

KAPOHO II

16-22 MARCH 2003 II (CONTINUED)

10 APRIL 2003 V

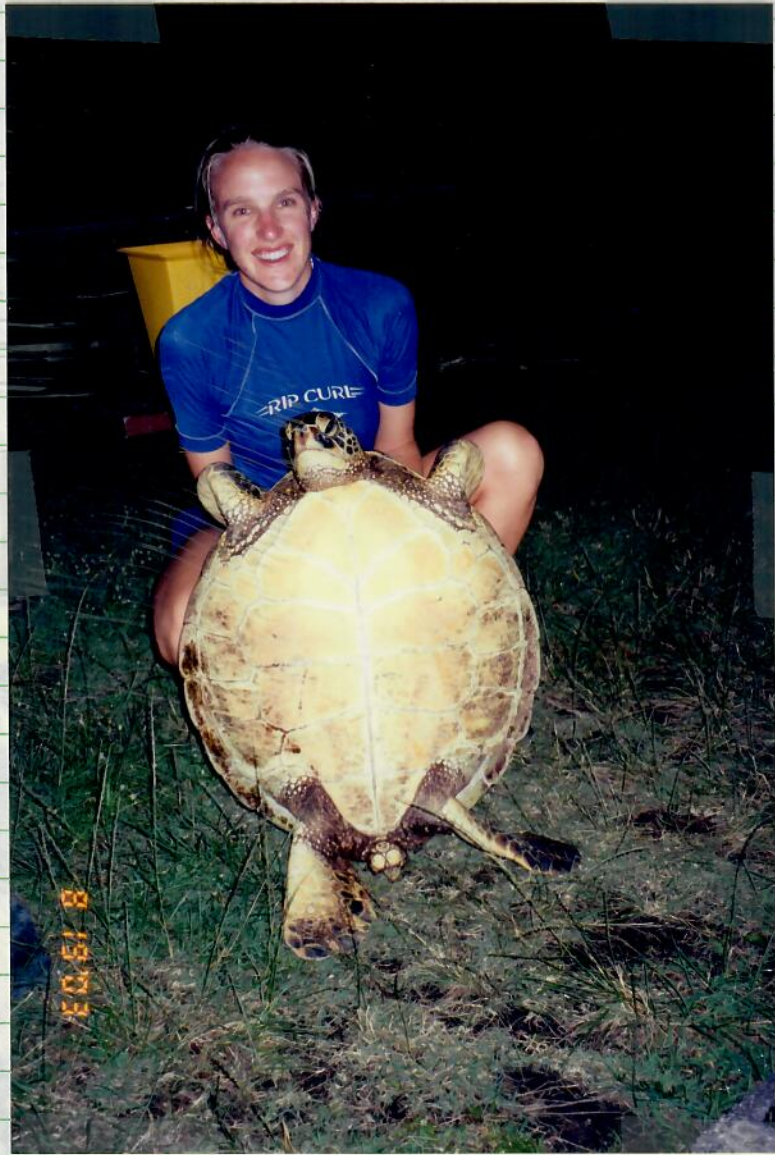
10-13 JUNE 2003 VI

19-21 AUGUST 2003 VII

G.H. BALAZS

2 OF 2

BALAZS (808) 393-6404







Mar 6 2003



SWATH CAROLINA 2003

From p. 88

SEA TURTLE COUNTS AT KAPOHO

Date 2002	Time		Location (From ___) (Chong Pond To ___) (Outer C.P.)	Sighting /-(From shore 2- or snorkeling)	Weather (Sunny, cloudy, rain)	Number of Turtles Seen	Shell mark IDs seen
	From	To					
11-1	6:45A		1	1	C	12	S1, 3, 10, F7
11-2	9:15A		2	2	C	3	Heads only (see back)
11-3	10:30A		1	1	C	9	S1, 8 F6 ML
11-4	8:30A		2	2	C	10	RC S10, F4
11-5	9:30A		1	1	C	9	S1, 3, 8, 10 F1, 4 ML
11-9	4:00P		1	1	S	9	S1, 3, 8, 10 ML
11-10	5:00P		1	1	S	12	F4, 9, 10, Large turn ops (12)
11-11	10:00A		1	1	S	4	S1, FS
11-12	8:15A		1	1	S	1	NER
11-13	8:30A		1	1	S	1	ML
11-14	9:30A		1	2	S	2	ML
11-15	9:00A		2	2	S	6	ML S10
11-16	5:00P		1	1	S	5	S10
11-16	3:15P		1	1	S	4	S10, S3
						2	S10, S3, ML
						6	F7, ML
						6	S10, F1 (see back)

Unmarked



Sylvia Akiona
2511 Kinohale St.
Hilo, HI 96720-5046

Please return to: Marine Turtle Research Program
National Marine Fisheries Service
2570 Dole Street
Honolulu, Hawaii 96822-2396
(808) 286-2899
gbalazs@honlab.nmfs.hawaii.edu

SEA TURTLE COUNTS AT KAPOHO

Date	Time		Location (From ___ / (Chong Pond To ___) 2 or Outer C.P.)	Sighting (From shore / 2 or snorkeling)	Weather (Sunny, cloudy, rain)	Number of Turtles Seen	Shell mark IDs seen
	From ___ To ___						
2003 5/8	5P	1	1	1	S	4	L
5/8	6P	1	1	1	S	7	SHA, L, J
5/9	8A	1	2	1	C	5	HEADS ONLY
5/9	8A	1	1	1	C	5	J, SHA
5/10	5P	1	1	1	S	1	FI
5/11	9A	1	2	1	S	7	HEADS
5/15	2P	1	2	2	S	6	"Per snorkeler" MUYELENANA
5/17	10A	1	1	2	S	26	FI ONE OR ID w/ Tumors
5/19	7:15A	1	1	1	S	2	FI
5/24	10A	1	1	1	S	13	SHA
5/25	6:15A	1	1	1	S	8	31, SHA, A, L, ML
5/26	6A	1	2	2	S	7	(SHA many Tumors 1 to 2 1/2" Top of Left Front + under J, SHA, ML also right eye.
6/8	10A	1	1	1	S	5	
6/11	11:45A	1	1	1	S	4	
						2	
						1	

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Agnie Okunio

11-1 1 Turtle (large) with large tumors seen - previously on report.

Seen smaller turtles are in area. approx 10-12 inch shell.

11-16 1 medium size turtle with with several large ^{size} tumors &
many small tumors on + under front flippers. 54

Judy Molen Ocean Resort
(830) 832-4530

NOT FOR TDBS

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

①

SEA TURTLE TAGGING FORM

DATE FORM FILLED OUT / /

CAPTURE DATE, LOCATION AND METHOD: ^{Appho} 8/19/03 K'Chong Pond 9:30 PM
scoop net

PERSON RECORDING DATA:

TUMOR SCORE

3

OLD TAGS:

42333E1C62

NEW TAGS:

ORAL TMRS EXT. YES OR NO

—

422E702E62

RFL

LFL

EMACIATION CODE

0

6/2/03 = 50.5
51.1 cm

STRAIGHT CARAPACE - LENGTH:

WIDTH: — cm

NOTCH LENGTH: 50.9 cm

DB: 0 L.O.

VB: 0 L.O.

CURVED CARAPACE LENGTH:

53.5 cm

WIDTH: — cm

HEAD WIDTH: — cm

AXIAL: 19.2 cm

LATERAL: 19.2 cm

PPS: YES OR NO OR NE. —

SEX: Male, Female or Undetermined [V]

TAIL LENGTH: T — cm

C — cm

RIGHT FRONT FLIPPER WIDTH:

— cm

SAMPLES COLLECTED:

Q 8612

PLASTRON LENGTH: 40.6 cm

GRA - Stomach Plus

WEIGHT: 6/2/03 = 38.5 #

DESCRIPTIVE REMARKS:

MT-S4A - Crisp Highly Visible

Several print pictures taken

ventral necrotic

RFF-1-#1

LFF-1-#32, 4-#35, 3-#2, 2-#15

Neck-

LH-1-#1

RH-1-#3

Head-1-#2 seam Right Head

EYE-3-#15

REYE-

1-#2 blind

vised 04/04/01

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(2)

SEA TURTLE TAGGING FORM

DATE FORM FILLED OUT / /

CAPTURE DATE, LOCATION AND METHOD:

8/19/03 ^{Kapoho} Chong Pond 930PM
Scoop net

PERSON RECORDING DATA:

TUMOR SCORE

0

ORAL TMRS EXT:
YES OR NO

—

EMACIATION CODE

0

OLD TAGS:

422F080020
4234624214

NEW TAGS:

RFL
LFL

STRAIGHT CARAPACE - LENGTH:

60.1 cm

WIDTH: — cm

NOTCH LENGTH: 59.8 cm

DB: 0 L.O.

VB: 0 L.O.

CURVED CARAPACE LENGTH:

65 cm

WIDTH: cm

HEAD WIDTH: — cm

AXIAL: 26.8 cm

LATERAL: 26.2 cm

PPS: YES OR NO OR NE —

SEX: Male, Female or Undetermined U

TAIL LENGTH: T — cm

C — cm

RIGHT FRONT FLIPPER WIDTH: — cm

SAMPLES COLLECTED:

Q 8616

PLASTRON LENGTH: 49.6 cm

KA Stomach Flusk

WEIGHT: 73 #

DESCRIPTIVE REMARKS:

[Empty box for descriptive remarks]

REV: 1

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SEA TURTLE TAGGING FORM

DATE FORM FILLED OUT / /

CAPTURE DATE, LOCATION AND METHOD:

8/20/03 KAPOHO MAUNG ROVE COVE
 Hand Snorkel

PERSON RECORDING DATA:

TUMOR SCORE

0

ORAL TMRS EXT:

YES OR NO

-

EMACIATION CODE

0

OLD TAGS:

NEW TAGS:

RFI



44545D612B

LFI

4A

44521C5A59



STRAIGHT CARAPACE - LENGTH:

73.2 cm

WIDTH: - cm

NOTCH LENGTH:

73.2 cm

DB: 0

L.O.

VB: 0

L.O.

CURVED CARAPACE LENGTH:

79.5 cm

WIDTH: - cm

HEAD WIDTH: - cm

AXIAL: 31.8 cm

LATERAL: 32.1 cm

PPS: YES OR NO OR NE -

SEX: Male, Female
or Undetermined

J

TAIL LENGTH: T - cm

C - cm

RIGHT FRONT FLIPPER WIDTH: - cm

SAMPLES COLLECTED:

Q8617

PLASTRON LENGTH: 60.5 cm

KA-Skin and Flesh

WEIGHT: - #

(over 100 lb)

DESCRIPTIVE REMARKS:

Bone Deep Scratch injury - RHS of Head
 Right dorsal head

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(4)

SEA TURTLE TAGGING FORM

DATE FORM FILLED OUT / /

CAPTURE DATE, LOCATION AND METHOD:

8/20/03 KAPOHO MANGROVE COVE
Hand Stroke

PERSON RECORDING DATA:

TUMOR SCORE

ORAL TMRS EXT:
YES OR NO

EMACIATION CODE

OLD TAGS:

[Empty box for old tags]

NEW TAGS:

RFL

LFL

LR

RR

[Empty box for RFL tag]

[Barcode for LFL tag]

4439785B33

[Barcode for RR tag]

4452057F4C

STRAIGHT CARAPACE - LENGTH:

54.9 cm

WIDTH: cm

NOTCH LENGTH:

54.4 cm

DB: L.O.

VB: L.O.

CURVED CARAPACE LENGTH:

60 cm

WIDTH: cm

HEAD WIDTH:

cm

AXIAL: 24.1 cm

LATERAL: 23.9 cm

PPS: YES OR NO OR NE

SEX: Male, Female
or Undetermined

TAIL LENGTH: T

cm

C cm

RIGHT FRONT FLIPPER WIDTH:

cm

SAMPLES COLLECTED:

PLASTRON LENGTH:

43 cm

Q8615
KA-Stomach Flush

WEIGHT:

54 #

DESCRIPTIVE REMARKS:

2 teeth left jaw hinge
removed

NMFS 1

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J. W.

SEA TURTLE TAGGING FORM

(5)

DATE FORM FILLED OUT / /

CAPTURE DATE, LOCATION AND METHOD:

8/20/03 KAPALO CHONG POND
 PERSON RECORDING DATA: SET NET

TUMOR SCORE

0

ORAL TMRS EXT:
YES OR NO

—

EMACIATION CODE

0

OLD TAGS:

422E745C5E
 422D62752C

NEW TAGS:

RFL

LFL

STRAIGHT CARAPACE - LENGTH:

50.7 cm

WIDTH:

— cm

NOTCH LENGTH:

50.4 cm

DB:

0 L.O.

VB:

0 L.O.

CURVED CARAPACE LENGTH:

55.5 cm

WIDTH:

— cm

HEAL WIDTH:

— cm

AXIAL:

22.8 cm

LATERAL:

22.8 cm

PPS: YES OR NO OR NE

—

SEX: Male, Female
or Undetermined

U

TAIL LENGTH: T

— cm

C

— cm

SAMPLES COLLECTED:

RIGHT FRONT FLIPPER WIDTH:

— cm

Q8619

PLASTRON LENGTH:

40.2 cm

WEIGHT:

~~44~~ #

43

DESCRIPTIVE REMARKS:

MT-JW - On Carapace, some white paint, fading.

REV: 1

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SEA TURTLE TAGGING FORM

6

DATE FORM FILLED OUT / /

CAPTURE DATE, LOCATION AND METHOD:

8/20/03 KAPOKO Blind inlet
PERSON RECORDING DATA: Hand shorked

TUMOR SCORE

0

ORAL TMRS EXT:

YES OR NO

—

EMACIATION CODE

0

OLD TAGS:

LH 443A113D41



RHS 445524350B



STRAIGHT CARAPACE - LENGTH:

~~84.7~~ 84.2

WIDTH: — cm

NOTCH LENGTH: 83.9 cm

DB: 0 L.O.

VB: 0 L.O.

CURVED CARAPACE LENGTH:

91.0 cm

WIDTH: — cm

HEAD WIDTH: — cm

AXIAL: 35.5 cm

LATERAL: 35.8 cm

PPS: YES OR NO OR NE —

SEX: Male, Female or Undetermined

U

TAIL LENGTH: T — cm

C — cm

RIGHT FRONT FLIPPER WIDTH: — cm

SAMPLES COLLECTED:

PLASTRON LENGTH: 67.7 cm

08620
KA Stomach
flush

WEIGHT: — #

DESCRIPTIVE REMARKS:

Horny
~ Protrusion LFF
Horny Protrusion LFF

REV:

(7)

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SEA TURTLE TAGGING FORM

DATE FORM FILLED OUT / /

CAPTURE DATE, LOCATION AND METHOD:

8/20/03 Kapaehaona Pond
 9 PM Scoop net

PERSON RECORDING DATA:

TUMOR SCORE

0

ORAL TMRS EXT.
YES OR NO

-

EMACIATION CODE

0

OLD TAGS:

LR 4154/E3A17
 RR 4152491C1B

NEW TAGS:

RFL

LFL

STRAIGHT CARAPACE - LENGTH:

~~52.7~~ 49.2 cm

WIDTH:

-

NOTCH LENGTH:

44 cm

49.1

DB:

0 L.O.

VB:

0 L.O.

CURVED CARAPACE LENGTH:

53 cm

WIDTH:

-

HEAD WIDTH:

-

AXIAL:

22.1 cm

LATERAL:

22.3 cm

PPS: YES OR NO OR NE

-

SEX: Male, Female
or Undetermined

U

TAIL LENGTH: T

-

C

-

SAMPLES COLLECTED:

RIGHT FRONT FLIPPER WIDTH:

-

Q 8618

PLASTRON LENGTH:

40.1 cm

KA - Stomach Flush

WEIGHT:

38 #

DESCRIPTIVE REMARKS:

MT - "L" - weak/faint

Revised 04/04/01

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SEA TURTLE TAGGING FORM

8

DATE FORM FILLED OUT / /

CAPTURE DATE, LOCATION AND METHOD:

8/20/55 KAPOTO CHONG Pond
9pm Scoop Net

PERSON RECORDING DATA:

TUMOR SCORE

3

OLD TAGS:

RL 443A183A0F
LR 445 4446861

NEW TAGS:

RFL

LFL

ORAL TMRS EXT:

YES OR NO

EMACIATION CODE

0

STRAIGHT CARAPACE - LENGTH:

62.1 cm

WIDTH:

— cm

NOTCH LENGTH:

61.8 cm

DB:

0 L.O.

VB:

0 L.O.

CURVED CARAPACE LENGTH:

67 cm

WIDTH:

— cm

HEAD WIDTH:

— cm

AXIAL:

25.2 cm

LATERAL:

25.3 cm

PPS: YES OR NO OR NE

—

SEX: Male, Female or Undetermined

J

TAIL LENGTH: T

— cm

C

— cm

RIGHT FRONT FLIPPER WIDTH:

— cm

SAMPLES COLLECTED:

PLASTRON LENGTH:

50.6 cm

Q8614
KA - Stomach Plst

WEIGHT:

6/12/03 75 lbs
75 lbs

DESCRIPTIVE REMARKS:

MT "A" - Deep Engraved, little fading
EXISTING

TUMORS
RFE
Lx#4
LFF
Lx#3
Lx#4
Necrosis
LFE
Perfor white
Suspens Area

Tumor
Right Eye
1x#2
Bleedy
Left Eye
1x#1

REV: 1

(9)

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SEA TURTLE TAGGING FORM

DATE FORM FILLED OUT / /

CAPTURE DATE, LOCATION AND METHOD:

8/20/03 KAPOLOA CHONG Pond Scoop Net
9pm

PERSON RECORDING DATA:

TUMOR SCORE

1

ORAL TMRS EXT.

YES OR NO

—

EMACIATION CODE

0

OLD TAGS:

[Empty boxes for old tags]

NEW TAGS:

REF

LFL

CA
RA

[Empty box for new tag REF]

445272F74

445277141A

STRAIGHT CARAPACE - LENGTH:

62.3 cm

WIDTH: — cm

NO. CH LENGTH:

61.5 cm

DB: 0 L.O.

VB: 0 L.O.

CURVED CARAPACE LENGTH:

67 cm

WIDTH: — cm

HEAD WIDTH:

— cm

AXIAL: 26.5 cm

LATERAL: 26.6 cm

PPS: YES OR NO OR NE

—

SEX: Male, Female or Undetermined

J

TAIL LENGTH: T

— cm

C — cm

RIGHT FRONT FLIPPER WIDTH:

— cm

SAMPLES COLLECTED:

Q8621

PLASTRON LENGTH:

51.1 cm

KA-Stomach Flush

WEIGHT:

83 #

[Empty box]

DESCRIPTIVE REMARKS:

4mm lateral left, Healed indentation

END KAPOTO 8/20/03 83

(10)

SEA TURTLE TAGGING FORM

NEED NEW CLOVES

DATE FORM FILLED OUT / /

CAPTURE DATE, LOCATION AND METHOD:

8/20/03 KAPOTO CHONG Pond
Scoop Net 9PM

PERSON RECORDING DATA:

TUMOR SCORE

0

ORAL TMRS EXT:

YES OR NO

—

EMACIATION CODE

0

OLD TAGS:

[Empty boxes for old tags]

NEW TAGS:

RFL

LFL



4452417C36



443A083132

STRAIGHT CARAPACE - LENGTH:

53.9 cm

WIDTH: cm

NOTCH LENGTH:

53.8 cm

DB:

0 L.O.

VB:

0 L.O.

CURVED CARAPACE LENGTH:

58 cm

WIDTH: cm

HEAD WIDTH:

— cm

AXIAL:

22.5 cm

LATERAL:

22.5 cm

PPS: YES OR NO OR NE

—

SEX: Male, Female or Undetermined

U

TAIL LENGTH: T

— cm

C

— cm

SAMPLES COLLECTED:

Q8613

RIGHT FRONT FLIPPER WIDTH:

— cm

PLASTRON LENGTH:

43.3 cm

KA - Stomach Flush

WEIGHT:

51 #

Mouth/Diet smells like

DESCRIPTIVE REMARKS:

dead fish. or something rotten

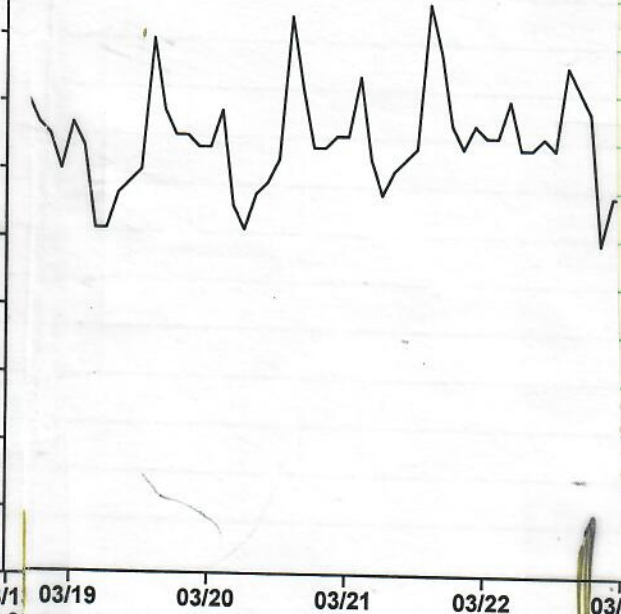
Blind Inlet, Kapoho, Hawaii

MAR 17
2003

Temperature (°C)

03/13/03 01 03/19 03/20 03/21 03/22 03/

40
35
30
25
20



03/18/03 15:31:29.0	26.99 ^{°C}	80.59 ^{°F}
03/18/03 17:31:29.0	26.63	79.95
03/18/03 19:31:29.0	26.46	79.64
03/18/03 21:31:29.0	25.93	78.69
03/18/03 23:31:29.0	26.63	79.95
03/19/03 01:31:29.0	26.28	79.32
03/19/03 03:31:29.0	25.07	77.14
03/19/03 05:31:29.0	25.07	77.14
03/19/03 07:31:29.0	25.59	78.07
03/19/03 09:31:29.0	25.76	78.38
03/19/03 11:31:29.0	25.93	78.69
03/19/03 13:31:29.0	27.88	82.2
03/19/03 15:31:29.0	26.81	80.27
03/19/03 17:31:29.0	26.46	79.64
03/19/03 19:31:29.0	26.46	79.64
03/19/03 21:31:29.0	26.28	79.32
03/19/03 23:31:29.0	26.28	79.32
03/20/03 01:31:29.0	26.81	80.27
03/20/03 03:31:29.0	25.42	77.76
03/20/03 05:31:29.0	25.07	77.14
03/20/03 07:31:29.0	25.59	78.07
03/20/03 09:31:29.0	25.76	78.38
03/20/03 11:31:29.0	26.11	79.01
03/20/03 13:31:29.0	28.24	82.85
03/20/03 15:31:29.0	27.17	80.91
03/20/03 17:31:29.0	26.28	79.32
03/20/03 19:31:29.0	26.28	79.32
03/20/03 21:31:29.0	26.46	79.64
03/20/03 23:31:29.0	26.46	79.64
03/21/03 01:31:29.0	27.34	81.23
03/21/03 03:31:29.0	26.11	79.01
03/21/03 05:31:29.0	25.59	78.07
03/21/03 07:31:29.0	25.93	78.69
03/21/03 09:31:29.0	26.11	79.01
03/21/03 11:31:29.0	26.28	79.32

Time	From	To	Temp	Temp
2:30	11:4			
2:35	5:30			
2:38	2:30			
2:39	2:30			
2:40	5:30			
2:42	9:20			
2:43	4:00			
2:49	10:31			
2:46	10:00			
2:47	6:21			
2:48	4:47			
2:49	4:47			
2:50	8:20			

5-9-03

Reduce

Hi George,

Just to let you know I can't count turtles as I did earlier. I have a health problem at this time and am limited.

However I will try to do my best from shore whenever I am at Kapoho. You probably have already noticed my counts recently ARE more spread apart - "heads only".

I would appreciate if you would give me a list of marking (I D's) of turtles you last did. Was exciting to see "J" & "A". Any more?

Sorry I couldn't be with you at changes on your last project. I'm glad Mr. Cheng permitted you to use his place. Along, Sylvia

SEA TURTLE COUNTS AT KAPOHO

Unmarked

Date	Time		Location (Chong Pond / 2 or Outer C.P.)	Sighting (From shore / 2 or snorkeling)	Weather (Sunny, cloudy, rain)	Number of Turtles Seen	Shell mark IDs seen
	From	To					
1/30	11 A		1	1	S	5	4 ML
2/6	5:30p		1	1	C	2	1 ML
2/8	7:30 A		1	1	S	2	
2/9	7:00 A		1	1	S	4	S3
2/10	5:00 P		1	1	S	1	Head only - very small
2/21	9:20 A		1	1	S	6	510, ML, 54 Many Tumors
2/22	4:00 P		1	1	S	0	
3/30	10:30 A		1	1	S	6	53, 510, ML
4/10	10:00 A		1	1	S	5	"J" ML
				1	C	4	Head only
4/11	6 AM		1	1	C	5	ML
				1	C	4	J, S1
4/20	10 AM		1	1	C	4	J, S1
4/27	9 AM		1	1	S	6	F1, ML
5/3	8 AM		1	1	S	8	J, ML
				1	C	4	"A" Many large tumors

Please return to: Marine Turtle Research Program
National Marine Fisheries Service
2570 Dole Street
Honolulu, Hawaii 96822-2396
(808) 286-2899
dhalays@hawaii.nmfs.gov

Dybra Skonie

SEA TURTLE COUNTS AT KAPOHO

2003

Date	Time (From To)	Location (Chong Pond or Outer C.P.)	Sighting (From shore or snorkeling)	Weather (Sunny, cloudy, rain)	Number of Turtles Seen	Shell mark IDs seen
12/6	5 P	1	1	S	6	ML SFA
12/7	8 AM	2	2	S	10	1 with 3 large tumors 1 RC, 20 known's found
12/8	10 AM	2	1	R	0	
12/9	5:30p	1	1	C	3	Heads only
12/13	9 AM	1	1		0	
12/14	8:30	1	2	RC	8	ML SFA
12/23	10 AM	1	2	S	11	ML, L
12/24	2 P	1	2	S	16	RC, F, S, MER
12/25	10 A	2	2	S	6	SFA
12/26	8 A	1	1	S	9	
			2	S	0	
			2	S	2	
			2	S	3	
			1	S	1	RC ML

Ms. Sylvia T. Aikona
2511 Kinohi St.
Hilo, HI 96720

Go to P.64

kapoho_sighting_form.xls
05-21-02

Happy New Year
to all!

Agnia Akwani

Please return to: Marine Turtle Research Program
National Marine Fisheries Service
2570 Dole Street
Honolulu, Hawaii 96822-2396
(808) 286-2899
chahara@hawaii.gov

Date: Thu, 12 Jun 2003 19:09:45 -1000
From: jo mitchel <popojo@prodigy.net>
To: George H. Balazs <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Accounts of nights used and payment for HonuHale Maluhia

Hi George, Thank you so much for an interesting day. I was happy to meet some of your students & work-mates. Everyone seem to have a conscientious effort to treat the turtles kindly & get their respective data. And they had fun too. I was happy to meet Jill who I knew of her Dad. I believe he was in the Boy Scout Troop that my son was in. It was the Hilo Methodist Church's troop # 77. It was interesting later on we bought the house they lived in in Hilo. Yes, all is in order w/ the rental accounting. You are very kind and honest in your dealings w/ me. I guess Scrappy & Akua left your house. The Unsinkable Molly Brown would have stayed and spent the night w/ you. Thanks again for a nice day, and for your business. aloha, jo

George H. Balazs wrote:

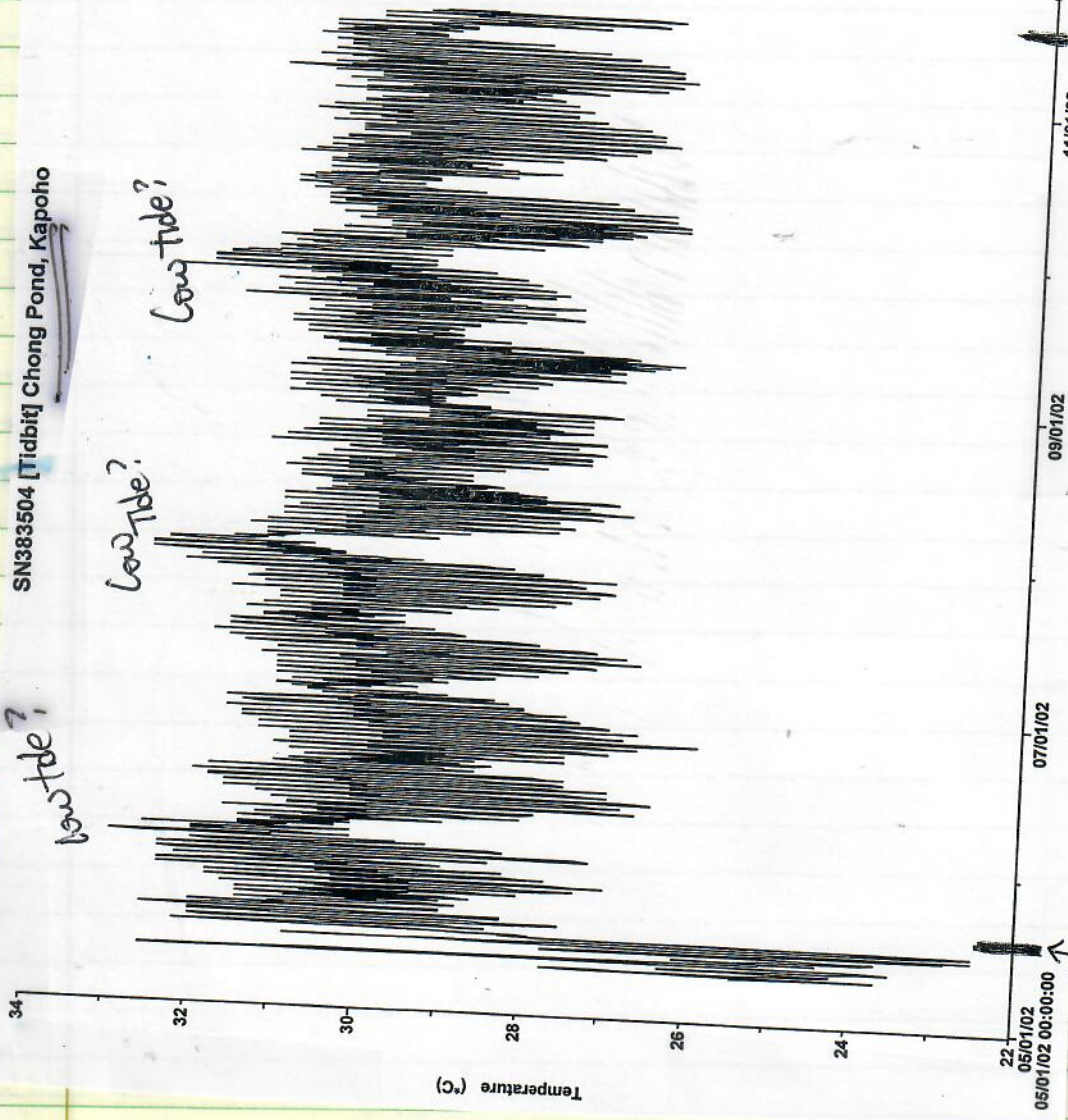
- > JO, Thank you again ever so kindly for coming to be with us
- > today and bringing the lunch food. (Ono, especially your banana bread!).
- >
- > I thought it would be good for me to give you an accounting of where we
- > stand with regard to money and nights for Peaceful Place in recent
- > months:
- >
- > March 2003 \$1,670 paid to your bank account for 2 weeks use of house
- > (\$750 a week + taxes= \$1,670)
- >
- > March 16th 2003 in, March 21st out= 5 nights
- >
- > April 10th, 2003 (I paid you a personal check for this night).
- >
- > June 10th, 2003 in, June 13th (pm late checkout) out= 4 nights
- >
- > TOTAL used to date= 9 nights. Total still available-- 14 minus 9= 5
- >
- > Scheduled for August, nights of 18th, 19th, 20th, 21st check out 22nd= 4
- > nights
- >
- > 5 minus 4= One night remaining to my credit- uncertain at present when
- > that will be used.
- >
- > NOTE in addition you have a piece of paper (purchase order) guaranteeing
- > you payment of another \$1,670 payment from my research program for two
- > more weeks. I haven't scheduled those dates with you yet.
- >
- > All of the above look ok to you? Hope so. Warm Aloha, George

SN383504 [Tidbit] Chong Pond, Kapoho

low tide?

low tide?

low tide?



covered
6/03
But stopped
late Nov 07

05/01/02 00:00:00
07/01/02
09/01/02
11/01/02
01/01/03
01/01/03 00:00:00

Mototooled turtles at Kapoho, Hawaii

Mototool #	Tag #	Date	Location	SCL (cm)	Weight (lb)
EN	424F0B024D 4250040032	7/11/01	Kapoho, Blind Inlet	83.5 (CCL)	-
4C	423B292674 424F373E4C	7/11/01	Kapoho, Outside Mangrove Cove	73.1	-
1B	40616C721B 410B123D38	7/11/01	Kapoho, Mangrove Cove	54.9	52.0
3A	424F373941 42500B213A	7/11/01	Kapoho, Mangrove Cove	56.1	50.0
F1	424D0A5F56 424F0D4471	5/14/02	Kapoho, Champagne Pond	44.1	26.0
J1	424D135E5A 425012380E	5/13/02	Kapoho, Jo Mitchell	60.2	-
J2	4243153236 424E403863	5/13/02	Kapoho, Jo Mitchell Blind Inlet	75.0	-
J3	423D770E2B 424D0D6D60	5/13/02	Kapoho, Jo Mitchell Blind Inlet	59.9	-
S1	424D2B355D 424F0F131C	5/13/02	Kapoho, Champagne Pond	54.6	-
F1	424D0A5F56 424F0D4471	5/14/02	Kapoho, Champagne Pond	44.1	26.0
S2	424D0E4556 4250136B0A	5/14/02	Kapoho, Champagne Pond	48.3	-
S3	423F3A0E72 424E752E50	5/14/02	Kapoho, Champagne Pond	57.6	-
MER	42434F7668 4250324F10	5/14/02	Kapoho, Champagne Pond	52.9	-
RC	424D05435C 42501E1224	5/14/02	Kapoho, Champagne Pond	63.5	-
F2	423334300D 4239614827	5/14/02	Kapoho, Champagne Pond	61.1	-
F3	424F105A44 4250371044	5/14/02	Kapoho, Champagne Pond	59.7	-
SP	423F274925 424E7C6D7D	5/14/02	Kapoho, Champagne Pond	51.4	-
ML	V717 V718 407C7A4924 423D7D2549 4243396667	5/14/02	Kapoho, Champagne Pond	49.6	35.0
S4A	422E702E62 42333E1C62	5/14/02	Kapoho, Champagne Pond	49.2	-
DX1	422F0A5D3F 4232356159	5/14/02	Kapoho, Jo Mitchell Blind Inlet	75.5	-
DX2	7966 422D4D6C08 422E7C3E47	5/14/02	Kapoho, Jo Mitchell Blind Inlet	85.2	-
S4	422D760E19 4236356C7A	5/15/02	Kapoho, Champagne Pond	43.3	-
F4	422D6A1A4A 42323E4447	5/15/02	Kapoho, Champagne Pond	53.0	47.0

Mototool #	Tag #	Date	Location	SCL (cm)	Weight (lb)
S5	422F1D275A 42346E5C59	5/15/02	Kapoho, Champagne Pond	52.2	50.0
F5	4232511C58 423254401B	5/15/02	Kapoho, Champagne Pond	59.5	65.0
F6	422F080020 4234624214	5/15/02	Kapoho, Champagne Pond	55.9	57.0
DMP	423230347F 42334A1D57	5/15/02	Kapoho, Champagne Pond	45.9	32.0
S6	422D4F4030 422F0A2B15	5/15/02	Kapoho, Champagne Pond	47.1	34.0
S7	422D62752C 422E745C5E	5/17/02	Kapoho, Champagne Pond	44.8	32.0
F7	422F0A6613 423239081D	5/17/02	Kapoho, Champagne Pond	42.3	25.0
S8	422F181428 4236153B67	5/17/02	Kapoho, Champagne Pond	42.7	23.0
F8	422D5F6C03 42324E6167	5/17/02	Kapoho, Champagne Pond	44.6	26.0
S9	4235706F07 4236414C6F	5/17/02	Kapoho, Champagne Pond	43.0	22.0
F9	422F1B6B14 42360B5A6E	5/17/02	Kapoho, Champagne Pond	48.8	37.0
S10	422E752F59 422F046E69	5/17/02	Kapoho, Champagne Pond	60.6	66.0
F10	422E59672A 42397F5661	5/17/02	Kapoho, Champagne Pond	61.4	77.0
RE	422F0A3E52 4234764B11	5/17/02	Kapoho, Champagne Pond	46.5	33.0
A	443A183A0F 4454446861	3/17/03	Kapoho, Champagne Pond Chong Pond (CPCP)	61.9	78.0
B	443A185310 4454266D49	3/17/03	Kapoho, CPCP	41.0	23.0
E	424F113561 4359317562	3/17/03	Kapoho, CPCP	41.7	24.0
F	4359191061 4454263508	3/17/03	Kapoho, Blind Inlet	67.7	108.0
C	42334F004E 433D532A49	3/17/03	Kapoho, Blind Inlet	58.6	67.0
G	443A114614 4454086229	3/17/03	Kapoho, Blind Inlet	73.2	-
D	433D34573B 43674F3070	3/17/03	Kapoho, Blind Inlet	49.2	45.0
AL	44397A5D7A 4454683F27	3/18/03	Kapoho, Slim Holt Pond	63.9	103.0
H	443A041E21 443A0D3627	3/18/03	Kapoho, Blind Inlet	63.8	73.0
I	4452501C34 4454165D4F	3/18/03	Kapoho, Blind Inlet	72.3	116.0
K	44523C0421 4452580B10	3/19/03	Kapoho, CPCP	42.4	25.0

kapoho.mototool.xls
06-05-03

Marine Turtle Research Program
National Marine Fisheries Service
Honolulu Laboratory
2570 Dole Street

Mototool #	Tag #	Date	Location	SCL (cm)	Weight (lb)
J	44524E0272 4455162816	3/19/03	Kapoho, CPCP	66.5	84.0
L	4452491C1B 44540F3A17	3/19/03	Kapoho, CPCP	47.2	34.0
M	4454244937 4455244036	3/21/03	Kapoho, Blind Inlet	59.1	67.0
N	4414127F2D 44141E174A	3/21/03	Kapoho, Blind Inlet	55.2	55.0
O	44146C0921 441474015C	3/21/03	Kapoho, Blind Inlet	67.2	102.0
P	445221664C 445479652A	3/22/03	Kapoho, Mangrove Cove	63	68.0





Ms. Josephine G. Mitchel

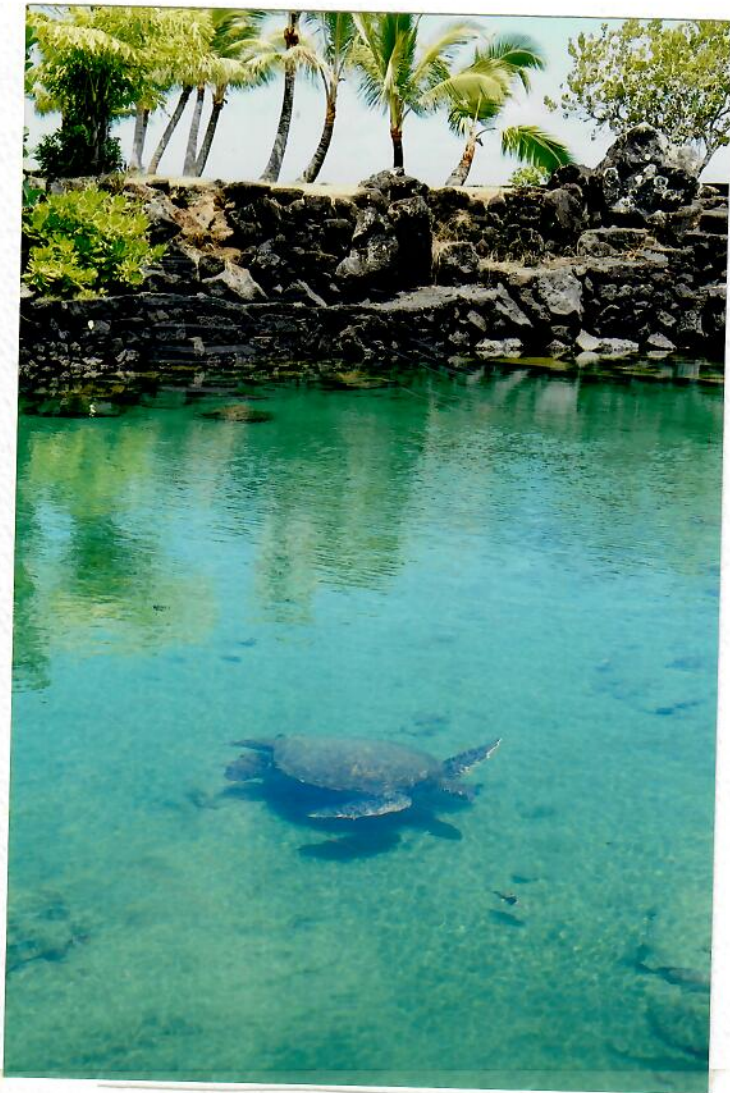
Sept. 25, 2003

Hi George -
Just that you'd
like - to see "Albert"
again -

← Isn't he handsome?

Take care +
mucho aloha -

Jo
Mary Lou was a
guest at Kapoho's
"Peaceful Place"
She lives on Oahu -



Tide Pool with Honu .26
A turtle plays in one of the many tide pools
in Kapoho, on the eastern shore of the Big Island.

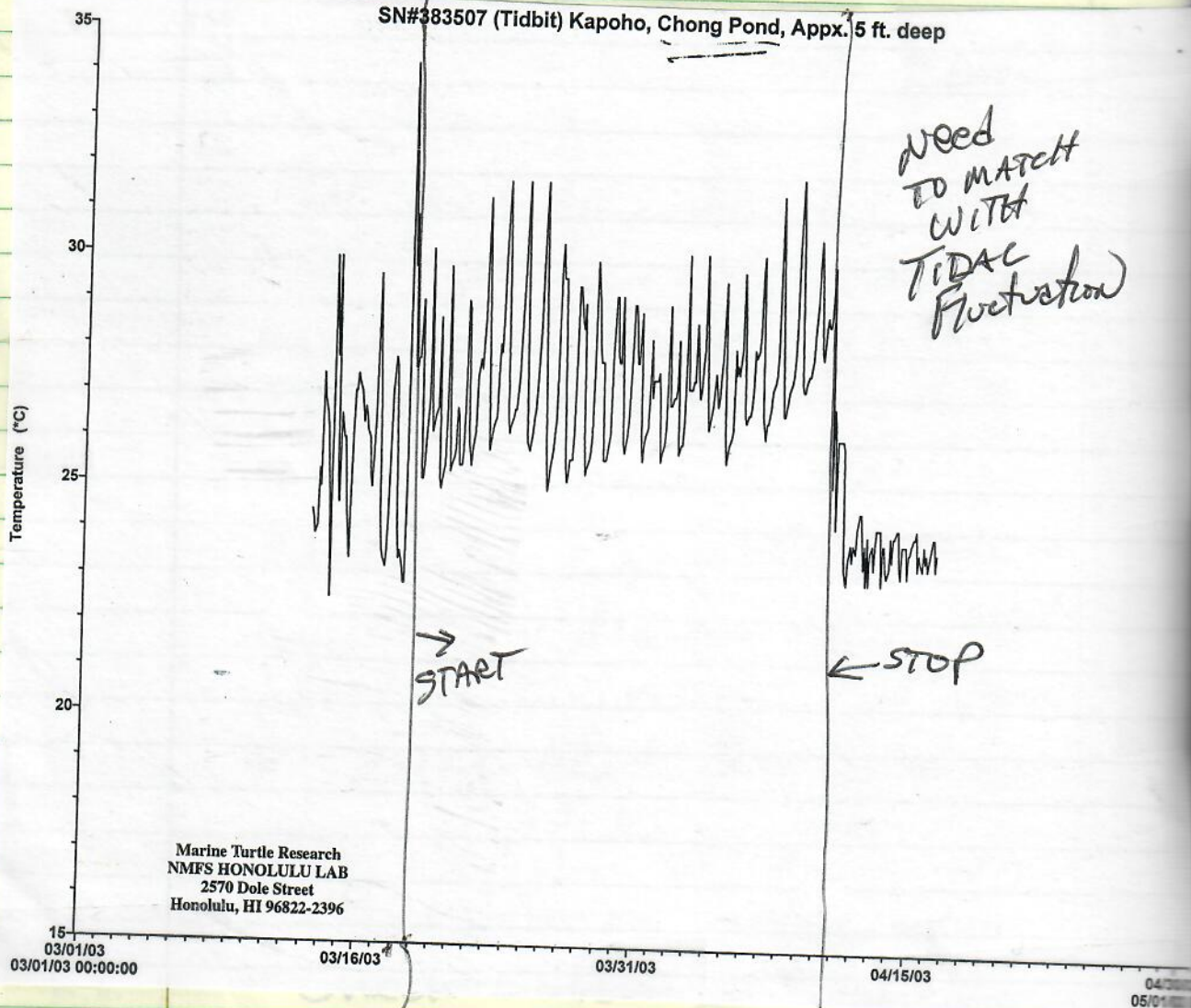
- OVER -

03/25/03 21:32:48.0
03/25/03 21:32:48.0
03/25/03 21:32:48.0

28.2
29.3
30.4
31.5

32.6
33.7
34.8
35.9
36.0
37.1
38.2
39.3
40.4
41.5
42.6
43.7
44.8
45.9
46.0
47.1
48.2
49.3
50.4
51.5
52.6
53.7
54.8
55.9
56.0
57.1
58.2
59.3
60.4
61.5
62.6
63.7
64.8
65.9
66.0
67.1
68.2
69.3
70.4
71.5
72.6
73.7
74.8
75.9
76.0
77.1
78.2
79.3
80.4
81.5
82.6
83.7
84.8
85.9
86.0
87.1
88.2
89.3
90.4
91.5
92.6
93.7
94.8
95.9
96.0
97.1
98.2
99.3
100.4

SN#383507 (Tidbit) Kapoho, Chong Pond, Appx. 5 ft. deep



on 11th and 14th
Mabitte again

38350

Marett 18 - April 10,
532pm 2003

C-Hang Ponds Tad Bit in Cup
Under Rocks

03/18/03 17:32:48.0	27.61
03/18/03 19:32:48.0	27.61
03/18/03 21:32:48.0	27.79
03/18/03 23:32:48.0	27.79
03/19/03 01:32:48.0 <u>130Am</u>	<u>29.06</u>
03/19/03 03:32:48.0	25.16
03/19/03 05:32:48.0	25.16
03/19/03 07:32:48.0	25.5
03/19/03 09:32:48.0 <u>930Am</u>	<u>26.02</u>
03/19/03 11:32:48.0	26.89
03/19/03 13:32:48.0	30.17
03/19/03 15:32:48.0	27.07
03/19/03 17:32:48.0 <u>532pm</u>	<u>26.19</u>
03/19/03 19:32:48.0	26.37
03/19/03 21:32:48.0	26.54
03/19/03 23:32:48.0	26.72
03/20/03 01:32:48.0 <u>132Am</u>	<u>28.69</u>
03/20/03 03:32:48.0	25.16
03/20/03 05:32:48.0	24.98
03/20/03 07:32:48.0	25.16
03/20/03 09:32:48.0 <u>932Am</u>	<u>25.5</u>
03/20/03 11:32:48.0	<u>26.72</u>
03/20/03 13:32:48.0	29.8
03/20/03 15:32:48.0	27.25
03/20/03 17:32:48.0 <u>532pm</u>	<u>25.33</u>
03/20/03 19:32:48.0	25.5
03/20/03 21:32:48.0	25.67
03/20/03 23:32:48.0	25.84
03/21/03 01:32:48.0	26.72
03/21/03 03:32:48.0	26.54
03/21/03 05:32:48.0	25.5
03/21/03 07:32:48.0	25.5
03/21/03 09:32:48.0	25.84
03/21/03 11:32:48.0	27.07
03/21/03 13:32:48.0	29.06
03/21/03 15:32:48.0	28.88
03/21/03 17:32:48.0	26.02
03/21/03 19:32:48.0	25.5

03/21/03 21:32:48.0	25.84
03/21/03 23:32:48.0	26.02
03/22/03 01:32:48.0	26.19
03/22/03 03:32:48.0	27.43
03/22/03 05:32:48.0	27.79
03/22/03 07:32:48.0	27.61
03/22/03 09:32:48.0	28.14
03/22/03 11:32:48.0	28.69
03/22/03 13:32:48.0	29.98
03/22/03 15:32:48.0	31.31
03/22/03 17:32:48.0	27.25
03/22/03 19:32:48.0	25.84
03/22/03 21:32:48.0	26.02
03/22/03 23:32:48.0	26.19
03/23/03 01:32:48.0	26.37
03/23/03 03:32:48.0	26.54
03/23/03 05:32:48.0	27.61
03/23/03 07:32:48.0	28.14
03/23/03 09:32:48.0	27.97
03/23/03 11:32:48.0	28.88
03/23/03 13:32:48.0	30.17
03/23/03 15:32:48.0	31.69
03/23/03 17:32:48.0	30.17
03/23/03 19:32:48.0	26.54
03/23/03 21:32:48.0	26.19
03/23/03 23:32:48.0	26.37
03/24/03 01:32:48.0	26.54
03/24/03 03:32:48.0	26.72
03/24/03 05:32:48.0	26.72
03/24/03 07:32:48.0	27.07
03/24/03 09:32:48.0	27.43
03/24/03 11:32:48.0	28.33
03/24/03 13:32:48.0	29.8
03/24/03 15:32:48.0	30.93
03/24/03 17:32:48.0	31.69
03/24/03 19:32:48.0	28.14
03/24/03 21:32:48.0	26.02
03/24/03 23:32:48.0	25.84
03/25/03 01:32:48.0	26.02
03/25/03 03:32:48.0	26.19
03/25/03 05:32:48.0	26.54
03/25/03 07:32:48.0	26.72
03/25/03 09:32:48.0	27.25
03/25/03 11:32:48.0	28.51
03/25/03 13:32:48.0	29.8
03/25/03 15:32:48.0	30.93
03/25/03 17:32:48.0	31.69
03/25/03 19:32:48.0	28.88
03/25/03 21:32:48.0	25.67
03/25/03 23:32:48.0	24.98
03/26/03 01:32:48.0	25.16
03/26/03 03:32:48.0	25.5

Range = 25.2 - 31.9 °C

03/26/03 05:32:48.0	25.67	03/30/03 13:32:48.0	29.06
03/26/03 07:32:48.0	25.84	03/30/03 15:32:48.0	29.06
03/26/03 09:32:48.0	26.54	03/30/03 17:32:48.0	28.69
03/26/03 11:32:48.0	28.33	03/30/03 19:32:48.0	27.79
03/26/03 13:32:48.0	29.8	03/30/03 21:32:48.0	27.79
03/26/03 15:32:48.0	30.36	03/30/03 23:32:48.0	28.88
03/26/03 17:32:48.0	29.62	03/31/03 01:32:48.0	26.02
03/26/03 19:32:48.0	29.62	03/31/03 03:32:48.0	25.67
03/26/03 21:32:48.0	27.25	03/31/03 05:32:48.0	26.02
03/26/03 23:32:48.0	25.5	03/31/03 07:32:48.0	26.19
03/27/03 01:32:48.0	25.16	03/31/03 09:32:48.0	26.37
03/27/03 03:32:48.0	25.33	03/31/03 11:32:48.0	27.25
03/27/03 05:32:48.0	25.67	03/31/03 13:32:48.0	28.33
03/27/03 07:32:48.0	25.67	03/31/03 15:32:48.0	27.07
03/27/03 09:32:48.0	26.19	03/31/03 17:32:48.0	27.43
03/27/03 11:32:48.0	27.79	03/31/03 19:32:48.0	27.43
03/27/03 13:32:48.0	29.43	03/31/03 21:32:48.0	27.43
03/27/03 15:32:48.0	29.43	03/31/03 23:32:48.0	27.61
03/27/03 17:32:48.0	28.69	04/01/03 01:32:48.0	27.07
03/27/03 19:32:48.0	28.51	04/01/03 03:32:48.0	25.67
03/27/03 21:32:48.0	29.06	04/01/03 05:32:48.0	25.84
03/27/03 23:32:48.0	26.19	04/01/03 07:32:48.0	26.02
03/28/03 01:32:48.0	25.33	04/01/03 09:32:48.0	26.37
03/28/03 03:32:48.0	25.5	04/01/03 11:32:48.0	27.97
03/28/03 05:32:48.0	25.67	04/01/03 13:32:48.0	29.06
03/28/03 07:32:48.0	25.84	04/01/03 15:32:48.0	26.89
03/28/03 09:32:48.0	26.19	04/01/03 17:32:48.0	26.89
03/28/03 11:32:48.0	27.79	04/01/03 19:32:48.0	27.07
03/28/03 13:32:48.0	29.98	04/01/03 21:32:48.0	27.07
03/28/03 15:32:48.0	29.06	04/01/03 23:32:48.0	27.25
03/28/03 17:32:48.0	28.14	04/02/03 01:32:48.0	28.33
03/28/03 19:32:48.0	27.79	04/02/03 03:32:48.0	25.84
03/28/03 21:32:48.0	27.79	04/02/03 05:32:48.0	26.02
03/28/03 23:32:48.0	27.79	04/02/03 07:32:48.0	26.02
03/29/03 01:32:48.0	25.67	04/02/03 09:32:48.0	26.54
03/29/03 03:32:48.0	25.67	04/02/03 11:32:48.0	28.14
03/29/03 05:32:48.0	25.84	04/02/03 13:32:48.0	30.17
03/29/03 07:32:48.0	26.02	04/02/03 15:32:48.0	27.25
03/29/03 09:32:48.0	26.19	04/02/03 17:32:48.0	27.25
03/29/03 11:32:48.0	27.97	04/02/03 19:32:48.0	27.25
03/29/03 13:32:48.0	29.24	04/02/03 21:32:48.0	27.43
03/29/03 15:32:48.0	29.24	04/02/03 23:32:48.0	27.43
03/29/03 17:32:48.0	27.97	04/03/03 01:32:48.0	28.69
03/29/03 19:32:48.0	27.79	04/03/03 03:32:48.0	27.43
03/29/03 21:32:48.0	27.79	04/03/03 05:32:48.0	27.07
03/29/03 23:32:48.0	29.24	04/03/03 07:32:48.0	27.25
03/30/03 01:32:48.0	26.02	04/03/03 09:32:48.0	27.79
03/30/03 03:32:48.0	25.84	04/03/03 11:32:48.0	28.14
03/30/03 05:32:48.0	26.02	04/03/03 13:32:48.0	30.17
03/30/03 07:32:48.0	26.19	04/03/03 15:32:48.0	27.07
03/30/03 09:32:48.0	26.54	04/03/03 17:32:48.0	26.37
03/30/03 11:32:48.0	28.14	04/03/03 19:32:48.0	26.54

04/03/03 21:32:48.0	26.72
04/03/03 23:32:48.0	26.89
04/04/03 01:32:48.0	27.61
04/04/03 03:32:48.0	27.25
04/04/03 05:32:48.0	26.89
04/04/03 07:32:48.0	27.07
04/04/03 09:32:48.0	27.61
04/04/03 11:32:48.0	27.97
04/04/03 13:32:48.0	29.62
04/04/03 15:32:48.0	26.37
04/04/03 17:32:48.0	25.67
04/04/03 19:32:48.0	25.84
04/04/03 21:32:48.0	26.02
04/04/03 23:32:48.0	26.19
04/05/03 01:32:48.0	26.37
04/05/03 03:32:48.0	28.14
04/05/03 05:32:48.0	27.61
04/05/03 07:32:48.0	27.79
04/05/03 09:32:48.0	27.61
04/05/03 11:32:48.0	28.14
04/05/03 13:32:48.0	29.8
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04/05/03 17:32:48.0	26.72
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04/06/03 03:32:48.0	27.25
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04/06/03 07:32:48.0	27.97
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04/06/03 17:32:48.0	26.72
04/06/03 19:32:48.0	26.19
04/06/03 21:32:48.0	26.54
04/06/03 23:32:48.0	26.54
04/07/03 01:32:48.0	26.72
04/07/03 03:32:48.0	26.89
04/07/03 05:32:48.0	27.25
04/07/03 07:32:48.0	27.43
04/07/03 09:32:48.0	27.61
04/07/03 11:32:48.0	28.14
04/07/03 13:32:48.0	29.98
04/07/03 15:32:48.0	31.49
04/07/03 17:32:48.0	27.97
04/07/03 19:32:48.0	26.72
04/07/03 21:32:48.0	26.72
04/07/03 23:32:48.0	26.89
04/08/03 01:32:48.0	27.07
04/08/03 03:32:48.0	27.25

04/08/03 05:32:48.0	27.43
04/08/03 07:32:48.0	27.61
04/08/03 09:32:48.0	27.97
04/08/03 11:32:48.0	28.69
04/08/03 13:32:48.0	30.36
04/08/03 15:32:48.0	31.88
04/08/03 17:32:48.0	30.55
04/08/03 19:32:48.0	27.43
04/08/03 21:32:48.0	27.25
04/08/03 23:32:48.0	27.25
04/09/03 01:32:48.0	27.43
04/09/03 03:32:48.0	27.61
04/09/03 05:32:48.0	27.61
04/09/03 07:32:48.0	27.79
04/09/03 09:32:48.0	27.97
04/09/03 11:32:48.0	28.51
04/09/03 13:32:48.0	29.24
04/09/03 15:32:48.0	29.98
04/09/03 17:32:48.0	30.55
04/09/03 19:32:48.0	29.8
04/09/03 21:32:48.0	28.14
04/09/03 23:32:48.0	27.97
04/10/03 01:32:48.0	28.69
04/10/03 03:32:48.0	28.88
04/10/03 05:32:48.0	28.69
04/10/03 07:32:48.0	28.69
04/10/03 09:32:48.0	28.88

Travel

Sunday,
March 23, 2003

'The Big Island Revealed'

Writer takes the advice of Hawaii travel guidebook

By Alan D. McNarie
For the Tribune-Herald

A little excitement recently came into this writer's life.

A visitor from the mainland brought a travel guide into the house with him: a book called "Hawaii The Big Island Revealed," by Andrew Doughty and Harriett Friedman. It was actually an interesting read.

The organization was a bit chaotic and idiosyncratic; instead of telling everything about one part of the island, it discussed all the beaches in one section, all the "sights" in another, "activities" in yet another, and "dining" in another, etc., which meant planning a single trip required a lot of page turning. And when this writer read the "adventures" section, his first thought was, "Some tourist is going to get killed because of this."

But the book had one all-redeeming virtue: This writer was surprised to discover that it contained descriptions of places where this 14-year Big Island veteran had never been.

The true test of a guidebook is to actually try to follow its directions and see what happens. So this author picked



T-H photo by Alan D. McNarie

Houses and concrete walls surround the Champagne Pond in lower Puna, one of many destinations included in the travel guidebook, "Hawaii The Big Island Revealed."

DAY TRIPPER



out one of those places he hadn't visited: the "Champagne Pond" in lower Puna.

Doughty and Friedman call the Champagne Pond "an awesome experience" and "a real gem." The pond, which was actually a small cove, is renowned for being volcanically heated — sort of like Ahalanui State Park, only larger and cleaner.

It's located at the back of Kapoho Beach Lots, which has been gated for several years. But the guidebook describes how to get there by a "4WD public lava road"

from Kumukahi Point.

Kumukahi Point, for the uninitiated, is the easternmost point on the island. It's home to a light tower and a very large a'a flow. The guidebook doesn't give directions to the point alone — it's described in the "Hilo and Puna Sights" section, as part of a general tour of Puna — so a tourist would have to pick bits of directions out of several different paragraphs.

So this writer cheated, since he already knew how to get there: From Hilo, take Volcano Highway to the Keaau-

Paho Bypass, and follow it onto Hawaii 130. Go to the second Paho exit, but instead of turning right into Paho, turn left on Hawaii 132 (the Kapoho-Paho Road). When you hit the "Y" intersection, turn left, then follow the highway to the "T" intersection, where it intersects Hawaii 137, better known as the Red Road. Straight ahead is a gravel road. Take it. It's passable even for this writer's Geo Metro. But take it very slow, because it's horribly washboarded. Go too fast, and it'll chatter your teeth or rattle

your muffler right off your car.

This road leads directly across the 1960 lava flow that destroyed Kapoho Village. At its end, you'll find the Kumukahi Light, which resembles a small Eiffel tower surrounded by a chain-link fence and barbed wire.

"Take a deep breath," instructs the guidebook at this point. "This is the easternmost part of the island, and since our winds come from that direction, scientists use it to

See REVEALED,
Page 39

Travel

REVEALED: Finding Champagne Pond by trail can be a challenge

From Page 37

test "virgin air" that has drifted over the landless Pacific for many weeks. Air from here is considered as pristine as any in the world."

This writer followed directions, and took a deep breath. It smelled slightly fishy.

A number of tourists were parked at the turnaround by the light. One woman had stopped another couple to ask, "Do you know where the road to the warm swimming pool is?" This led to some discussion. More than one faint trail took off across the area from here.

But the guidebook clearly said "gray lava road on the right." And sure enough, there it was: gray because the chunks of a had been ground down by more tires than had the area on any other road in the area.

"Regular car drivers will have to walk 1 1/10 mile to Kapoho Bay," reads the guidebook. It's right. Abandon Geo Metros, all ye who enter here.

Then the fun begins. The guidebook doesn't mention all the fishermen's jeep trails branching off to the left, or the shortcut that branches right and

ends up back at the Kumukahi Light Road. This author strayed off at the first intersection, and ended up out at a fisherman's point, where a bemused couple in a rented sport-utility vehicle were admiring the crashing waves and consulting their own copy of "The Big Island Revealed."

"Do you know where the warm pond is?" they asked. "Uh, I guess not this way," I replied.

We all retraced our tracks, headed inland, then turned left when the shortcut branched off, obviously heading too far inland. From then on, it was a simple process: Stay on the biggest, grayest trail, unless you wanted to go to the edge of the cliffs and enjoy the view (or throw in a fishing line).

As it turned out, the trail was the highlight of the trip. It passed along a wild, black coast, a sort of miniature Big Sur, with huge waves crashing against cliffs and sea stacks, then retreating in waterfalls of brilliant white froth.

Towers of spray sometimes shot 20 or 30 feet above the

an ominous hint of the rocks and reefs beneath all that froth. At the far end of the beach lay the promised Champagne Pond.

Unfortunately, there also lay civilization. The guidebook had noted that the cove was "next to an A-frame house." It didn't mention all the other houses, nor the huge sea walls that intrude far into the tidal zones.

One such wall, capped by "NO TRESPASS" signs, ran nearly the entire length of the cove's opposite shore; another cut directly across one fork of the cove, turning it into someone's private swimming pool. But there was still plenty of water for the rest of us — and there weren't that many of us on this weekday.

Despite all the wave action going on a few dozen yards away, the water in the cove was calm and crystal clear, except for the wavy convection lines that marked the boundary to the warm freshwater that was floating atop colder, denser seawater. On this particular day, the touted 91-degree water formed a layer only about 6 inches

deep. If you stuck your toe down, you instantly encountered the usual Big Island March ocean.

This writer had a snorkel mask along, but no fins. But a leisurely breast stroke seemed perfectly suited for this little cove.

The bottom was rather uninteresting: hardly any coral, only a few schools of small fish. There is actually much better snorkeling available elsewhere on this coast. There was one mysterious feature: occasional large clusters of rocks that looked as if they'd been piled together by human hands,

though some of them were several feet down and some of the rocks were huge. Underwater heiaus? The freak action of tidal currents?

But the chief points of marine interest on this particular day were a couple of green sea turtles.

One of the great virtues of turtles is that they eat seaweed, so we really have nothing that they want — and since we've stopped eating them, for the most part, they have no particu-

lar reason to avoid us, either. So they're free to just eat like turtles.

These two weren't exactly friendly, but they were obviously quite used to humans. At one point, this author was swimming into a rather narrow stretch of this cove when the larger of the two honu — a monster with a shell at least three feet in length — was swimming out. It passed within a foot or two, while altering neither course nor speed.

Later the smaller turtle was swimming, quite unconcernedly, on a parallel course at the same speed, effectively blocking the route to shore. This writer had to slack off and let him continue on, before angling in for the beach. Turtles have the legal right of way; it's a misdemeanor to disturb or harass them.

All told, this author wouldn't call the Champagne Pond truly "awesome." But it was worth a pleasant afternoon. On a grade scale, I'd give it a B — and about the same grade to "Hawaii the Big Island Revealed."

*Aethurena's II
found PARTNER*

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 3-206
HONOLULU, HAWAII 96850
808-541-3445, FAX 541-3472, thierry_work@usgs.gov

Case # 15297

Epizoo #

Submitter:

Mr. George Balazs
NOAA-NMFS-SWFC
2570 Dole Street
Honolulu, HI 96822-2396

Specimen description/identification:

1 green turtle carcass

Date Submitted: (04/03/2000) Date Collected: (02/11/2000) Date Examined: (04/03/2000)
(mm/dd/yy) (mm/dd/yy) (mm/dd/yy)

Location: Kapoho

County/Site: Hawaii

HISTORY: This animal was found dead in an isolated saltwater pond near Kapoho on Hawaii. The animal was fed papayas and other fruit due to the lack of opportunities to graze on algae. This is MTRP ID 02-11-00D.

SIGNIFICANT FINDINGS: This was a subadult male with massive deposits of fat in the coelomic cavity. Significant gross findings included a massively enlarged thyroid, severe shrinkage of the liver and papayas in the stomach and small intestines. Microscopic findings included severe goiter, fatty change, fibrosis, and atrophy of the liver, kidney testes, and spleen, and acute necrosis of kidney tissue associated with crystal deposition.

DIAGNOSIS: Goiter and hypothyroidism.

COMMENTS: The lesions in this animal pointed to a metabolic disease associated with inability to properly mobilize and metabolize fat. This was evident in the changes (fatty change) seen in multiple organs. The fibrosis accompanying these changes indicated the process was chronic (occurring over several months and perhaps years) and eventually impaired function of critical organs (spleen, liver, kidney) to the point where the animal died. It is likely that a major source of this metabolic disorder was severe hypothyroidism manifested morphologically as a massively enlarged thyroid (goiter). Goiter is typically associated with a diet deficient in iodine. Sea turtles in the wild typically graze on a variety of marine algae, which are rich sources of iodine, and probably other critical nutrients. The diet (papayas and other fruit and vegetables and absence of marine algae) of this animal may have lacked sufficient iodine. Alternatively, this animal may have been unable, for unknown reason, to properly assimilate iodine from its diet. The crystals in seen in the kidney were compatible with oxalate. Deposition of these crystals in animals typically occurs when they eat antifreeze (ethylene glycol) or plants rich in oxalates. These crystals, in sufficient amounts, damage kidney tissue and may lead to renal failure.

MANAGEMENT: Provision of a diet more compatible with what green turtles eat in the wild.

Preliminary Report (/ /) X Final Report (05/18/2000)
date date

Necropsy report is: X enclosed available upon request.

If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM at 808-541-3445. Include above Case Number. Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

NATIONAL WILDLIFE HEALTH CENTER
NECROPSY REPORT

Submitter's Name, Affiliation Address

Mr. George Balazs
NOAA-NMFS-SWFC
2570 Dole Street
Honolulu, HI 96822-2396

Case: 15297
Accession: 001
Collected: 02/11/2000
Exam Date: 04/03/2000
Pathologist: T.M. Work
Prosector: T.M. Work

Species: Green turtle Specimen: Carcass
Bandtype: (E) Ref/Band No: (021100D) Euth: (N) Weight (Gm): (94545)
History Summary: This animal was found dead in an isolated saltwater pond near Kapoho on Hawaii. The animal was fed papayas and other fruit due to the lack of opportunities to graze on algae. Identification tags: RFL-Y153, LFL-Y152. Body measurements: SCL-80.2 cm, CCL-83.5 cm, TTL-38.5 cm.

EXTERNAL/INTERNAL OBSERVATIONS - LABORATORY RESULTS

External: The carcass was frozen prior to necropsy.

Internal: There are massive amounts of body fat. The liver is gray, cirrhotic, and appears shrunken. Pale foci ranging from pinpoint size to 1 mm appear on the liver surface. The heart is firm, smooth, homogenous red and otherwise unremarkable. The lungs are spongy and homogenous red-pink. The spleen is firm, smooth, and homogenous brown. The kidneys are firm, smooth, and homogenous brown. The adrenals appear enlarged. No bladder trematodes were seen. There is a huge amount of mesenteric fat. The thyroid is markedly hypertrophied and measures 11 cm in diameter. The brain is smooth, firm, and homogenous tan-pink. The esophagus contains the remains of 3-4 papayas. The gastrointestinal mucosa is smooth, homogenous tan and the lumen of the small intestines contains remains of papayas. No lesions are seen in the brain, musculoskeletal system, pericardial sac, heart valves, gall bladder, gastrointestinal mucosa and serosa, testes, pancreas and superficial and cut surface of heart, kidney, spleen, and lungs.

Preliminary Diagnosis: Goiter Exam Type: (GO)

Sex (M) Age (B)/() Body Cond. (E) Postmortem State (G) Giz. Lead ()/()

Laboratory Tests/Samples Saved:

- 1. Histo: Brain (A); Liver, spleen, testes (B); heart (C); lung (D); thyroid (E); liver (F); kidney (G-H).
- 2. Frozen: spleen, liver, thyroid.

HISTOPATHOLOGY:

Lung: In one section, the pleura appear somewhat thickened with nidi of eosinophilic homogenous material.

Liver: Diffusely, hepatic architecture is largely replaced by trabeculae of fibrous tissue surrounding pleomorphic clear spaces (probable fatty change) some of which are filled with masses of melanophages. Isolated foci of massively atrophied hepatocytes are occasionally noted within connective tissue trabeculae.

Heart: Myocardial fibers appear alternatively shrunken to hypertrophied and there are numerous small infiltrates of melanophages. In one section, myocardium is displaced by large numbers of lipocytes.

Brain: There is marked deposition of fibrillar eosinophilic material around meningeal blood vessels. Some vessels within the brain contain intramural depositions of granular brown pigment.

Case No.15297-01
Page 2

Histopathology (cont.)

Spleen: The spleen is virtually bereft of lymphoid tissue and red cells most of which are replaced by massive deposition of granular brown pigments and vacuolated cells. The latter are hard to positively identify as lipocytes due to freeze-thaw damage. The splenic capsule appears thickened and there are focal areas of necrosis and deposition of basophilic granular pigment (probable mineralization).

Kidney: There is marked fatty change and fibrosis of renal tubular interstitium that occupies most of the renal architecture. Remnant proximal tubular cells are either massively atrophied or exhibit acute necrosis characterized by cytoplasmic hyper eosinophilia, fragmentation and nuclear pyknosis and karyolysis. Accumulations of birefringent crystals are noted within the lumen of scattered tubules. Epithelium of bowmans capsule of glomeruli appears hypertrophied and glomeruli are infiltrated by moderate numbers of melanophages.

Thyroid: Some follicles are massively distended with colloid and lined by flattened epithelium. Focally, there are marked infiltrates of melanophages within smaller follicles.

Testes: There is marked diffuse atrophy of spermatocytes and seminiferous tubule cells. Seminiferous tubules are surrounded by a markedly thickened connective tissue/fibroblasts layer and are separated by massive numbers of lipocytes.

Morphologic Diagnoses:

- 1) Severe goiter.
- 2) Severity, diffuse, chronic, fatty change, fibrosis, and atrophy, liver, kidney, testes.
- 3) Severe, multifocal, necrosis with crystals, proximal tubules, kidney
- 4) Severe, diffuse, lymphoid depletion and fatty change, spleen.

Comments: The lesions in this animal pointed to a metabolic disease associated with inability to properly mobilize and metabolize fat. This was evident in the changes (fatty change) seen in multiple organs. The fibrosis accompanying these changes indicated the process was chronic (occurring over several months and perhaps years) and eventually impaired function of critical organs (spleen, liver, kidney) to the point where the animal died. It is likely that a major source of this metabolic disorder was severe hypothyroidism manifested morphologically as a massively enlarged thyroid (goiter). Goiter is typically associated with a diet deficient in iodine. Sea turtles in the wild typically graze on a variety of marine algae, which are rich sources of iodine, and probably other critical nutrients. The diet (papayas and other fruit and vegetables and absence of marine algae) of this animal may have lacked sufficient iodine. Alternatively, this animal may have been unable, for unknown reason, to properly assimilate iodine from its diet. The crystals in seen in the kidney were compatible with oxalate. Deposition of these crystals in animals typically occurs when they eat antifreeze (ethylene glycol) or plants rich in oxalates. These crystals, in sufficient amounts, damage kidney tissue and may lead to renal failure.

Final Diagnosis (in order of importance)

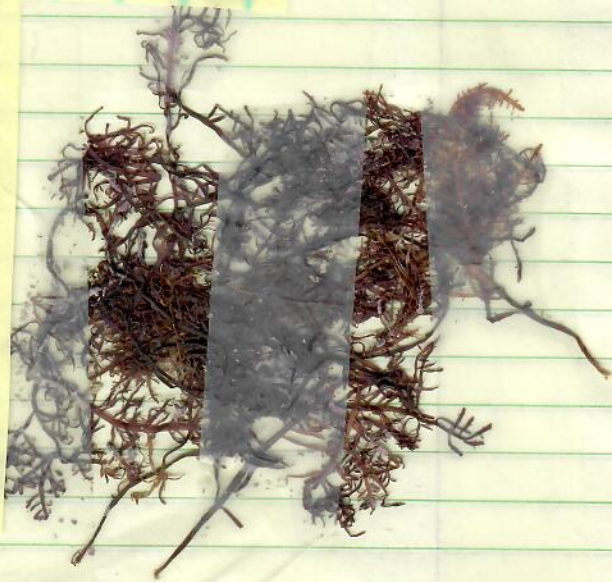
	topog.	morph.	etiol.	funct.	disease	link
1. <u>Hypothyroidism</u>	(T96000)	(M71000)	()	()	()	()
2. _____	()	()	()	()	()	()
3. _____	()	()	()	()	()	()

Diagnostic findings may not be used for publication without the pathologist's knowledge and consent. COD (16)

6/18/02

George,

This is the seaweed from rocks in ocean
at Kapoho which turtles really like. Will eat
this before others.



Hope you can identify.

Sylvia Axion



Case in
Page 2
Microsc
Polen
reparat
are has
Ayuda
granda
Kidney
massive
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17/10/1974

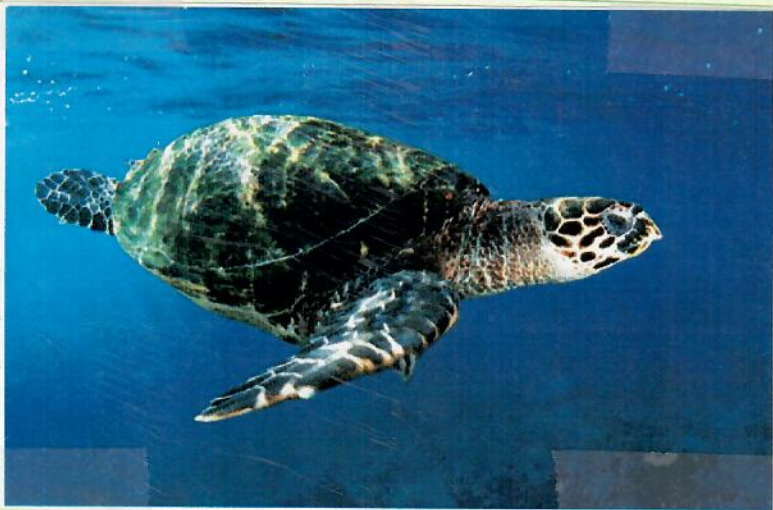
Date: Tue, 06 May 2003 07:50:22 -1000
 From: jo mitchel <pepejo@prodigy.net>
 To: George H. Balazs <gbalazs@honlab.nmfs.hawaii.edu>
 Subject: Re: Add for Molly and note from you

Reduce KAPOKA
~~KAPOKA~~

Hi George, Albert's symptoms are: Personality change, he use to come w/ a smile (?) on his face whenever I appeared w/ some food for him. His face would surface from the water as if to say "Hi glad to see you" Now if he comes out from hiding, he never comes to the surface, I have to look & look for him beneath the water & for the last few times he did not come out at all. However, when I went down on May 1st, he was under water, w/ a dusky coat of limu on him, no interest in eating anything, Albert moves very slow, not w/ any deliberate movement. I guess that is all I can observe. I'm not there that much & I needed to do my own thing, so couldn't stay any longer. There is a new guy from Kauai that moved into our neighborhood & he seemed most interested in Albert & he is a member of the Sierra Club. He wants to meet you. His name is Robert Culbertson. About 40 yrs. I think. Well, I've gott a go, so aloha, jo

George H. Balazs wrote:

- > Aloha Jo, can you tell me the details of what you are seeing for you to
- > feel that Albert looks and acts sick?
- > On Mon, 5 May 2003, jo mitchel wrote:
- > > He looks & acts
- > > sick to me. aloha, jo



2) has changed except colors.

I called about a recent deposit - I think it's from your company -

Bank statement said:

3-19 - Preauthorized credit
COM 4 Treas. 303

MISC PAY - RMR-10-1
\$1 1,670

But she couldn't give me information -

So assume rent for Kapoho is paid - Mucho mahalo - !!

April 16, 2003

Hey George -

Found some old photos I took of Kapoho cottage.

That you'd like to have them - I have more

recent ones - keep or throw away.

As you can tell - I've

been improving the

home all along - Tho'

really nothing much

Kapoho Village loses

Editor's note: Those who travel around the Big Island can find the remnants of a bygone era nearly everywhere. This column attempts to explain the history behind some of them.



The Riddle of the Relic

Kent Warshauer

The Kapoho graben — a slice of the earth's crust that's subsided between two bordering faults to the north and south — resembled a large slice of a pie. The seaward edge of the graben was the wider edge, and tended to drop downward during changes in the level of the lava that supported it. This was due to its position directly over the east rift zone of Kilauea.

During times of volcanic stability the Kapoho graben remained stationary, and there were no changes in sea level on its outward edge. As long as the summit remained inflated with lava, the Kapoho graben did not move as the charged column of magma under it supported it much as a hydraulic jack can support the weight

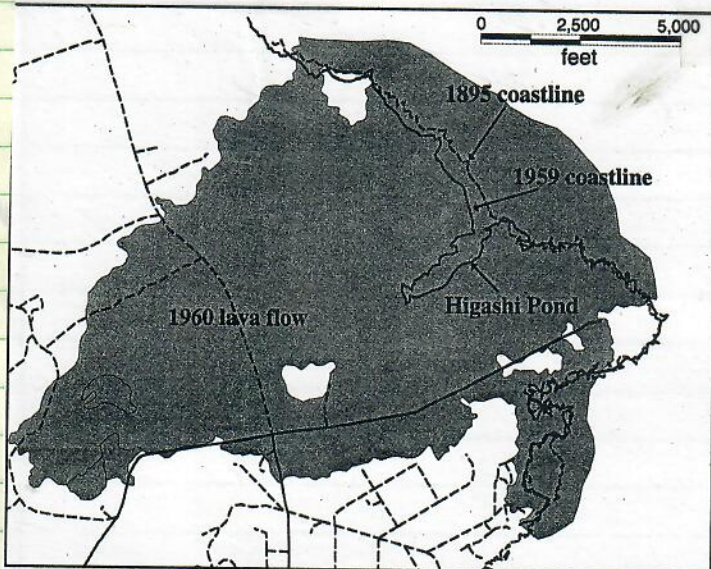
of a automobile.

A submarine eruption on the east rift zone triggered changes in the Kapoho graben much like the actions of a hydraulic jack. To lower the auto from its lifted position, the mechanic opens a valve and the fluid returns to the reservoir and the piston retracts. A submarine eruption does the same thing. The magma supporting the Kapoho graben drained away, causing the land to subside.

During historic times the coastline off Kula has changed, the first instance following a one-day submarine eruption reported by Mrs. Sarah J. Lyman on Jan. 22, 1884. A large part of the

See KAPOHO,
Page 35

tug-o-war with Pele



Map by Jim Kauahikaua, USGS

This map shows the major lava flows that overran Kapoho. The destruction of the village was heralded with a series of earthquakes that began in January 1960.

KAPOHO-

From Page 33

coastline disappeared under the sea. As this particular eruption occurred in shallow water, it was noticed from shore and reported.

Undoubtedly, other recent underwater eruptions have occurred, as changes in the summit crater had been also recorded as large collapse events occurring Aug. 13, 1883, March 7, 1886, March 7, 1891 and again July 11, 1894. These events probably occurred in deep water, as they were not reported by local residents.

Changes were noticed in the shoreline, as early maps recorded the receding coastline during surveys done in 1880, 1895, 1924 and 1960.

On April 2, 1924, a swarm of earthquakes began near the Kilauea caldera, and migrated down the east rift zone, centralizing in the Kapoho area by April 20 as the walls of Halemau mau began to collapse on the summit. The Kapoho area began to shake as the graben dropped, due most likely to a submarine eruption in deep water draining the magma column.

The earthquakes in Kapoho increased in intensity by April 22 when great cracks began to form as the graben dropped into the sea, and water began to rush into low lying areas. Earthquakes continued as new cracks opened and closed — one crack crushing a cow. On April 25, the earth near the railroad company's dancing pavilion dropped 90 feet, and a crack opened in the Japanese cemetery as it also dropped 30 feet.

The Kula fault dropped 10 to 12 feet along its nearly five-mile length, and the southern side of the Kapoho graben fell a foot or two. The sea flooded inland, forming Ipocho Lagoon (Higashi's Fishpond) as the coastline sank another 14 feet, leaving coconut trees standing in 12 feet of water.

THE KAPOHO LAND AND DEVELOPMENT CO. LTD.

In early 1948, the Lyman family heirs decided to develop their 12,000 acres in Kapoho, and a family corporation was organized for this purpose. The Kapoho Land and Development Co. Ltd. was organized Sept. 28, 1948, with Richard J. Lyman Jr. as president, Arthur Lyman as vice president and treasurer, and Clarence Lyman secretary.

A new road from the lighthouse to the Kapoho Beach shoreline allowed the subdivision of recreational sites for cottages among the many tidepools in the area, as surveyors began plotting various areas for either lease or sale.

By 1950 about 40 residents of Kapoho Village had purchased the lots they'd been leasing and on which they had

*Hawaiian P. Pond
Herd 11/10/02 P.35*

built homes or businesses. Two remote fishponds were leased for mullet farming, the five-acre Mizukami Pond and the Ipocho Lagoon, now to be known as Higashi Pond.

Surveys and permits were completed on the Kapoho Beach Lots and all access roads provided when the lots, starting at \$575 each, went on sale June 7, 1952. This 75- to 80-acre subdivision contained 125 lots, and was considered a semi-private luxury subdivision.

Electricity to Kapoho was a desire of the people, but the community at this time lacked the \$16,000 of the required \$40,000 needed to bring it into the village. It was not until Oct. 7, 1959, that electricity came to Kapoho Village, beach lots and school. This was due to the Lymans investing \$90,000 into the \$155,566 project, as they had something bigger in mind.

On May 6, 1958, it was announced that a Hilo syndicate headed by real estate broker Peter Hayashi had purchased a 90-acre tract at Kula for \$172,500. This purchase included the Waiakea Lagoon and the "last truly authentic Hawaiian village" according to Richard Lyman, president of the Lyman heirs.

This sale, by the way, kicked off the subdivision land boom resulting in most of the standard Puna subdivisions we have today. Ironically, the syndicate planned an exclusive subdivision with a small boat harbor, deluxe hotel and a 18-hole golf course around Higashi Pond to be developed by the Lyman interests. The village site was cleared of vegetation, revealing the ruins of ancient fishing settlements, which were destined to become a park and picnic area near the proposed hotel.

On March 26, 1959, the Kapoho Land and Development Co. Ltd. announced a development plan for Kapoho calling for a hotel overlooking the Ipocho Lagoon, coast and warm springs. This resort was to have 120 guest suites, to be expanded to 250.

Also planned was a 25-acre community center in the heart of Kapoho, complete with community, civic and commercial buildings, ballfields and parks, and a 23-acre industrial area as well as a small airport. Also planned were 183 farm lots of five acres each.

On April 30, 1959, a hui consisting of James Kuwaye, Norman Lyman, Kazuhisa Abe, Stanley Hara, Jack Suwa and Yoshio Yanagawa, purchased 900 acres and planned for a "Japanese architecture" hotel resort, a beach subdivision with lots from 10,000 to 20,000 square feet and 2 1/2- and 1-acre lots for farming and homesite purposes.

SLOW DESTRUCTION OF KAPOHO

The destruction of Kapoho and its graben was a slow process. The first big disaster befell the Kapoho community at 7 p.m. March 3, 1955, when a crack developed on the western edge of the village and opened up into the town itself. This phenomenon had also occurred during the earth movements of 1924, but this case was different.

Lava began to spew from the western edge, and flow towards the town at 9:30 p.m. along a newly surveyed highway. This outbreak was situated in cane fields owned by S. Ikeda, S. Kakugawa and K. Fujisaka. By 2:25 a.m. the following morning, the Ikeda house and P. Caniete houses had been burned and the ruins covered with lava. An old railroad embankment at the head of the Kapoho graben prevented the destruction of the town, as the lava flow stopped upon entering the town's ballfield. Some 450 acres of cane land were put out of production, eliminating Olaa Sugar Co. cane growing operations at Kapoho, although private planters continued to operate. Small coffee, papaya, vanda orchids, and vegetable farms replaced these fields.

On Jan. 10, 1960, earthquakes again rocked the ancient buildings in Kapoho. On Jan. 12-13, people working in fields north of the village experienced earthquakes made it hard to remain standing. Earth cracks opened in and around the village as the graben sank, and at 10:30 a.m. on the 13th, Kapoho Village was declared a disaster area by the Civil Defense Agency and evacuation of the 300 or so inhabitants began.

At 7:30 p.m. lava fountains broke out in a sugar cane field, and a crack opened towards the sea a half mile long, spewing lava and steam. Located a half mile northwest of Kapoho Village, this vent soon built a cinder cone dubbed Puu Laimana for Senator Lyman, owner of the land, about a third of a mile from the center of town.

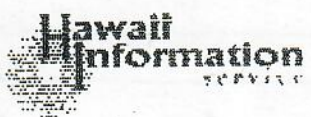
Lava flows issuing from the cone had traveled to the ocean by Jan. 15, where the cold water diverted and stalled the flow. This caused the lava to inflate and fill the former shallow valley. Hastily built earth and rock walls put up by bulldozers failed to contain the lava, and on Jan. 17-18, Higashi Pond and Warm Springs were overrun.

The tiny hamlet of Koae, former headquarters of the Eldert Ranch, was the next victim, succumbing Jan. 23-29. Along with William Elderts \$4,000 home, eight other dwellings, the Hoonaaou church and hall and the Puula church hall were consumed, wiping the tiny community off the map.

Meanwhile, the remainder of Kapoho had fared no better.

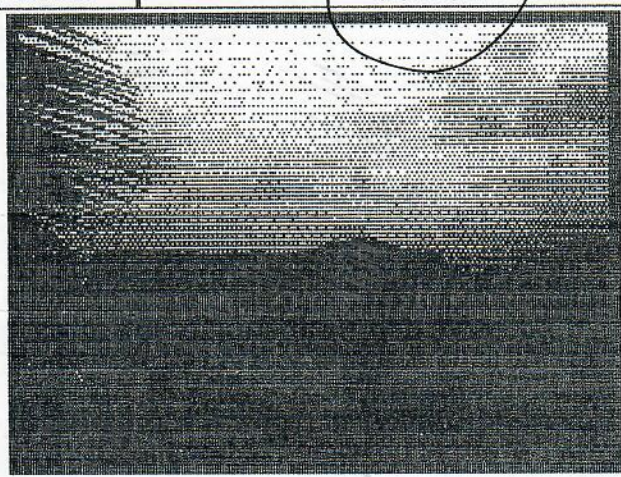


To page 12

Hawaii Real Estate & Business Data Provider



- Start a **NEW** search
- Get **HELP**

*The place
I want
you to
buy for
turtles!*

Island of Hawaii, Puna District Laepaoo-Puua	
MLS # 109642	\$1,490,000
	
<p>If you would like to print this record on a single page, click here to display only the main picture above.</p> <p>10 photographs are available for this listing. Click an image below to see a full size view of that image, or select another set of photographs to view. Available photographs: 1-4 5-8 9-10.</p>	
	
<p>16.91 ac total land area Fee simple ownership</p>	
<p>Remarks: Large oceanfront lot with ponds, coconuts and a lush tropical setting.</p>	
<p>Contact: Denise S. Nakanishi R (808) 959-6093 (Home)</p>	
	

*Place
to
buy
for
turtles*



Travel

from p. 120

On the evening of Jan. 27, lava flows buried the majority of Kapoho town and also burned four buildings of the Kapoho School. Only 15 buildings in the town remained by morning as the eruption was producing some 6,600,000 cubic yards of a day. As the lava overflowed the graben, more structures were destroyed. Three homes of the Tanioka, Higashi and Fukumoto families were moved out of the way of the advancing flows.

Pele targeted the beach communities next and burned the U.S. Coast Guard lighthouse

keeper's residences Feb. 2. Lava then overran both Kula Village site and the Waiakea and Mizukami fishponds, burned the teacher's cottage at Kapoho School, and also invaded the Kapoho Beach Lots. On Feb. 3, the million-dollar subdivision began to shrink as lava replaced \$40,000 luxury beach homes. By the eruption's end on Feb. 19, 1960, 10 buildings and 30 lots were destroyed in the Kapoho Beach Lots.

The town of Kapoho ceased to exist, as only three buildings survived the assault. Eighteen acres of cane land were

destroyed and 533 acres were damaged by cinder fall, more than 40 farms destroyed by lava along with 71 residences and 16 business establishments, churches and public buildings. Only the old Railroad Station, Mukai home and Nakamura Store survived, the latter being dismantled by Yoshio Nakamura and the lumber used to build a house in the Kapoho Beach lots, leaving only the sign.

Readers who have questions for Kent Warshauer, the Sugar Mill Spy, can write to him in care of the Tribune-Herald, P.O. Box 767, Hilo, HI 96721.



Beach Lots Beacon

The Newsletter of Kapoho Beach Lots
Neighborhood Watch Committee

August 2002

SPECIAL NEWS RELEASE

Special Watch Meeting

THE NEXT WATCH MEETING IS A SPECIAL ONE!!

The agenda for the next Watch meeting will be very interesting. Please mark the evening of August 13 on your calendar and plan to attend this meeting.

At the request of Neighborhood Watch, State Department of Land and Natural Resources' Conservation Enforcement Officer Alan Akau will present a talk and a slide show about the agency's DOCARE (Dept. of Conservation, Awareness, Resource, Education) Program.

The objective of the CARE Program is to reduce unlawful activity through increased awareness and involvement of the community in the enforcement process.

Harassment and deaths of several turtles in Champagne Pond has occurred over the past year or so. It is important that we find out what we can do to prevent these events from recurring.

Do plan to come and hear what the agency is responsible for and what we can do to assist in educating the public and preserving all of our natural resources (not just our turtles!!)

We have also invited Councilman Gary Safarik to attend this meeting. Gary is very interested in the turtle harassment issue and has offered his assistance.

The meeting will be held at 6:30 pm on Tuesday, August 13. Watch the bulletin board for the location. *2002*

CAN'T HEAR THE CIVIL DEFENSE SIREN??

That's what the folks living near the oceanfront are saying!

After the last two siren test periods, July 1 and August 1, neighbors windward of the siren, which is mounted at the gate, were canvassed. Some said they heard a little peep and others heard nothing. That isn't a very good system of emergency warning for our community.

Neighborhood Watch, in cooperation with Joanie Burns, our Civil Defense coordinator, will be writing a letter to William Davis, CD Director, requesting that we get another siren perhaps near the lighthouse or on the lava flow. That is the direction of the prevailing winds. Those winds could carry the sound from a siren in those locations toward our community.

If you are concerned, too, please write to Mr. Davis, at Civil Defense, 920 Ululani St., Hilo, HI 96720. We need all the support we can get for this project!

IN MEMORIAM

Our hearts and prayers go out to the families of Warren "Pepper" Martin, who passed away in May and Dr. Keith Godfrey, who passed away in July.

Both Pepper and Keith were valuable assets to our community. Pepper was our Civil Defense coordinator and Keith was Treasurer of our Kapoho Community Association Board. Both were very active in the Neighborhood Watch program.

They will be sorely missed.



A special publication of:
Kapoho Beach Lots Neighborhood Watch
RR 2 Box 3901 Pahoia, HI 96778
808-965-0176
Lorraine Stahr, Editor

Heaven and Earth: A portrait of Hawai'i



DAVID JORDAN • Associated Press

AI 8-23-02 8-23-02 THA
 The moon gets some competition for loveliest sight on the Big Island, as lava from Kīlauea Volcano pours into the ocean. Visitors continue to flood the area in numbers never seen since the volcano began its Pu'u 'Ō'ō eruption 19 years ago. This breakout of lava began May 12, and first reached the Puna coast July 19. **See story, B4.**

2002

MARCH
2003

SERUM 19

FROZEN:

N=19
Turtles

(25 samples)

SAMPLE

LIST

ALBERT	4454683F27	(3)
YUNIS	4452200.535	(3)
SAM	3/19/03	(3)
#5	43674F3070	
SR	423635667A	
FI	42400A5F56	
#2	4359317562	
V717 "ML"		
—	4434003627	
#1	422F0A057E	
S4A		
—	4414600921	3/22/03
—	44141E174A	
—	347F	3/19/03
#6	44552F3B47	
#4	4454086229	
—	4454266049	
—	4452501C34	
—	445479652A	

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

Irene Herbert
1043 Sherwood Rd.
Muskegon, Mich
49441

I autographed
her Patrick
Book

Senior
Brethren
of
Women

~~Sent~~
Gene Green
1459 Marlboro
Muskegon, Mich
49441

WAPotto
3/03

~~Sent~~
Pictres

Jenny Honer
16897 w 73rd place

wants to be a zoologist

6/12/03

Arvada, Co 80007
Email: Blinkgirl73@hotmail.com

WAPotto
Students

Jeff Kelly
10401 Owens Circle
Westminster CO. 80021

~~Sent~~

Arjun Clarr

Good
Kids

Bruce & Susan Buecht
CHILDREN CONNOR & COLBY
45-175 F LILIPUNA ROAD
KANEONE, HI 96744
H (808) 234-1734
CELL (808) 228-5160

one of
Marty's
SONS

~~12300#~~
~~23900#~~
~~23900#~~

other ^{lower} not Chong Pond

Captive turtle,
private
POND

DATE FORM FILLED OUT 3/18/03 SLIM HOLT POND

CAPTURE DATE, LOCATION AND METHOD: ^{just the name:} 3-18-03 Kapoho Albert

1030 - 1130am

PERSON RECORDING DATA: Jilly Q

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

HAND

TUMOR SCORE

0

OLD TAGS:

NONE

ORAL TMRS EXT:
YES OR NO

NO

EMACIATION CODE

0

LH
RF
LF
RH

NEW TAGS:

4454683F27
44397A5D7A

cm
O
m
cm

STRAIGHT CARAPACE LENGTH: 63.9 cm

WIDTH: 51.8 cm

NOTCH LENGTH: 63.9 cm

DB: 0 L.O.

VB: 0 L.O.

CURVED CARAPACE LENGTH: 66.5 cm

WIDTH: 57.0 cm

HEAD WIDTH: 10.2 cm

AXIAL: 26.8 cm

LATERAL: 26.8 cm

PPS: YES OR NO OR NE NO

SEX: Male, Female
or Undetermined

M

TAIL LENGTH: T 35 cm

C 25.5 cm

RIGHT FRONT FLIPPER WIDTH: 14.0 cm

SAMPLES COLLECTED:

Blood glucose from neck

PLASTRON LENGTH: 52.4 cm

GB 74, 74

WEIGHT: 104 lbs #

MR 86

59 45

Blood for biochem
and banking

DESCRIPTIVE REMARKS:

Soft round area 19cm diameter
centered on horizontal seam

note "AL" L+R 2nd act

DATE FORM FILLED OUT

capture date 2003

Released

CAPTURE DATE, LOCATION AND METHOD:

Tuesday "AETURENA" 3/18/03 KAPOHO formerly Makawao family

PERSON RECORDING DATA: Jill Q

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

FAMILY

TUMOR SCORE

0

OLD TAGS

Y-159

All still attached

ORAL TMRS EXT.

YES OR NO

NO

RFL

Y-157

LFL

Y-158

NEW TAGS:

4452200535



LH

RF

LFL

EMACIATION CODE

0

STRAIGHT CARAPACE - LENGTH:

84.3 cm

WIDTH:

63.8 cm

NOTCH LENGTH:

84.2 cm

DB:

0

L.O.

VB:

0

L.O.

CURVED CARAPACE LENGTH:

89.0 cm

WIDTH:

78.5 cm

HEAD WIDTH:

12.3 cm

AXIAL:

35.3 cm

LATERAL:

30.1 cm

PPS: YES OR NO OR NE

Yes

SEX: Male, Female or Undetermined

F

TAIL LENGTH: T

24 cm

C

18.5 cm

RIGHT FRONT FLIPPER WIDTH:

14.4 cm

SAMPLES COLLECTED:

PLASTRON LENGTH:

29.4 cm

WEIGHT:

— #

Blood for biochem and BTKing

DESCRIPTIVE REMARKS:

marked

Alice Drew

DATE FORM FILLED OUT / /

CAPTURE DATE, LOCATION AND METHOD:

3/19/03

wednesday

Turtle named Sam at Peggy Forges

SAM

capture 120 private pond

head capture

PERSON RECORDING DATA:

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

TUMOR SCORE

0

OLD TAGS:

N479

ORAL TMRS EXT. YES OR NO

~~TTT~~

EMACIATION CODE

0

NEW TAGS:
RFL
LFL

STRAIGHT CARAPACE - LENGTH:

69.4 cm

WIDTH: 52.4 cm

NOTCH LENGTH:

69.4 cm

DB: 0 L.O.

VB: 0 L.O.

CURVED CARAPACE LENGTH:

73.0 cm

WIDTH: 61.0 cm

HEAD WIDTH:

10.7 cm

AXIAL: 29.0 cm

LATERAL: 28.9 cm

PPS: YES OR NO OR NE

Y

SEX: Male, Female or Undetermined

M

TAIL LENGTH: T

35.5 cm

C 25 cm

SAMPLES COLLECTED:

RIGHT FRONT FLIPPER WIDTH:

13.2 cm

glucose

PLASTRON LENGTH:

51.4 cm

B-76

WEIGHT:

126 #

R-89

for Biochem and plasma
3 Tubes of blood

DESCRIPTIVE REMARKS: no tumors

→ RH flipper, likely tag loss R Eye posterior slight bulge

NATIONAL WILDLIFE HEALTH CENTER
NECROPSY REPORT

Submitter's Name, Affiliation Address
Mr. George Balazs
NOAA-NMFS-SWFC
2570 Dole Street
Honolulu, HI 96822-2396

Case: 15297
Accession: 001
Collected: 02/11/2000
Exam Date: 04/03/2000
Pathologist: T.M. Work
Prosector: T.M. Work

Species: Green turtle Specimen: Carcass
Bandtype: (E) Ref/Band No: (021100D) Euth: (N) Weight (Gm): (94545)
History Summary: This animal was found dead in an isolated saltwater pond near Kapoho on Hawaii. The animal was fed papayas and other fruit due to the lack of opportunities to graze on algae. Identification tags: RFL-Y153, LFL-Y152. Body measurements: SCL-80.2 cm, CCL-83.5 cm, TTL-38.5 cm.

EXTERNAL/INTERNAL OBSERVATIONS - LABORATORY RESULTS

External: The carcass was frozen prior to necropsy.

Internal: There are massive amounts of body fat. The liver is gray, cirrhotic, and appears shrunken. Pale foci ranging from pinpoint size to 1 mm appear on the liver surface. The heart is firm, smooth, homogenous red and otherwise unremarkable. The lungs are spongy and homogenous red-pink. The spleen is firm, smooth, and homogenous brown. The kidneys are firm, smooth, and homogenous brown. The adrenals appear enlarged. No bladder trematodes were seen. There is a huge amount of mesenteric fat. The thyroid is markedly hypertrophied and measures 11 cm in diameter. The brain is smooth, firm, and homogenous tan-pink. The esophagus contains the remains of 3-4 papayas. The gastrointestinal mucosa is smooth, homogenous tan and the lumen of the small intestines contains remains of papayas. No lesions are seen in the brain, musculoskeletal system, pericardial sac, heart valves, gall bladder, gastrointestinal mucosa and serosa, testes, pancreas and superficial and cut surface of heart, kidney, spleen, and lungs.

Preliminary Diagnosis: Goiter Exam Type: (GO)
Sex (M) Age (B)/() Body Cond. (E) Postmortem State (G) Giz. Lead ()/()
Laboratory Tests/Samples Saved:

1. Histo: Brain (A); Liver, spleen, testes (B); heart (C); lung (D); thyroid (E); liver (F); kidney (G-H).
2. Frozen: spleen, liver, thyroid.

HISTOPATHOLOGY:

Lung: In one section, the pleura appear somewhat thickened with nidi of eosinophilic homogenous material.

Liver: Diffusely, hepatic architecture is largely replaced by trabeculae of fibrous tissue surrounding pleomorphic clear spaces (probable fatty change) some of which are filled with masses of melanophages. Isolated foci of massively atrophied hepatocytes are occasionally noted within connective tissue trabeculae.

Heart: Myocardial fibers appear alternatively shrunken to hypertrophied and there are numerous small infiltrates of melanophages. In one section, myocardium is displaced by large numbers of lipocytes.

Brain: There is marked deposition of fibrillar eosinophilic material around meningeal blood vessels. Some vessels within the brain contain intramural depositions of granular brown pigment.

Histopathology (cont.)

Spleen: The spleen is virtually bereft of lymphoid tissue and red cells most of which are replaced by massive deposition of granular brown pigments and vacuolated cells. The latter are hard to positively identify as lipocytes due to freeze-thaw damage. The splenic capsule appears thickened and there are focal areas of necrosis and deposition of basophilic granular pigment (probable mineralization).

Kidney: There is marked fatty change and fibrosis of renal tubular interstitium that occupies most of the renal architecture. Remnant proximal tubular cells are either massively atrophied or exhibit acute necrosis characterized by cytoplasmic hypereosinophilia, fragmentation and nuclear pyknosis and karyolysis. Accumulations of birefringent crystals are noted within the lumen of scattered tubules. Epithelium of bowmans capsule of glomeruli appears hypertrophied and glomeruli are infiltrated by moderate numbers of melanophages.

Thyroid: Some follicles are massively distended with colloid and lined by flattened epithelium. Focally, there are marked infiltrates of melanophages within smaller follicles.

Testes: There is marked diffuse atrophy of spermatocytes and seminiferous tubule cells. Seminiferous tubules are surrounded by a markedly thickened connective tissue/fibroblasts layer and are separated by massive numbers of lipocytes.

Morphologic Diagnoses:

- 1) Severe goiter.
- 2) Severity, diffuse, chronic, fatty change, fibrosis, and atrophy, liver, kidney, testes.
- 3) Severe, multifocal, necrosis with crystals, proximal tubules, kidney
- 4) Severe, diffuse, lymphoid depletion and fatty change, spleen.

Comments: The lesions in this animal pointed to a metabolic disease associated with inability to properly mobilize and metabolize fat. This was evident in the changes (fatty change) seen in multiple organs. The fibrosis accompanying these changes indicated the process was chronic (occurring over several months and perhaps years) and eventually impaired function of critical organs (spleen, liver, kidney) to the point where the animal died. It is likely that a major source of this metabolic disorder was severe hypothyroidism manifested morphologically as a massively enlarged thyroid (goiter). Goiter is typically associated with a diet deficient in iodine. Sea turtles in the wild typically graze on a variety of marine algae, which are rich sources of iodine, and probably other critical nutrients. The diet (papayas and other fruit and vegetables and absence of marine algae) of this animal may have lacked sufficient iodine. Alternatively, this animal may have been unable, for unknown reason, to properly assimilate iodine from its diet. The crystals in seen in the kidney were compatible with oxalate. Deposition of these crystals in animals typically occurs when they eat antifreeze (ethylene glycol) or plants rich in oxalates. These crystals, in sufficient amounts, damage kidney tissue and may lead to renal failure.

Final Diagnosis (in order of importance)

	topog.	morph.	etiol.	funct.	disease	link
1. <u>Hypothyroidism</u>	(T96000)	(M71000)	()	()	()	()
2. _____	()	()	()	()	()	()
3. _____	()	()	()	()	()	()

Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

SEA TURTLE COUNTS AT KAPOHO

Date _____ Time (From _____ To _____) Location (Chong Pond or Outer C.P.) Sighting (From shore or snorkeling) Weather (Sunny, cloudy, rain) Number of Turtles Seen Shell mark IDs seen

Date	Time (From _____ To _____)	Location (Chong Pond or Outer C.P.)	Sighting (From shore or snorkeling)	Weather (Sunny, cloudy, rain)	Number of Turtles Seen	Shell mark IDs seen

Please return to: Marine Turtle Research Program
 National Marine Fisheries Service
 2570 Dole Street
 Honolulu, Hawaii 96822-2396
 (808) 286-2899
 gbalazs@honiab.nmfs.hawaii.edu

[Faded white label with illegible text]

