2³⁰ - 4¹⁵ - 43 turtles punched
34 - East 9 I.C.U.
I.C.U. - unmarkable

Recaptured 1st 34 + 2 already
marked in I.C.U.

group - 36 includes 2 marked in I.C.U.

Released (34) @ 9-10pm ^{10⁰⁰ 1⁰⁰ AM} HOLD 2 Kwalo

Recama 43 - R(41) @ 10-10⁵⁰
^{1¹⁵ AM} plain HOLD 3 Kwalo

Amy not returned by 11pm
Vid on her.
she had found several turtles
crabs had gotten + a few
live turtles.

found nest -
50 dug out (included 6-8 Amy picked up)
total 26 fresh hatch (1) eggs 12 + 5 mang egg
8 5 - bodies crabs had
1 - egg found

total collected 50 Live
^{5 eggs dug out as 10⁰⁰ AM}
25 egg / fresh
75

some probably won't make it /
some eggs die prob. dead
will have John check

FRIDAY 13 Aug -
1 alive + marginal } you

3 did - strays
4 eggs hatched
39 alive
1 dead egg - twino
7 partial hatched egg I.C.U.
4 egg probably dead
75

Turtles being held are being
fed 2 x 5 daily
≈ 10am + 6pm
Separate feeding logs -
Tern a.m. check - nothing

East in pm - will try lights
* on poles to attract turtles
3 AM worked great - 4ft poles - 6v batt.
nest lamp

~~11/11/11
1/15/11
1/15/11~~

13 Fri East - 4pm arrival

4³⁰ 1st nest - 15

5⁴⁵ strays - 1

5⁵⁰ 2nd nest $\frac{69}{85}$ + (20⁺ dead)
85 dug out by 6³⁰

8³⁰pm - middle lt - ground exploded w/ turtles - found 1 then "gillions". Found nest only dug out 1 add coming to small light - once I found clutch - $\boxed{84}$ 83 total $\boxed{1}$ strays^{off}

1⁰⁰ 1 stray near pier
1⁰⁰ 1st nest end $\boxed{227}$ @ light w/
16 w/in 1st 3-4 min then 3 more
1 stray near tent

$\overline{22}$ lt - 22 total
 $\overline{4}$ strays total

T $\overline{26}$
4 luth's lt. +
30
strays

$\boxed{199}$

East - 8/14/82 - Saturday

1 nest - 5 only -

punched 39 turtles - 1-2³⁰ group 1 unmarked -

group 2 - 40 punched 39, 1 plain

9¹⁵-10¹⁵ - Released 76 turtles ^{74m} 2 in
HOLD for keep 10 - 3

1 - wouldn't move put in I.C.U.

1 died - found "belly up" - (on back)

7¹⁰ nest on a.m. or p.m. walk on Jew -

Sunday 15 Aug.

12-1¹⁰ 2 found dead from East

group 1 - 43 - punched (Edot)

1 from I.C.U. east rd.

44

2⁰⁰-4³⁰

group 2 - 39 punched (East) / 1 plain
1 very weak when punched

group 3 - 38 (East) ²⁰

$\overline{14}$ (Jern)

52

~~199~~
199
199

Release

- group 1 - 1 dead from Sat net.
39 Released
4 dead - ? very thin
- group 2 - 35 Released 34 M / 1 U
1 dead - weak one
- group 3 - all 52 Released

Alot of ghost crabs can only
be released 6-8 hatchlings @ a
time

TO DATE

12 MIDNITE 15 Aug -

738	TOTAL COLLECTED
621	RELEASED (MARKED)
17	UN "
25	HOLD FOR KEWAIA
26	DEAD
49	HOLD TO MARK 16 AUG
<u>738</u>	

Mon Marking - am - 25
16 Aug - pm - 34

Whale - Skate - start dig 10⁵⁰

111 - coral = dig nothing

101 - coral = " turtles

010 - coral = " egg shells
only

11:50 - 1st dig w/ turtles: 20 live
weak, buried under 4 dead
heavy coral - photos of dig

2nd - 3 live

3rd - 10 live

33 TOTAL - sent back to
American - marked - Mon afternoon
1:00A

East Is

arrive 7:4 pm

4:55 start ducking dig

4:10 found - 8 in turtle dig
1 in shear Hob

19 nest (diag)

SP10

24

3

58

2

9

67 bpm - TOTAL

6:30 - BP stepped on soft spots
activated entire clutch -
(11) turtles - all healthy - all
crawled out - amazingly fast
talking about it as I did.

(178)

1/2 on @ 2/755 -

by 9:00 pm - 58 hatchlings @
1/2 2-3 (from Jenn end of
island) a few @ ± 1

T-224

1/2 - 4 - 74

1/2 - 1 - 4

78

TOTAL @ 10 pm (314)

78
58
178
1/2 @ 1

156
78
234

342
178
214

tubs of 60 - 4 ea - 240

blue basket 73

pink 76+3

389

392

78 collected from 19 pm - 11:30 pm

via B.S.

T @ 11:30 pm
all from East

East 8/17 am -

2 found in turtle pit - fell in

(5) 43 - 1st dig
6/7 - 2nd dig

Punched - 75 total (Roll)

1 dead after marked

76 found upside down

pm - punched 13 on 2 sh 18 Aug

8/18 - Wed

Marked 45 + 13

2 UM

58 M

60 -

1 Hold Kewalo

(59 R) (58 M / 10 M)

Marked - 39 M

2 Hold Kewalo UM

41 TOTAL

2 Hold Kewalo M

37 R TOTAL

Marked - 48 - (R-46)

H: 1 Kewalo M

1 Dead

R-140 M

2 UM

6 HOLD TOTAL (20M / 4M)

148

8:30 pm - Mark 25 for 19 Aug R

8/19

am - marked 35

Total marked

207 on 8/19

206 R M

3 UM

9 pured

6 Hold

Totals

Collected

1210

Kewalo

39

Released

M

1101

UM

30

Mark.

40

8:20 - fuel tank nest emptied -

missed by less than

1ft when hatchlings emerged.

92 hatchlings -

Ruth will release -

unmarked

not included in totals.

507710
\$1250

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