

Kaloko, Keamano

Bureau

LOGGER

5 meters from West side  
3 meters from North side  
144072 6-9-00  
18186 6-9-00

PUAKO KIHOLA - 261374 - SLUICE 6-9-00  
KEAWA NUI - 29581 - POND 2 6-9-00  
MAUNA LANI  
KALOKO WAIKOLOA 1999-2001

SEA TURTLE CAM

PUAKO 2 MAY 2000 KIHOLA 9 JUNE 00

6 JULY 2000 KIHOLA KEAWA NUI Loggers p. 101  
p. 39 26 JUNE 00 P. 111

Roaring Spring

30 AUGUST 00 MAUNA LANI 1 JULY 00 P. 137  
KEAWA NUI 2 Fishpond turtles - p. 38

Compositions ML 4 JULY 2000

Name GEORGE BALAZS

808-983-5733

808-395-6409

KIHOLA TDR 24 OCT. 2001 PAGE 168 & 161  
9 3/4 in. x 7 1/2 in. 100 Leaves

Roaring Spring, PA 16673  
KALOKO 8 APRIL 2000

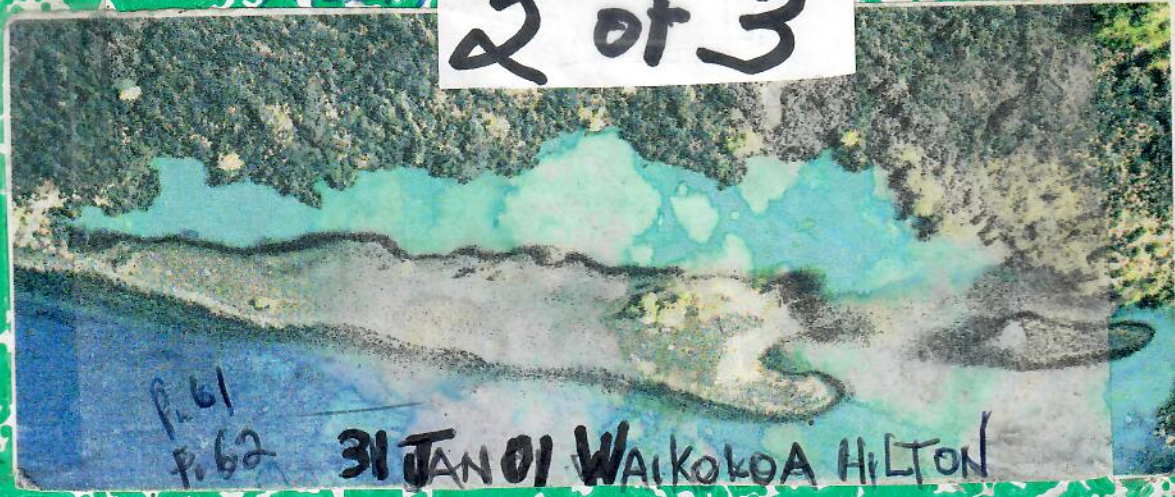


Marine Turtle Research  
NMFS HONOLULU LAB  
2570 Dole Street  
Honolulu, HI 96822-2396

SeaTurtleCam 7-9 APRIL 2000 - KIHOLA  
SEA TURTLE CAM PAGE 14 KIHOLA

BALAZS

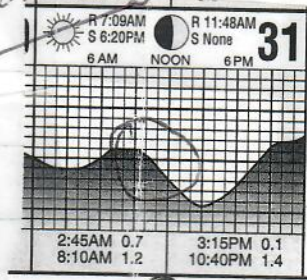
2 of 3



P. 61  
P. 62  
31 JAN 01 WAIKOLOA HILTON

Tessa  
31 JAN 01 HILTON  
WAIKOLOA  
Depart 6:50am Aloha  
Fl. 82

Wednesday



Thierry Work, Bob Morris, <sup>Hongkong</sup> Simon Chan,  
Mike Bresette Florida Power & Light

Objectives: ① Sample to Compare/contrast  
- Body Condition etc. w/ Kaloako & Kiholoa Peako  
turtles.

- ② ORAL Swabs (R. Morris)
- ③ Axial/Lateral measurements
- ④ Blood Cultures on Selected few (R. Morris)
- ⑤ CBC (white cell counts), PWC, TP, etc.
- ⑥ Blood smears
- ⑦ Phototool for visual ID
- ⑧ Collect Algae in Porpoise Pond - Dolphin Quest
- ⑨ Get Night Scope from MARC <sup>preserved</sup> hawksbill watching from Pottersfield

"Feedlot" <sup>need to bring to new area</sup> Thick algae on bottom in one area.  
Dolphin Quest opens gates - *Caulerpa racemosa*  
comes out; turtles come to feed.  
Departed 4:45 PM  
Data p. 62

62

CAPTURE DATE, LOCATION AND METHOD:

1/31/01 Waikoloa Hilton (hard snorkeled)  
PERSON RECORDING DATA: Laura

OLD TAGS: H123  
NEW TAGS: RFL 502F057809  
TUMOR SCORE: H121  
OTHER NEW TAGS: 221A720301

STRAIGHT CARAPACE-LENGTH: 66.0 WIDTH: 50.7  
NOTCH LENGTH: 64.9 DB: L.O. VB: L.C.  
CURVED CARAPACE LENGTH: 70.5 WIDTH: 63.5  
HEAD WIDTH: 10.6 SEX: MALE, FEMALE OR UNDETERMINED U  
PPS: YES OR NO OR NE Yes  
TAIL LENGTH: T 15 C 9.5

RIGHT FRONT FLIPPER WIDTH: 10.9 SAMPLES COLLECTED:  
PLASTRON LENGTH: 55.7 oral swab  
WEIGHT: 90 lbs blood dots

DESCRIPTIVE REMARKS:  
blood for TW, 7 RM, 3.6 LIQ, oral swab 10 RM  
blood dots  
Digital: 1 (eye), 2 (eye)

CAPTURE DATE, LOCATION AND METHOD:

1/31/01 Waikoloa Hilton (hard snorkeled)  
PERSON RECORDING DATA: Laura

OLD TAGS:  
NEW TAG: RFL 424E153113  
TUMOR SCORE: LH  
OTHER NEW TAGS: 4135147C7D

STRAIGHT CARAPACE-LENGTH: 60.9 WIDTH: 46.3  
NOTCH LENGTH: 60.8 DB: L.O. VB: L.C.  
CURVED CARAPACE LENGTH: 66.5 WIDTH: 57  
HEAD WIDTH: 9.8 SEX: MALE, FEMALE OR UNDETERMINED U  
PPS: YES OR NO OR NE Yes  
TAIL LENGTH: T 12.5 C 8.5

RIGHT FRONT FLIPPER WIDTH: 10.5 SAMPLES COLLECTED:  
PLASTRON LENGTH: 47.3 oral swab  
WEIGHT: 60 blood dots  
blood for TW, 7 RM

DESCRIPTIVE REMARKS:  
axial: 21.5  
lateral: 22.3  
Digital: 3 (eye), #4 (R eye)

CAPTURE DATE, LOCATION AND METHOD:

1/31/01 waikoloa

PERSON RECORDING DATA: Laura

net capture

Waikoloa in D...

413E39047E

OLD TAGS:

RH NEW TAGS

TUMOR SCORE

LH

OTHER NEW TAGS



424F166871



STRAIGHT CARAPACE-LENGTH: 56.8

WIDTH: 46.7

NOTCH LENGTH: 56.5

DB:

L.O.

VB:

L.O.

CURVED CARAPACE LENGTH: 61

WIDTH: 57

HEAD WIDTH: 9.1

SEX:

MALE, FEMALE OR UNDETERMINED

U

PPS: YES OR NO OR NE

YES

TAIL LENGTH: T 13

C

8.5

RIGHT FRONT FLIPPER WIDTH: 9.4

SAMPLES COLLECTED:

oral swab

PLASTRON LENGTH: 46.3

blood dots

WEIGHT: 66 lbs

Blood for TW & RM

DESCRIPTIVE REMARKS:

axial: 26.0

3 L10 lateral: 25.7 (seam of 2-3 central)

Digital #1 (R eye) photos

lateral: anterior (-post 3rd bilateral seam)

CAPTURE DATE, LOCATION AND METHOD:

1/31/01 waikoloa Hilton

PERSON RECORDING DATA: Laura

net capture coming in 2 channels

OLD TAGS:

407CFA4578

NEW TAGS: RFL

TUMOR SCORE

LH

OTHER NEW TAGS

413517410C



STRAIGHT CARAPACE-LENGTH: 67.9

WIDTH: 53

NOTCH LENGTH: 67.5

DB:

L.O.

VB:

L.O.

CURVED CARAPACE LENGTH: 73.5

WIDTH: 66

HEAD WIDTH: 9.9

SEX:

MALE, FEMALE OR UNDETERMINED

U

PPS: YES OR NO OR NE

YES

TAIL LENGTH: T 17

C

12

RIGHT FRONT FLIPPER WIDTH: 11.8

SAMPLES COLLECTED:

oral swab RM

PLASTRON LENGTH: 54.7

blood dots

WEIGHT: 101 lbs

blood for TW & RM

DESCRIPTIVE REMARKS:

axial: 29.9

lateral: 28.4

Digital [Disk 2] photos #3 (L eye) #4 (R eye)

lateral: anterior (-post 3rd bilateral seam)

Scaevine/guan  
Tadpoles

Lawrence Francisco, N. Kohala Waikaloa  
Restaur

CAPTURE DATE, LOCATION AND METHOD:

5) 1/31/01 waikaloa Hilton  
PERSON RECORDING DATA: Laura

CAPTURE DATE, LOCATION AND METHOD:

1/31/01 Waikaloa Hilton  
PERSON RECORDING DATA: Laura

OLD TAGS: RFLR487

NEW TAGS: 4135226B1E

TUMOR SCORE: 0

OTHER NEW TAGS: RH

T.P.T. 4135767509

OLD TAGS: 407677184F

NEW TAGS: RFL

TUMOR SCORE: 0

OTHER NEW TAGS: LH

T.P.T. 413628263B

STRAIGHT CARAPACE-LENGTH: 55.9 WIDTH: 44.3

NOTCH LENGTH: 55.4 DB: L.O. VB: L.C

CURVED CARAPACE LENGTH: 61 WIDTH: 59.5

HEAD WIDTH: 8.8 SEX: MALE, FEMALE OR UNDETERMINED U

PPS: YES OR NO OR NE YES

TAIL LENGTH: T 13.5 C 8.0

RIGHT FRONT FLIPPER WIDTH: 10.2

PLASTRON LENGTH: 45.4

WEIGHT: 61 lbs

DESCRIPTIVE REMARKS:

3 ml L10  
axial: 23.5  
lateral: 23.2  
Digital Disk 2: #5 (L eye) #6 (R eye)

STRAIGHT CARAPACE-LENGTH: 60.4 WIDTH: 49.3

NOTCH LENGTH: 59.9 DB: L.O. VB: L.C

CURVED CARAPACE LENGTH: 66 WIDTH: 58.5

HEAD WIDTH: 9.7 SEX: MALE, FEMALE OR UNDETERMINED U

PPS: YES OR NO OR NE YES

TAIL LENGTH: T 12 C 8

RIGHT FRONT FLIPPER WIDTH: 10.1

PLASTRON LENGTH: 48.9

WEIGHT: 74 lbs

DESCRIPTIVE REMARKS:

Digital #7 (L eye) axial: 25.9  
Disk #8 (R eye) lateral: 25.4

SAMPLES COLLECTED:  
oral swab RM  
blood dots  
blood for TW & RM

CAPTURE DATE, LOCATION AND METHOD:

1/31/01 waikaloa

net capture  
beginning in  
channel

PERSON RECORDING DATA: Laura

7

OLD TAGS:

NEW TAGS:

424F246731



TUMOR SCORE

0

OTHER NEW TAGS:

LH

413E40374D



STRAIGHT CARAPACE-LENGTH: 53.2

WIDTH: 40.9

NOTCH LENGTH: 52.6

DB: 57.5

L.O. VB: L.C

CURVED CARAPACE LENGTH: 49.5

WIDTH: 49.5

HEAD WIDTH: 8.5

SEX: YES

MALE, FEMALE OR UNDETERMINED

U

PPS: YES OR NO OR NE

YES

TAIL LENGTH: T 11

C 7

RIGHT FRONT FLIPPER WIDTH: 43.4

9.1

SAMPLES COLLECTED:

PLASTRON LENGTH: 45 lbs

43.4

blood dot

WEIGHT: 45 lbs

45 lbs

blood for TW+RM

DESCRIPTIVE REMARKS:

axial: 20.9

lateral: 20.1

3 mls L1Q

CAPTURE DATE, LOCATION AND METHOD:

1/31/01 waikaloa Hot.

hand snorkel

PERSON RECORDING DATA: Laura

8

OLD TAGS:

220E060D05

RF-V695

LF-V696

TUMOR SCORE

0

OTHER NEW TAGS:

LH

423F324C68



STRAIGHT CARAPACE-LENGTH: 45.0

WIDTH: 36.2

NOTCH LENGTH: 44.8

DB: 48.5

L.O. VB: L.C

CURVED CARAPACE LENGTH: 48.5

WIDTH: 43

HEAD WIDTH: 7.4

SEX: YES

MALE, FEMALE OR UNDETERMINED

U

PPS: YES OR NO OR NE

NO

TAIL LENGTH: T 10

C 7.5

RIGHT FRONT FLIPPER WIDTH: 35.9

7.6

SAMPLES COLLECTED:

PLASTRON LENGTH: 28 lbs

35.9

blood dot

WEIGHT: 28 lbs

food sample

blood for TW+RM

DESCRIPTIVE REMARKS:

axial: 18.9

lateral: 18.7

E

CAPTURE DATE, LOCATION AND METHOD:

1/31/01 Waikaloa Hotel hand snorkel

PERSON RECORDING DATA:

OLD TAGS:  LF 407D327C32

RF-Q778

TUMOR SCORE

0

NEW TAGS: RFL

LFL

OTHER NEW TAGS:

LH

42500C5B33



STRAIGHT CARAPACE-LENGTH:

WIDTH:

NOTCH LENGTH:

DB:

VB:

CURVED CARAPACE LENGTH:

WIDTH:

HEAD WIDTH:

SEX: MALE, FEMALE OR UNDETERMINED

PPS: YES OR NO OR NE

TAIL LENGTH: T

C

RIGHT FRONT FLIPPER WIDTH:

SAMPLES COLLECTED

PLASTRON LENGTH:

WEIGHT:

DESCRIPTIVE REMARKS:

axial: 26.1

lateral: 25.9

no head lip

CAPTURE DATE, LOCATION AND METHOD:

1/31/01 Waikaloa Hotel hand snorkel

PERSON RECORDING DATA: Laura

OLD TAGS:  LF 221A7B0930

RH-V819

LF-V818

RF-V817

TUMOR SCORE

0

NEW TAGS: RFL

LFL

OTHER NEW TAGS:

LH

424F233D3B



STRAIGHT CARAPACE-LENGTH:

WIDTH:

NOTCH LENGTH:

DB:

VB:

CURVED CARAPACE LENGTH:

WIDTH:

HEAD WIDTH:

SEX: MALE, FEMALE OR UNDETERMINED

PPS: YES OR NO OR NE

TAIL LENGTH: T

C

RIGHT FRONT FLIPPER WIDTH:

SAMPLES COLLECTED

PLASTRON LENGTH:

WEIGHT:

DESCRIPTIVE REMARKS:

fat

axial: 27.2

lateral: 27.7

66

70

CAPTURE DATE, LOCATION AND METHOD:

1/31/01 Waikaloa Hotel

PERSON RECORDING DATA: Laura

Hand snapper  
thucksbill

OLD TAGS:

407C57301D

LFF Q779

RFF V700

TUMOR SCORE

0

NEW TAGS: RFL

LFL

OTHER NEW TAGS:

STRAIGHT CARAPACE-LENGTH: 52.3

WIDTH: 40.1

NOTCH LENGTH: 49.1

L.O.

VB: L.C

CURVED CARAPACE LENGTH: 57

WIDTH: 47.5

HEAD WIDTH: 6.9

SEX: MALE, FEMALE OR UNDETERMINED

PPS: YES OR NO OR NE

YES

TAIL LENGTH: T 8.5

C

RIGHT FRONT FLIPPER WIDTH: 38.5

SAMPLES COLLECTED:

PLASTRON LENGTH: 34 lbs

38.5

blood dots

blood for tw+RM

WEIGHT: 34 lbs

DESCRIPTIVE REMARKS:

no head tag  
Digital: # photo  
Disk # 9 | Disk # 3  
#1 (L eye)  
#2 (R eye)  
Coysters growing in shell cracks  
axial: 7.5  
lateral: 17.4  
Bilateral fracture  
to mandible (old)  
LHF: longitudinally  
half missing in  
heel

CAPTURE DATE, LOCATION AND METHOD:

1/31/01 Waikaloa Hotel

PERSON RECORDING DATA:

hand snapper

BJD 1/31/01

OLD TAGS:

221A4D5B13

RF-V697

TUMOR SCORE

0

NEW TAGS: RFL

LFL

OTHER NEW TAGS:

STRAIGHT CARAPACE-LENGTH: 59.5

WIDTH: 47.6

NOTCH LENGTH: 58.7

L.O.

VB: L.C

CURVED CARAPACE LENGTH: 63.5

WIDTH: 55.5

HEAD WIDTH: 8.9

SEX: MALE, FEMALE OR UNDETERMINED

PPS: YES OR NO OR NE

NO

TAIL LENGTH: T 11

C

RIGHT FRONT FLIPPER WIDTH: 48.0

SAMPLES COLLECTED:

PLASTRON LENGTH: 65

48.0

mouth  
food sample

WEIGHT: 65

of algae at feed lot

DESCRIPTIVE REMARKS:

not injected  
blood-sample axial  
-10 laterals



424E687406



CAPTURE DATE, LOCATION AND METHOD: wednesday 10-24-06

PERSON RECORDING DATA: Veronica M  
Kittolo ed not to tag BASK

OLD TAGS: LH 4135735726 NEW TAGS: RFL           
RH 4136047670 LFL           
TUMOR SCORE: RF 7776  
LF 7774 OTHER NEW TAGS:           
RH Y116

TUMOR SCORE: 0  
STRAIGHT CARAPACE-LENGTH: 68.6 WIDTH: 56.4  
LH Q29Z

NOTCH LENGTH: 68.3 DB: L.O. VB: L.C  
CURVED CARAPACE LENGTH: 74.5 WIDTH: 70.1

HEAD WIDTH: 10.3 SEX: NO MALE, FEMALE OR UNDETERMINED U

PPS: YES OR NO OR NE NO  
TAIL LENGTH: T          C         

RIGHT FRONT FLIPPER WIDTH: 11.2 SAMPLES COLLECTED:         

PLASTRON LENGTH: 58.0

WEIGHT: 101.10g

DESCRIPTIVE REMARKS: DRAGS =  
old new MOB TOOL #53 redone right only  
sonic tag: 0070883 10.6 test left  
+TDR

EMACIATED released: 12:39 PM  
1500 Bump

CAPTURE DATE, LOCATION AND METHOD: wednesday 10-24-06

PERSON RECORDING DATA: Veronica M  
Kittolo M053 BASK

OLD TAGS: RF 3317 NEW TAGS: RFL           
RH 563 LFL           
TUMOR SCORE: LH 8733  
LF 7782 OTHER NEW TAGS:         

TUMOR SCORE: 0  
STRAIGHT CARAPACE-LENGTH: 71.6 WIDTH:           
LH 4074307165 LF 1F7116SP7E

NOTCH LENGTH: 71.6 DB: L.O. VB: L.O  
CURVED CARAPACE LENGTH: 76.5 WIDTH: 70.0

HEAD WIDTH: 10.5 SEX:          MALE, FEMALE OR UNDETERMINED U

PPS: YES OR NO OR NE Y  
TAIL LENGTH: T 18 C 12

RIGHT FRONT FLIPPER WIDTH: 13.3 SAMPLES COLLECTED:         

PLASTRON LENGTH: 59.4

WEIGHT: 111.05

DESCRIPTIVE REMARKS:           
axial: 27.5  
lateral: 27.9  
6 ord bumps  
gill raker fragments collected  
mt: #94 sonic: 249 mt date: 98

CAPTURE DATE, LOCATION AND METHOD:

Wednesday 10-24-01  
Kitholo ed motor by BA SK

PERSON RECORDING DATA: Veronica M

OLD TAGS:

LH 4135735726  
RH 4136041020  
RF 7776  
LF 7777  
RH Y116

NEW TAGS: RFL  
LFL

OTHER NEW TAGS:

STRAIGHT CARAPACE-LENGTH: 68.3

WIDTH: 56.4

NOTCH LENGTH: 68.3

DB: J.O.

VB: L.C.

CURVED CARAPACE LENGTH: 74.5

WIDTH: 70.1

HEAD WIDTH: 10.3

SEX: MALE, FEMALE OR UNDETERMINED

U

PPS: YES OR NO OR NE

NO

TAIL LENGTH: T

C

RIGHT FRONT FLIPPER WIDTH: 11.2

SAMPLES COLLECTED

PLASTRON LENGTH: 58.0

WEIGHT: 101.105

DESCRIPTIVE REMARKS:

ORACS =  
old motor tool #53 reduce right only  
new sonic tag: 0070883 10.6 1st. left  
+TDR  
MILD EMACIATION released 12:39 PM  
1 oval bump - SEE PASE 161 & 164 FOR MARC DURS

CAPTURE DATE, LOCATION AND METHOD:

Kitholo Wed 10/24/01 BASK  
PERSON RECORDING DATA: Veronica M

CAPTURE DATE, LOCATION AND METHOD:

Friday 10-24-01  
Kitholo motor by BASK

PERSON RECORDING DATA: Veronica M

OLD TAGS:

RF 3317  
RH 563  
LH 8733  
LF 7782

NEW TAGS: RFL  
LFL

OTHER NEW TAGS:

STRAIGHT CARAPACE-LENGTH: 71.6

WIDTH: 71.6

NOTCH LENGTH: 71.6

DB: L.O.

VB: L.C.

CURVED CARAPACE LENGTH: 76.5

WIDTH: 70.0

HEAD WIDTH: 10.5

SEX: MALE, FEMALE OR UNDETERMINED

U

PPS: YES OR NO OR NE

Y

TAIL LENGTH: T

C

RIGHT FRONT FLIPPER WIDTH: 13.3

SAMPLES COLLECTED

PLASTRON LENGTH: 59.4

WEIGHT: 111.105

DESCRIPTIVE REMARKS:

ORACS = 27.5  
lateral: 27.9  
6 oval bumps, 4 Gillidian fragments collected  
+TDR  
MILD EMACIATION released 12:39 PM  
1 oval bump - SEE PASE 161 & 164 FOR MARC DURS  
sonic: 249  
TDR: 00-032  
mt: #94  
wt done: 98

CAPTURE DATE

10-23

location and method of capture

hand/notes  
20.50/h

recorder

Photo

CAPTURE DATE, LOCATION AND METHOD:

Kiholo Wed 10/24/01 BASK <sup>9:10</sup>  
 PERSON RECORDING DATA: Veronica

OLD TAGS:  
 LF B960  
 RF B961  
 LF B962  
 RH B963

NEW TAGS: RFL 422 F175374  
 LFL 422 D586541

TUMOR SCORE: 0

LF 2201366329

STRAIGHT CARAPACE-LENGTH: 58.4 WIDTH: 48.0  
 NOTCH LENGTH: 57.9 DB: — L.O. VB: — L.C.  
 CURVED CARAPACE LENGTH: 62.2 WIDTH: 55.6

HEAD WIDTH: 8.7 SEX: MALE, FEMALE OR UNDETERMINED U  
 PPS: YES OR NO OR NE Y

TAIL LENGTH: T 14 C 9

RIGHT FRONT FLIPPER WIDTH: 10.4 SAMPLES COLLECTED:

PLASTRON LENGTH: 46.6

WEIGHT: 58 lbs

DESCRIPTIVE REMARKS:

opall: 22.2 cm  
 lateral: 28.3 cm  
 1 oral bump  
 soft palate  
 ribbing

*(circled)*  
 New tag  
 2201366329

10-25-01  
 END

(3)

CAPTURE DATE, LOCATION AND METHOD OF CAPTURE

9-25 ✓ hand/basking Kanobu ✓  
 2050 h ✓  
 recorder

PIT tag bar code

old tags: RFL 41020064230 ✓  
 LFL 4108130900 ✓  
 RFL 4108130900 ✓  
 RFL 4108130900 ✓  
 RFL 4108130900 ✓

other new tags:

straight carapace length: cm. notch: cm.  
 straight carapace width: cm.

curved carapace length: 52.1 cm. curved width: 46.6 cm. sex: male  female unknown

head width: cm. total: cm. cloaca: cm.

PPS: YES  NO  tail length: cm. weight: 36 lbs.

right front flipper: cm. samples collected

plastron: cm.

plastron: cm.

descriptive remarks

TS = 22.0 ✓  
 TE = 26.0 ✓  
 TB = 28.25 ✓  
 TC =  
 TP = 27 ✓  
 PIC. 22099  
 2293  
 2294  
 ✓ Note Tool 57  
 From P. 57  
 GO TO PAGE 70

(69)

④ capture date 9-23 ✓ location and method of capture hand/basking 21:05 ✓ Kiholo ✓  
 JILL recorder

old tags: LK 415037765C ✓  
 RH 4150473951 ✓

PIT tag bar code

other new tags:

straight carapace length: cm. notch: cm.  
 straight carapace width: cm.

curved carapace length: 39.3 cm. curved width: 36.0 cm. sex: male female unknown  
 head width: cm. total: cm. cloaca: cm.

PPS: YES NO weight: 17 lbs. samples collected

right front flipper: cm. plastron: cm.

descriptive remarks  
 Ts = 23 ✓  
 Tc = 24 ✓  
 Tb = 26 ✓  
 Te =  
 Tp = 23 ✓  
 2295 3 pictures  
 2294  
 reprinted # 2

⑤ capture date 9-23 ✓ location and method of capture hand captures/basking 2127 ✓ Kiholo ✓  
 JILL recorder

old tags: none

PIT tag bar code 4150426A59 ✓  
 415043603F ✓

other new tags:

straight carapace length: cm. notch: cm.  
 straight carapace width: cm.

curved carapace length: 65.1 cm. curved width: 65.0 cm. sex: male female unknown  
 head width: cm. total: 57.3 cm. cloaca: cm.

PPS: YES NO tail length: 57.0 cm. weight: 62 lbs. samples collected

right front flipper: cm. plastron: cm.

descriptive remarks  
 Ts = 17 ✓  
 Tc = 22 ✓  
 Tb = 26.5 - 18 cm ✓  
 Te =  
 Tp = 21 ✓  
 mild scitken plastron  
 2297  
 2298  
 2299  
 C916  
 From page 69

From p. 70

[23 OCT 2001]

71

⑥ capture date: 9/23 21:48 hr. location and method of capture: Kiholo ✓  
 recorder: Katie H. hand capture/basking

PIT tag bar code: LHF 415057134C ✓  
 old tags: UK 40774A517E  
 other new tags:

straight carapace length: [ ] cm. notch: [ ] cm.  
 straight carapace width: [ ] cm.  
 curved carapace length: 45.5 cm. curved width: 38.1 cm.  
 sex: [ ] male [ ] female [ ] unknown  
 head width: [ ] cm. total tail length: [ ] cm. cloaca: [ ] cm.  
 PPS: [ ] [ ] weight: 20 lbs. samples collected: [ ]  
 right front flipper: [ ] cm.  
 plastron: [ ] cm.

descriptive remarks  
 Ts = 17°C / mototobled - 97  
 Tc = 22°C /  
 Tb = 29.0°C - 18 cm pictures: 2300  
 Te = 2301  
 Tp = 21°C / 2302

END  
 9-23-pp  
 Marc Rice  
 Kiholo night

31 JAN. 01

# PARTICIPANTS

2  
Remarks  
Haley

Name


~~email if you wish~~

Remarks

HILTON  
WATKINS

- please email: mnakade@hpa.edu  
for assistance in the translation of  
the turtle gr a sheet.

+ Mike Bressette; Simon Chari; <sup>Bob Morris</sup> Therynork  
- Veronica Morriss - vmorriss@hpa.edu <sup>or</sup>  
cricketz4@hotmail.com

- Katie Harrington kharrington@hpa.edu  
 my dad's roy@harrington.com

- emi tokita : etokita@hpa.edu.

Jilly Quaintance jquaintance@hpa.edu  
not i, like acquaintance not quaintance

Alex DiTullio <sup>it is</sup> fishonamish@hotmail.com

Laura Morgan Morgs 527@hotmail.com  
(available for slave labor)

Vanessa Bleacher vbleacher@hpa.edu

~~Peter Olson~~ repete14@hotmail.com  
P olson@hpa.edu

Bryan Ruch bruch@hpa.edu

ALLISON FUNDIS afundis@ecology.coa.edu

76  
16 photos of  
group sent

EDWIN HARA (PHOTO)  
714 KANOELEHUA AVE  
HILO, HI 96720

8 April 2000

Paul Sugiyasha Troop 23 Parent  
Mike Sarzo TR 23 "

Jason Inaba Troop 23 Parent

Kevin Kurata Troop 23 Parent

Stanley Bond Kaloa-Honokaaui NHP

Nick Quintance HPA

Rebecca Goodman HPA 8th

Jill Quintance HPA 9th

HPA

Apr-26-2000 12:27pm From-HAWAII PRINTING CORP #9350518 T-608 P.001/001 F-873



HAWAII PRINTING CORPORATION

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Hilo, Hawaii 96720  
Telephone (808) 961-6651  
Facsimile (808) 935-0518

FACSIMILE COVER LETTER

Date: 4-26-2000 Time: (A.M.) (P.M.)

We are sending 1 pages (including this cover letter).

CONFIRMATION REQUESTED: YES NO

This information is for: GEORGE H. BALAZS

Firm: Fax Phone: 983-2902

MESSAGE:

GEORGE:  
  
THANK YOU VERY MUCH FOR THE PHOTOS & THE INFORMATION SHEETS...  
  
I'LL PASS ON THE PHOTOS TO THE SCOUTS...  
  
LOOK FORWARD WITH WORKING TOGETHER AGAIN IN THE NEAR FUTURE. YOU CAN CALL ME ANY TIME AT THE ABOVE NUMBER AND I CAN COORDINATE THE EFFORT.

MAHALO,  
EDWIN HARA

FROM:

8 April 2000  
Saturday KAZOKU

Michael Iwashita	Troop 23
Jonathan Hara	+23 BS.
Reyn M. Kashiwamura	Troop 23
Kevin Higashi ☺	Troop 23
Brandon Maeda	Troop 23
Sherman Kaopua	Troop 23
Scott Saito	Troop 23
Jordan Maeda	TROOP 23
Ashley Petersen	HPA
JW Wood	HPA 7th
India Emerald Fox	HPA 8th grade
TY Yoshii	Troop 23
Darren Inaba	Troop 23
Justin <del>Wata</del>	Troop 23
Byron Jimoto	Troop 23
Sean Franco	Troop 23
Jason Sugibayashi	Troop 23
Ronald Takamoto	Scoutmaster
Van Kashiwamura	Parent
Howard Higashi	PARENT
Byron Fujimoto	Assistant Scoutmaster
Akemi Bhatt	HPA



L-20 *Denise - did I give those to* (Shawn) 7 DFI + Denise PIT Tag List already?

Date: Wed, 22 Dec 1999 22:09:23 -1000  
 From: MARC RICE <mrice@hpa.edu>  
 To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>  
 Subject: Re: flight information

Gosh, I wonder when or if they are going to make any flights to Midway? I guess I better call them and find out when they are going to fly.

Anyway, the day at Kiholo went well. There wasn't a lot of basking activity.. only 16 events during the entire day. The majority of the animals were on the south side but there were a couple of animals on the north side that we were able to work on. We captured one that had been out for several hours and had a good record of carapace / substrate and globe temps. The other one had just emerged and I thought it worthwhile to get at least one data point for body temp prior to / at the beginning of basking. The two sets of data are below:

*If so Return If no*  
*copy for you two and return this to me*  
*GeoS*

I'LL FAX THE DATA SHEETS TO YOU FRIDAY.

*Not photo - no material given*  
 BASKING TURTLE NUMBER 9 ON 12/22/99 KIHOLO BAY CAPTURED AT 1329 HRS AND RELEASED AT 1338 HRS. PICTURE TAKEN OF LEFT AND RIGHT SIDE OF HEAD. ANIMAL APPEARS ROBUST AND HEALTHY

Old Tags: LFF 221062262A  
 LH K435  
 RH B942  
 LFL K433  
 RFL HEALED NOTCH

NEW TAG: LH 410C2C680E

MEASUREMENTS: CCL= 52 CCW= 46 WT. = 33 LBS  
 CARAPACE TEMP = 32 DEGREES Tb = 30.4 DEGREES (20 CM DEEP)

WATER TEMP SURFACE = 24 DEGREES  
 WATER TEMP 3 FEET = 25.4 DEGREES

*Not photo - no material given*  
 BASKING TURTLE NUMBER 16 ON 12/22/99 KIHOLO BAY CAPTURED AT 1542 HRS AND RELEASED AT 1551 HRS. ANIMAL APPEARS HEALTHY AND ROBUST.

OLD TAGS: LFF 41037B4466  
 LFL V671  
 RFL V670  
 LH Q750

NEW TAG: LH 410C010D15

MEASUREMENTS: CCL=51 CCW= 45 WT. = 32 LBS  
 CARAPACE TEMP = 18 DEGREES Tb= 25.9 DEGREES (15 CM DEEP)

WATER TEMP SURFACE = 23.9 DEGREES  
 WATER TEMP 3 FEET = 25.4 DEGREES

From: Sun, 26 Dec 1999 22:02:03 -1000  
From: marc rice <mrice@hpa.edu>  
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>  
Subject: Re: Basking turtle No. 9 etc

No. 9 was my reference number and not the moto tool number-- this turtle was unmarked.

I hope that the lf pit tag shows that it wasn't moto tooled before...  
No. 16 had old tag in LFL 41037B4466. Again, I hope the database will show that this tag belongs in that flipper!

In both cases the new tags were placed in the LH.  
I didn't get around to faxing the data sheets on Friday so will get to it in the morning.

Let me know if there are other questions / errors in the data I sent.  
Received you information on the misreading of tags and proper placement of the tags and will comply. Sorry about the reading or lack thereof. While we still have a lot of animals with metal tags on, we could double check the presence of PIT tags if we could bring the data base with us on trip where the environment would not preclude use of a computer. I suppose a printed list would be useful if the computer idea didn't pan out. I would be willing to bring along one of ours at any time.. just email me a list of the tag numbers and I can put it into a searchable excel document. This may keep us from double tagging.

So do you think we can try for Feb 12 to 19th for the Midway trip?

Aloha,  
Marc

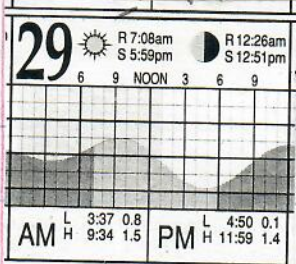
At 05:37 PM 12/26/99 -1000, you wrote:

>  
>Marc, was looking back over the email you sent me 22 Dec.  
>  
>By no. 9 do you mean Mototool 9, one we previously scoop netted? you  
>indicate putting in a new pit in the LHF. But if that's mototool 9 we  
>would have done that at scoop net time, which indicates it's lost  
>already? (or didn't read when you tried to read it).  
>  
>The other one, No. 16 (mototool 16?), you have written old pit LH, and  
>new pit LH. Could you double check notes on that, Mahalo.  
>  
>Your email said you would fax data sheets on Friday, but nothing showed  
>up here, maybe you mailed instead and of course that's fine. Aloha, George  
>

80

12-

99



Rice-BASK

**HAWAII PREPARATORY ACAI**  
 65-1692 KOHALA MOUNTAIN RD  
 KAMUELA, HAWAII 96743-847  
 (808) 885-7321  
 FAX (808) 881-4003

**FAX TRANSMITTAL**

Please advise if there are any problems with transmittal.

From: Marc Rice  
 Date: 12/30/99  
 To: George Balazs  
 Company/ School: NMFS  
 FAX Number: 808-983-2902

Number of Pages (including this cover sheet): \_\_\_\_\_

Message: George -  
Here is the data for the three turtles we did  
yesterday - MT #2, New MT #55 & MT #45  
I got some gnt data on basking animals and these 3  
were out for 4:20, 5:42 & 8:39 [Hrs:mins]

Date: Thu, 30 Dec 1999 13:24:21 -1000  
 From: Marc Rice <mrice@hpa.edu>  
 To: "George H. Balazs" <gbalazs@hnlab.nmfs.hawaii.edu>  
 Subject: Re: Forwarded mail....

Got back from Kiholo around 1600 last night after a successful trip. There were a number of turtles that carried out very long basks. There were three that were out as I arrived (0745) and remained there after I left at 1630 hours..!! We got three good Tb's on two known animals and one new one. All three had been out for extended periods and were nice and new. I'll be anxious to hear if we missed any pit tags on these three.. I did everything as you suggested in your earlier message. I think I will begin working on some of this data now and see what it tells us. Happy new year...  
 Marc

D 0

Deep Body Temp.

12/29/99

Old Tags: RH: 4150473951

New Tags:

LH: 41503F7C5C

Signs

captured at 1516

released at 1524

Carapace Temp =

CCL = 41

Tb = 31.9 at 18 cm.

CCW = 37.5

Head Photo: None

weight: 14 lbs.

mild emaciation

Moto # = 2

Carapace Sub

1, 28, 28 1612 hours

3, 28, 28 11

8, 28, 28 11

1615 hrs: 10 28

30 - Varies because of shadow

time 1516 - #14 crawled out

time 1524 #15 crawled out

time 1527 #16 crawled out

time 1529 #17 crawled out (smaller than 16) S

time 1555 #18 crawled out leaving large Pictus

1500 - #19 - M 19

#17 #16 0 #18 0

000

under

12/29/99

old tags: LFL V678

turtle #9

RFL V677

No pit tag found

mild emaciation

captured at: 1532 released at 1548

Carapace Temp: 31

new tags: LH-

Substrate: 35

Tb = 33.3 at 18 cm.

RH

weight: 20 lbs.

CCL = 45 CCW = 40.5

moto tool #55

Head photo: 2 taken

12/29/99 turtle #2

Carapace Temp: 34

Captured at 1554

old tags: LH 4150441353

LFL N728 RFL N727

LFL 410403482F

LH R490

Substrate: 30

Tb = 30.6 at 18 cm.

weight: 47

Head photo: none

CCL = 60

CCW = 53.5

moto #45

82

Reduce  
K/H

Katie Harrington, 10:16 PM 11/9/99 , <no subject>

X-Mailer: Microsoft Outlook Express for Macintosh - 4.01 (295)  
Date: Tue, 09 Nov 1999 22:16:01 -0800  
Subject: <no subject>  
From: "Katie Harrington" <kharrington@hpa.edu>  
To: Marc Rice <mrice@hpa.edu>

All done! I watched all the tapes and made the spreadsheet and chart. I used your tide measurements from the pond\_count\_11-1-2.xls you sent me. The turtles from 5:02 to 7:03 are all from only the data book. Otherwise I used the tape times rather than the data book times. I have the data book, so don't worry. Talked to the Watsons. They'll give me a ride as you know. We'll see about the food tomorrow after we talk to the kitchen crew. The other problem is for how many people we need to plan for since you won't get any replies from students until tomorrow, after we've packed. How much food did you want to bring along otherwise? Were we going to buy something at the shopping center for dinner? While I have yet to find the Frobishers, I managed to talk to Ms. Hindle, but she can't come. She did mention that many of the new teachers in the Middle School might be interested in going, it's your call. I think she mentioned Ms. Shay and a few others, but I can't remember any of their names. Finally, where do you want me to leave the video stuff like the monitor after we pack up since it goes in the truck? Okay, I'm done. I think that covers it. Have a nice day in Honolulu. Here's all the stuff from my project:

I counted the total number of numbered turtles, which equaled 27 of 53 turtles going out (including the one we couldn't read) - 50.94% of the turtles leaving and 25 of 52 turtles going in - 48.08% of turtles entering. This includes all repeats. NN stands for no number. and, #? means we couldn't read the specific number, but it had one.

Here's a bit of a list of the numbered turtles in the spreadsheet and data book from 11/2:

Turtles that entered/left the pond: 1 5 6 7 8 9 10 11 12 13  
14 15 16 18 19 20 22 23 24 26 27 28 29 30 32 33  
39 40 41 42 43 44 45

Turtles that left and returned later (11/2): 1 6 7 9 12 14 20 24  
26 27 28 30 32 39 43 44 45

Turtles not observed entering/leaving pond, but seen: 2 17 31 36

Turtles observed basking (lagoon): 31 44 2 19

Turtles never seen: 3 4 21 25 34 35 37 38

Note that 2, 3, and 4 were numbers on turtles we did not use in the pond study as they had been seen in the area before.

ifKatieifE

Something humorous too:

A murderer, sitting in the electric chair, was about to be executed.

"Have you any last requests?" asked the chaplain.

"Yes," replied the murderer. "Will you hold my hand?"

Attachment Converted: "c:\eudora\attach\Pond Count 11-2.xls"

Attachment Converted: "c:\eudora\attach\11-2 Pond Count Chart.xls"

FIGURE 1. 24 hour count of turtles moving in and out of awai at Kiholo Anchialine Pond on October 12 and 13.

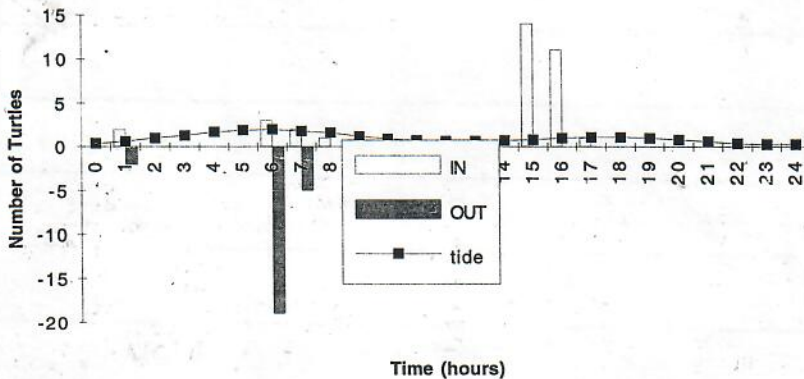
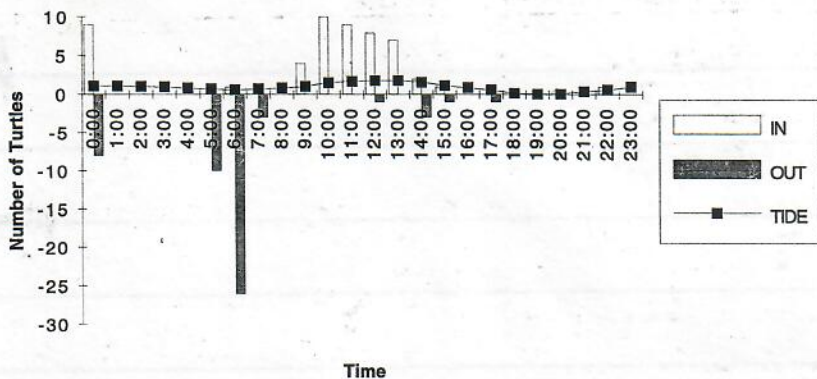


Figure 2. 24 hour count of turtles moving in and out of awai at Kiholo Mixohaline Pond on Nov 1 and 2.



Date: Sat, 13 Nov 1999 09:07:48 -1000  
 From: Marc Rice <mrice@hpa.edu>  
 To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>  
 Subject: Re: Abstract

*Reduce  
Kiholo*

George,

The trip went well and we got another 24 hours window on the awai. There were far fewer animals on this trip, but we haven't looked at the video yet so can't say what the total count was. We did a night snorkel in the lagoon and got a count of 112 turtles on the north side and 10 turtles on the south side.. a number of the numbered turtles were observed. There were 6 or eight animals basking on the shores as late at 2100 hours that night.

We also were able to Kayak the mixo pond just to see what it was like. is quite shallow and, as you know, almost totally covered with a thick layer of ooze. There were 14 or so turtles in the two areas of the pond that we observed - one (#13) was out of the water and dry, basking in the back pond area. We observed several turtles sitting on the bottom in the muck, pretty much covered by the silt.. there is a 10 inch layer of fresh water 21-22 degrees on top which is clear and then the warm (I assume) saline waters are below (very murky). We propose to measure the salinity and temperature the next time we are down there. So, some of the turtles are laying in the warmer water but there are still a lot of them that just lay along the edges of the pond in the cooler fresh water. There were 5 turtles feeding in the area near the campsite.. we collected the greed turf algae that is growing on the rock. There was one larger animal in the reeds apparently feeding. When we walked overthere after the tide went down, we found numerous freshly chopped reeds.. seems that the turtle was taking some of the reeds!

We didn't get to do much on the basking side. We did monitor the night baskers at 2000 hours on Thursday night before the snorkel and we got a 1700 hours count of baskers on Friday - There were 23 turtles out of the water at that time! The locations were noted and will be mapped.

When we get some more info from the tapes I will report more.

At 05:00 PM 11/12/99 -1000, you wrote:

>  
 >Marc, I hope your time at Kiholo went well. I'm faxing you comments back  
 >on what you gave me back from Katie. I've decided that we shouldn't talk  
 >on Monday (the three of us). Also, it's my view that the proceedings'  
 >abstract for this project should be kept to a short one, one page or less.  
 >Also, let's talk again about student projects, future ones I mean, about  
 >one or the other of us always being the lead author for any paper going to  
 >the Sea Turtle Symposium. I think that would make things easier all  
 >around, the student would still get significant experience and  
 >involvement, and also the writing would be at our immediate discretion and  
 >control, between the two of us. I think I can live a lot easier and  
 >happier with such an arrangement. The flow chart would still hold and be  
 >useful. Aloha, George

>  
 Marc R. Rice

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Date: Wed, 08 Dec 1999 08:07:20 -1000  
From: Marc Rice <mrice@hpa.edu>  
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>  
Subject: Re: 15th

Yes, we could do that using a kayak or swimming around in the pond. We did find that once we get into the water, it mixes the cool fresh water surface layer and the warm saline subsurface layer... working from the Kayak seemed to be the least disturbing to the water colume.

Some pond data from 11/22:  
Pond 1: surface salinity 5 ppt  
          subsurface salinity (3 ft. deep) 33ppt  
          surface temp 22.5 C  
          bottom temp 26 C  
Pond 2: surface salinity 0 ppt  
          subsurface salinity (3.5') 20 ppt  
          surface temp 22.7 C  
          bottom temp 26 C

At 07:33 AM 12/8/99 -1000, you wrote:  
>sounds good, I suppose also we should get some temperature reading on the  
>ponds (in addition to the loggers) for that very day when we first  
>arrive. Mahalo! Geo.

>  
>On Tue, 7 Dec 1999, Marc Rice wrote:  
>  
>> Thoughts about sampling protocol and timing:  
>> Pond Turtles:  
>> Purpose: Determine the internal body temperatures of animals that have  
>> spent the night in the mixohaline ponds at Kiholo.  
>> 1. capture turtles who are exiting after a night in the pond  
>> 2. take full set of measurements? in addition to internal body temp  
>> 3. release animals  
>> 4. do five animals  
>>  
>> Basking Turtles:  
>> Purpose: Determine the maximum internal body temperature attained by  
>> turtles that have been basking in the sun for know periods of time.  
>> 1. capture turtles that have been out basking for at least one hour??  
>> 2. try to get some that have been basking for longer periods-  
>> particularly during the hottest part of the day.  
>> 3. internal body temp, measure, identify (moto tool?), release  
>> 4. do five animals  
>> 5. record corresponding substrate, carapace and black ball temps at  
>> of capture for later comparison.  
>>

Date: Wed, 08 Dec 1999 21:49:48 -1000  
From: marc rice <mrice@hpa.edu>  
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>  
Subject: Re: Biological inventories workshop (fwd)

*George H. Balazs*  
*Kiholo*

George,  
Thanks for including me in the message about the inventories. I hope th  
it all works out. Did you get the image of kiholo in you noaa account? I  
think the second time it went through. I didn't send the pictures of the  
ponds yet, but will do so tomorrow. When we are able to get a more  
vertical picture of the lagoon, I will put the thing into ArcView and get  
it GeoRectified so that we can begin to plot usage of the area by basking  
turtles in that program.

We are also discussing the possibility of creating an image map of the  
lagoon so that anyone looking at the image on the internet can click on a  
particular locations and Zoom in to find text data, graphic data and (if it  
is an authorized observer) enter data on the presence of a basker or some  
other information. I know this sounds a little bazaar, but I will try and  
explain it too you more when we are together. I am very excited about the  
possibility of linking this to the webcam project.. I think it would be a  
great plus for NMFS, HPA and, of course, us. I am excited about the  
possibilities and hope thatwe have time to discuss them some time soon. I  
have a feeling that we will be quite busy on the 15th but soon after that  
maybe.

All of this is very transferrable to the Kaloko site... something that I  
am really excited about also.  
More soon

December 15, 1999

Post Office Box 265  
Alderpoint, CA 95511-0265

Frederick Potter, Jr.  
Post Office Box 265  
Alderpoint, CA 95511

Dear Mr. Balazs,

A very belated thank you for all the green turtle information you sent me last June! What a wealth of information that is. I've shared it with several people, but no one was more interested than my father, who grew up in the Honolulu Aquarium @ Waikiki. (I believe I mentioned during our brief conversation that my grandfather was curator from the early 1900's until his retirement about 1940.)

You told me to leave my name & address with your son, which I did and snapped this enclosure photo with a poor, disposable camera.

Thank you for the information and for all your work over all those years including passing along your interest to students. There is hope for MM  
Melekalikimaka — Rick Palle



Date: Mon, 17 Jan 2000 08:28:48 -1000  
From: Marc Rice <mrice@hpa.edu>  
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>  
Subject: Re: Kona Coast SeaTurtle WebCams

Reduce  
Kiholo

George,

Well, we made it back from Kiholo around 1600 yesterday. The trip went well and we got most (but not all) of the data we wanted. We were able to capture 5 turtles exiting the mixo pond Sunday morning early and got the internal temperatures. Four of the five were already numbered. All of the temps on those turtles hovered between 21 and 22 except one which was out around 0900 which was 22+.

We did two more internal temps on daytime baskers but our efforts were limited by the large number of visitors that were in the area. We only captured and measured when there was no one watching. I will forward the data to you. When we were out on the first day, I was stupid and left the databook at camp so I couldn't remember what moto tool Number we were on. So, I put 60 on the first one because I know we didn't have that one yet. As it turns out, the next number was supposed to be 56 so I did 56 and 57 next (total of three new numbers) That means that next time I/we will need to do numbers 58 and 59 to get back into the proper sequence. Sorry.

We did try to do some night baskers on Saturday night. I did not do the on Friday because there were campers in the area. We had 4 animals that were still out at 2000 hours but all but one of them (our old friend #2) went back in when they saw our lights (at least that is my interpretation.. two of them were on the other side of the lagoon (south) while we were walking on the north side and they immediately went back in... I really wanted them! So, my night vision scope is in the forefront of my mind.. we did get a Tb on #2, at 2020 hours which was around 25.4 degrees (environmental and substrate temps were both 19 degrees. There seems to be a long lag period as the body temp slowly decreases to surrounding temp... My suspicion is that these animals come out and warm up and remain out even when the outside temp drops because of their internal thermal inertia.. i.e., they lose heat less rapidly out of the water that they would in it???

How do I prove that one?

Also, I have yet to witness/observe any basking turtle that came out at night.. they are all out during the day and extend their stay into the night or the tide exposes them while they were laying in shallow water at night.

Ok, I will prepare the data to fax to you.

The webcam stuff really sounds great... critter cam... yes, why not (perhaps we can finally find that hidden cave where all the Kiholo turtles hide).

At 11:28 AM 1/16/00 -1000, you wrote:

>

>Greetings- Just to confirm with all of you that our agency's 30 day  
>travel order expiration time-line has now passed, so the air tickets for  
>our travel had to be returned. That's ok though, things like this are  
>bound to happen in any fledgling project. When the gear from Nokia is  
>in-hand, let me know and we'll start over in planning the field  
>work/obtaining the travel authorization.

>

>In the meantime, as I mentioned to Steve in a phone call on Friday, I want  
>you-all to know I've been in contact recently with a Daniel Zatz. Daniel

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**HAWAII PREPARATORY ACADEMY**  
65-1692 KOHALA MOUNTAIN ROAD  
KAMUELA, HAWAII 96743-8476  
(808) 885-7321  
FAX (808) 881-4003

**FAX TRANSMITTAL**

Please advise if there are any problems with transmittal. Ask for Administration Office.

From: Marc Rice

Date: 1/17/99

To: George Balazs

Company/ School: NMFS

FAX Number: 808-983-2902

Number of Pages (including this cover sheet): \_\_\_\_\_

Message: Data sheets for 8 turtles at  
Kiholo - 1/15/00 to 1/16/00

(1)

1/15/00 Kiholo Basking Project

Captured at 1520

Old Tags - V691  
V692

No old PIT

New PIT

Carapace Temp: 36° LH → 410B6F4D69

Substrate Temp: 36°

CCW = 46 cm

RH → 411959287C

SCL = 52.5 cm

T<sub>b</sub> = 34.0°C

Moto Tool #60

Basking data sheet - 1/15/00 - turtle #9

(2)

Carapace

#2 #8 basking Data sheet

20:20 hrs.

Old Tag

41503F7C5C

Released at 2030 hrs.

4150473951

mildly sunken (mild emaciation)

c temp = 21°

No other measurements taken because it was captured on the 29<sup>th</sup> of Dec. 99

s temp = 20

T<sub>b</sub> = 25.4°

20 cms. Deep

(3) Pond Exit

Carapace #45 - time = 0635.

1/16/99

(T<sub>b</sub>) ~~carapace~~ = 22.5 = T<sub>b</sub>

Carapace Temp = 21° (20cm deep)

PITS check-OK RFL & LH

LH - 4150441353

LFL 410403482F

90

④ Pond Exit

Carapace  
 #21 = 0714. (time.)  
 Tb. = 21.8° (15 cm.)  
 Carapace Temp 21°  
 wt. 27 lbs -  
 CCL - ~~47.5~~ 47.5  
 CCW - ~~41.4~~ 41.4

1/16/00

LH - 4103784771

LFL - 221A602568

⑤ Pond Exit  
0650 hrs

Carapace  
 #27  
 Carapace = 27 cm  
 Tb = 21.5°  
 ctemp = 21°  
 time = 6:41  
 CCL = 48  
 CCW = 42

1/16/00

Robust Looking

LH - 4104157F35

RH = 413621044F

WT = 27 lbs -

⑥

Pond Exit

Carapace #13 0725 hrs.  
 Tb = ~~22.0~~ 22°  
 wt. = 45  
 CCL = 56  
 CCW = 50

1/16/00

LH = 41363E4E00

LFL = 1F430E1A 96

OLD TAGS = H64, N695, N694

7 Pond exit

Moto tool # 56

1/16/00

carapace temp = 26°

OLD TAGS

Tb = 22.4°

LFL 410+124A74

wt = 32

40774C492D → LH

ccl = 49.5

Q755, Q756, Q757

ccw = 44

Captured 0848 hrs.

Released 0908

8 captured: 1051

Moto tool # 57

1/16/00

c temp = 28° = Carapace Temp

LFL?

OLD TAGS = RFL: H-295, H-294 \*No old Pit

Tb = ~~22.25~~ 25 (20cm deep)

PIT TAGS

wt = 35

410B130600

ccl = 53.5, ccw = 47



→ LH

captured: 1051



→ RH

Released: 1100

Met  
saw 2 emerald  
wound in plastic  
Sediment sample

0min	39°C	39°C
2min	39°C	39°C
3min	39°C	39°C

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Hawaii Tribune-Herald  
1-24-00

# BAKKEN

## Millionaire Bakken wants the state to approve land swap

By Dave Smith  
Tribune-Herald

Earl Bakken is asking the state to approve a land swap to allow him to expand his estate at Kiholo Bay.

Bakken, a philanthropist who has given millions of dollars to North Hawaii Community Hospital, last year spent nearly \$2.7 million to buy a house and three acres of land formerly owned by country singer Loretta Lynn that fronts the beach near the south end of Kiholo Bay in North Kona.



BAKKEN

Bakken wants to trade the property for a nine-acre portion of state land located directly behind his oceanfront estate. The addition of the state land would provide a "buffer" around Bakken's existing property, which contains landscaped grounds, a 13,000-square-foot home and other amenities.

Bakken's existing parcel, which is three acres in size with 700 feet of shoreline frontage, is one of eight privately owned, similar-sized

See BAKKEN,  
Page 10

parcels on the bay shores that were created in the late 1960s.

Assigned on the proposal, Bakken wants to trade a 13,000-square-foot parcel of state land for the three-acre parcel. The state is currently conducting an environmental assessment prepared for the land swap. Bakken also wants to create an easement providing access to his property from a next-door neighbor further up slope to the other side of the nine-acre parcel.

Bakken's representatives say that owing the former Lynn parcel could be a benefit to the state as it would extend the state's coastal frontage at Kiholo by 400 feet and provide infrastructure including the house and road access for recreational purposes. The environmental study said the state would also have control over anichaline ponds, lava tubes and other sensitive ecosystems found on the Lynn property.

Currently, the shore at Kiholo Bay, which is located makai of the 79- and 80-mile markers on the Queen Kaahumanu Highway, is used "informally" by the public for recreation including camping, the study said. However, access by vehicles over the road leading nearly a mile down to the beach is controlled by residents through locking gates.

Because of a lack of public facilities at Kiholo Bay, problems with trash and human waste are common in the area, the study said. Bakken's planners said a possible use of the Lynn property could be the development of restrooms for use by beach-goers. They said the state also should consider leasing the property to a nonprofit group that could act as caretakers for the public lands.

However, state officials have already expressed concerns over the use of the property.

In a letter accompanying the study, officials from the Big Island land office of the Department of Land

and Natural Resources said they have no qualms about the swap in general but object to the acquisition of the Lynn home. They said the DNR lacks the money and personnel to maintain it or existing easements and suggested another state agency could manage the property.

The swap will require the approval of the state Board of Land and Natural Resources as well as the state Legislature. Bakken also must obtain a permit for use of the state land, which is in a state conservation zone. County approvals required include building and grading permits and a Special Management Area permit.

The Big Island member of the land board, Russell Kokubun, said while he is not yet familiar with the details of Bakken's proposal, he believes it could have merit.

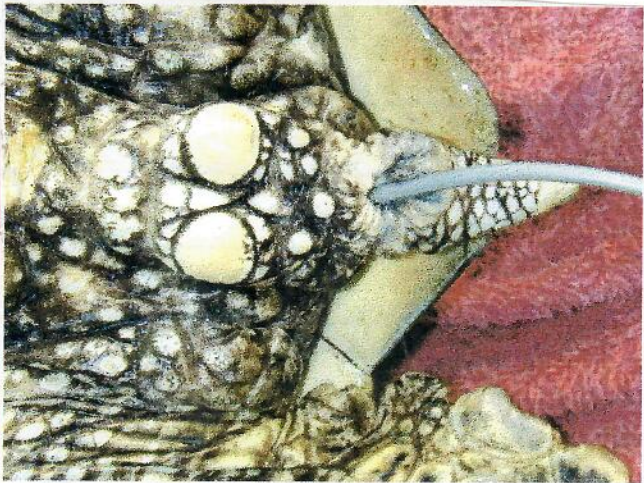
"It would be a very positive move to establish some kind of state presence down there," Kokubun said. "But the bottom line is can we afford it?"

While a Bakken-commissioned survey identified a number of archaeological sites on the state parcel, that is not the case for the Lynn property, most of which was bulldozed in the 1970s.

Bakken proposes to protect existing archaeological features found on the state land, which consist mostly of C-shaped rock structures, and to preserve any other historic sites that may be discovered during development.

According to Ron Terry, the consultant who prepared an environmental assessment of the proposal, there are no caves, water features or Hawaiian burial sites located on the state land.

Bakken is proposing an even swap for the two properties even though the Lynn property cost nearly \$2.7 million and the parcel of state land was appraised at "considerably less than \$1 million."



tbclose.JPG

Location

Kiholo lagoon

Date

1/25/00

TIME CAPTURED: 15:30

TIME RELEASED: 15:47

Old Tags:

LFL

RFL

LH

407A304B6A

LH

RH

410C1E2D52

RH

WEIGHT:

48 lbs.

CCL

65.5 cm.

CCW

57.5 cm

CARAPACE TEMP:

15:31

34°C

SUBSTRATE TEMP:

15:32

42°C/33°C

BLACK BULB:

SPECIAL IDENTIFYING MARKS:

COMMENTS:

TB - 32.8° - 23 cm. deep

Mototooled - #58

severe emaciation (pictures taken)


wound in plastron

Sediment sample taken



	clean	white.
0min	39°C	40°C
2min	39°C	40°C
3min	39°C	39°C

94

Location Kiholo lagoon		Date 1/25/00	TIME CAPTURED: 18:51
Old Tags:		TIME RELEASED: 19:13	
New Tags:			
LFL 221A58627F K406	LFL		
RFL K407	RFL		
LH K408	LH	410B530742	
RH B970	RH		
WEIGHT: 56 lbs.	CCL 63 cm	CCW 55 cm	
CARAPACE TEMP: 20 C	SUBSTRATE TEMP: 15 C	BLACK BULB:	
SPECIAL IDENTIFYING MARKS:			
COMMENTS: TB - 29.5°C - 25 cm. deep. Mototooled - #59			



GEORGE,

Here is some of the basking data sent over simply as a text file. I am also including it as a word document attachment... Hope you can make sense of it.

OBSERVATION  
DATE

12-Oct 5  
13-Oct 11  
25-Oct 2  
26-Oct 11  
2-Nov 12  
21-Nov 6  
11-Dec 5  
15-Dec 3.5  
22-Dec 6  
29-Dec 8.5  
14-Jan 3  
15-Jan 13  
16-Jan 2  
88

HOURS OBSERVED

DEEP BODY TEMPERATURE OF TURTLES EXITING THE MIXOHALINE  
POND (degrees C)

mixo pond  
pond TbOUT  
20.9  
21.7  
23.2  
22.5  
21  
22.5  
21  
21.5  
22  
22.4

Average Tb = 21.87

DEEP BODY TEMPERATURE OF TURTLES ENTERING THE MIXOHALINE POND (degrees C)

mixo pond  
pond Tb IN  
25

24.7  
25  
25.2  
25.3  
24.8  
24.5  
24.6

Average Tb = 24.8

DEEP BODY TEMPERATURES OF TURTLES BASKING IN SUN (degrees C)

Baskers (OC) wt. (pounds)

26 17  
30.5 27  
29.4 100  
26.9 90  
29.3 52  
30.4 33  
25.9 32  
27 51  
30.4 33  
25.9 32  
31.9 14  
33.3 20  
34 30  
30.6 47

Average Tb = 29.4 OC

Average weight of Baskers = 41.3 OC

Surface Water Temperature - 21-22 OC

Water Temperature (3' deep) - 24-25 OC

Tb MEASURED AFTER DARK

lagoon

1/25/67

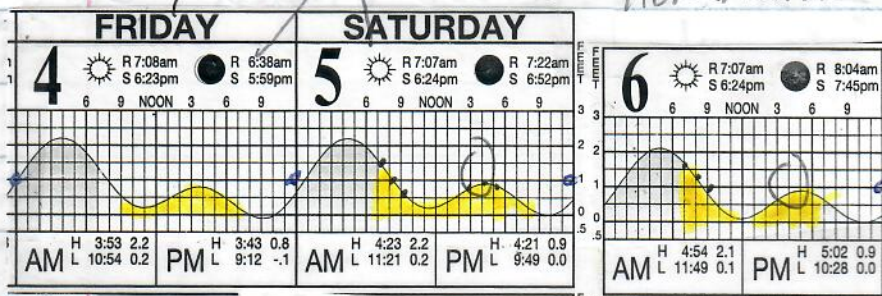
TIME CAPTURED

TIME RELEASED



FEBRUARY 2000

Daniel Zatz, Danny  
Marc, George  
Houkottan and Kittozo



new MK7 TO MARC = #00-032  
 TO Coppers set for 1 hour for Kittozo  
 Marc = #266016 & #144070  
 Replacement  
 Replacement  
 INTO POND  
 2-15-00

"Bill" Billie  
 Crevsky  
 License  
 Car take at  
 Paul Mitchell Property?  
 Kittozo

Toyota Blue 4WD Pickup truck =  
 HWG 047

Night Gull netter reported by  
 Bruce Nagel Kailua Tennis Club  
 262-2057

(100)

See cover LOGGERS

6-9-00 Installed TWO Logger at  
Friday South basking beach-buried under small wet  
along where turtles haul out

144072

Friday 181186

6/29/00

Retrieved for download:

#266016 Pond 2

#224564

#144070

6/9/00 Deployed

-261374

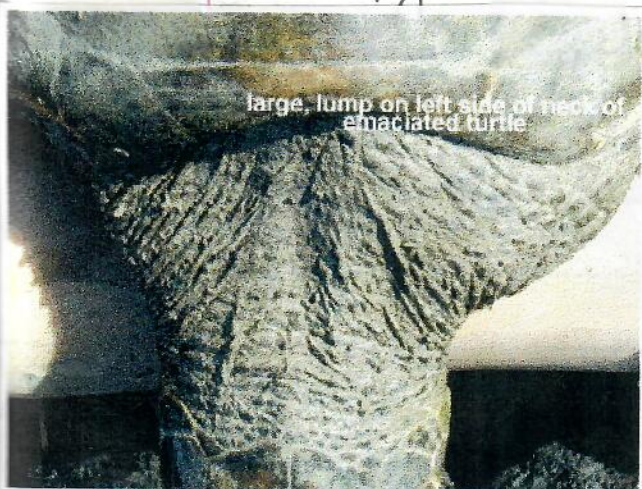
-29551

S/vice  
POND 2

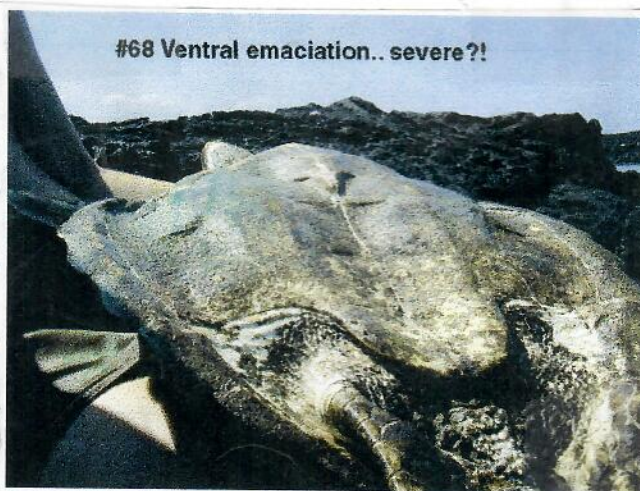
5 LOGGERS GIVEN TO MARC RICE 2-16-00

	6/9/00	144071	Small 1.5" PVC
Deployed	6/9/00	261374	2" PVC
	6/9/00 Pond	29551	2"
	6/9/00	144072	2" sec 128 6/24/00 #144072 MISS (M) only PVC case found
	6/9/00	181186	2" S. Beach Basking

see page 102



no68\_neck\_lump.jpg



no68emaciated.jpg

102

2. substrate why

Location <i>Kihei Area A</i>	Date <i>2/15/00</i>	TIME CAPTURED: <i>10:18</i>
Old Tags:	New Tags:	TIME RELEASED: <i>12:17</i>
LFL	LFL	
RFL	RFL	
LH	LH <i>410B6C6903</i>	
RH	RH <i>410A79723C</i>	
WEIGHT: <i>25</i>	OCL: <i>55.6</i>	CCW: <i>50</i>
CARAPACE TEMP:	SUBSTRATE TEMP:	BLACK BULB:
SPECIAL IDENTIFYING MARKS: <i>NONE</i>		
COMMENTS: <i>Pictures taken - Turtle was sitting in 1' of water on north edge. swollen left neck-shoulder region severe emaciation -</i>		

11/PTS  
1/BMP



**HAWAII PREPARATORY ACADEMY**  
 65-1692 KOHALA MOUNTAIN ROAD  
 KAMUELA, HAWAII 96743-8476  
 (808) 885-7371  
 FAX (808) 881-4908

**FAX TRANSMITTAL**

Please advise if there are any problems with transmittal. Ask for Administration Office

From: Manu Paei      8 Turtles (new), 6 Recaps

Date: 2/10/00

To: Manu Paei George Balgo

Company / School: NMFS

FAX Number: 808-983-2902

Number of Pages (including this cover sheet): \_\_\_\_\_

Message: Data sheets from 1/3/00

①

MARC + student only

Location # 31 on Map	Kiholo Lagoon	Date 1/31/00	TIME CAPTURED: 4:19	TIME RELEASED: 4:39
Old Tags:	New Tags:			
LFL		LFL		
RFL		RFL		
LH	(No scl)	LH	41086C447F	
RH		RH	4119515773	
WEIGHT: 35	CCL 53	CCW 43		
CARAPACE TEMP: 36°	SHADE SIDE 31	SUBSTRATE TEMP: 42°	BLACK BULB:	
SPECIAL IDENTIFYING MARKS: Nothing				
COMMENTS: T <sub>6</sub> = 32.4° Carapace # 61 Robust healthy/Biter ask Jill				

②

MARC + student only

Location # 31	Kiholo Lagoon	Date 1/31/00	TIME CAPTURED: 1642	TIME RELEASED: 1657
Old Tags:	New Tags:			
LFL	221A5B7165	LFL		
RFL	metal-B-931	RFL		
LH	B-932	LH	410C253622	
RH	B-934	RH		
WEIGHT: 25	CCL 45	CCW A1		
CARAPACE TEMP: 34°	SHADE SIDE 29°	SUBSTRATE TEMP:	BLACK BULB:	
SPECIAL IDENTIFYING MARKS:				
COMMENTS: T <sub>6</sub> 30.9 20um Carapace # 62 Robust, Healthy - Cap 16:42 release - 1657				

501



104

MARC + students only

Location Kibola Cagoon		Date 1/31	TIME CAPTURED: 17:19	TIME RELEASED: 17:34
Map # 22				
Old Tags:				
LFL	V-683			
RFL				
LH	V-802			
RH				
New Tags:				
LFL				
RFL				
LH	410B2D463E			
RH	411A0E4202			
WEIGHT:	30	CCL	18.5	CCW
CARAPACE TEMP:	33			44
SUBSTRATE TEMP:		35		
SPECIAL IDENTIFYING MARKS:				
COMMENTS: 16 33.3 Mr. FIVE says Robust strong				
MOTO # 63				

MARC + Students only

Location Kibola Cagoon		Date 1/31	TIME CAPTURED: 19:21	TIME RELEASED:
Beaker				
Old Tags:				
LFL	ZZ106ZZ62A			
RFL	K-433			
LH	RFL healed notch			
RH	K-435 AIPCCLOSPE B-GAZ			
WEIGHT:	35	CCL	21	CCW
CARAPACE TEMP:	27			45
SUBSTRATE TEMP:		28		
SPECIAL IDENTIFYING MARKS:				
COMMENTS: 16 29.9 MOTO # 6724				

Marec + Students only

Location LAGOON Kiholo Beach		Date 1/31	TIME CAPTURED: 20:01
Old Tags: None			TIME RELEASED: 20:22
LFL		New Tags:	
RFL		LFL	
LH		RFL	
RH		LH	4061630237
		RH	4108552861
WEIGHT: 84	CCL	CCW	65
CARAPACE TEMP: 21	SUBSTRATE TEMP:	BLACK BULB:	
SPECIAL IDENTIFYING MARKS:			
COMMENTS: 1b 249 # were small open wound on Lk hind flipper			

Marec + Students only

Location Kiholo, South shore		Date 1/31	TIME CAPTURED: 20:34
Old Tags: LAGOON			TIME RELEASED: 20:36
LFL		New Tags:	
RFL		LFL	
LH	410866FAD6A	RFL	
RH	411959287C	LH	
		RH	
WEIGHT:	CCL	CCW	
CARAPACE TEMP: 21	SUBSTRATE TEMP: 21 / plastron	BLACK BULB:	
SPECIAL IDENTIFYING MARKS:			
COMMENTS: 1b = 27°C Moto # 60			

day

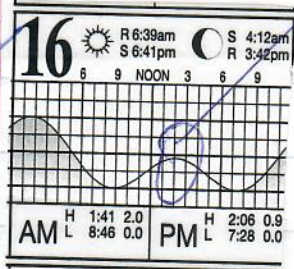
MARC + Students only

Location Kiholo South Shore	Date 1/31	TIME CAPTURED: 9:05 2105	TIME RELEASED: 2122
New Tags:			
LFL 1F70555646	LFL		
RFL Q758 (L3-4)	RFL		
LH 410C223150	LH		
RH K643	RH		
WEIGHT: 75 lbs	CCL 69	CCW 62	BLACK BULB:
CARAPACE TEMP: 26° Plastron: 26°	SUBSTRATE TEMP:		BLACK BULB:
SPECIAL IDENTIFYING MARKS:			
COMMENTS: Tb = 28.9°C			
Moto tool = #67			

MARC + Students only

Location Kiholo Night Beach	Date 1/31	TIME CAPTURED: 2130	TIME RELEASED: 2140
New Tags:			
LFL 1F6F230946	LFL		
RFL	RFL		
LH 40773E3A43	LH		
RH	RH		
WEIGHT:	CCL	CCW	BLACK BULB:
CARAPACE TEMP: photo 23 22	SUBSTRATE TEMP:		BLACK BULB:
SPECIAL IDENTIFYING MARKS:			
COMMENTS: Tb: 24.9°C			
Carapace # - 19			

16  
MARCH  
2000



Thursday

Depart 11:55 AM KONA Aloha (A/L); picked up at the airport by Osha Davidson, and 24 year old daughter "Sea" wife and 5 year old son at hotel. Drove to Koho - parked just before Mile Marker 81 and walked in ~ 20 min. Trail ended right at Mr. Hinds, Ford property (Paul Mitchell estate now). Walked along shoreline of bay - 15-20 small turtles froging in very shallow water, no fear. Saw "32" mottled in pond connection between 1st and 2nd. Saw mottled "26" and "13" among the 15-20. Saw "45" basking on rocks of Peninsula 3 pm. Saw "57" basking on lava shoreline at 2:30 pm.

Photos of Osha, Osha & George; basters; and Seawara with turtles froging in the background.

Hiked out to lagoon, but not out Peninsula.

5-6 basking at South Beach <sup>need a new</sup> <sub>catchy Hawaiian name!</sub>

5-6 others basking on Kahaloa, often in "uncomfortable" looking positions.

ARRIVE ALOHA FL. 283 4:55 PM.

Need  
In 2001  
out 44  
BAGGAGE  
RAM

NEW  
MK7 #  
00-032

2 Loggers set 1 hour -  
# 266016  
# 144070  
TO MAEC

4-5 FEB 00  
Friday Sat. Picked up Steve Eitel re: Small turtle reported

ashore for "4 days" by neighbors, but turtle left between 6:30pm - 10pm. TO Waimea Country Resort - overnight.

Met Stan Boyd 7:30am - 10am walked shoreline  
Saw some turtles, stills cools in pond.

TO KIHOTO, hiked in to evaluate sites  
Saw "cleaning station" Small Manini & Manoa.

Two baggers, one on top of other.  
Maec has been shipping on head of turtle at night. South Beach is the clustered basketry

of greatest numbers ashore.  
10-12 noon 1-3pm  
Dennis's recommendation Bag with camera w/ light

there low burned in rock antenna as it.  
Hurt to run upward, from there to school. Need a day with good visibility.

Drove up Waikoloa to belt road then  
toward Kona to locate Big Island Golf Club - not much

turned into green grass, still under construction. walked  
up Noel with family graves at top.

Drove to HPA, saw school and computer  
facilities. Had lunch in Waimea to go  
over plans.

Drove to Kona, depart on 6:35 pm Aloha for  
Honolulu.

- ① Contacts Dick Brock monitoring devices.
- ② Modify State Permit
- ③ Need pictures, drawings specifications of Bag, etc. plus photos, meet
- ④ Permits - HONOLULU OW webcam. (3) photos, meet

Why Bask?  
Relatively new behavior?  
 ① Something in water they don't want to be with?  
 ② Something on land they desire?  
 45

Date: Wed, 2 Feb 2000 07:58:21 -1000  
From: Lisa Choquette <lisa@divemakai.com>  
To: George Balazs <gbalazs@honlab.nmfs.hawaii.edu>  
Subject: Fw: Miss Piggy!

[The following text is in the "iso-8859-1" character set]  
[Your display is set for the "US-ASCII" character set]  
[Some characters may be displayed incorrectly]

Save it all in my special TURTLES file! Here it is!

-----  
Aloha,  
Tom Shockley & Lisa Choquette  
Dive Makai Charters-(808)-329-2025 (ph/FAX)  
E-Mail:dmakai@divemakai.com  
http://www.divemakai.com/  
P.O. Box 2955  
Kailua-Kona, HI 96745

-----Original Message-----  
From: Lisa Choquette <lisa@divemakai.com>  
To: Marc Rice <mrice@hpa.edu>; George Balazs  
<gbalazs@honlab.nmfs.hawaii.edu>  
Date: Tuesday, January 11, 2000 9:00 AM  
Subject: Miss Piggy!

>Happy New Year, You 2!  
>  
>One of my best Christmas presents was a visit from Miss Pig on 12/22-  
>looking hale & hearty! Unfortunately, I didn't have a measuring tape with  
>me, so I couldn't measure her. She's getting BIG!  
>  
>Do NOT ask me how I know, but we were off Pine Trees, on the drop, & I  
>looked & saw this turtle swimming along the drop - oh- 60-70 feet away! I  
>don't know how I knew it was her- but I did! & she knew it was me. We  
>rushed to each other & had a lovely visit before she went on her way.  
>  
>Was sooo good to see her. Populations at the turtle dives good & healthy-  
>tags just about unreadable- why we haven't sent any info!  
>  
>Have a good,  
>Lisa  
>

### 13<sup>th</sup> Biennial Conference on the Biology of Marine Mammals

(CV = 0.51 - 1.42). Similar infaunal density and biomass estimates were obtained from Ahous Bay and Cow Bay, yet whales did not feed in Ahous Bay. Amphipods in Ahous Bay were smaller in size than in Cow Bay.

#### USING A REMOTE TELEVISION CAMERA FOR LONG-TERM OBSERVATIONS OF STELLER SEA LION ACTIVITY ON CHISWELL ISLAND, AK

Dunlap-Harding, W.S.<sup>1</sup>, Burkanov, V.N.<sup>2</sup>, Calkins, D.G.<sup>2</sup>, Castellini, M.A.<sup>2</sup>, Zatz, D.<sup>3</sup>

(1) University of Alaska Fairbanks, Fairbanks, AK 99775

First Author Address: P.O. Box 1329, Seward, AK, 99664, USA

(2) Alaska SeaLife Center, Seward, AK 99664

(3) SeaMore Wildlife Systems, Inc., Homer, AK 99603

Due to the inaccessibility and remoteness of many Steller sea lion (SSL), *Eumetopias jubatus*, haulouts and rookeries, it is difficult to study sea lion life history patterns in detail. To alleviate this problem, we developed a remote control television monitoring system for continuous, long-term observations of SSLs at their haulouts. A television camera was placed on Chiswell Island in Resurrection Bay, about 30 miles south of Seward, AK in October 1998. The TV signal was transmitted via microwave to a coastal repeater, then to the Alaska SeaLife Center in Seward. During the first six months (November-April) maintenance visits occurred seven times to the island and two times to the coastal repeater. Concurrent with this development phase, PC software for remote control was constantly upgraded and improved. In early March 1999, we placed a second camera near the haulout and were able to control each camera separately through a switching mechanism. In total, we collected data on SSL activity for 99 days (55%) during the first six months. Chiswell Island was used throughout this period, but not daily. Observations included counts and continuous VCR recordings during daylight hours. Total recording time has reached 700 hours. SSLs were consistently present when a signal was received during November-December. During January-February they were present 73-83% of the days and March-April 30-35% of the days. SSLs spent from 1-2 minutes to 11.5 hours on the haulout. Average times of presence on land were: January - 2.2 hrs (0:02-8:00), February - 1.62 hrs (0:01-10:15), March - 1.65 hrs (0:01-8:32), and April - 4.52 hrs (0:02-11:37). Numbers of SSLs hauled out ranged from 1 to 35 animals of both sexes and all ages. Females with nursing pups and juvenile animals were more common than adult males.

112

Date: Wed, 26 Jan 2000 08:44:11 -1000  
From: Marc Rice <mrice@hpa.edu>  
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>  
Subject: Re: sign

Yesterday's work went well. We were only able to get one night basker as all others went in as the sun went down.. mostly because the tide was rising. We did do one animal (new mototool #58) at around 1500. Got some sediment samples and tried the clean vs white scute study. I have mailed the two data sheets for the Tb and the sediment sample. We can talk about this later.

Yes, I was going to propose placing a picture on the sign to instruct people what basking looks like... I just sent a version with the picture and the new text...

At 11:19 PM 1/25/00 -1000, you wrote:

>  
>Marc, were you considering including the photo in the sign (shown in the attachment you sent)?

>  
>I thought of something simple, but a little longer. Maybe the word >"basking" is unclear to some (dummies)?

>  
>SEA TURTLES SLEEP OUT OF THE WATER ALONG THE SHORE AT KIHOLO BAY  
>IT IS ILLEGAL TO DISTURB THEM - STAY AWAY AT LEAST 20 FEET

>  
>Or reverse last line

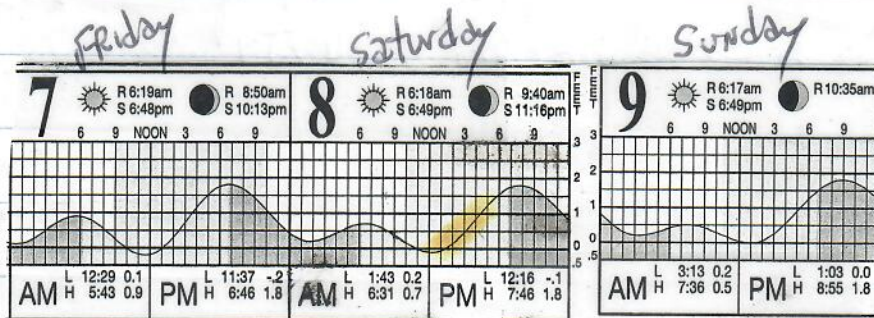
>  
>STAY AWAY AT LEAST 20 FEET - IT IS ILLEGAL TO DISTURB THEM

>  
>Or STAY AT LEAST 20 FEET AWAY

>  
>I started measuring 15 ft. Not very far. while ok it seems for the hard >to disturb baskers at Punaluu, it seems our Kiholo ones need more space, >hence 20 ft. or 25 ft.

>  
>Your thoughts now.

April  
2000



# Sea Turtle Cam Kiholo installation

7 APRIL 2000  
Friday

Depart Aloha 5:20 am, Arrive Sunrise Cam  
Avis Rental Car - Drove to Waikea-McDonalds  
then to Waikea Chevron meet Marc, <sup>student</sup> Kattie Herrington,  
Veronica \_\_\_\_\_ Gary \_\_\_\_\_

Roman Polonski <sup>installer</sup> VISA Cellular, drove to  
Pu ANA HULU  
Pu ANA HULU Microwave Tower site -  
Daniel and Bill HAGEY arrived from here  
installed two antennas - each w/wire dish  
and direction - one set aiming at Kiholo -  
the other 29-30° aiming at HPA. Plugged in  
power to V.S. Cellular unit. Drove to  
HPA - Steve \_\_\_\_\_ <sup>is HPA</sup> Computer person.

Installed same antenna set by Marc's  
office aiming down at Pu ANA HULU.  
Load rubber boat drove to Kiholo  
Stakes met Bill wife and Daniel's  
girlfriend (Barbara) - motor of  
gear to "South Beach" (= need Hawaiian  
name).

6-7 turtles at S. Beach while installing, but  
most left with our presence after a while. 1-2 in  
background of photos.

Finish at end of dusk ~ 30 past sunset



114 Sea Turtle Cam

8 April 2000 <sup>Street</sup> AT Alumni House, across from H&A entrance.

Friday UP 7 AM - Breakfast at McDonald's / loaded gear at 8:30 AM for the Loko trip,

TO MARC'S office at ~9 AM - phone to Daniel who was on his way to Waimea from hona, gave instruction for controller. At 9:55 AM <sup>over the</sup> we had live video.

11:05 - 11:09 AM 2 or 3 men <sup>Crabs on the</sup> walked by - No real interest in cameras - instead walked close to turtle and caused it to go into water. <sup>(Mele) (Maha) (more)</sup>

11:20 AM on internet via Real Player:

rtsp://216.33.225.102/encoder/turtle.rm

but not turtles present when on internet. Played with controls until ~11:45 PM.

All of the above was video <sup>VHS</sup> taped.

Marc and I departed for Kaloa tagging trip with Stan Bard and Boy Scout. Seven captures ~ 1 PM - 4:15 PM.

Daniel and Kathie Harrington stayed in Marc's office to work with controller. At 5:15 PM we met Daniel and Bill <sup>with</sup> at Marine restaurant Honokahau Harbor.

They had been to Kiholo - snorkled, looked at gear TO PAGE 116

Billie's Truck abandoned?

Needs - Degree of Bearing reading when swinging camera. (115)

- Distance from camera to shore/water edge

- Distance from camera to antenna; and another

- Ground truth - go soon to do it.

- Cement or kevlar fill-boxes; - <sup>High</sup> Trees

- Sea in plastic - NOAA emblem - "Sea Turtle

Research & and Monitoring Project" NMFS <sup>HPA</sup> Tel#

- GPS; Sealed in plastic (NOAA emblem) (HPA?)

- Make closer to turtles.

- Closest Caption - ability to type captions

- Smooth out rocks? Lay out indoor/outdoor

116

from page 114

8 APRIL 2000  
Saturday

Sea turtle Cam

are turtle when they arrived - 4 came = 5  
Discussions on Marina restaurant centered on  
used <sup>5</sup> - we stressing <sup>1</sup> Time-lapse <sup>infrared</sup> out <sup>2</sup> Time-lapse PAN  
for census - time of day.

needs include Fixing controller to correctress and  
fixing close-up focus.

Small camera on the back of the turtle - video - that is then  
transmitted to Moby <sup>tele</sup> <sup>tele</sup> system and cleared to start over  
Solar panel on turtle. - Install UK unit.

Departed about 6:45 pm w/ Marc for Waimea.

Turned off cameras. Nothing visible due to "1 Lux".  
Dinner alone at Korean Barbeque.

9 APRIL 2000 up 7 AM - to MacDowds Waimea  
Sunday then to Marc's office ~ 8:30 am - turtles  
already present. VHS 16 hour video put in  
to record everything. Watched 2 swimmers come  
up on turtles → 3-4 frightened back into water  
surprisingly fast. Difficult to tell distances  
with lenses. Notes video on web site - results out  
Daniels, web site - phoned Barbara

10-13-00 left Marc's office and parked small frozen  
associated turtle previously recovered from beach  
Drove to Kiholo alone. + walk of

9 April 2000  
Sunday

811

from Road. Highway all AM.  
6-8 people.

Numerous turtles basking  
6-7 at site.

Walked to site - Took numerous pictures of  
Mele & Maki & turtles w/print out 35mm slide.

One <sup>(couple)</sup> person thought antenna <sup>seen</sup> from a distance was  
a "shopping cart".

Woman (Fiji?) in green sarong started to run up  
to the turtles (on "foot path" from peninsula end).  
I told her she would cause them all to go back into water.  
Spoke to and walked out with couple from  
San Francisco (he is a cable car operator).

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*produce + review letter need*



U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Southwest Fisheries Science Center Honolulu Laboratory  
2570 Dole St. • Honolulu, Hawaii 96822-2396  
(808)983-5733 • Fax: (808)983-2902

MEMORANDUM FOR:

DOCARE Oahu  
DOCARE WAIMEA  
NMFS - LE  
*FAXED 3:10 PM*  
*FAXED 3:11 PM*  
*FAXED 3:12 PM*

FROM:

George H. Balazs  
Leader, Marine Turtle Research Program  
Telephone: (808) 983-5733  
Fax: (808) 983-2902  
*Subah*  
Cell (808) 286-2899

SUBJECT:

Notification of intended research involving capture and tagging of sea turtles

From (date) *Friday Saturday* APRIL 7 & 8, 2000 (time) 8 AM to

(date) APRIL 7 & 8, 2000 (time) 6 PM

I will be conducting ~~capture, tagging, and related research activities of~~ *installation of a portable camera for monitoring of sea turtles basking at Kiholo Bay, Big Island*

These activities are authorized under Federal Fish and Wildlife Permit PRT-739350, 50CFR 17.31(b), and our State of Hawaii Scientific Collecting Permit SCP 2000-05

- Research activities will be conducted from shore by snorkeling and/or scuba diving to hand-capture turtles.
- Research activities will be conducted from shore using a closely monitored tangle net to capture turtles.
- Research activities will be conducted using a bullpen net.
- Research activities will be conducted from a boat by snorkeling and/or scuba diving to hand capture turtles. The boat's identification number, name, and description are as follows:

*NOAA Research Signs will be displayed. A few basking turtles may be disturbed for a short time during the camera installation process.*

"Yawning" turtles, Kiholo BASKERS

(119)

2 MAY 2000 Aloha F.R.2  
 TUESDAY Depart 6:15 am Aloha w/Thermy  
 work to Kona; TO Puako Ramp ~ 8:15 am  
 met by George and Sardi WATSON 16' whaler -  
 transported out to "Banua Patch" new renovated  
 boat of HPA. Dive 1 started slightly south  
 of usual point. Lost scuba here was  
 0498. 75 min. Dive 13 captured - seemed  
 small. Didn't see as many turtles total -  
 went for a long ways before patching the  
 first one. Perhaps 3 others seen but  
 not captured. Dive #2 only one turtle  
 captured.

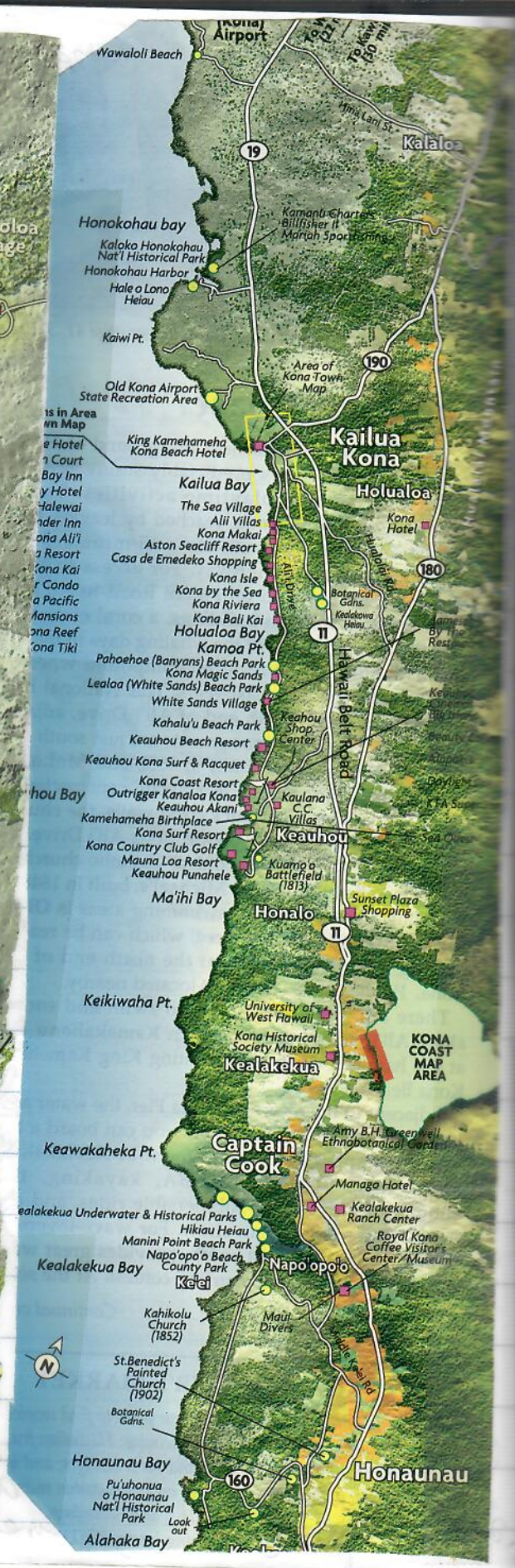
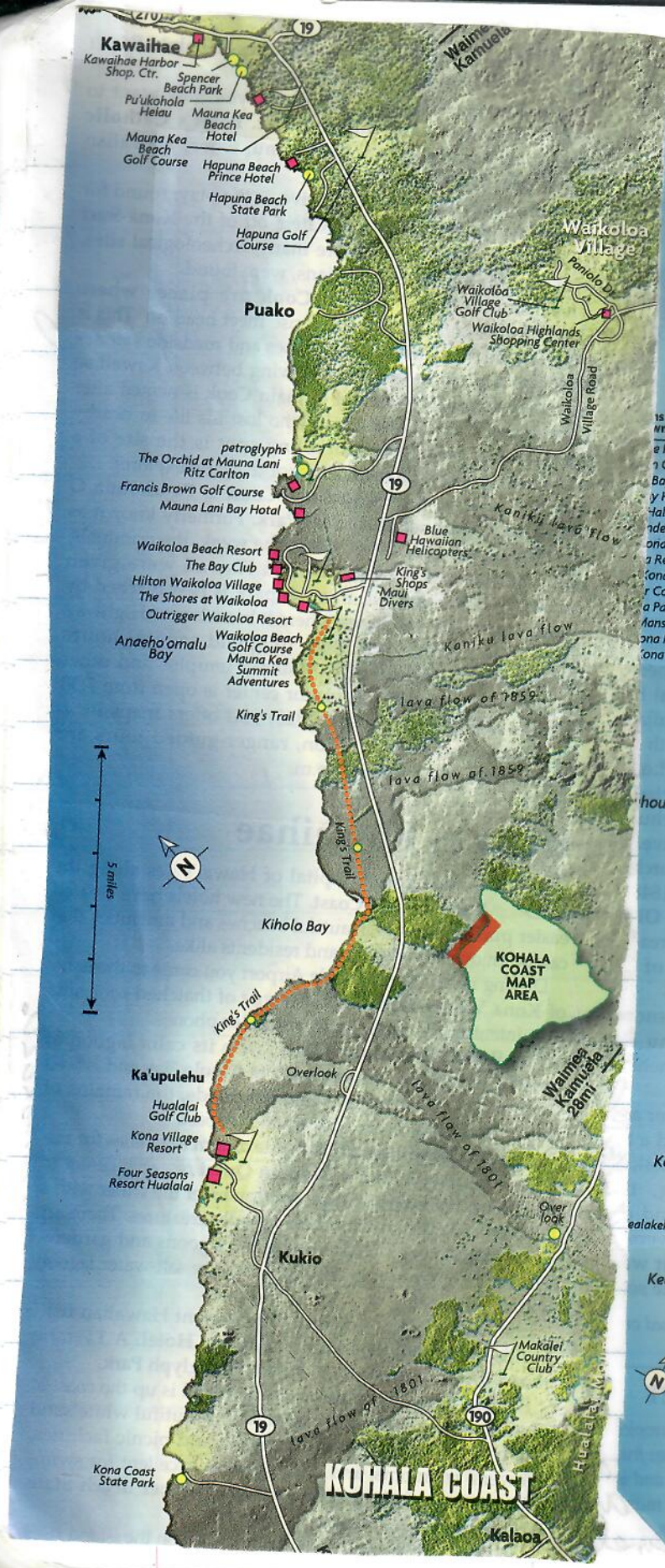
my one  
 2nd only  
 SCUBA  
 30 ft  
 75  
 MIN

Captured  
 TAG Recoveries

SCL	lbs	SCL	lbs
56.5	58	42.8	23
56.9	52	55.4	49
47.9	35	57.7	54
50.8	40	44.1	27
51.2	42	42.1	24
51.9	45	45.4	28
		57.2	54
		59.0	56

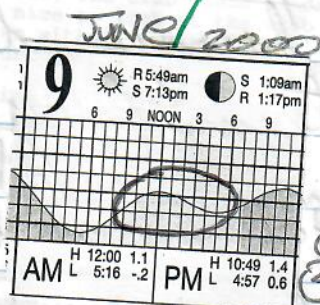
Departed 5:35 PM Aloha via  
 Maui to Honolulu.

Upon Return to Puako boat ramp, 2 turtles were  
 seen basking around pier. one clearly was a Mauna  
 Kea Release (when?) In coral tags distal. need to catch.



# KITULO BAY

9 JUNE 00  
Friday



Objective:  
Blood - Kitulo  
Baskers

UDS - Baskers  
TO COMPARE WITH:  
① HANAKURA  
② WAWAMAKU  
③ KAWBINUI  
④ PUKO

Depart w/ thier work at 6:15 am Aloha to Kora.

Took separate rental cars to Kitulo, met Marc and Lura Rice (recently back from Porape) with 8-9 Jetteo (Colorado) high school student, 1 teacher. Proceeded to catch in Awa, but tide low and ~~not~~ not many coming out (or in).

However, as morning progressed more did, not many feeding the Bay either. Proceeded to drop net 11, one was "Big Mema" known from Cam basking (now Mototoo 77), the other were not known as baskers.

Proceeded to walk around lagoon obtaining baskers and bleeding/weighting. 5 of 11 basked unwanted (rotations of plastic) looking a "little flat" (but not enough to designate "mild emaciation").

The two baskers I picked up both had <sup>small</sup> grassid crabs (1-3) scurrying under them. No physical injuries to plastic, though.



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6-9-00 Kiholo

Friday

Are baskers getting burrowing barnacles cleaned off of them? By crabs?

Buried 10 loggers at South beach intertidal Basking. Retrieved ~~THE~~ loggers from ponds, put in 2 new

Departed Kiholo after T.W. I took 640pm Aloha flight.



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<BODY BGCOLOR="white">  
 <BRNT SIZE=2> Yes, the crab issue is definately worth looking in to.. I wond  
 <BR> It would be nice to look at the crab issue... what do we look for? Observ  
 <BR> Re the turtles with flat plastrons. Perhaps the blood work will show some  
 <BR> I am pretty sure that I will be over on the 15th for an afternoon conference  
 <BR>  
 <BR> I will be going down by boat tomorrow morning some time to retrieve the cam  
 <BR> Also, I will try and remember to look for the data logger numbers tomorrow  
 <BR>

More in a later message.

Aloha,

Marc

<BR>

<BR>

<BR>

<BR>

<BR>-Original message-----

From: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>

To: mrice@hpa.edu

Date: 06/10/2000 (Sat) 15:00

Subject: Re: Thank you for a great day

<BR>

Good news, I won't worry too much any more about rejects coming to me  
 saying "undelivered" after trying for 7 days (automated), will ignore.  
 Two things stood out for me about yesterday re basking: The two turtle I  
 picked up rapidly while basking both had small graspid under them. and  
 5 of the 22 turtles we handled had what you I and TW agree were  
 "slightly flat looking plastrons." And all five of these were Basking  
 turtles! Flat because they're on the rocks? Or, flat because they're  
 undernourished (which then would lead into the hypothesis about caloric  
 deficiency driving the basking behavior in the Kiholo, Puako and  
 Punaluu cases).  
 I'm ready to return, say when. We still have two nice signs to install also.  
 SeaTurtleCam stuff. How will you send to them? Did they give you a fedex  
 #? Let me know please.  
 Kiholo data sheet have been mailed to you already, will go out in  
 Monday's mail. Included also my 2001 state permit for you signature and  
 printed name, on both copies, return to me. Mahalo! Geo.  
 PS tried calling Mark Hodges KIRK today, no answer. Will try tomorrow and  
 so forth until I get him. Hope it's not too late before he leaves.  
 Sat, 10 Jun 2000 mrice@hermes.hpa.edu wrote:

Yes, the crab issue is definately worth looking in to.. I wonder if we should think about/discuss what it is we are looking for when we go back out to the baskers. I am still interested in seeing what the temperature profiles are for the baskers during the summer months.. how hot do they get/how much heat can they stand.  
 It would be nice to look at the crab issue... what do we look for? Observe the behavior of the crabs? Catch a few and see if we can figure out what they are eating?

Re the turtles with flat plastrons. Perhaps the blood work will show something. If not, should we be looking at some other blood component? I think it would be nice to follow up on your anaerobic respiration/oxygen debt hypothesis. Lets follow up with TW on the idea of fatty acids in the blood as an indication of increased digestive activity... Still in contact with Cathy and ??? (the ladies that did the fatty acid work several years ago at Kiholo and Kaneohe bay) Perhaps they would be able to help...

I am pretty sure that I will be over on the 15th for an afternoon conference... maybe we can take a few moments to discuss these things.

I will be going down by boat tomorrow morning some time to retrieve the cameras, etc. I am to ship them FEDEX COD to them as soon as I have them packed. I will try and get them out on Tuesday or Wednesday.  
 Also, I will try and remember to look for the data logger numbers tomorrow afternoon. Just remind me if I forget.

More in a later message.

Aloha,

Marc

-----Original message-----

From: "George H. Balazs"

To: mrice@hpa.edu

Date: 06/10/2000 (Sat) 15:00

Subject: Re: Thank you for a great day

- > Good news, I won't worry too much any more about rejects coming to me
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- > Two things stood out for me about yesterday re basking: The two turtle I
- > picked up rapidly while basking both had small graspid under them. and
- > 2) 5 of the 22 turtles we handled had what you I and TW agree were
- > "slightly flat looking plastrons." And all five of these were Basking
- > turtles! Flat because they're on the rocks? Or, flat because they're
- > undernourished (which then would lead into the hypothesis about caloric
- > deficiency driving the basking behavior in the Kiholo, Puako and
- > Punaluu cases).
- > I'm ready to return, say when. We still have two nice signs to install also.
- > SeaTurtleCam stuff. How will you send to them? Did they give you a fedex
- > #? Let me know please.
- > Kiholo data sheet have been mailed to you already, will go out in
- > Monday's mail. Included also my 2001 state permit for you signature and
- > printed name, on both copies, return to me. Mahalo! Geo.
- > PS tried calling Mark Hodges KIRK today, no answer. Will try tomorrow and
- > so forth until I get him. Hope it's not too late before he leaves.
- > On Sat, 10 Jun 2000 mrice@hermes.hpa.edu wrote:

Same

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Re: Mauna Lani, etc. All good points. Hope the meeting goes well. I just returned from Kiholo where we removed the two cameras, the encoder box and the two batteries. I left the two boxes where the cameras were and the big box and antennas. I will box up the cameras, etc. tomorrow and send them off. We also placed the two cement backed signs out on the peninsula. One near the sand beach (where people tend to come out of the water and walk to the west end) and one at the West end... (where people come around to get to the sand beach). The can be moved if you would like them at some other location. This evening, I will send a few pictures of them and their placement. Aloha, Marc

-----Original message-----  
From: "George H. Balazs"  
To: mrice@hpa.edu  
Date: 06/12/2000(Mon)06:43  
Subject: Re: Temperature loggers

- > Mahalo Marc.
- > Let me get back to you about Thursday, I'm sure it can work and that will
- > be an excellent opportunity.
- > SLP is having their meeting today at 10am, they firmed it up late last
- > week, apparently Dan and Marty are both coming. Bob Morris and Bob Braun
- > also, we have now learned that there are some disease issues associated
- > with the turtles they are (were!) intending to ship to ML to replace what
- > will be released on July 4. So there are multiple issues and if they
- > don't conduct their meeting well it will be a disaster. Issues: our
- > summary of 10 years of results; biting of people/conditioning so as to
- > maybe reduce eliminate that prior to release; and current shipment of
- > turtles over there. In addition, I will ask the 64000 dollar question-
- > Has anyone recently properly healthscreened the turtle at ML right now to
- > judge them proper for release on July 4, 2000?
- > Also, I will bring up the issue (gently and only for possibility) that
- > there are now enough turtles on the Kona Coast, we suspect maybe food
- > limits in some areas, and in the long term do they (we) really want to be
- > adding more! They will "love" that but hell someone has to bring out
- > these things.
- > Will you take Cam gear out today? Aloha, George
- > On Mon, 12 Jun 2000 mrice@hermes.hpa.edu wrote:

----- Forwarded message -----  
Date: Mon, 19 Jun 2000 09:52:02 -1000  
From: Marc R. Rice <mrice@hpa.edu>  
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>  
Subject: Re: Mapping out a good plan (fwd)

It would seem to me that there are probably 4 or 5 that regularly come into the area. A discussion with one of the boaters there revealed that the turtles tend to come around when there are fishermen on the ramp. He said they sometimes bite the hooks and some get hooked. The one we caught did not have any hooks or line on it. As I mentioned in the earlier message, the two that came around sure seemed to home in on the speared fish and tako. We did not see # 70 on that day.

Yes, I believe that we can promise some students to help with the tagging on July 3rd, if you do it.


I will call Doug Herkes and indicate that we might be over to observe, capture and tag some of the turtles in his area in the afternoon if it all works out. I will report back to you on the conversation.

Just got off the phone with Elli (in charge in Doug's absence. She will confirm with her bosses that we are coming and that there will be no problem with us coming over there in the afternoon to observe and possibly capture some turtles. We are to call her before we come over on Monday next.


Quoting "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>:

- > Got the fax, mahalo. How many others to you speculate are hanging
- > around
- > there?
- >
- > See below, re ML. Read at very end of Danny's message. I feel we can
- > positively assume we have access on the 26th to our regular site. So,
- > yes, please go ahead and call Doug. Mahalo, George
- >
- > will your cell work ok on Maui just in case there's any important reason
- > I need to phone you?
- > Would you and some students be willing to come down to ML to help
- > out on

capture date 4-16-00 location and method of capture  
4/16/00 Puako Ramp  
Rice 4/16/00 Friday 1406h  
 recorder

PIT tag bar code 41361F5B44 LH  


old tags: None

other new tags: 4135727505 RH  


St. width 45.0 cm.  
 straight carapace length: 59.9 cm. notch: 57.7 cm.  
 curved carapace length: 61.3 cm. curved width: 53 cm.

head width:          cm. sex:  male  female  unknown  
 PPS:  YES  NO tail length:          cm. cloaca:          cm.  
 right front flipper:          cm. weight: 55 lbs. samples collected:           
 plastron: 44.7 cm.

descriptive remarks  
Scoop net capture at South side of launch Ramp 1406h  
Time ~~2:23~~ 1426 release at the Ramp - White paint  
M.T #88  
Turtle appears healthy -

forwarded message

Date: Sat, 17 Jun 2000 17:11:48 -1000

From: Marc R. Rice &lt;mrice@hpa.edu&gt;

To: "George H. Balazs" &lt;gbalazs@honlab.nmfs.hawaii.edu&gt;

Subject: Re: Puako Turtles

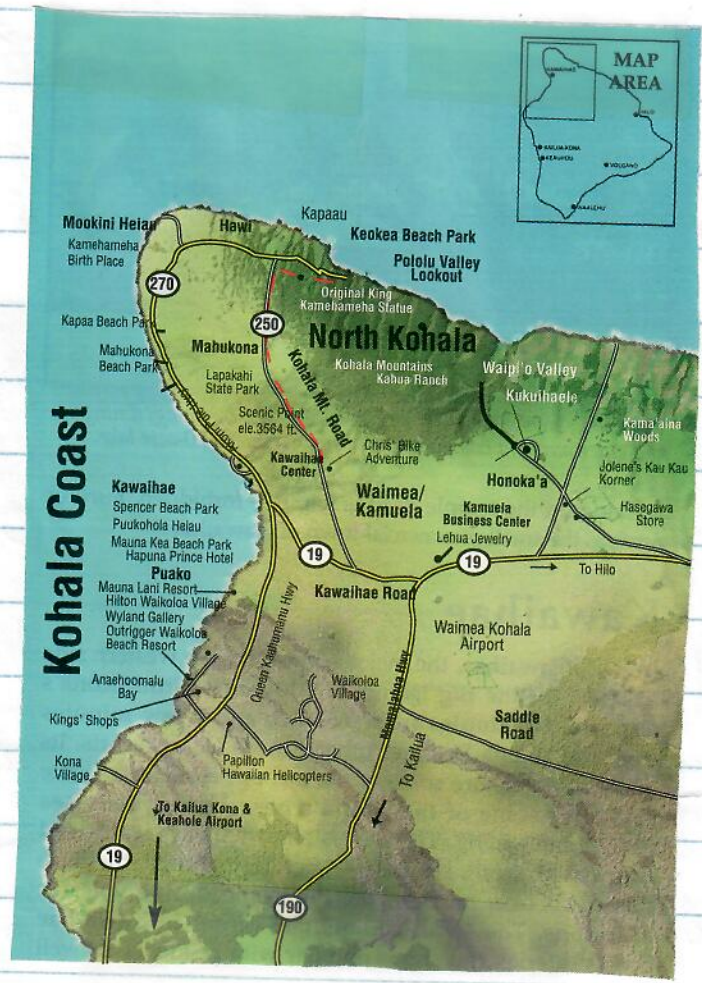
We were able to pick up one turtle at the Puako ramp today around 1400. It and another smaller turtle were, we believe, following the scent of a stringer of fish that was on the shore on the south side of the launch ramp. They repeatedly swam over that way and meandered in the shallows near the stringer. We picked up the larger of the two in the scoop net. It was 55 lbs and was untagged. I will fax the data as soon as I get into the office. It was very healthy appearing with no sunken plastron. I have to go now but will follow up with more information soon.

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----- Forwarded message -----  
Date: Tue, 20 Jun 2000 11:59:26 -1000  
From: Marc R. Rice <mrice@hpa.edu>  
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>  
Subject: Re: Mapping out a good plan (fwd)

I was trying to remember if I sent you the information on the turtle that we captured and moto tooled at Puako on 6/29. In looking at it, I realized that I started MT numbering at 71 at Kiholo and I placed a number 71 on the "sick" turtle at Puako... sorry but we have a duplicate. Experience says that it will not be a problem, but I wanted to let you know that we have two 71's. What are we going to do when we get to three digits???

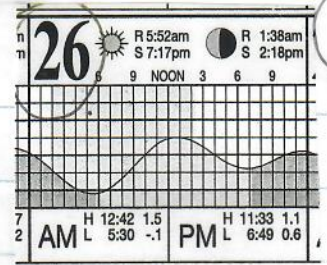
Marc



See p. 171

June 2000

127.31



Keawanoi  
6-26-00  
Monday

depart w/ Aloha FL82  
Bob Morris 6:15am

Fax Cover  
Sheet

To: Victor Hill  
From: Jeffery Co.  
Date: November

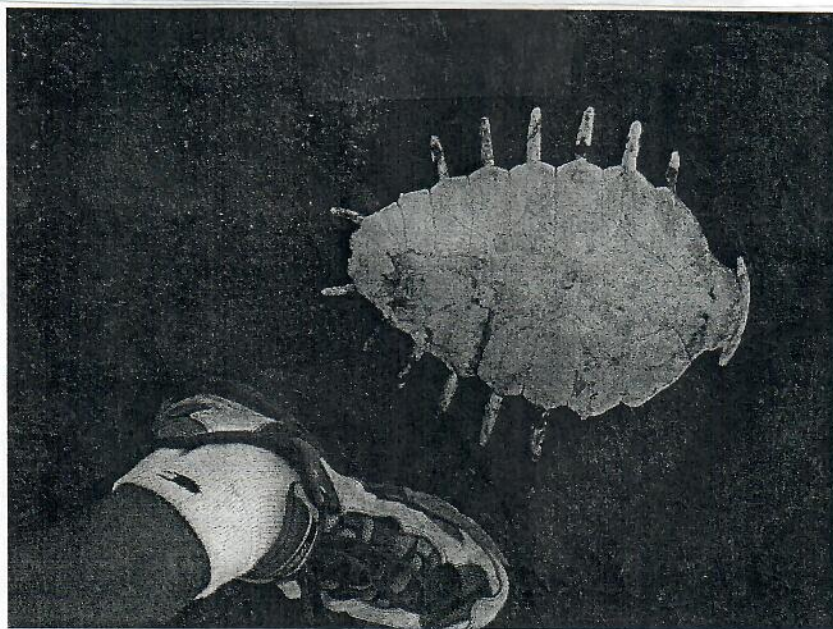
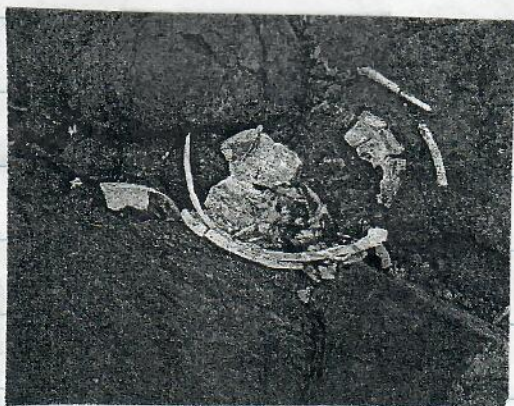
128

----- Forwarded message -----  
Date: Sat, 24 Jun 2000 20:58:36 -1000  
From: Marc R. Rice <mrice@hpa.edu>  
To: gbalazs@honlab.nmfs.hawaii.edu  
Subject: Follow up phone!!!

#144072

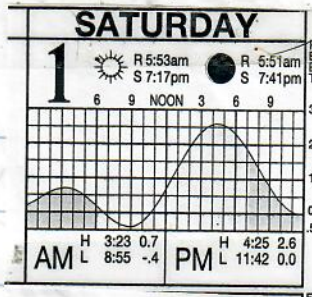
Sorry the phone signal faded today,, but I am sure you had plenty to do... We went down to Kiholo this afternoon just to make sure everything was ok. Found a few interesting things:  
Big Mama (77) was basking on south beach. Numbers 51, 57, 64, 60, 63, 50, 67, 26, 81 and a couple of other numbered ones (I don't have the notes with me right now). out and basking happily. Also found one of our data loggers in front of south beach with both end caps removed and the contents missing. I looked around and searched, but someone must have taken them or thrown them into deep water. The number written on the pvc pipe is 144072-- obviously, I didn't bury the tube deep enough!

I am enclosing a couple of pictures of the remains of a small turtle that I found almost directly across from the sand beach. There were no soft parts remaining and I could find no limb bones or tags. I looked at every scute I could find to see if there were any numbers etched on them... no luck.  
There were 18 turtles out basking today between the hours of 1400 and 1530. I can't wait to get those cameras back in action...  
I faxed the name list to the security office this morning just after I spoke with you. Hope you have a good weekend... see you on Monday.  
Aloha,  
Marc



MAUNA  
LANI  
Fish Pond CAPTURES  
(2)

DATA  
p. 38



2000  
See page 137 (129)

JULY 1, 2000 MAUNA LANI

:21p Jeffrey Smith

808-886-5565

### Fax Cover Sheet



Pages including this cover sheet 1

To: Victor Honda ✓  
 From: Jeffrey Smith  
 Date: November 19, 2001  
 Re: Temporary Fence in Hilton Lagoon

Aloha Officer Honda,

Thank you for your visit last week in regards to the temporary fence we had in place by the Hang Ten Restaurant in the Hilton Waikoloa Village lagoon.

As we discussed, we all want what is best for the turtles and after our conversation, I acted on your recommendation and had the fence taken out of the lagoon.

We are currently pursuing permitting that would allow a permanent divider, which we feel, would be in the best interest for the turtle's welfare. Should you have any further suggestions or recommendations, please do not hesitate to call me at the numbers below.

Thanks again for your time and comments.

  
 Jeffrey Smith  
 General Manager  
 Dolphin Quest Hawaii  
 69-425 Waikoloa Beach Drive  
 Waikoloa, HI 96738  
 808-886-1234 ext. 1505 PH  
 808-937-9199 Cell  
 808-886-5565 Fax  
 jsmith@dolphinquest.org  
 www.dolphinquest.org