

BALAZS

2011 & 2016

See
p. 108

caliber

BALAZS

COMPOSITION BOOK

KAPOHO 18-23 NOV. 11

EXPEDITION XVIII 2011

18-22 APRIL 2016

KAPOHO p. 33

Wide Ruled
100 Sheets

9.75 in x 7.5 in (24.8 cm x 19 cm)

CLASS SCHEDULE

DATE _____

NAME _____ SCHOOL _____

ADDRESS _____

PERIOD	MONDAY LUNDI LUNES	RM.	TUESDAY MARDI MARTES	RM.	WEDNESDAY MERCREDI MIERCOLES	RM.	THURSDAY JEUDI JUEVES	RM.	FRIDAY VENDREDI VIERNES	RM.
1										
2										
3										
4										
5										
6										
7										
8	11-21-2011 P.5									
9										

18-22 APRIL 2016
 KAPOHO 24 CAPTURES
 (14 NEW
 10 RECAPTURES)

PARTICIPANTS - P.35
 TIDES - P.32

Blood samples PCV N=22 + FP TO HONOLULU

AS PERSAM -
4 MONTH ago
3 MONTHS ago
DRIll TRUNK
UNW, Hawaii

DONATED By

①

" BRAND NAME " MONSANTO BASS
- ROUND UP - - Glyphosate - SYSTEMIC BROAD leaf Herbicide
" BRAND NAME " - IMAZAPYR
ASSAULT SYSTEMIC Herbicide

PARTICIPANTS: P. 5, 7, 9,

next TO JOWITCHAI Hale Lokelani
Girls house
808-965-9786

Formerly
ROSE'S HOME



John Theismann
Rt. 2 Box 3879
Pahoa, HI, 96778

Needs

- name of Chemical ^{see} p.1
- Land use Thesis - N --- ^{sent} to Jenn Keller
- STONE IN AWAi
- Thiesman class name = HAAS SHIFTS
- Gene class name = p.9

KAPOTTO

18-23 Nov. 2011

FRIDAY Wednesday

11/18/2011
FRIDAY

DAY 1

$N = 7$ (6.00, 1.00)

11/19
SAT.

DAY 2

(2.00, 0.00)

11/20
SUN.

DAY 3

11/21
MON.

DAY 4

11/22
TUES.

DAY 5

CLASS SCHEDULE

DATE

NAME _____

SCHOOL _____

ADDRESS _____

PERIOD	MONDAY LUNDI LUNES	RM.	TUESDAY MARDI MARTES
1			
2			
3			

SPAM -
Chialing

1. BRASS
MONTAUB
ROUND UP -
DONATED BY
MONTAUB
BRASS
GLYPHOSATE SYSTEMS
IMAZAZAPYR
SYSTEMIC Herbicide
Herbicide

(3)

008244
11/26/2011



Notes:

008243
11/26/2011



11/23/2011
Wednesday

Chialing Fong

231 New Taipei City, Xindian Dist.,

San-ming Road, 58, 4F

Taiwan (R.O.C).

加伶

= Chialing

Notes:

008244

11/26/2011



Notes:

008243

11/26/2011



Group ONE 11-18
FRIDAY

PARTICIPANTS

TO 11/21/2011
Sunday

(5)

NAME GRADE Age

Kailani Deville	11	16
Emmanuel Okot	12	17
Amanda	9	15
Ryan Smith	12	17
Malia Brown	9	14
Bo Bleckel	10	15
Ella Kotner	9	14
Chialing Fong 張加伶	DA	

Date: Sat, 26 Nov 2011 17:20:57 -1000 (HST)
From: George H. Balazs <gbalazs@honlab.nmfs.hawaii.edu>
To: John and Sandi Barsell <sbarsell@aim.com>
Subject: Results of turtle work at Kapoho- November 18-23,
2011 from George Balazs

book

Dear Mr. and Mrs. Barsell (Sandi and John), I'm writing to let you know that our trip last week to Kapoho was very successful. I want to sincerely thank you once again for your Warm Aloha and Hospitality in allowing us access to your property. Without that access it would have been impossible to accomplish what we did.

We captures 38 turtles during our 6 days 5 nights of work. The turtles' weights ranged from 30 to 197 lbs, and their shell lengths ranged from 17 to 33 inches (44 to 83 cm). 13 of the 38 turtles had tumors-- that is, about 34% of them. 8 of the 13 were very mild cases of tumors. 2 of the 13 were moderate cases. And 3 of the 13 were severely tumored. On this trip samples of blood and shell scrapings were collected to test for contaminants. Nothing in particular, just everything in general in the way of possible organic and heavy metal contaminants. That work will be conducted at a laboratory in Charleston, South Carolina (at the National Institute of Standards and Technology). It will take about a year to complete the analysis and results made available to us (and forwarded to you as soon as we have them). The laboratory has a back-log of work, since they receive samples of all kinds from all over the USA.

Of the 38 turtles captured, 15 (39.5%) had never been seen before so were newly tagged. 23 (60.5%) of the 38 turtles were tag recoveries-- and all of these were tagged by us in the past at Kapoho. Rates of growth documented for the tag recovered turtles were quite good-- suggesting that food resources at Kapoho are reasonably adequate at this time. A major foraging region appears to be inside your pond wall. And certainly your back connecting pond is a major resting area for turtles-- both day and night.

28 of the 38 turtles were captured in the ponds open to the ocean via the Makaha located in your pond wall. Again, we are thankful for allowing us access to your land using a pickup truck. Without that access our captures would have been far fewer and significantly more difficult.

The other 10 of the 38 turtles were captured in the inlet behind behind the Mitchel's home that we rented. (named by us years ago as "Blind Inlet").

Note that none of the 38 turtles were captured at Champaign Pond, or in the pond on the Chong A-Frame property near Champaign Pond. We saw very few turtles in this area.

One thing we have noticed was the presence of a large rock immediately inside the entrance-way of your pond's Makaha. We watched turtles, especially the medium to larger ones, struggle to come inside, and struggle to leave, due to the rock's presence. This isn't the best of situations, since several of the larger turtles we examined had deep abrasions to their underside, likely from this stone obstacle. Clearly the desire by the turtles to enter your pond is very strong. And indeed it was even back when there was no wall and only mangroves in the vicinity. Among other things, I'm sure the pond provides better safety now from large sharks, and shelter from ocean waves during periods when the turtles rest. If you could see your way clear to do so, having Sam remove the rock from it's presence location would be a very good thing to do. Both from the standpoint of the turtles, and as an increase to water flow flushing of your pond. If I understood Sam correctly, the stone fell from the top of the wall during a period of high waves earlier this year.

11-21
Sunday

TO

PARTICIPANTS
11/23/2011
Wednesday

(7)

NAME

GRADE

AGE

MANOA

12

18

With Best Regards, George Balazs

Note- I'll be mailing you a copy of the above email report along with a few pictures. Please give Lucky a 'pat and a pet' for me!

Zachary Wigzell	8th	13
Elizabeth Jim	8th	13
Dyleen Rycas	8th	14
Jordan Virtue	8th	13
ARJUN CLARK	1995	34
Michael Koka	10th	15
Bo Bleckel	10th	15
Emily Yoshida	10th	15
Leila Takahashi Ruiz	10th	15
Ryan Smith	12th	17

HAAS

11-23-2011

(9)

~~TUESDAY~~
TUESDAY

Junior Ocean Scientists

at Hui Malama / Hawaii Academy of Arts &
Science, Paikoa

teacher: Randi Brennon, Gene Madriaga

students:

Juniper Oebolt

Mo Song

Aurora Hawkins

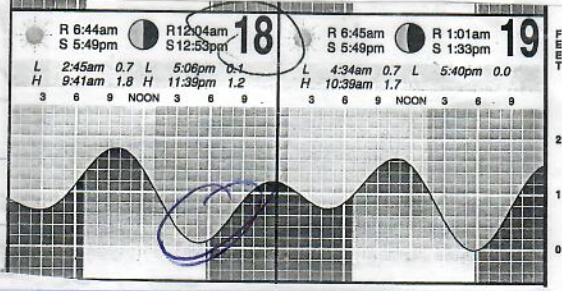
Sofia Aiello

Solé Ridgway

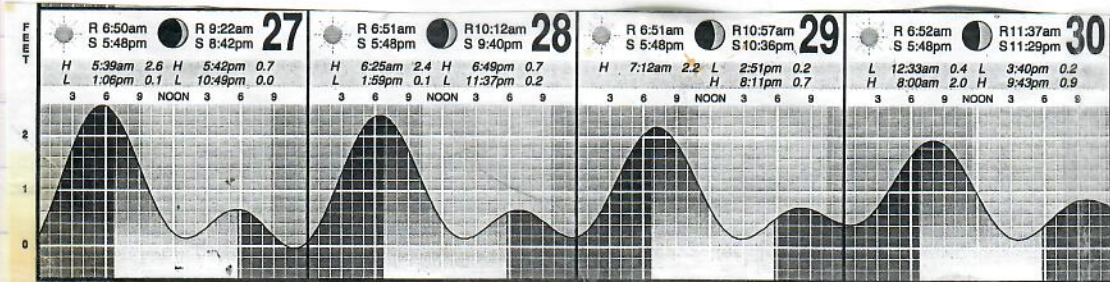
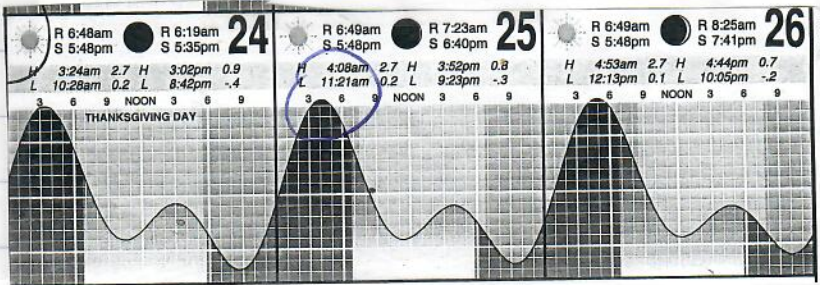
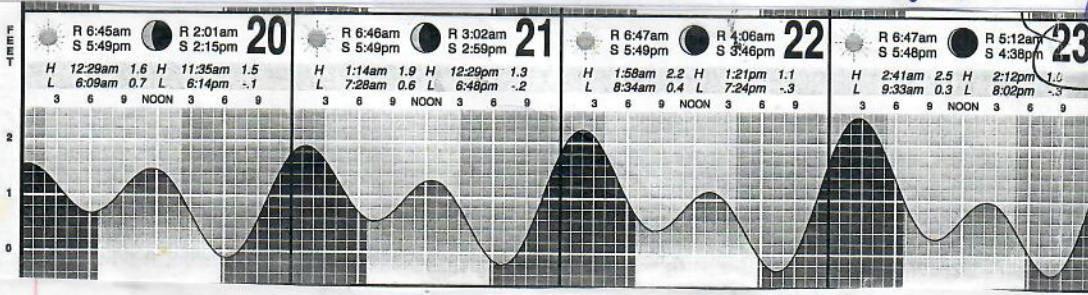
Shamara Jones

Nov. 2011

Friday

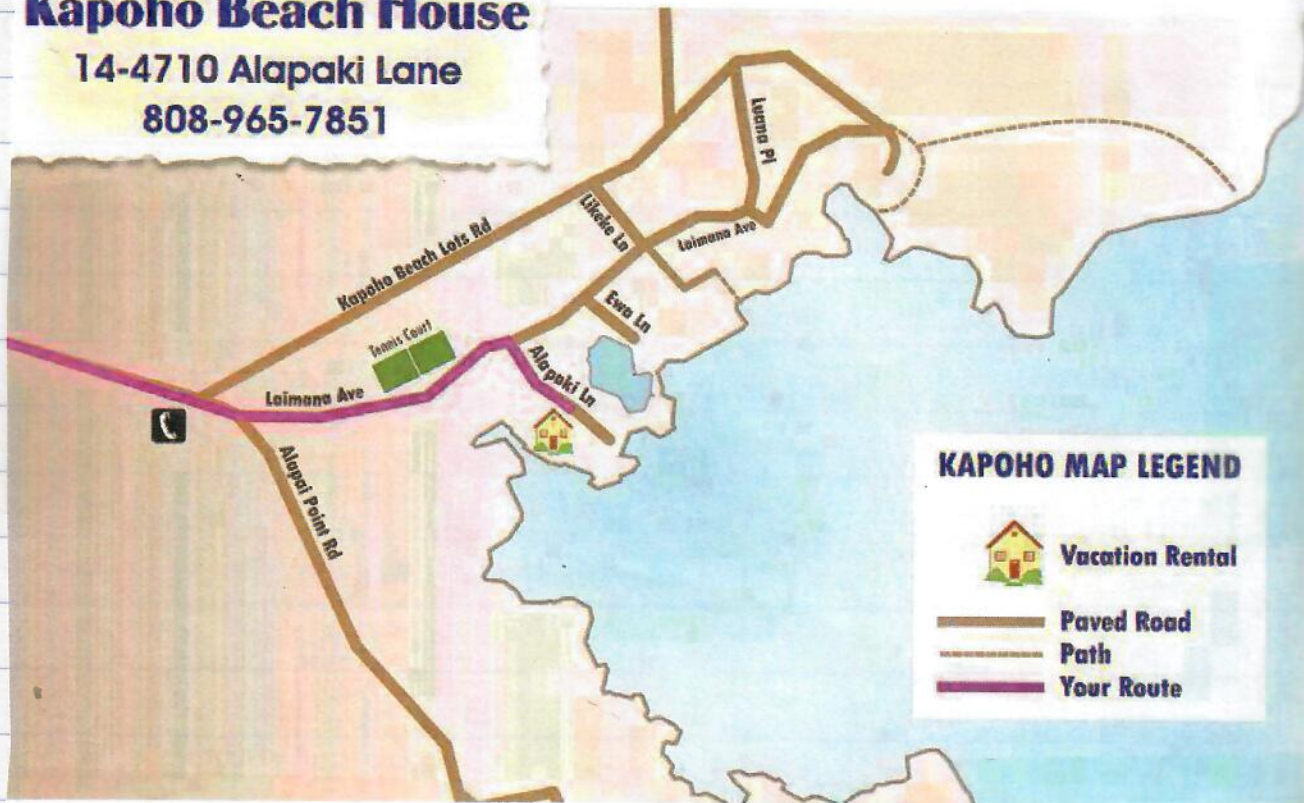


Wednesday



Jo Mitchel's Kapoho Beach House

14-4710 Alapaki Lane
808-965-7851



KAPOHO MAP LEGEND

-  Vacation Rental
-  Paved Road
-  Path
-  Your Route



Hawaii Holiday
Vacation Rentals

ALOHA COAST
REALTY, LLC

PRINT THIS PAGE AND BRING IT WITH YOU!

JO MITCHELS KAPOHO BEACH HOUSE
14-4710 Alapaki Lane, Pahoa, HI 96778

IMPORTANT NUMBERS

- Hawaii Holiday Vacation Rentals 808 - 965 - 0400 Open 7 days a week: 8am - 5pm
- After Hours "Emergencies" 808 - 965 - 0411 Be prepared to leave a call-back number!
- Jo Mitchel's Beach House 808 - 965 - 7851 Cell phone coverage is SPOTTY.

Jo and her husband built **JO MITCHEL'S KAPOHO BEACH HOUSE** over 50 years ago, one of the first homes in this area after the lava flow came through. It's an old kama'aina house; not fancy, but comfortable! The living, kitchen and indoor dining area are all open with a view of the outdoor lanai and the wonderful pond frequented by sea turtles! There is a TV with satellite service, plus a DVD player. Also, the home has a starter supply of TP, paper towels, soaps etc. Should you go out, it is your responsibility to replenish. The outdoor bath and shower are wonderful when spending a lot of time in the water! An assortment of floats and toys for the water, along with beach chairs are stored downstairs for your use.



Hawaii Holiday
Vacation Rentals

ALOHA COAST
REALTY, LLC

PRINT THIS PAGE AND BRING IT WITH YOU!

HALE LOKELANI

14-4708 Alapaki Lane, Pahoa, HI 96778

IMPORTANT NUMBERS

- **Hawaii Holiday Vacation Rentals** 808 - 965 - 0400 Open 7 days a week: 8am - 5pm
- **After Hours "Emergencies"** 808 - 965 - 0411 Be prepared to leave a call-back number!
- **Hale Lokelani** 808 - 965 - 9786 Cell phone coverage is SPOTTY.

Notes
 EARLY 1980S
 MAXWELL'S

Tagging Summary from Kapoho during 12/28/1993 - 12/31/2009

2/8-
 02

Tag Numbers	Date	Carapace Length (cm)		Weight (lbs)	Capture Method
		Straight	Curved		
H412, H413	12/28/1993	---	44.5	---	Trapped in pond Trapped in pond Trapped in pond
H414, H415	12/28/1993	---	51.0	---	
H416, H417	12/28/1993	---	52.0	---	
424D5E0C47, 42501E2760	04/04/2001	53.7	57.0	53.0	Hand/Snorkel
424F066575, 424F270873	04/04/2001	74.0	79.5	---	Hand/Snorkel
40616C721B, 410B123D38	07/11/2001	54.9	59.0	52.0	Hand/Snorkel
423B292674, 424F373E4C	07/11/2001	73.1	79.0	---	Hand/Snorkel
424F0B024D, 4250040032	07/11/2001	---	83.5	---	Hand/Snorkel
424F373941, 42500B213A	07/11/2001	56.1	60.5	50.0	Net
423D770E2B, 424D0D6D60	05/13/2002	59.9	64.5	---	Hand/Snorkel
4243153236, 424E403863	05/13/2002	75.0	81.0	---	Hand/Snorkel
424D135E5A, 425012380E	05/13/2002	60.2	65.5	---	Hand/Snorkel
424D2B355D, 424F0F131C	05/13/2002	54.6	59.0	---	Scoop Net
422E702E62, 42333E1C62	05/14/2002	49.2	52.5	---	Scoop Net/Drag Net
422F0A5D3F, 4232356159	05/14/2002	75.5	82.0	---	Hand/Snorkel
423334300D, 4239614827	05/14/2002	61.1	65.0	---	Scoop Net/Drag Net
423F274925, 424E7C6D7D	05/14/2002	51.4	56.0	---	Scoop Net/Drag Net
423F3A0E72, 424E752E50	05/14/2002	57.6	62.0	---	Scoop Net/Drag Net
42434F7668, 4250324F10	05/14/2002	52.9	57.0	---	Scoop Net/Drag Net
424D05435C, 42501E1224	05/14/2002	63.5	70.5	---	Scoop Net/Drag Net
424D0A5F56, 424F0D4471	05/14/2002	44.1	47.5	26.0	Scoop Net/Drag Net
424D0E4556, 4250136B0A	05/14/2002	48.3	52.0	---	Scoop Net/Drag Net
424F105A44, 4250371044	05/14/2002	59.7	58.0	---	Scoop Net/Drag Net
422D4F4030, 422F0A2B15	05/15/2002	47.1	50.5	34.0	Scoop Net/Set Net
422D6A1A4A, 42323E4447	05/15/2002	53.0	56.5	47.0	Scoop Net/Set Net
422D760E19, 4236356C7A	05/15/2002	43.3	46.5	---	Scoop Net/Set Net
422F080020, 4234624214	05/15/2002	55.9	60.5	57.0	Scoop Net/Set Net
422F1D275A, 42346E5C59	05/15/2002	52.2	55.5	50.0	Scoop Net/Set Net
423230347F, 42334A1D57	05/15/2002	45.9	49.0	32.0	Scoop Net/Set Net
4232511C58, 423254401B	05/15/2002	59.5	63.5	65.0	Scoop Net/Set Net

(15)

Tagging Summary from Kapoho during 12/28/1993 - 12/31/2009

Tag Numbers	Date	Carapace Length (cm)		Weight (lbs)	Capture Method
		Straight	Curved		
422D5F6C03, 42324E6167	05/17/2002	44.6	48.0	26.0	Hand/Snorkel/Scoop/Set
422D62752C, 422E745C5E	05/17/2002	44.8	38.5	32.0	Hand/Snorkel/Scoop/Set
422E59672A, 42397F5661	05/17/2002	61.4	66.0	77.0	Hand/Snorkel/Scoop/Set
422E752F59, 422F046E69	05/17/2002	60.6	65.5	66.0	Hand/Snorkel/Scoop/Set
422F0A3E52, 4234764B11	05/17/2002	46.5	50.0	33.0	Hand/Snorkel/Scoop/Set
422F0A6613, 423239081D	05/17/2002	42.3	45.0	25.0	Hand/Snorkel/Scoop/Set
422F181428, 4236153B67	05/17/2002	42.7	45.0	23.0	Hand/Snorkel/Scoop/Set
422F1B6B14, 42360B5A6E	05/17/2002	48.8	52.0	37.0	Hand/Snorkel/Scoop/Set
4235706F07, 4236414C6F	05/17/2002	43.0	45.5	22.0	Hand/Snorkel/Scoop/Set
42334F004E, 433D532A49	03/17/2003	58.6	63.0	67.0	Hand
424F113561, 4359317562	03/17/2003	41.7	44.5	24.0	Hand
433D34573B, 43674F3070, 445268711D (1/31/2005)	03/17/2003	49.2	53.0	45.0	Hand
4359191061, 4454263508	03/17/2003	67.7	76.0	108.0	Hand
443A114614, 4454086229	03/17/2003	73.2	79.5	---	Hand
443A183A0F, 4454446861	03/17/2003	61.9	66.5	78.0	Scoop Net
443A185310, 4454266D49	03/17/2003	41.0	44.5	23.0	Hand
44552F3B47	03/17/2003	77.3	83.0	---	Hand
44397A5D7A, 4454683F27	03/18/2003	63.9	66.5	103.0	Captive
443A041E21, 443A0D3627	03/18/2003	63.8	68.3	73.0	Hand
4452501C34, 4454165D4F	03/18/2003	72.3	78.0	116.0	Hand
44523C0421, 4452580B10	03/19/2003	42.4	45.5	25.0	Net
4452491C1B, 44540F3A17	03/19/2003	47.2	50.5	34.0	Hand
44524E0272, 4455162816	03/19/2003	66.5	71.0	84.0	Hand
4414127F2D, 44141E174A	03/21/2003	55.2	59.0	55.0	Hand/Snorkel
44146C0921, 441474015C	03/21/2003	67.2	73.5	102.0	Hand/Snorkel
4454244937, 4455244036	03/21/2003	59.1	63.5	67.0	Hand/Snorkel
434A064C4B, 435C29443F	06/12/2003	40.9	43.5	20.0	Hand/Snorkel
4351211273, 435B71235D, TDR0490052 (9/25/2006)	06/12/2003	49.2	52.0	39.0	Hand/Snorkel
4439785B33, 4452057F4C	08/20/2003	54.9	60.0	54.0	Hand/Snorkel

Tagging Summary from Kapoho during 12/28/1993 - 12/31/2009

Tag Numbers	Date	Carapace Length (cm)		Weight (lbs)	Capture Metho
		Straight	Curved		
443A083132, 4452417C36	08/20/2003	53.9	58.0	51.0	Scoop Net
443A113D41, 445524350B	08/20/2003	84.2	91.0	---	Hand/Snorkel
44521C5A59, 44545D612B	08/20/2003	73.2	79.5	---	Hand/Snorkel
445277141A, 4455272F74	08/20/2003	62.3	67.0	83.0	Scoop Net
44396D5973, 44526A6104	01/31/2005	53.3	58.0	49.6	Scoop Net
443A0C1858, 44525D234D	01/31/2005	48.8	53.4	39.9	Hand/Snorkel
443A267F08, 445425595D	01/31/2005	64.0	69.5	72.6	Hand/Snorkel
44520D6B7F, 445246763B	01/31/2005	61.8	67.0	81.3	Hand/Snorkel
46023F2F76, 460815397C	01/31/2005	68.0	74.5	105.1	Hand/Snorkel
452368061C, 452852255A	02/01/2005	---	46.0	---	Hand/Snorkel
4527306D31, 452A46123D	02/01/2005	---	---	190.0	Hand/Snorkel
452572103B (7/11/2005), 46017C6B14, 4607347D59	02/01/2005	47.7	51.5	37.0	Hand/Snorkel
452422733F, 452640704E	02/02/2005	52.4	56.5	43.6	Scoop Net
4528672123, 4529692442	02/02/2005	65.7	73.0	95.4	Hand/Snorkel
0490945-C (2/12/2008), 44143C4876, 4422014D05	02/03/2005	86.3	93.5	219.9	Hand/Snorkel
44131C6552, 442C790762	02/04/2005	54.9	60.0	58.0	Hand/Snorkel
44397E0319, 4453674702	02/05/2005	---	---	---	Hand/Snorkel
4454084B4F, 4526074603	02/05/2005	---	84.5	---	Hand/Snorkel
4523671373, 4525215208	07/11/2005	58.4	63.0	68.4	Net
45266D2528, 45292D4C13	07/11/2005	61.8	67.0	73.9	Hand/Snorkel
4527631034, 4528653520	07/11/2005	54.1	59.0	50.1	Hand/Snorkel
4524205741, 45264D1461	07/12/2005	76.1	84.0	130.4	Hand/Snorkel
4525507112, 45266C2005	07/12/2005	50.6	54.5	45.0	Hand/Snorkel
45240B707C, 45273F001C, TDR0490942 (9/23/2006)	07/13/2005	61.4	67.5	78.7	Hand/Snorkel
452425775A, 46020F7041, 470B5C3F03 (5/2/2007), TDR490256B (5/2/2007)	07/13/2005	68.8	75.5	123.4	Hand/Snorkel
45242F2060, 4524717262	07/13/2005	59.0	65.0	73.8	Hand/Snorkel
4602315F4E, 4607494E66	07/13/2005	49.4	54.0	37.1	Hand/Snorkel

17

Tagging Summary from Kapoho during 12/28/1993 - 12/31/2009

Tag Numbers	Date	Carapace Length (cm)		Weight (lbs)	Capture Method
		Straight	Curved		
4607503106, 46075E322D	07/13/2005	45.2	48.5	31.5	Hand/Snorkel
4522415843, 4529786D26	09/21/2006	60.9	65.4	68.3	Hand
45265B6E10, 4529410A69	09/21/2006	62.3	68.0	73.0	Hand
4523063B54, 4527336730	09/21/2006	66.5	73.0	89.6	Net
4523514D0C, 4528376832	09/21/2006	61.0	66.0	77.0	Net
467D3A2A1E, 470C72633C	09/22/2006	63.4	69.0	86.6	Hand/Snorkel
47071E0900, 470C524611	09/22/2006	50.5	54.0	39.4	Scoop Net
470970365D, 4709753C37	09/22/2006	69.7	75.0	102.0	Net
470A070775, 470B2D5F77	09/22/2006	48.8	52.5	32.5	Hand
467D03394F, 470A155832	09/22/2006	40.1	43.0	19.2	Net
470A016647, 470A2C1116	09/22/2006	73.5	80.5	130.0	Net
470A1B5A3A, 470D031748	09/22/2006	66.1	71.0	91.4	Hand
470C7A7315, 470D115B66	09/22/2006	38.6	41.5	17.7	Net
47097E3742, 470C630F62	09/23/2006	75.2	83.0	132.3	Hand/Snorkel
47096E517A, 470B054121	09/23/2006	63.0	67.5	74.0	Hand/Snorkel
MC	09/23/2006	83.1	91.0	199.3	Hand/Snorkel
47096D6340, 470A081723	09/24/2006	42.0	46.0	22.4	Hand/Snorkel
47097B7339, 470A202227	09/24/2006	47.4	51.5	34.3	Hand/Snorkel
470B353A0F, 470D045805	09/24/2006	42.5	45.0	24.6	Hand/Snorkel
45234D1160, 470B4E6B15	09/24/2006	52.0	57.0	41.7	Hand/Snorkel
467D35257D, 470A195B7E	09/25/2006	68.9	76.0	103.9	Hand/Snorkel
470A087A26, 470C702D4A	09/25/2006	40.4	45.0	22.4	Hand/Snorkel
470C7D2A08, 470C7E0624	09/25/2006	83.5	89.0	171.6	Hand/Snorkel
4523274D7D, 45273F0406	09/26/2006	59.0	64.0	73.7	Hand/Snorkel
45242C1640, 45284D434A	09/26/2006	---	86.0	---	Hand
4528503777, 4528682028	09/26/2006	41.3	44.5	22.6	Hand
45241E7C54, 4529615532	09/26/2006	65.7	70.5	91.6	Hand/Snorkel
4529200D06, 45296B2F74	09/26/2006	65.9	70.5	90.0	Hand/Snorkel
4628461300, 4628585733	04/28/2007	59.3	64.5	69.7	Hand/Snorkel
4629090167, 4629184E2D	04/28/2007	53.8	58.5	49.3	Scoop Net

Tagging Summary from Kapoho during 12/28/1993 - 12/31/2009

Tag Numbers	Date	Carapace Length (cm)		Weight (lbs)	Capture Method
		Straight	Curved		
467B413D78, 470D106444	04/28/2007	46.3	50.5	31.1	Hand/Snorkel
470A004773, 470A3A3954	04/28/2007	73.3	80.0	144.5	Hand/Snorkel
4709700D71, 470C636053	04/28/2007	61.1	68.0	78.6	Hand/Snorkel
4629011A1F, 470B1E616A	04/29/2007	36.4	39.0	14.0	Hand/Snorkel
46283B3275, 4629147140	04/29/2007	46.3	51.5	37.4	Hand/Snorkel
47063C1E67, 470D0D1774	04/29/2007	44.9	48.5	25.4	Hand/Snorkel
4709624E14, 470A0B5333	04/30/2007	80.6	87.0	150.5	Hand/Snorkel
44522D2925, 44525D3C78	05/01/2007	60.7	65.5	65.8	Hand/Snorkel
4709744B2A, 470C24635A	05/01/2007	60.0	66.0	60.7	Hand/Snorkel
445226301A, 4454473815	05/02/2007	41.6	44.5	24.7	Hand/Snorkel
44522D2274, 4453582F6D	05/02/2007	59.4	65.0	65.7	Hand/Snorkel
44525E3057, 44552C3A17	05/02/2007	47.8	52.5	40.1	Hand/Snorkel
470A082A21, 470B493B6D	05/02/2007	56.1	61.5	57.6	Hand/Snorkel
470B523363, 470C797071	05/02/2007	65.6	72.0	85.2	Hand/Snorkel
470C311730, 470D14010B	05/02/2007	49.6	54.0	38.3	Hand/Snorkel
467C194135, 47097D5A34	02/11/2008	82.8	89.0	183.2	Scoop Net
4709701836, 470B46171A	02/11/2008	68.8	74.0	97.0	Hand
470A11783D, 470C620E55	02/11/2008	47.2	51.5	33.6	Hand
470A204473, 470B366627	02/11/2008	49.8	53.5	39.0	Hand
470B460069, 470D131C75	02/11/2008	66.4	72.0	86.9	Hand
470A00683B, 470B552F3E	02/12/2008	58.6	64.0	64.8	Hand/Snorkel
470A1C3928, 470B1E7320	02/12/2008	87.9	94.0	185.8	Hand/Snorkel
470B39534B, 470C60451A	02/12/2008	63.1	69.5	88.5	Hand/Snorkel
470C2E4547, 470C7B3A1D	02/12/2008	57.9	64.5	62.4	Hand/Snorkel
4709733846, 470B355629	03/16/2008	60.2	64.5	73.5	Hand/Snorkel
4709792D31, 470A512633	03/18/2008	45.4	49.0	32.5	Hand/Snorkel
47097A2E55, 470B1F6F16	03/18/2008	59.0	63.5	64.0	Hand/Snorkel
4709693672, 470A146A6F	03/18/2008	52.3	56.0	50.5	Hand/Snorkel
470B2D720B, 470C736425	03/18/2008	48.9	53.0	36.0	Net
470A48435F, 470D125C18	03/18/2008	53.0	57.0	48.0	Net

Tagging Summary from Kapoho during 12/28/1993 - 12/31/2009

Tag Numbers	Date	Carapace Length (cm)		Weight (lbs)	Capture Meth
		Straight	Curved		
4709640474, 470C694C3C	03/19/2008	69.6	75.0	105.0	Net
47096F5663, 470A101970	03/19/2008	56.2	61.0	56.5	Net
443A1E2068, 470B466855	10/12/2008	70.4	76.0	117.0	Hand/Snorkel
467B425537, 470A183807	10/13/2008	61.4	65.0	67.5	Net
4709727554, 470C7B325B	10/13/2008	75.9	83.0	153.0	Net
470A023C41, 470A054066	10/14/2008	55.0	61.0	57.0	Net
470A0D4508, 470A385436	10/14/2008	47.6	52.0	35.0	Net
470A0D4E59, 470C5F7F46	10/14/2008	78.6	84.5	139.5	Net
470B4E3459, 470D135C0C	10/14/2008	64.6	69.5	81.0	Net
470C255862, 470C752948	10/14/2008	81.3	88.5	218.0	Net
470C5C4F48, 470D116F01	10/14/2008	48.8	52.0	37.5	Net
470A1F6617, 470C7A4772	10/15/2008	45.9	49.5	30.5	Hand/Snorkel
470A4C1354, 470B2F0939	10/16/2008	60.9	65.0	67.5	Hand/Snorkel
483A440C23, 484F721863	04/25/2009	46.6	51.0	35.0	Hand/Snorkel
	04/26/2009	37.4	40.0	15.0	Scoop Net
470B252475, 483C41373C	04/27/2009	45.1	48.0	26.0	Hand/Snorkel
483A463F2E, 4853551A4F	04/27/2009	43.2	46.5	27.5	Hand/Snorkel
485160186F, 4856325B24	04/27/2009	44.4	48.0	31.0	Hand/Snorkel
483B426C56, 485322605C	04/28/2009	41.8	45.0	24.5	Hand/Snorkel
48507E0F28, 485321575F	04/28/2009	46.1	49.5	27.5	Hand/Snorkel
48503C6308, 485328240F	04/29/2009	63.8	68.5	85.5	Hand/Snorkel
48501C6412, 485070517B	04/29/2009	50.4	54.5	42.5	Hand/Snorkel

(DLNR Agents),

We are writing in opposition to the application submitted by KapohoKine for commercial tours across the lava flow from Cape Kumukahi Lighthouse to Kapoho Bay.

The historical importance of the Hawaiian heiau and burial site just south of Kumukahi Lighthouse is a mere 20 ft from the bulldozed path which Kapohokine Tours was using.

With a diverse and fragile ecosystem, Kapoho Bay provides necessary sanctuary for many species on the US Fisheries Endangered Species List. Monk Seals have been seen near the mouth of Kapoho Bay. One of the most critical on the Endangered List is the green sea turtle. It is imperative that DLNR act responsibly and protect them from commercial activity.

Only 1 year ago, many green sea turtles a day languished in Champagne Lagoon. Currently, after a year of KapohoKine bussing in 50 to 100 tourists a day, the numbers are down to one or two turtles a day visit Champagne Lagoon. They no longer have a quiet place to rest for their exhausting migration to lay eggs. It is imperative that DLNR protect these Endangered Species by rejecting all commercial activity applicants.

In addition, the Dept. of Health's weekly water samplings reveal constant e-coli contamination in Champagne Lagoon. To legitimize the transport of tourists across the bulldozed path to swim in polluted waters would be in direct conflict with the safety and well-being of the public.

Respectfully submitted,
(your name)

Kapoho Bay Preservation Council

cc: Mayor Harry Kim
cc: Governor Linda Lingle
cc: Hawaii State Ombudsman
cc: Senator Daniel Inouye
cc: Rep. Neil Abercrombie
cc: Hawaii County Council
cc: Hawaii State Ombudsman Office

LINDA LINGLE
GOVERNOR OF HAWAII



*George - I got
a copy (free)
for these
guys of the
G.A.*

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

Laura R. Thielen
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCES

Russell Y. Tsao
FIRST DEPUTY

Ken C. Kawaraha
DEPUTY DIRECTOR

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONSERVATION
COMMISSION ON WATER RESOURCES
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESTORATION
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVATION
LAND
STATE PLANTS

REF:OCCL:DH

Patty and Erik Belcher
P.O. Box 7310
Hilo, Hawaii 96720

*I will
share w/ you
Feb 10 - 14.
Aloha, Patty*

CDUA: HA-3447

JAN 24 2008

SUBJECT: Conservation District Use Application (CDUA) HA-3447 to restore and rebuild the 1893 "nameless" fishpond, hereinafter referred to as "Kapoho Fishpond," located at Kapoho Bay, Kapoho Ahupuaa, Puna District, Island of Hawaii located on subject parcel TMK: (3) 1-4-002:036.

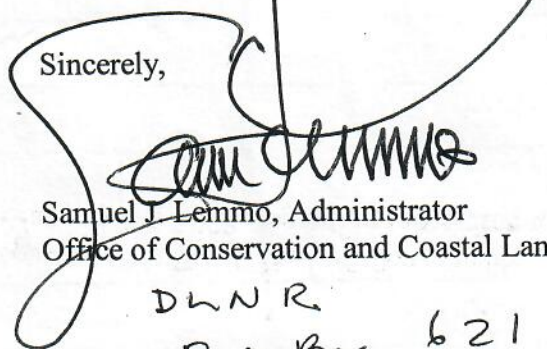
The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL), received your letter, dated January 20, 2008, regarding more time to respond to CDUA HA-3447.

The OCCL notes a copy of the CDUA and Draft Environmental Assessment (DEA) is located at the Hilo Public Library, 300 Waiuanue Avenue, in Hilo, and also at the Hilo District Land Office at 75 Aupuni Street, Room 204, Hilo. However, we have attached a copy of an DEA for you.

In regards to your request for additional time to examine the DEA, the OCCL notes the public comment period was over on January 23, 2008. CDUA HA-3447 DEA was published in the December 23, 2007 Environmental Notice – which has a 30-day public comment period, pursuant to Chapter 343 Hawaii Revised Statutes (HRS). However, you may wish to submit a late comment letter and/or present information to the Board of Land and Natural Resources (BLNR) meeting for which a date, time, and place has yet to be announced.

Should you have questions, please call Dawn Hegger of our Office of Conservation and Coastal Lands staff at 587-0380.

Sincerely,



Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

D L N R
P O Box 621
Hilo HI 96809

C: Joe Farber

Attachment

Tribune Herald

Wednesday, March 3, 2010

Proudly serving Hilo and the Big Island since 1923

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SPORTS

UH cagers want to finish strong
Page C1



LIFE

Pole dancers eye Olympics
Page B1



NATION

Senator finally releases \$10B measure
Page A3

Council looks at coqui killers



'Agent Green' touted as among the most effective

By PETER SUR

Tribune-Herald staff writer

Councilwoman Brenda Ford wants to get the ball rolling on approving baking soda as a pesticide for use against coqui frogs.

Meeting as the Environmen-

tal Management Committee, County Council members listened to a presentation from various scientists on the different methods and chemicals that people are using across the Big Island.

See COQUI Page A6

Jet tax fails to take flight

By PETER SUR

Tribune-Herald staff writer

Councilman Kelly Greenwell's novel proposal to have the ultra-rich donate money to the island's hospitals failed to get off the ground.

Five votes at Tuesday's

committee meeting were needed to send Greenwell's nonbinding resolution to the full council with a positive recommendation, but it received only four votes.

The resolution urges the

See TAX Page A6

COQUI

From front page

The frogs, native to Puerto Rico, have become widely established throughout the island's lower elevations, even in areas experiencing a severe drought. High concentrations of the chirping males disrupt the sleep of countless residents and visitors. The frogs' incessant appetite poses a threat to native insects and the birds that depend on them. If overseas markets decide to restrict imports from Hawaii based on the threat of a coqui infestation, that would harm the economy.

Mark MuneKata, a volunteer with the Hawaii Island Economic Development Board and former research technician with the U.S. Department of Agriculture, passed to the council two large jars containing three live frogs each.

"The main thing is the public needs to be trained in using any of these methods, and all," MuneKata said. "Because one thing that the coqui frog has shown is that it is adaptable. Once you think you have got it under control and you understand it, it does something else and throws you totally for a loop."

Residents have been

experimenting for years ways to capture or kill the frogs, attacking them with chemicals, powders, sprays and traps of all kinds. Members of the public testified that chickens, baking soda, and neighborhood cooperation were all effective.

Several of the speakers praised the "Agent Green" developed by orchardist David Davis. This solution of acidic calcium sulfate, he said, is nontoxic, half the cost of citric acid and approved by the Food and Drug Administration.

"I'm asking for the council's support in further development of this," Davis said.

Citric acid is the only chemical approved for use against the frogs. Calcium carbonate — baking soda — is not, but the FDA classifies both substances as "generally recognized as safe."

"Baking soda will control the frog. It'll also kill your grass," MuneKata said. "It's not the silver bullet, but it's something that the public understands."

MuneKata said the major manufacturers of baking soda, including the company that makes Arm & Hammer, do not want the state to use

their product as a pesticide, "which is unfortunate."

The frogs will eat honey bees, fruit flies, small lizards, other coquis and "anything that fits into the mouth," he said.

MuneKata urged that the public get some kind of educational program to raise awareness about the frog.

Ford, who requested the presentation, then asked other specialists present to comment on what they heard.

Lionel Wong is the head of the state Department of Agriculture's Plant Industry Division.

He said that the state was asking the Environmental Protection Agency to grant plant nurseries permission to use hydrated lime.

Baking soda could be procured from sources in China, for example, if U.S. manufacturers don't allow it to be used for frog control, Wong said.

Agent Green, if it's effective against the coquis, should be considered for registration as a pesticide, Wong said. And it cannot be described as nontoxic.

Bill Mautz, a biology professor at the University of Hawaii at Hilo, said that

all acids or bases will kill the frogs if in high enough concentrations.

"The question before us is what ones work that are inexpensive and relatively not hazardous," he said. "I find ... that sodium bicarbonate isn't nearly as effective as citric acid, but in high enough concentrations it does work to kill coqui frogs."

He called Davis' Agent Green "very effective" by causing death within a matter of minutes. Mautz also endorsed chickens and the clearing of vegetation to deprive the frogs of habitat.

Ford pledged to meet the scientists at a later time, and asked about the process of getting baking soda approved for use on the frogs.

"Which of you gentlemen is going to be working on getting baking soda potentially approved as a pesticide?" she asked, inviting Wong to step forward.

Wong said the state could submit a request for an exemption to the EPA.

"How do we inspire you to fill out an application for an exemption?" Ford asked. Wong said he would work with MuneKata to determine the best way to do so.

Man fights for mangroves

Sydney Singer has also gone to bat for coqui frog, strawberry guava

By JOHN BURNETT
Tribune-Herald staff writer

A Puna resident is suing Malama O Puna and several government agencies, accusing them of illegally poisoning red mangroves on the Big Island coastline.

The lawsuit, filed Feb. 16 in Hilo Circuit Court by Sydney Ross Singer, also names the state Department of Land and Natural Resources' Office of Conservation and Coastal Lands, Hawaii County, U.S. Fish and Wildlife Service, Big Island Invasive Spe-

cies Committee, and the Hawaii Tourism Authority. No hearing has been scheduled on the lawsuit.

Singer has waged previous campaigns to protect coqui frogs and strawberry guava, both considered invasive threats to Hawaiian flora and fauna.

Singer alleges that Malama O Puna, in partnership with the Big Island Invasive Species Committee, used herbicides at the Wai 'Opae Marine Life Conservation District in Kapoho "to poison and kill approximately 20 acres of mangrove trees and



SINGER

said that the Hawaii Tourism Authority put up \$40,000 to have Malama O Puna carry out the project at Wai 'Opae and that the Fish and Wildlife Service funded eradication at the other sites.

The lawsuit names those sites as Honokohau Harbor, Oneka-

leave them to rot in place." He states that the "eradication by using poison ... was a test for the use of herbicide to kill mangroves at other sites on the Big Island." Singer said that the Hawaii Tourism Authority put up \$40,000 to have Malama O Puna carry out the project at Wai 'Opae and that the Fish and Wildlife Service funded eradication at the other sites.

Singer's suit asks for both temporary and permanent injunctive relief and unspecified damages.

"To date, all the mangroves at Paki Bay has been poisoned and are rotting in place. One to two acres of mangroves at Pohoiki have also already been poisoned," the document states.

The lawsuit contends that the removal of mangroves will have the opposite effect of what is

See MANGROVES Page A6

intended, harm both native and exotic fish, reduce shoreline protection from storm surge and tsunamis, and cause "irrevocable harm to the environment."

Malama O Puna President Rene Siracusa declined to comment, she said, on advice of legal counsel. Deputy Attorney General Gregg Kinkley said Tuesday that the state has been served with the suit, but he could not yet comment. County Corporation Counsel Lincoln Ashida said he had not seen the suit. The Fish and Wildlife Service did not return a phone call.

Malama O Puna's Web site calls mangroves "aggressive aliens that replace coral pool and other coastal habitats, shading out coral, dropping large amounts of organic matter, and resulting in muck-filled pools with little diversity." According to the site, MOP received a Shoreline Management Area Minor Permit from the county's Planning Department, "which required an application similar to an Environmental Assessment, and signatures of all landowners." MOP was also required to obtain certification by the state Department of Agriculture to apply herbicide.

"(The state Division of

"Hawaii evolved without mangroves and without the high silting that comes up with that."

— David Cameron Duffy, UH botany professor

Aquatic Resources) requested that we not use herbicides within the (Marine Life Conservation District), which includes some of the sparsely mangrove-infested area," the site states.

"They don't like mangroves because they're not native," Singer said of MOP and the BIISC. "It really comes down to that. I consider them native species supremacists. To them, only native counts, and nothing can change in the environment from what it was a few hundred years ago. ... These are all partners and they define what they think are invasive species. ... In this instance, they didn't even get an Environmental Assessment to address this mangrove issue."

Singer said that MOP is exploiting a legal loophole to avoid filing an EA.

"They said this was noxious weed removal and they cited some law that allows that, but the law also says the noxious weed is as defined

by the Department of Agriculture and their noxious weed list, and mangrove is not on the noxious weed list," he said. "... So they could not use this law to justify doing this without an EA."

BIISC referred the Tribune-Herald to David Cameron Duffy, a botany professor at the University of Hawaii at Manoa. Duffy said mangrove roots destroy the walls of native Hawaiian fish ponds, crowd out native vegetation and provide a breeding place for mosquitoes, causing possible dengue fever concerns.

"Hawaii evolved without mangroves and without the high silting that comes up with that. We have one endangered bird, at least, the stilt, that doesn't like mangrove," Duffy said. "In Kaloko-Honokohau National Historical Park, my unit and the (National) Park Service had to take 'em out by hand, because legally we couldn't use herbicides there. ... Once they

finally got rid of the mangroves and the associated silt, and put in a fish gate, all this muck went away, a sandy bottom came in, and instantly, dozens of Hawaiian stilts arrived. So it transformed what had been just sort of a disgusting backwater into what the Hawaiians had originally intended."

Duffy called the lawsuit's conclusions "over the top."

"I worked in Costa Rica and Galapagos, places where mangroves were critically important — and in some cases, were endangered," he said. "And I've tried to preserve them. This is a case where these are not native, and we've got to think in terms of whether or not we want to homogenize our natural environment with the rest of the world. We've already decided that we don't want to homogenize our culture, and basically, we need to think about our environment."

"I would hate to see the Big Island look like everywhere else. I've been to China and places in Central America and South America, and we can look like that, if you want. And we probably will if Syd gets his way."

E-mail John Burnett at jburnett@hawaii.tribune-herald.com.

THE ROOT OF A TANGLE



Visitors cool off at the base of mangroves growing at Pohoiki Cove last August.

WILLIAM ING/Tribune Herald

32

Sunday

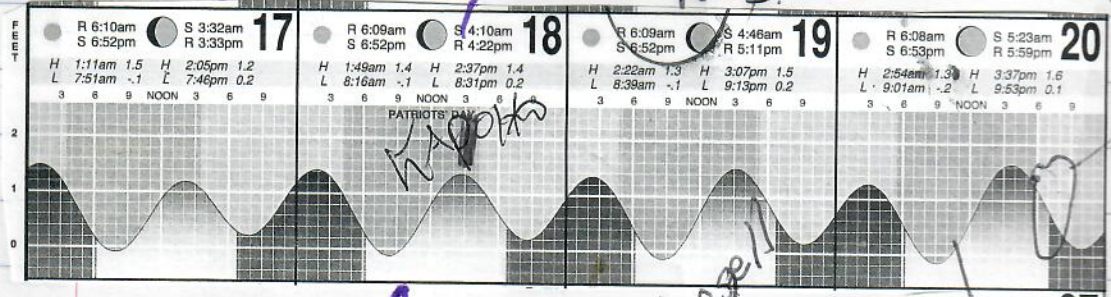
ARRIVE
~ 2 PM
N=7
Monday

BARCELL
TRANSECTS
KAPLA
+ CHAZ to
ROW KIRK
Tuesday
N=3

18-22
APRIL
2016

wed

BARCELL
NET 3
HAND
SNORKEL
3

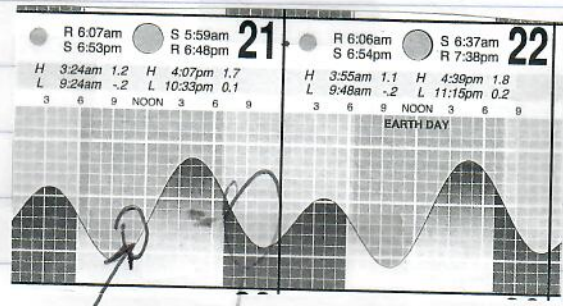


BI
8:30 PM
7 HAND SNORKEL
(2 NET POND)
4 REC, 3 NEW

BARCELL
1 NET (RECOY)
2 BI
(1 RECOY, 1 NEW)

ITMR
BARCELL
POND
BUSH
(TO HOOKSW)
N=7

Thursday



Friday

SCOOP
NET
Fishline
ENTANGLED

6 HAND
SNORKEL

N=7

TOTAL - 24
14 New
10 Recaptures

new
N=10
REC
ALL N=

22
FR

new

new
new

new
ITMR

Monday Friday

(33)

HA KAPOHO 18-27 APRIL 2016
935 HA TO HILO. WAITED/worked AT

AIRPORT MARC picked me up 1230pm,
TO KUA INAKO MARKET. SAW photos
MRS. JO Michelle & PATTY Belcher,
JO'S SON lives in in Calif. formerly
oil in Indonesia.

new N=10	40.5 / 21 lbs	→	72.3 / 116.7 lbs
N=14 RECAP	41.3 / 23.5 lbs	→	73.6 / 131 lbs
ALL N=24	40.6 scl / 21 lbs	→	73.6 / 131 lbs

22 APRIL 2016 Depart HA HILO → HONOLULU
Friday 14 new, 10 RECAP 115PM

	SCL	WT		SCL	WT
	46.3 cm	36.5 lbs		41.5 cm	23.5 lbs
new	46.8	32.5	new	44.0	27.5
	57.3	60.5	new	63.2	72.7
new	61.3	87.7	new	63.9	71.5
new	62.9	79.3	new	70.6	110.5
	52.7	43.5		73.6	131.0
	46.5	33.5	Fish Line	60.5	73.0
	61.2	78.5	new	72.3	116.7
	45.0	30.5	new	40.5	21.0
new	55.9	53.0	new	43.3	22.5
TRR	69.6	~	new	52.6	50.5
new	40.6	21.0	new	45.9	30.5

ISSUED BY HAWAIIAN AIRLINES
TSA PRECHK
NAME OF PASSENGER (NOT TRANSFERABLE)



FROM BALAZS/GEORGE H
TO HONOLULU
HILO

18APR16
4PJ /HNL HONOLULU
CARRIER FLIGHT CLASS DATE TIME
HA 382 Y 18APR938A

US

HAWAIIAN AIRLINES
BOARDING PASS

NAME OF PASSENGER
BALAZS/GEORGE H
HA FROM 115219970
TO HONOLULU
HILO

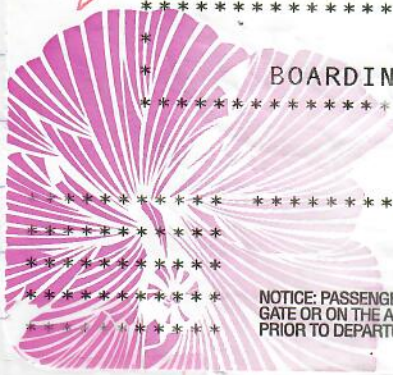
HAWAIIAN AIRLINES
CARRIER FLIGHT CLASS DATE TIME

HA 382 Y 18APR938A
GATE BOARDING TIME SEAT

55 858A 15D

ZONE 3

ELECTRONIC
PJ /HNL



BOARDING PASS

PNR CODE

EVOJKT /HA

SEAT/SMOKE
15D NO

NOTICE: PASSENGERS MUST BE AT THE
GATE OR ON THE AIRCRAFT 30 MINUTES
PRIOR TO DEPARTURE FOR ALL FLIGHTS.

ZONE 3
ELECTRONIC
1 173 7769008936 5

ISSUED BY HAWAIIAN AIRLINES
TSA PRECHK
NAME OF PASSENGER (NOT TRANSFERABLE)



FROM BALAZS/GEORGE H
TO HILO
HONOLULU

22APR16
4A7 /ITO HILO
CARRIER FLIGHT CLASS DATE TIME
HA 181 Y 22APR105P

US

HAWAIIAN AIRLINE
BOARDING PASS

NAME OF PASSENGER
BALAZS/GEORGE H
HA FROM 115219970
TO HILO
HONOLULU

HAWAIIAN AIRLINES
CARRIER FLIGHT CLASS DATE TIME

HA 181 Y 22APR105P
GATE BOARDING TIME SEAT

6 1245P 20D

ZONE 3

ELECTRONIC
4A7 /ITO



BOARDING PASS

PNR CODE

EVOJKT /HA

SEAT/SMOKE
20D NO

NOTICE: PASSENGERS MUST BE AT THE
GATE OR ON THE AIRCRAFT 30 MINUTES
PRIOR TO DEPARTURE FOR ALL FLIGHTS.

ZONE 3
ELECTRONIC
2 173 7769008936 1

EGC4C

2016
KAPOTO

APRIL 18-19-20

(35)

MON. TUES WED.
AM

PATTY'S HOME
w/ LAURA
JIM

- 7th [Kaija Cooper¹ COOPES kcooper@hpa.edu
Sara Kimura² SKimura@hpa.edu
Morgan davis³ mdavis1@hpa.edu]
- 12th Kali Stecker⁴ kstecker@hpa.edu
- 9th Paula Rey⁵ preylosantos@hpa.edu
- 10th Caroline Menner⁶ cmenner@hpa.edu
- 11th Joshua Bramwell-Butcher⁷ jbramwell-butcher@hpa.edu

APRIL 20-22, 2016

Wed. pm

photos

Friday AM

- 11th Sidney Vermeulen¹ svermeulen@hpa.edu
- 11th Yuki Furusho² yfurusho@hpa.edu
- 10th Franz ~~Präuner~~³ fpraener@hpa.edu
- 10th Paula Reichert⁴ preichert@hpa.edu
- 7th Kahalley Anton⁵ [Kanton@hpa.edu]
- 7th Katie Kuyper⁶ [kkuyper@hpa.edu]
- 7th Jared Barrett⁷ jbarrett@hpa.edu
- 10th Ian Naibryf⁸ inaibryf@hpa.edu

6/22/2016

2/PBR

6/22/2016 Wednesday PuaKO N=8 captors
MOTOki 4 KANAKO

Hematocrit Карото
PCV

A.M. 4/19/2016 (37)

TUESDAY
SPIN

SAMPLE
I

DUP L
10,000 10min

30.5 → 37.7%

DUP 2

11.5

29.0

12.5

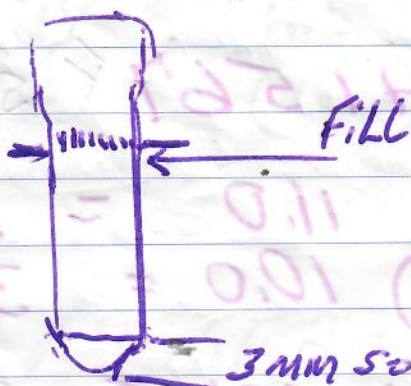
43.0%

$\bar{X} =$

SCL 46.8

$\bar{X} =$
40.3%

4C3B44φφ4φ



31

SPIN 3min * 10,000 RPM

2.9 46%

" 5min "

1.5

* " 10 min "

PCV 13.5 29

36.0mm = 45%

+5.5

PCV 14mm

31

KAROTTO

4/19/2016
SPIN TUES,

#2-4C4A683C45

$\bar{x} =$
 dup 29.0 (9.0) = 7.5 = 25.9%
 dup 30.0 (10.0) = 8.5 = 28.3% \rightarrow 27.1%
 SCL 46.5 cm

#3 4C4B11443A

$\bar{x} =$
 dup 29.5 (10.0) ^{1.5} 8.5 = 28.8%
 dup 29.0 (10.5) 9.0 = 31.0% \rightarrow 29.9%
 SCL 46.3

#4 4C4A441567 F SCL 52.7

$\bar{x} =$
 dup1 30.0 (12.5) 11.0 = 36.7%
 dup2 28.0 (11.5) 10.0 = 35.7% \rightarrow 36.2%

#5 4C3C5A534F SCL 61.3

$\bar{x} =$
 dup1 30.0 (12.5) 11.0 = 36.7%
 dup2 31.0 (13.0) 11.5 = 37.1% \rightarrow 36.9%

Kapotto 4/19/2016 TUES, SPIN (39)

#6 4C 487F2649 SCL 57.3

~~Dup 1~~ 29 (12) 10.5 = 36.2%
 Dup 2 30 (12) 10.5 = 35.0%
 $\bar{x} = 35.6$

(510) 875 8084
Weak letnargic

4/26/2016 TUES LINDSAY HILLO STRAND picked up

#7 4C 3B 3E 6C 4C SCL 62.9

~~Dup 1~~ 29 (11.5) 10 = 34.5%
 Dup 2 29 (12.5) 11 = 37.9%
 $\bar{x} = 36.2$
 SPIN 4/20 wed.

#8 4C 4A 453E 29

Dup 1 29 (11.5) 10.0 = 34.5%
 Dup 2 31.5 (12.0) 10.5 = 33.3%
 $\bar{x} = 33.9$
 SCL 45.0

4/20/2016 Late AM
flew DRONE over Boursell Pond
still photos

$$\bar{x} = 32.9$$

H G B B B E C H C

$$\bar{x} = 32.9$$

(15.2) 11 = 31.2
(11.2) 10 = 31.2

4/20/2016
Wednesday (41)

#9 470A11783D
Dup 1 29 (12) 10.5 = 36.2
Dup 2 31 (12.5) 11 = 35.4
 $\bar{x} = 35.8$

#10 4C3D1D060B SCL 55.9
Dup 1 30 (11) 10.5 = 35.0%
Dup 2 31 (11) 10.5 = 33.9%
 $\bar{x} = 34.5$

4/21/2016 Thurs.
SPIN

#11 4C3B5C4967 SCL 41.5
Dup 1 30 (11.5) 10 = 33.3%
Dup 2 29 (11) 9.5 = 32.8
 $\bar{x} = 33.1$

#12 4C3B477D48 SCL 44.0
Dup 1 29 (10.5) 9 = 31.0%
Dup 2 28.5 (10) 8.5 = 29.8%
 $\bar{x} = 30.4$

4/21/16
Thurs

~~SPIN~~

#13

SCL 63.2

4C3B436D3A

Dup 1 28.5 (11.5) 10 = 35.1%

Dup 2 28.0 (11) 9.5 = 33.9%

$\bar{X} = 34.5\%$

#14

4C3B5B5B52 SCL 63.9

Dup 1 28.5 (10) 8.5 = 29.8%

Dup 2 28.0 (10) 8.5 = 30.4%

$\bar{X} = 30.1$

#15

4C4A64787D SCL 70.6

~~small~~ Dup 1 28. (10) 8.5 = 30.4

Dup 2 28.5 (10.5) 9.0 = 31.6

$\bar{X} = 31.0$

#16

4850/3C6308 SCL 73.6

Small Dup 1 30 (15.5) 14.0 = 46.7%

Clot Removed Dup 2 29 (14.0) 12.5 = 43.1%

$\bar{X} = 44.9\%$

4p

4/2

10/6

4/20/2016 ~ 12 noon

Wednesday heavily Turnover low tide
Shallow water by Palms Siend Bassell
Pond - Picked up by Rice & GB,
Lindsey - HILO / Stranding Team
picked it up ~ 2pm to fly to HILO.

~ 1pm flew drone - Bassell Pond
Still photos.

4pm new student group ARRIVED
w/ Lawa Jim, see p. 35

Net at lowering tide at sunset
6 Caught - some in net some
hand snorkel.
Worked up at JO Mitchell home

up ~ 830 A.M.

4/21 Thursday - Students went to
snorkel Waipoua Reserve.

Marc & I Scooped Bassell Pond
10lb Fish live entangled LFF deep cut + swollen
4 Strands down throat cut short.
TO P. 45

no plain view
"In plain sight"

6:30 PM
Sunset

Thursday
4/21/2016 Bassell Pond
Scoop net
PHF



4C3D1A351E

~~No blood on site at Karotte~~

SCL 60.5

SCL 69.6

House burned down recently mountain side of Chong A-frame.
Huge mound of gravel inside bar of Champagne Pond, from storm ^{formed since 2015} _{2-yr old}

34

4/22/2016 Friday spin Blood Am

17. 4C3D1A351E entangled turtle
 Dup 1 20 (6) 4.5 = 22.5
 Dup 2 21 (6) 4.5 = 21.4
 SCL 60.5 $\bar{x} = 22.0$

18. 470B2F039 SCL 72.3
 Dup 1 28.5 (10) 8.5 = 29.8
 Dup 2 28.0 (9.5) 8.0 = 28.5
 $\bar{x} = 29.3$

19. 4C3C666708 not spun for TW
~~dup~~ SCL 40.5

20. 4C3B4A6 125
 Dup 1 28.5 (9.5) 8.0 = 28.1
 Dup 2 28.5 (9.0) 7.5 = 26.3
 SCL 43.3 $\bar{x} = 27.2$

SCL-52.6

21. 4C3B54344B

DUP 1 30 (10) 8.5 = 28.3
DUP 2 29 (9.5) 8.0 = 27.6

$\bar{X} = 28.0$

22. 4C3B487A6D

SCL 40.6 NOT SPUN
FOATW

RICE/BALAZS ON SITE

25336	ID	PCV 1	PCV 2				
1	0040		47	48	38	43	+ lower
2	3C45		25	25	26	28	
3	443A		28	28	29	31	
4	156T		35	33	37	36	
5	534F		36	35	37	37	
6	2649		35	36	36	35	
7	6C4C		37	35	35	38	
8	3E29		32	32	35	33	
9	783D		33	35	36	35	
10	060B		26	27	35	34	+ higher
11	4967		31	31	33	33	
12	7D48		30	30	31	30	
13	6D3A		36	36	35	34	
14	5B52		29	29	30	30	
15	4787D		32	31	30	32	
16	6308		42	41	47	43	
+ 17	6708		22	22			
+ 18	7A6D		27	27			NOT DONE
19	6125		31	29			NOT DONE
20	0939		34	34	28	26	
x 21	351E		25	25	30	29	
22	344B		28	27	23	21	ENTANGLE
					28	28	

25336	ID	PCV 1	PCV 2	Avg TW	Avg R/B	PCV 1 (R/B)	PCV 1 (R/B)
1	0040	47	48	47.5	40.5	38	43
2	3C45	25	25	25	27	26	28
3	443A	28	28	28	30	29	31
4	1567	35	33	34	36.5	37	36
5	534F	36	35	35.5	37	37	37
6	2649	35	36	35.5	35.5	36	35
7	6C4C	37	35	36	36.5	35	38
8	3F29	32	32	32	34	35	33
9	783D	33	35	34	35.5	36	35
10	060B	26	27	26.5	34.5	35	34
11	4967	31	31	31	33	33	33
12	7D48	30	30	30	30.5	31	30
13	6D3A	36	36	36	34.5	35	34
14	5B52	29	29	29	30	30	30
15	4787	32	31	31.5	31	30	32
16	6308	42	41	41.5	45	47	43
17	6708	22	22	22	#DIV/0!	-	-
18	7A6D	27	27	27	#DIV/0!	-	-
19	6125	31	29	30	27	28	26
20	0939	34	34	34	29.5	30	29
21	351E	25	25	25	22	23	21
22	344B	28	27	27.5	28	28	28

KAPOHO BEACH COMMUNITY ASSOCIATION

OCEAN ACCESSES

CP & 5 = CHAMPAGNE POND

2 & 3 = ****UNSAFE ACCESS****

1, 4 & 5 = WATER ACCESS

6, 7 & 8 = ACCRETION LAND ACCESS

NOTE: All sea walls and landings are private property and not to be trespassed upon. All KBCA held ocean accesses are to be considered use at your own risk. There are no parking, bathroom, or trash facilities near the accesses. All accesses are along the north shore of the bay...there are NO KBCA owned ocean accesses along Alapai Point Road.



99

Thursday, June 30th, 2011 | Posted by [Sydney Ross Singer](#) | [Print This Article](#)

BEACH BUMMED! The Poisoning of Big Island Beaches



[://www.hawaiireporter.com/beach-bummed-the-poisoning-of-big-island-beaches/123](http://www.hawaiireporter.com/beach-bummed-the-poisoning-of-big-island-beaches/123)

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BY SYDNEY ROSS SINGER - Hawaii's beaches have been praised recently as having some of the cleanest waters in the country.

However, on the shores of the Big Island, in plain sight of tourists and locals enjoying the beach and surf, is an ongoing environmental disaster, caused by an invasive species eradication project.

Since 2008, a local nonprofit, called Malama o Puna, working with the Big Island Invasive Species Committee, poisoned nearly 35 acres of mangrove trees growing along the shoreline. The trees were poisoned and left to rot as a cheap way of destroying them.

Why kill mangrove trees, valued worldwide for their environmental services of protecting coral reefs from runoff and the shore from storm surges and tsunamis, providing fish nursery habitat, sequestering carbon to slow climate change, and more?

It's because here in Hawaii some people consider mangroves an invasive species, since they were brought by humans to Hawaii and are not part of the shoreline ecosystem that existed prior to Western contact.

The poisoned beach parks include Onekahakaha in Hilo, and Isaac Hale (Pohoiki) and Wai Opae Marine Life Conservation District in Puna. The dead trees are now slowly decaying and falling into the water at Wai Opae, a famous snorkeling spot and the first area poisoned as a test for the poison method used.

Without any Environmental Assessment or public comment, government agencies on the federal, state, and county levels cooperated in poisoning the mangroves. Monsanto and chemical giant BASF donated the poisons, glyphosate and imazapyr. Monsanto even gave Malama o Puna a \$5,000 grant. In all, over \$125,000 have been received for this poisoning from government and private interests.

Hundreds of thousands of mangrove trees were injected or sprayed with poison, causing massive leaf drop into the water. According to the US Forest Service, (a project partner monitoring the impacts of the eradication experiment at Wai Opae), fish counts dropped significantly a year following the poisoning. There was a massive algal bloom in the poisoned areas, and the water became warmer, more acidic, and less oxygenated. And while the Forest Service did not consider impacts of the herbicidal application on coral, locals who snorkel in the area report the coral is dying and fish counts are still much lower than before the eradication.

A citizen lawsuit was filed to stop the poisoning and eradication until an Environmental Assessment was done. See www.mangrovelawsuit.com. However, the court ruled that it was too late to require an EA, according to a 120 day time limit specified by law.

It was not ruled that an EA was not required. The poisoning of 35 acres of mangrove trees along the shoreline on conservation lands owned by the state and with state and federal money clearly requires an EA, if not an Environmental Impact Statement. But if you sue for an EA to be performed, and the suit starts after 120 days from the time the otherwise illegal action began, then it is too late to sue for an EA. In this case, the lawsuit came a few weeks

too late.

However, in the lawsuit settlement with the DLNR Office of Conservation and Coastal Lands (one of the defendants), it was stated that the DLNR expected that the dead mangroves would be removed from the area, not just left to rot in place. The Hawaii Tourism Authority (another defendant), which paid for the Wai Opae poisoning, also stated that they had expected removal of the mangroves. In fact, the project was supposed to be mangrove removal, not just mangrove destruction.

So now there are dead mangrove trees lining the shore on the Big Island, rotting away and entering the ocean, a source of water pollution that poses a threat to the coral reef, swimmers, boaters, and endangered species that use these areas. And unless you enjoy the sight of dead, decaying trees, the beauty of these areas has been seriously impaired.

Clearly, there is now a water quality issue that needs to be addressed. Essentially, hundreds of thousands of dead trees now line these shores. At 100 pounds per tree on average, this means there are about a million pounds of dead trees rotting and entering the water. That's 500 tons of dead vegetative material, that essentially has been dumped along our pristine shoreline.

Since this is now a water quality issue, it comes under the jurisdiction of the Clean Water Branch (CWB) of the Hawaii Department of Health. What is the CWB doing about this?

The short answer is nothing. The CWB knew about this mangrove project, and questioned the use of herbicides. The concern was that excessive leaf litter resulting from the poisoning could cause water contamination. But since a permit was not required at the time from the CWB (new regulations may require a permit for shoreline herbicide use in the near future), the CWB claims it had no jurisdiction.

I submitted a formal complaint to the CWB in February, 2011, explaining the problem and providing a legal brief on how leaving these mangroves to rot and break into the water constitutes water pollution. I asked the CWB to investigate the situation and require that the mangroves be removed from the areas, as had been expected by the DLNR, HTA, and County of Hawaii.

There was no reply.

Two months later, I contacted the Governor's office to get the CWB to at least acknowledge receipt of my complaint. The CWB was contacted by the Governor's office, and I was told they are working on my complaint. But it has been months now, and still no word at all from the CWB.

I was told by an employee at the CWB that it could take a lawsuit to make them deal with this. It seems that government workers need to be sued to do their jobs.

Of course, if our government workers were doing their jobs in the first place, they would have realized there was no logical reason to poison mangroves if they were going to be removed from the area. Why use poison when the trees will be cut and taken away anyway?

Maybe this was just a test site for the use of poisons to kill mangroves. Indeed, the question

needs to be asked whether poisoning and leaving a tree to rot is equivalent to "removal" of the tree. This is an important question, since those who would poison mangroves along the shore may also want to "remove" other plants, and animals, that were not here prior to Western contact.

Will our forests become poisoned dead zones with bare, decaying trees and rotting animal carcasses? Since chemical companies seem to control environmentalism, will we need chemical protection suits to go for a hike in the forests? As our watershed is poisoned to eliminate species some people find undesirable, will it harm our health and pollute our environment?

Will the government, and especially the Clean Water Branch of the Department of Health, continue to ignore the damage it has allowed to happen? Will concerned citizens have to again sue to get the government to do its job?

Keep these questions in mind this July 4th weekend as you hit the beaches. And if you happen to be on the Big Island and see some mangroves dead along the shoreline, be careful. You may become a victim of invasive species control.

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Author: Sydney Singer

Sydney Ross Singer is a resident of Pahoa on the Big Island of Hawaii. He is head of the Good Shepard Foundation and a Medical Anthropologist.

[Sydney Singer has written 23 articles for us.](#)

103

in the former settlement with the CIA Office of Caseworking



There was no reply

Two months later, I contacted the CIA Office of Caseworking to at least acknowledge receipt of my complaint. The CIA said they were working on my complaint, and I was told they are working on my complaint. But it has been two years, and still no word at all from the CIA.

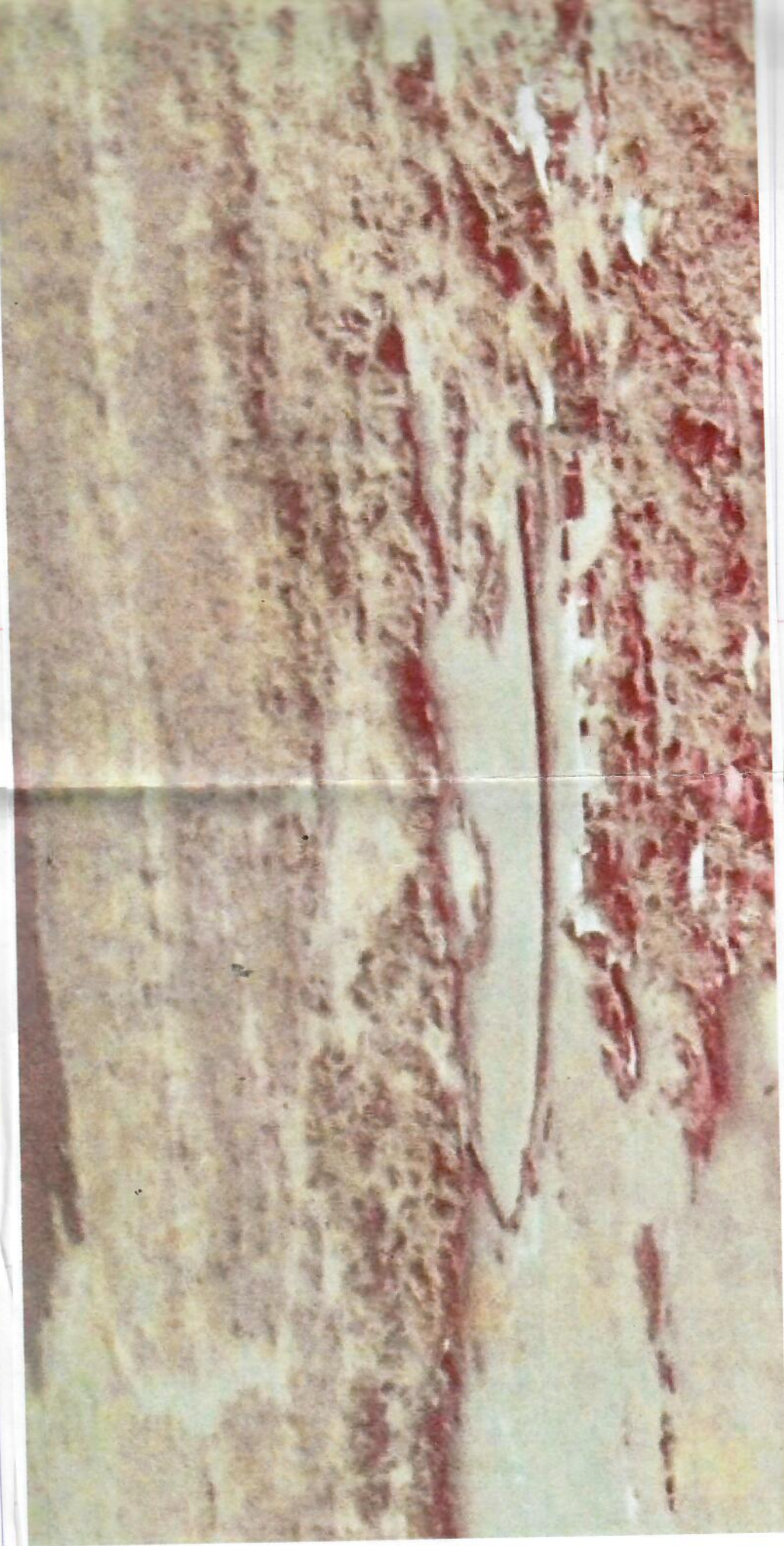
I was told by an employee at the CIA that they would try to make their job with this. It seems that government employees are not allowed to speak their minds.

Of course, if our government were to acknowledge that they were in the first place, they would have realized there was no logical reason for people to be there. They were going to be removed from the area. Why are people still there?

Maybe this is a test to see if the CIA is still in the area.

105





Small section with depth. 10th Office of Conservation and Conservation
of the State of Michigan. It will be noted that the distribution of the

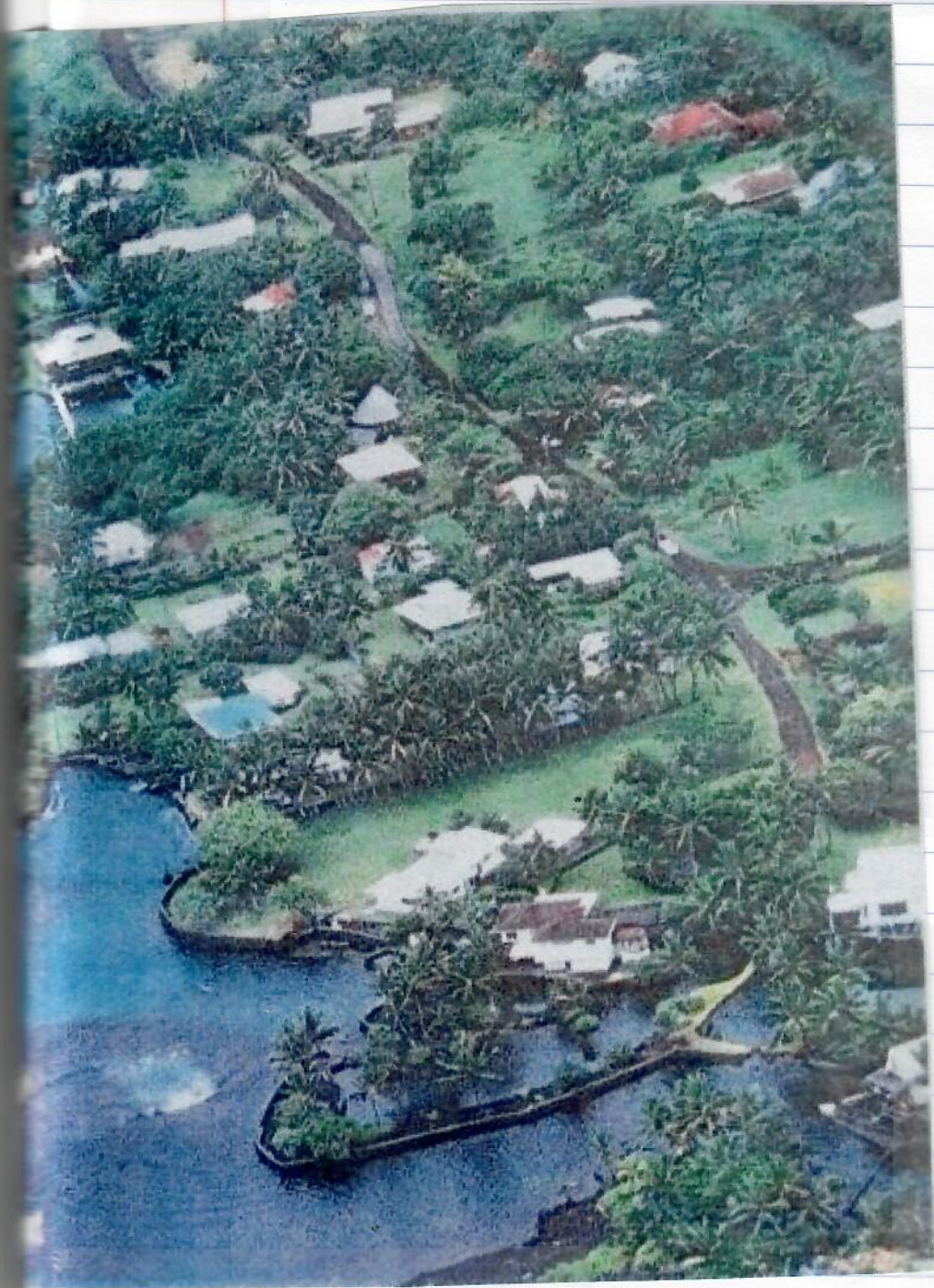
I requested the Governor's office to get the 10th Office of Conservation
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201



107





108

DRAFT ENVIRONMENTAL ASSESSMENT

**KAPOHO BAY FISHPOND RESTORATION PROJECT
KAPOHO, PUNA, HAWAI'I ISLAND, HAWAI'I**

OCTOBER 2007



Prepared for:
Department of Land and Natural Resources
State of Hawai'i
Department of Conservation and Coastal Resources
P.O. Box 621
Honolulu, Hawai'i 96809

Prepared by:
Farber & Associates Planning Services
2722 Ferdinand Ave.
Honolulu, Hawai'i 96822

2.2 PROJECT PURPOSE

The objective of the proposed project is the repair, restoration and maintenance of "nameless" fishpond at Kapoho for historic and cultural preservation purposes and to serve as a marine sanctuary.

2.3 LOCATION

"Nameless" fishpond at Kapoho is located along the shoreline of Kapoho Bay, Kapoho Ahupua'a, Puna District, Hawai'i Island. It is a *loko kupa* type pond. It is identified as Tax Map Key (TMK) number 1-4-02: portion of 36. Unlike most historic fishponds, this fishpond has no known name attached to it. For the purposes of this Environmental Assessment, the "Nameless" fishpond at Kapoho will be referred to as Kapoho Fishpond.

2.4 EXISTING USE

The subject property consists of the fishpond of about four acres in size and surrounding land of about 13 acres. The fishpond has deteriorated; walls are damaged by the forces of nature and altered by man. The fishpond basin waters *maui* inland and adjoining land are heavily inundated with mangrove. The fishpond is not actively being used.

The land is undergoing improvements based on a SMA Permit dated 2/15/05 and associated building permits and includes: mangrove eradication by hand along the shoreline area, landscaping, fencing, a new gate and rock wall entrance, and construction of 1,600 square foot single-family dwelling (A copy of this permit is found in Appendix C, page 122).

991

4.2.3 Endangered And Threatened Species

Existing Conditions.

The Hawaiian Green Turtle (*Chelonia mydas*) is federally listed as threatened under the under the U.S. Endangered Species Act of 1973 and is known to forage and rest in shallow waters in and around Kapoho Fishpond.

Potential Impacts and Mitigating Measures.

Turtles. No impacts on extant turtle populations are expected. The potential for the Hawaiian Green Sea Turtle to swim and forage within and around the fishpond is high. Should sea turtles be observed within the vicinity of the active construction site or should sea turtles use the fishpond shoreline, all construction activities would cease in that area. Post-construction, the *māhāhiā* will not be gated, sea turtles will be able to move into and out of the fishpond at will so their access to these protected waters will not be impeded.

No other Federal or State-listed endangered or threatened plant or animal species or any designated "critical habitat" is foreseen to be affected by the proposed project (see comment letter from Fish and Wildlife Service, Appendix C, page 122).

Kapoho Beach Lots and Public Access

W. Apotoke

What follows below is based on two recent proceedings before the Department of Land and Natural Resources and the Planning Department and their attempts to compel public access across property in Kapoho. It is based on my own legal research and the legal work by our attorneys. We have had meetings with Chris Yuen, Director of the Planning Department on two occasions. We have consulted with members of the Lyman family and other knowledgeable people in the community. We have commissioned Archeological reports and have hired other experts such as Joe Farber, of the U. of Hawaii, the state's leading expert on Hawaiian fishponds. We have been provided with old maps and vesting documents from our Title company.

Kapoho Bay and the surrounding land is private property and always has been. Until it was subdivided in the 1950s the Bay and all the surrounding land was a single parcel of land. We in the Beach Lots trace our title from Kamehameha III (1813-1854) to Charles Kamaina to the Lyman family who subdivided the land in the 1950s. Kapoho Beach Lots is a densely populated area of approximately 198 lots clustered around the Bay. The Lyman family owns an additional undeveloped 48 acres around the periphery of the subdivision. For over 50 years all the shoreline around the Bay has been developed by private homes. For over fifty years the people have purchased and built homes here in the expectation of the security and privacy of a gated community.

Kapoho Beach Lots is an unsuitable area for public access. There are no facilities for garbage, toilets, parking or police supervision. The Bay is a fragile environment which is already stressed by excessive usage. The waters of the Bay do not meet Hawaiian standards for clean water. The pollution is caused in part by the numerous cess pools many of which are built within a few feet of the water. The large fish population and the corals which formerly were present in the Bay are no more due to over fishing and pollution. The Kapoho Bay shoreline does not provide any place for the public to go. There are no areas to park, camp, fish or even sit. As Chris Yuen pointed out to the Planning Commission on November 6, 2008, there is little or no natural shoreline around the bay because it has been developed by private docks, steps, cement patios and rock walls.

There are two common misconceptions with regard to the public's right to access the shoreline. First, there is confusion between the right to traverse the shoreline and the right to access the shoreline across private property. The public **cannot cross private property** to access the ocean. This is well summarized in a recent letter from the Planning Department:

"Access that is on private property must be purchased or dedicated by easement to the county in order for the public to have a right to use that access... While the Department is trying to assure access when a new development is proposed, we cannot go backwards in time regarding already approved developments."

Second, traditional Hawaiian gathering rights to enter onto the land of others do not apply to developed property, *PASH v. Hawaii County Planning Commission*, 79 Hawaii 425. Of course, all of the Beach Lots is developed, particularly the shoreline of the Bay.

Old maps show that Kapoho Bay in ancient times was extensively developed with fishponds even out into the middle of the Bay. In traditional times the ponds belonged to the king or the high chiefs; the public was never allowed to access the ponds. This rule is the current law as set forth in cases such as *US v Kaiser Aetna* which hold that the government cannot compel public access to private fishponds.

When the boundaries of Kapoho were being fixed, Charles Kaiana, father of King Lunalilo, testified:

"All the lands which are written in this document were given in perpetuity for my Alii and from me also... Everything pertaining to these lands is owned and restricted... We are the ones with the main right, and the commoners are second, and all the stone-walled ponds are for the two of us"

There is one more point demonstrating the special private property status of Kapoho Bay and this has to do with the so called Konohiki (overlord) rights, that is the right in certain shoreline areas to exclusive fishing rights.

An act was passed in 1878 Article 5 of which was entitled "Of the Public and Private Rights of Piscary." It was provided that fishing grounds outside the reef should be free to the people except that the fishing grounds from the reefs to the beach, or, where there are no reefs, for one mile seaward, **shall in law be considered the private property of the landlords whose lands, by ancient regulation, belong to the same; in the possession of which private fisheries the said landholders shall not be molested...."**

Kapoho Bay is one of the unique places where these private fishery rights apply. The Konohiki rights to Kapoho Bay seaward belonged to Kamehameha III and passed on to the Lyman family. When Kapoho was subdivided in the 1950s the Konohiki rights were retained by the Lymans. (Email from Lono Lyman)

13

The private nature of the Beach Lots roads were confirmed by the Planning Department in a letter dated May 8, 1990 which concluded: "The general public does not appear to have legal access to this same shoreline via the aforementioned (Kapoho Beach Lots) roadways and access ways".

The private nature of the Kapoho Beach Lots roads were again confirmed when the lots were subdivided and sold. Each sale was pursuant to a standard Land Purchase Contract which contained the following covenant running with the land:

"...it is agreed that the road or roads leading into the said tract shall be barred from the public by the erection of a gate thereon, to be kept locked and a key or keys to the said gate shall be furnished to said Vendees for use by them and their friends, but not to be open for use by the public".

The covenant was made binding on the parties, their heirs, successors and assigns. Thus, the covenant is binding on all the present owners of Kapoho Beach Lots.

This document is a work in progress. Your suggestions and comments are welcome.

John Barsell
sbarsell@aim.com

117

Sea Turtle Autherena Oceanfront Rental Snork...

<http://hawaiiwego.com/kapoho-vacatio>



Click here to *visit*...
Tropical Vacation Homes, LLC
Kahopa Bay – Tide Pools & Warm Ponds
Big Island Hawaii Vacation Rental
New By Owner 3 Bedroom, 2 Bath, Sleeps 6







click on photo above to see full sized image

Green Sea Turtles - List Of Resources

- [The biological classification of the green sea turtle by EarthTrust.org](#)
- [Green Sea Turtle - Biology & Natural History](#)
- [About Marine Turtles](#)
- [Marine Turtles - Office of Protected Resources - NOAA Fisheries](#)
- [Threatened Species](#)
- [Green Sea Turtle \(Chelonia mydas\)](#)
- [Ancient ritual of reef fish cleaning their sensitive shells](#)
- [Sea Turtle Cleaning Station](#)
- [If paid the proper respect the turtles can give you a lifetime memory](#)
- [Sea Turtle Watching Manners](#)
- [The Green Sea Turtle - The Struggle of The Ancients](#)
- [According to the Star Bulletin, Hawaii's endangered Green Sea Turtle still has a long way to go but is making a comeback](#)
- [Links and resources... SeaTurtle.org](#)

(P)



Kapoho Book

9825542

987-4370

REPORT ON 3 CAPTIVE GREEN TURTLES-KAPOHO HAWAII

On 3/18 and 3/19/03 physical exams were done and blood samples were taken on three turtles confined in private ponds at Kapoho, Hawaii. These turtles have been living in these separate ponds for over 20 years and are legally owned by the property owners. Permission was obtained from the owners to do the examination and sampling.

A summary of the veterinary findings is presented below.

Turtle #1 "Albert"-Slim Holt Pond

This male turtle is being fed mostly papayas and dry dog food.

Weight 104 lbs

Straight carapace length 63.9 cm

Physical exam:

The turtle appears obese with a soft area of approximately 19cm diameter on the plastron. No tumors were found. Other physical findings were normal.

Blood results:

Elevated alkaline phosphatase, AST and low phosphorus values. Normal PCV and WBC.

151

Comments

This pond is somewhat restrictive in size when compared to the other two. The feeding of this turtle is dependent on one person with neighbors also feeding an unknown amount and type of food. The blood chemistry values are non-specific and could indicate muscle or liver problems possibly related to diet.

Recommendations:

Have one person in charge of feeding. Eliminate papayas from the diet; decrease protein content of food (restrictive diet dog food) and more dark green leafy vegetables (turnip greens, kale, broccoli, bok-choy). Lettuce has little nutritional value. Better still, purchase and feed only commercial turtle food (reference given at end of report). I can also recommend wild release for the best insurance of good health and well being for "Albert".

Turtle # 2 "Arthurena"-The Yunis family

This female turtle has not been eating for the past few weeks. The owners say this happens every year during the breeding season. The family cares for this turtle and usually feeds papayas and other vegetables and dry dog food.

Weight: too large to lift

Straight carapace length 84.3cm

173
Physical exam:

This turtle appeared in good flesh. The plastron was firm. No tumors were found. Other physical findings were normal.

Blood results:

There was an elevated alkaline phosphatase, AST and cholesterol. The CA/P ratio and glucose values were low. The hematocrit was low (anemia) and there was a reversal in the heterophil/lymphocyte ratio (infection?).

Comments:

This pond is of adequate size and has a gate direct to the sea.

There were definite abnormal values in the blood work. The anemia, low blood sugar and reversal of lymphocyte/heterophils are of some concern. The history of another companion male turtle dying in January of 2000 must be noted. This turtle was found to have a goiter with fatty changes in multiple organs. A lack of a balanced diet may have led to these changes. Perhaps similar changes are taking place in this turtle. The fact that the turtle was fasting could affect some of the values.

Recommendations:

This turtle should receive a more balanced diet. Commercial turtle pellets with seaweed supplementation would be a good choice. Vitamin supplements placed in a piece of squid or fish might be helpful. Release is also an option.

Turtle # 3 "Sam"-Peggy Forges

The grounds keeper is feeding this male turtle. He gathers seaweed (type not determined) several times weekly and also feeds papayas.

Weight 126 pounds

Straight carapace length 69.4cm

Physical exam:

The turtle appeared in good flesh and did not have any tumors. A slight bulge was noted in the right eye but did not present any problems.

The other physical findings were normal.

Blood results:

There was an elevated alkaline phosphatase and AST and decreased phosphorus. The calcium levels were normal. Other values were in the normal range.

Recommendations:

The pond is of adequate size. The seaweed supplementation is good for the turtle. The type of seaweed should be determined because certain types may be detrimental to the turtle's health. I would stop the papaya diet and supplement with dark green leafy vegetables (not lettuce). A commercial turtle pellet would be excellent. It should be noted that the feeding program is highly dependent on the yardman and his efforts to gather seaweed. Release is an option.

Footnote:

The significance in variation of some of the blood values in green turtles is unknown. It is not as an exact science in reptiles as it is in mammals. Many factors such as water temperature, sex, diet, and location sampled and time of year can affect the results. I have used some of our blood results from normal wild turtle to compare values with the pond turtles and made deductions from this. AST and alkaline phosphatase elevations can indicate liver or muscle pathology.

A good option for the turtle owners would be to get together and order dried commercial turtle food. Vitamin supplementation is recommended if this is not done. The address is furnished below.

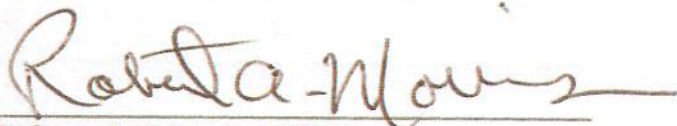
Melick Aquafeed

139 South First Street

Catawissa, Pennsylvania 17820

Phone: 1 800 358-6595

Price is approx. \$14/50 lb. bag plus shipping for turtle finisher pellets.



Robert A. Morris, DVM

Makai Animal Clinic

420 Uluniti Street

Kailua, HI 96734

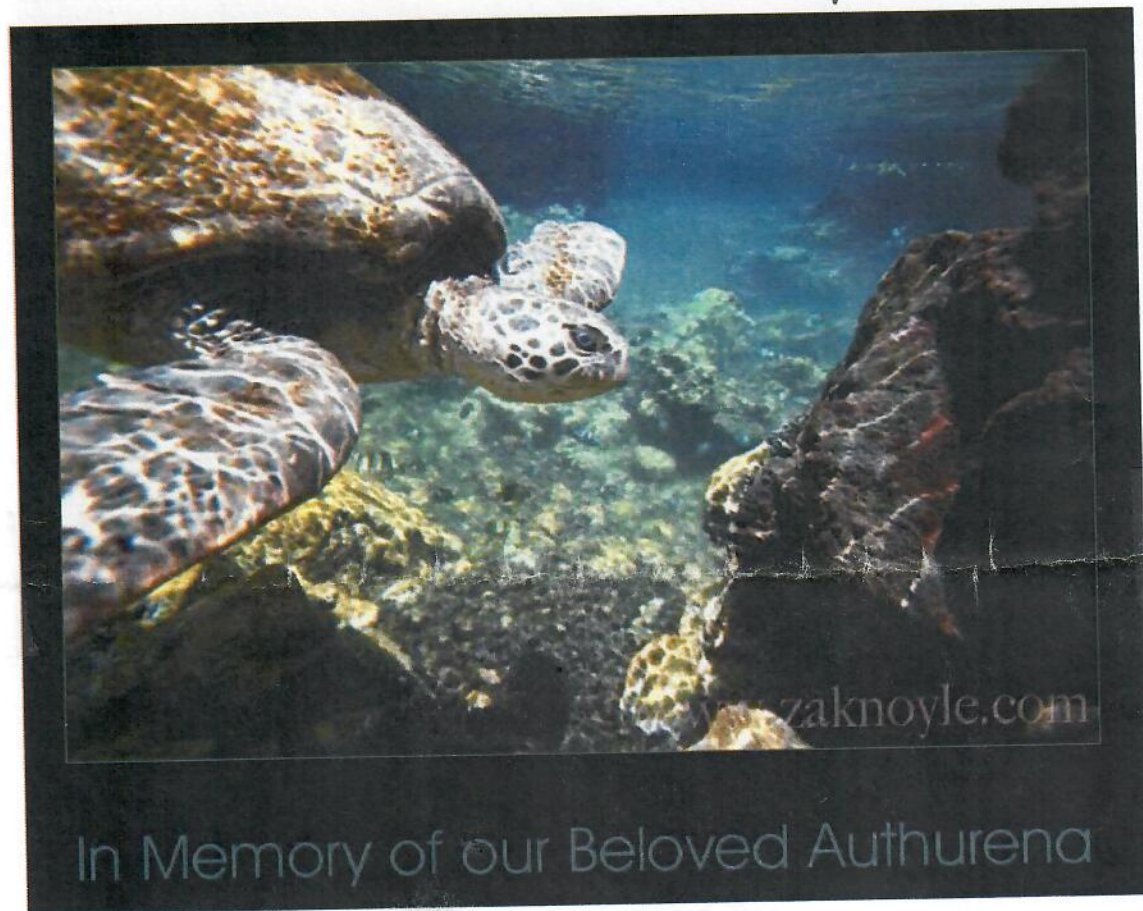
Mohamad

Kapoho Bo

Green Sea Turtle - 80-Year-Old - 400 Pound Tagged & Protected
Kopoho Bay The Big Island of Hawaii

Lynette
Yunis

In Memory of Arthurena



On March 27, 2008 our beloved sea turtle Arthurena passed away. She will be missed by many people, especially us. She had a long and protected life. Her friendliness and beautiful grace of movement will forever remain vivid in our minds. The joy and love she brought to our hearts with her visits to us humans continues to beat strong and the memory of her shall never fade

Arthurena - Green Sea Turtle
Kopoho Bay Geothermal Ponds
Oceanfront Kapoho Paradise Hawai'i Vacation Rental
Guests Swim and Snorkel With The Fish & Turtles



click on photo above to see full sized image

Gentle & Noble Herbavore
Gracious 80 Year Old 400 Pound
Protected & Tagged Sea Turtle

Experience The
Vacation Of A Lifetime!
On Kapoho Bay the ocean is warm,
clear, clean and sparkling blue.

Come... swim with the tropical fish
and family of sea turtles!



Arthurena's ancestors evolved on land,
then around 150 million years ago
they returned to the sea to live.

127

Green Sea Turtle Autherena Oceanfront Rental Snork...

<http://hawaiiwego.com/kapoho-vaca>



click on photo above to see full sized image

Green Sea Turtles

Named for the color of their skin, these gentle giants are herbavores and come by their color from the fatty tissue which is green from the algae or limu (sea lettuce) they eat.

Click on many of the photos below to see huge full sized images of Arthurena the 80 year-old, 400 pound green sea turtle and gracious lady whom has shared the ponds for more than 40 years.

Please note for the safety of our guests and our resident turtle, swimming in her pond is not permitted. (Arthurena is registered and protected by the state of Hawaii). There is great swimming/snorkeling from our property however, with sea turtles and tropical fish in Champagne Pond and the ocean.



click on photo above to see full sized image



click on photo above
to visit our Guest Book Excerpts

need

Vacation of a Lifetime

129

Green Sea Turtle Autherena Oceanfront Rental Snork...

<http://hawaiiwego.com/kapoho-vacation>

Dear Muhammad, Hi, I don't know if you remember me, but ...the young man in the pictures is my son, Shane. He was absolutely crazy about the fact that we had this beautiful creature to care for right in the back yard during our stay.

I know I said it before, but I really do want to thank you again for sharing such an amazing place on earth with others! I will never forget such a wonderful experience.

I hope to one day return and stay at your home again. K.Housty



click on photo above to see full sized image

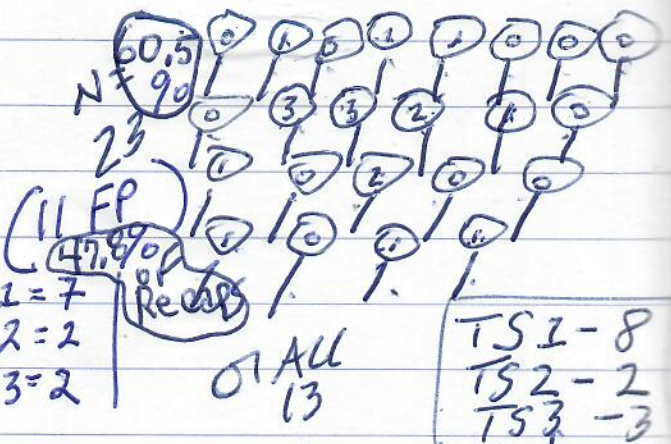
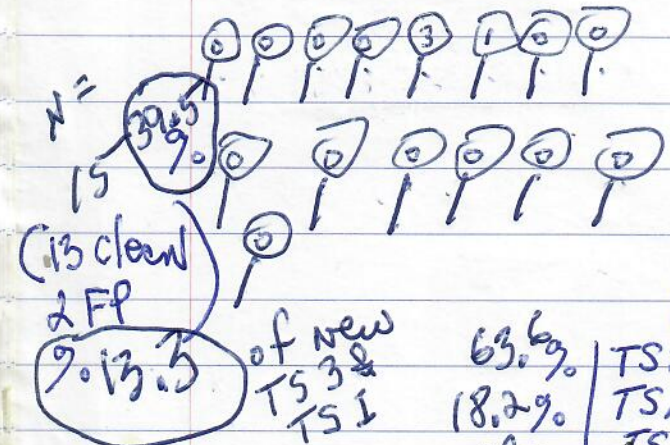
129
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BLIND INLET = 10 (2 in Hot Pond Scooped)
 BARSELL POND = 28

2011

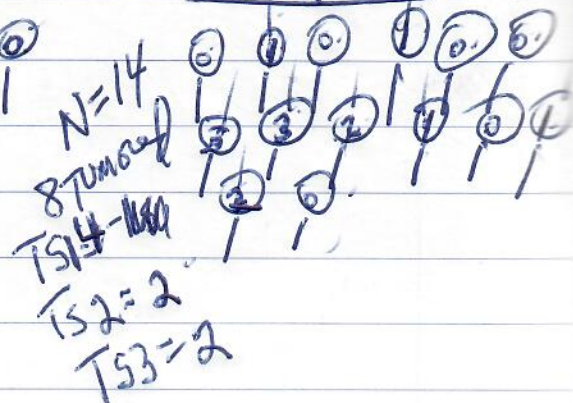
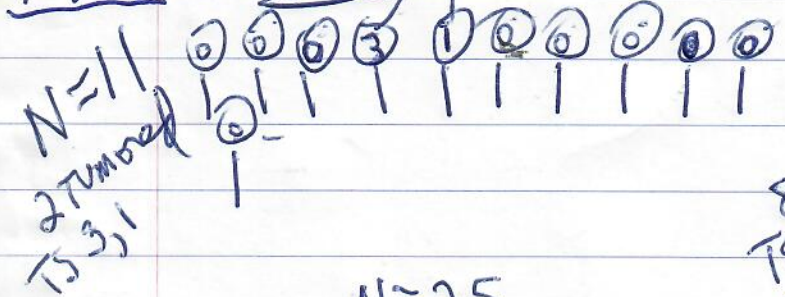
N=38 Size Range = 44.0 - 83.4
 13 of 38 = 90 34.2 30.5 - 197.0 lbs

NEW Recaptured



N=25
NIST = New

Recaptured



N=25
 (N=10 TM Rec)

TS1=5
 TS2=2
 TS3=3

131

1

NOAA Fisheries
Pacific Islands Fisheries Science Center
Marine Turtle Research Program
2570 Dole Street
Honolulu, Hawaii 96822-2396
(808) 983-5730

Sea Turtle Tagging Form

Version 3 - Sept 2010
Data Recorded By Stark
Release Date 11-19-11 Release Site Blind Islet



Capture Information: Species CM EI LO Sex M F U Recapture Y N

Date 11-18-11 Island HI Study Site Kapoho Lat _____

Capture Method Net Hand Hand/Snorkel Scoop Net Basking Stranding Location BARSELL POND Lon _____

Old Tags _____ New Tags Y N

PIT (LHF) _____	Tag (LHF) _____	PIT (LHF) <u>44131B140A</u>	
PIT (RHF) _____	Tag (RHF) _____	PIT (RHF) <u>44130B0A70</u>	
PIT () _____	Tag () _____	New MT <u>1</u>	Other _____

Measurements (cm) Comments: Injuries, Abnormalities, Mouth Contents, etc.

SCL 45.3 Lat1 17.0
 Notch 44.7 Lat2 15.3
 SCW 37.8 Lat3 12.5
 CCL 48.5 Plastron 36.0
 CCW 44.0 Tail 9.5
 Head 7.2 Vent 7.5
 RFF 7.7 Weight (lbs) 28.0

Dilute chlorox treatment for leeches -
90% Alcohol Treated 90% Alcohol for Leeches
Eye leech Frozen
leeches & EGGS

Visual Examination

Tumors Y N Leeches Y N
 Oral Tumors Y N Y N
 Visible Leech Eggs _____
 Tumor Score 0 Emac Code 0
 Dorsal Barn _____ Vent Barn _____
 Flipper Amput'd Y N _____ Y N
 Fish Hook Y N _____ Y N
 Boat Impact Y N _____ Y N
 PPS Y N Photos Y N

Samples Y N	<input type="checkbox"/> Skin (DNA)	<input type="checkbox"/> Diet (lavage)	<input type="checkbox"/> Barnacles	<input type="checkbox"/> Tumors
	<input type="checkbox"/> Skin (SIA)	<input type="checkbox"/> Diet (morphology)		
Tumors				
	1	2	3	4
R eye				
L eye				
Mouth				
Neck				
RFF				
LFF				
RHF				
LHF				
Tail Cloaca				
Seams Scutes				
TOTAL				

Stark

NOAA Fisheries
 Pacific Islands Fisheries Science Center
 Marine Turtle Research Program
 2570 Dole Street
 Honolulu, Hawaii 96822-2396
 (808) 983-5730

Sea Turtle Tagging Form Version 3 - Sept 2010



Turtle ID _____ Data Recorded By _____
 Release Date _____ Release Site _____

Capture Information: Species CM EI LO Sex M F U Recapture Y N

Date Island Study Site Lat
 Capture Method

Hand Net	Hand/Snorkel	Scoop Net
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Basking	Stranding	
<input type="checkbox"/>	<input type="checkbox"/>	

 Location Lon

Old Tags		New Tags	
PIT (LHF) <u> </u>	Tag (LHF) <u> </u>	PIT (LHF) <u> </u>	Tag () <u> </u>
PIT (RHF) <u> </u>	Tag (RHF) <u> </u>	PIT (RHF) <u> </u>	Other <u> </u>
PIT () <u> </u>	Tag () <u> </u>	New MT <u> </u>	Other <u> </u>
Old MT <u> </u>	Renewed <input type="checkbox"/> Tag <u> </u>		

Measurements (cm)	Comments: Injuries, Abnormalities, Mouth Contents, etc.																																																																																																									
SCL <u> </u> Lat1 <u> </u>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Samples</td> <td>Y</td> <td>N</td> <td><input type="checkbox"/> Skin (DNA)</td> <td><input type="checkbox"/> Diet (lavage)</td> <td><input type="checkbox"/> Barnacles</td> <td><input type="checkbox"/> Tumor</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Blood</td> <td><input type="checkbox"/> Skin (SIA)</td> <td><input type="checkbox"/> Diet (mouth)</td> <td><input type="checkbox"/> Other</td> <td></td> <td></td> </tr> <tr> <th colspan="7">Tumors</th> </tr> <tr> <th></th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th colspan="2">Comments</th> </tr> <tr> <td>R eye</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>L eye</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Mouth</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Neck</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>RFF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>LFF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>RHF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>LHF</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Tail Cloaca</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Seams Scutes</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TOTAL</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Samples	Y	N	<input type="checkbox"/> Skin (DNA)	<input type="checkbox"/> Diet (lavage)	<input type="checkbox"/> Barnacles	<input type="checkbox"/> Tumor		<input type="checkbox"/> Blood	<input type="checkbox"/> Skin (SIA)	<input type="checkbox"/> Diet (mouth)	<input type="checkbox"/> Other			Tumors								1	2	3	4	Comments		R eye							L eye							Mouth							Neck							RFF							LFF							RHF							LHF							Tail Cloaca							Seams Scutes							TOTAL						
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Visual Examination					
Tumors	Y	N	Leeches	Y	N
Oral Tumors Visible	Y	N	Leech Eggs	Y	N
Tumor Score <u> </u>			Emac Code <u> </u>		
Dorsal Barn			Vent Barn		
Flipper Amput'd	Y	N	Carapace Damage	Y	N
Fish Hook	Y	N	Fishing Line	Y	N
Boat Impact	Y	N	Shark Attack	Y	N
PPS	Y	N	Photos	Y	N