



HONOKOWAI 19-22 JAN 99 PAGE 43

4801 Book II Mead = 710-98
COMPOSITION 1999

MAUI BOOK 2

HONOKOWAI 11-12 AUG 99 PAGE - 70
HONOKOWAI 29 AUG 99 P. 88

HAWAII 9/28/99 Kihai 320 02/00 414/00 C. 137
page 134

100 sheets • 200 pages • 100 hojas
9 3/4 x 7 1/2 in / 24.7 x 19.0 cm

3 OF 3

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Ohio 45463 U.S.A.
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4801 (1998)
CONTINUED

GEORGE BALAZS (808) 983-5733

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

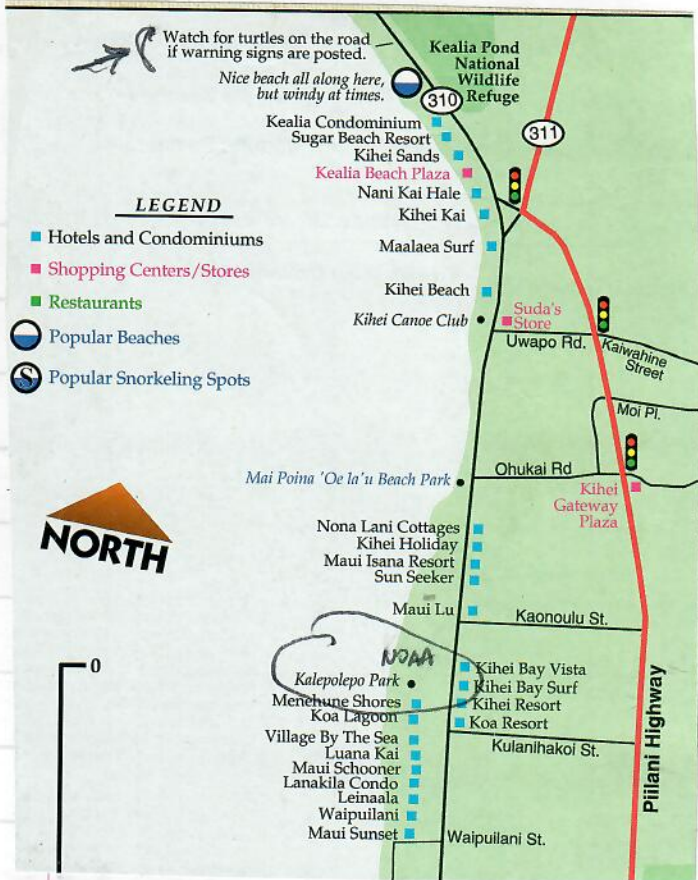


28 Sept. 99 ^{Hawaii} Allen Tom, Humphrey marine Sanctuary
 TUES. KITEI, MAUI, fax Friday information
 1-3 PM meeting for standing partnership - Sanctuary Volunteers
 Gen. Sec. ^{in house} ~~10 and~~ people present including Skippy Han and Glynnis
 Sp. Nahaia. Photo of ~~live~~ ^{trapped} on beach. 13 - when how to traps
 x Canoe paddlers, Sanctuary Specialist - former UH Hilo marine biologist - 1997
 Fundraising - write = Komanokoheka, (TAG =
 Next step = 1) Supplies, data tel. sheet, plastic bags, gloves, tap, knife
 Sissor Satchel
 Animal Carriers + Box
 4) Nona Program sheets
 1-3 PM meeting w/ MARK Hodges & Charlie?
 KIRC Wednesday to New Address? ^{FILES}
 offered to take on 1-3 day study. Boat-based go to ALL Around island.
 MARK DENNIS

Need

4-4-98 Tues.

with aim of doing only what's possible, appropriate and safe. Claire will
 take lead in USept. when Allen Tom goes to Sen. Dwyer's office for 1 year.
 Claire will meet w/ volunteers to see what scheduling is possible. Vehicle
 Maximum - HI Au MS staff - on site capacity. Considerations - Vehicle
 Lifting of turtles; Night time safety.
 Vic Honda thanked me for developing these standing responses.
 Return Home P.O. 3:30 PM



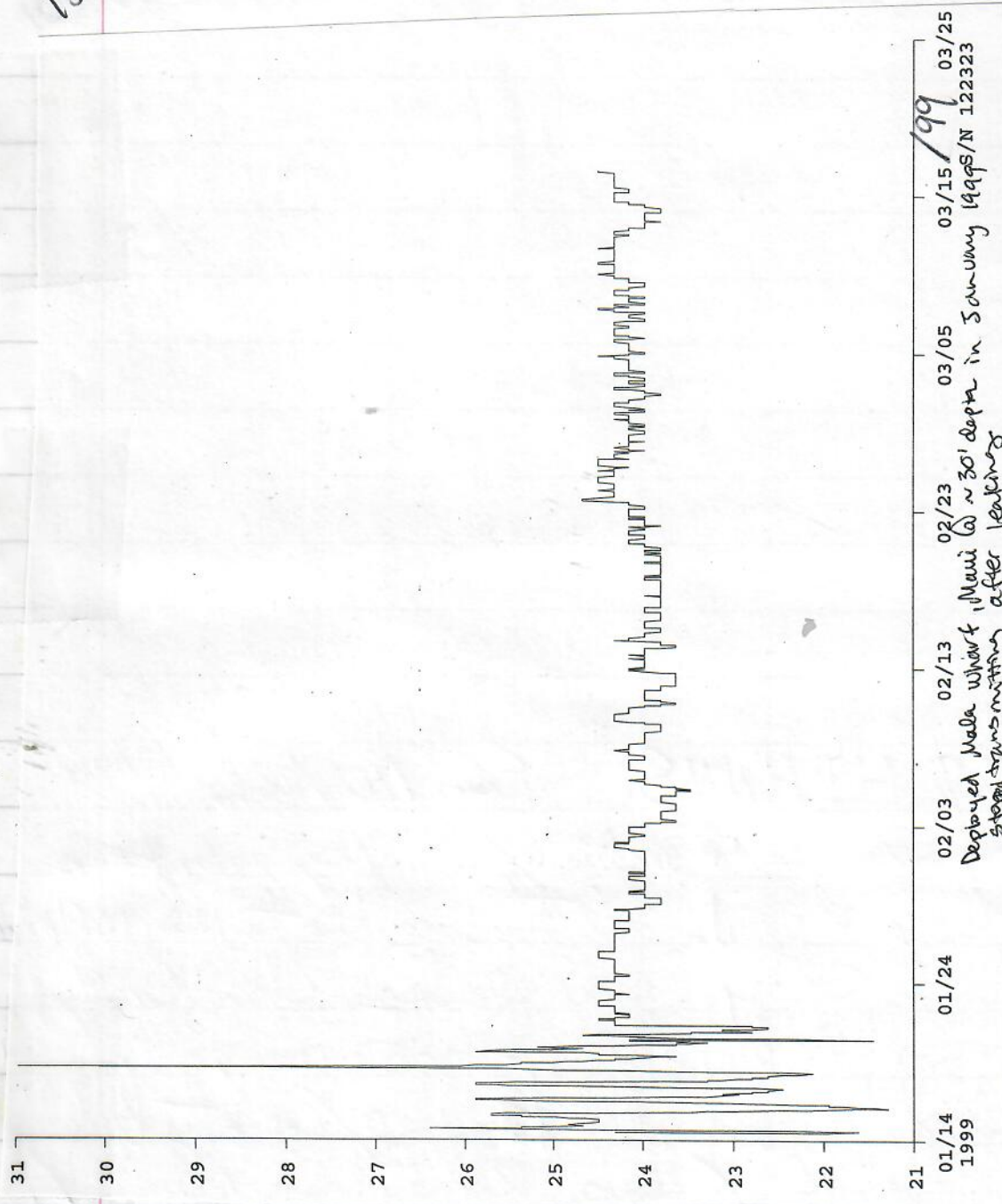
Jean/Wendy/Mike
staff Hike → PITO?

4/4/00 HIHWMS FC. 110 Aroha Kihiki

Tuesday for 9:30 AM meeting w/ Sanctuary volunteers
done ~ noon. Low attendance due to MD to Claire
Vic Honda, Skippy, Russell Sparks, Claire, Cindy,
Allen Tom, Patrick Ryan + ~ 5 other.

Reviewed History of Partnership/Capacity Building
Constructive: if problems, solve them. No
negativism. Serve the turtles, serve
the public. Volunteerism.

Went over Strand Instruction sheet with aim to
compose paper one for Mario Wentover in detail flow chart
(to p.136)



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----- Forwarded message -----
Date: Sat, 24 Jul 1999 11:49:48 -1000
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Your logger's in place now

Your yellow cord too short.

So we used some of the leftover rope from one of your loggers from last summer.

Note: We placed it at Mt. Balazs (mauka/Lahaina side). Camouflaged it with two coral rubble pieces. In next visit will tie them in place with monofilament line.

Peter was placing the logger when a honu flew in right past his face and tucked herself under Mt. Balazs! And that was quiet a scene. Peter placing the logger and a honu now asleep three feet away from him! Got it on video too.

Wonderful --you know, to see maybe a dozen turtles at a new site and then recognize a friend!

I want to share something with you because I know you'll understand (I haven't even told Peter yet --though I will) I helped George take his tree caliper to his car and said good-bye there. Usual hug and thanks etc.

And then I walked away. And remember how I told you I'm not comfortable around him --can't really talk to him face-to-face? Well, I broke a barrier today and didn't even plan it or psyche myself up. It just kind of happened.

He was backing out and I went back over to him and Balazs rolled down the window and I said, "I just want you to know I think you're amazing." And he handled it real well --smiled/laughed --said no, just that he really liked people is all.

Guess he didn't get the real message --why I thought he's amazing. He's a REALLY terrific diver Osha. Talk about underwater skills. And second dive at the Wharf he found this long long length of thick rope tied to chain and a plastic jug.

And he spent five minutes coiling it up (I watched --scanning back and forth between Balazs and Peter who was videoing at other end of site). Then because rope/chain/jug was so heavy Balazs struggled along the bottom and carried it over to this steel drum. Afterward he told me that kind of rope just floating like that has been known to snarl up a turtle.

He takes care of honu, Osha. Kindness.

And his energy because he wore us out again --in a GOOD way. I respect him even more than I did 48 hours ago.

Anyway, almost 6 pm here. Precious little sleep. Late dinner with Balazs (he paid --as he always does) --had three cups of coffee! I know. Self-inflicted. Then of course I lay awake thinking of all the stuff I learned during the day.

Then I woke up at 4:30 and couldn't get back to sleep.

I'MSOTIREDICAN'TSTANDIT!

----- forwarded message -----
Date: Thu, 12 Aug 1999 18:39:08 -1000
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Welcome back

Osha's back from vacation. He wrote. I just responded. FYI and hope this will "double" as my thank you.

Date: Thu, 12 Aug 1999 18:31:36 -1000
To: Osha Gray Davidson <osha@pobox.com>
From: Ursula Keuper-Bennett <howzit@turtles.org>
Subject: Welcome back

You know I was just going to send you an empty message with "LET ME KNOW WHEN YOU'RE BACK" in the Subject.

Glad you're back! Perfect timing because Balazs just left --on his way to Oahu as I type this. Stayed less than 48 hours but GADS! --we're exhausted. Can't summon the energy to read your croc/toxin thing but promise to do so as soon as I can.

Summary. Showed Balazs and Denise NorthHouse and where we placed the temperature logger. Second dive at Reef2. The two honu we were trying to find --Kiholo and Polzbarney weren't about. But he DID get to dive in this Cladophora bloom (minor but still here).

Third dive this am (Balazs only) --and he'd bought a spear and net to catch jactators. Like how do you spear a jactator right? He tried the net and quickly discovered the gentle approach wouldn't work.

Switched to spear and dammit if he didn't bag close to eight jactators! Will be comparing our fishes to Kiholo ones.

Last dive he took us about three miles downcurrent (remember where the ChartHouse was?) at a place called Mala Wharf to help him pick up a temp logger there. Actually he did all the work.

Guess what? We recognized a male Honokowai honu there! Saw him early in the summer then he "disappeared". Well, we found him today at the

----- Forwarded message -----
Date: Thu, 19 Aug 1999 20:30:41 -1000
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honiab.mmfs.hawaii.edu>
Subject: Re: Safe flight

Productive day diving. Aimed for three but three dives out of last four to NorthHouse did us in. Slept afternoon away. PM dive decided to do Reef2 to place loggers.

And who's there but Keoki. Oh man. Got video of her swimming around foraging -15 minutes of footage easy. Swam towards large honu 94#12 (regression case) and honu took one look and shot straight up. Keoki wasn't even doing anything but swimming.

But most remarkable stuff later. Keoki stops on top of coral and spies a wad of H. musciformis. Eats most of it! Then swims Iahaina and there's a large raft of musciformis and cladophora and damned if she doesn't settle in it and eats some more.

We're now trying to get ultra-macro of her ass. No clingons at all and we want to record that. Right now we've seen five interactions with honu. Honu took off in four of them. In one there was no reaction.

Certain from this pm dive Keoki does not go out of her way to bug the honu. However am CONVINCED the honu know she's a hawkbill and give her wide BERTH!

At 07:56 PM 8/19/99 -1000, you wrote:
>Great day in Kona with all my guests!

----- Forwarded message -----
Date: Mon, 23 Aug 1999 09:21:51 -1000
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honiab.mmfs.hawaii.edu>
Subject: NorthHouse

You know that ridge where all the honu are there? Well yesterday we kicked upcurrent for a long way. Dozens more turtles. Resting in ones, sometimes in five and sixes far as we dared go.

But here's the best part.

Sure many had FP but it was subtle. And of those with FP quite a few looked to be regressing. I recall you saying it ain't the prevalence but the severity that counts.

Granted we had some nasty FP cases this summer but am prepared to say the worst of FP is over here. Looks like Emmett was right. He told me to expect a miracle.

----- Forwarded message -----
Date: Sun, 22 Aug 1999 07:53:04 -1000
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honiab.mmfs.hawaii.edu>
Subject: clingons

We can shoot you more clingons. Truth is it requires we "touch" the turtle. Have to take the lens of the video camera, prop it under the marginals and then lift turtle slightly to get the barnacles on rear quarters. While that works for video, it won't for a still camera.

We just kind of backed off on clingons because they never grew out of control like we'd feared.

OH! Yeah check this out. What appears to be a regressed tumour with wall to wall clingons while the rest of the turtle's shoulder has few. Like the tumours are the preferential strata.

Hmmm...that reminds me. Zaphod's regressed tumour had clingons last summer. I wonder if it does now...

At 10:33 PM 8/21/99 -1000, you wrote:
>Turtles that had bad clingons last year. And photo documented this year
>same turtles with less or none. Have many of them? Aloha,

----- FUJWALUWA MESSAGES -----
Date: Sun, 22 Aug 1999 20:57:02 -1000
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honiab.mmfs.hawaii.edu>
Subject: Re: clingons

Fail to comprehend how you can return from North Shore watching a dozen or more people repeatedly touching/petting/feeding honu (likely a daily event) and refer to that as the Age of Aquarius and yet a one-time clingon inspection by me with lense port gently hoisting honu gets a no-touch recommendation.

Anyway, here's the answer to your question from yesterday. (We video'd these carefully today)

1. Hoa same as last year.
2. With stealth managed to get close to Noe. Fewer clingons and those there looked smothered and inactive.
3. Makana starting to get clingons --growing in "strings"
4. 99#44 same as last year and clingons growing all over a #2 shoulder tumour.

Documented Zaphod and TAMU last year. They weren't around today. Raphael and Tutu both well documented last summer --no shows this year.

Bottom line --clingons not the menace we feared a year ago. Hope this helps.

At 09:52 AM 8/22/99 -1000, you wrote:
>don't touch is my advice recommendation, Mahalo, Geo

Date: Thu, 26 Aug 1999 15:17:14 -1000
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honiab.mmfs.hawaii.edu>
Subject: Tagged honu sighting this am

Very happy to report first sighting of the summer of Shredder. A 240 (although Peter read tag A 241). First sighted by us in 1995.

Unhappy to report she now has FP --#1 in right eye, certainly something happening posterior left --pre-eruptive.

No paint job that would suggest she was at Shoals either.

All tagged ladies now accounted for except Tutu. We remain hopeful.

----- Forwarded message -----
Date: Fri, 27 Aug 1999 15:38:27 -1000
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Tutu is back from the Shoals!!!

Please update her file to record she was sighted second dive at her home Reef2.

"A 142" painted on right rear of carapace. Didn't press her and let her get used to watching us swim around. But third dive will video her closely to check out "Is regression permanent?".

Certainly left eye is clear. Very happy to have her home!

But what happened? You said she wasn't there!

----- Forwarded message -----
Date: Mon, 23 Aug 1999 13:03:49 -1000
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: top quality work programme review

I want to pipe in...

what you've provided for Trax in info/bibliography/papers:
<http://www.turtles.org/sickbay.htm#resources>

Your work here last summer:
<http://www.turtles.org/98week7.htm>

Your work here this summer:
<http://www.turtles.org/99week7.htm>

Kids' Resources (you and Polzbarney)
<http://www.turtles.org/kpolzb.htm>

And of course, the FFS section and the success of honu recovery there:
<http://www.turtles.org/ffs/ffs25.htm>

Plus you should mention to your boss that people think on top of all this that you're a nice guy.

----- Forwarded message -----
Date: Fri, 03 Sep 1999 16:24:35 -0400
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Fwd: Re: Signed Guestbook

A NetAngel just flew in and landed atop my computer.

This just in. Gee I love the Internet! Stationed with Tom, was there when you and Emmett put that plaque to the pole. Has pics of N36...and you and Emmett.

Little does this McNeil guy know how much I needed this sweet distraction...
My head isn't ready to tackle the present.

>From: "Michael W McNeil" <MIKE MCNEIL@prodigy.net>
>To: "Ursula Keuper-Bennett" <howzit@turtles.org>
>Subject: Re: Signed Guestbook
>Date: Sun, 3 Sep 2000 16:10:40 -0400
>X-Mailer: Microsoft Outlook Express 4.71.1712.3
>
>Yes, Tom Marquette and I were stationed at FFS together. I saw his entry in
>the guest book and tried to email him at the address that was listed, but it
>was returned as non-deliverable.
>
>I do remember George Balaz. He visited frequently during my year there. I
>probably have his face somewhere in some of the pics I took while there -
>but I'll have to go through them looking specifically for him to be sure.
>
>Definitely have pics of the DC3. Also seem to remember a few pics of an Air
>National Guard plane that came out to us once in place of the DC3 - I think
>it was a model commonly called a Caribou.
>
>If FFS were in the same condition it was in when I was stationed there, I
>would be very tempted to revisit (Tom and I were there when another of your
>guests - Everett? - put his plaque on the pole at East Island - have pic(s)
>of that), especially interested in showing it to family. Our youngest
>daughter could barely turn herself over in the crib when I left for my tour
>on Frigate. She's 24 now. But I'm not the campout kind of guy. Is N36
>actually still flying?!?!
>

----- Forwarded message -----
Date: Sat, 21 Aug 1999 23:40:53 -1000
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Clingings

Worst case in 98 was Raphael. Not sighted this year. Next case was Noe. Here but won't let us get near. We were lucky last summer --she was scratching up a storm. We're still trying. Tutu had a rich dose. Not here.

Hoa has 'em same amount as last summer. Didn't run out of control. Oh yeah and 98#44 lots of 'em last year. Still lots of 'em. I'd say little change. I'd say that's typical. That's why we've backed off on them.

But what's really weird is hawkbills don't have 'em. Not a one. Honu'ea are Teflon turtles.

At 10:33 PM 8/21/99 -1000, you wrote:
>Turtles that had bad clingings last year. And photo documented this year
>same turtles with less or none. Have many of them? Aloha,
>
>*****

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>Tom's comments regarding the primitive communications capabilities we had
 >back then. If not for the presence of an EMO/XO (I think his name was
 >Johnson, might have been Johnston) who was very heavily into ham radio we
 >would have been completely and totally dependent on the mail via N36. I
 >can't believe that I'm not sure of his name - he was certainly well known
 >and liked by both those of us there and our families back home.

>-----Original Message-----
 >From: Ursula Keuper-Bennett <howzit@turtles.org>
 >To: MIKE_MCNEIL@PRODIGY.NET <MIKE_MCNEIL@PRODIGY.NET>
 >Date: Wednesday, September 01, 1999 11:54 PM
 >Subject: Signed Guestbook

>>Aloha,
 >>
 >>Saw what you wrote in the FFS guestbook. Were you there when Tom Marquette
 >>was? And George Balazs (sea turtle guy)? Have you any photos of the FAA
 >>DC3
 >>that flew into Tern. Here ID is N36.
 >>
 >>Want to land at Tern again via that plane?
 >>
 >> <<http://www.turtles.org/ffs/ternlanding/ffsland0.htm>>
 >>
 >>I encourage you to scan your pics. I am especially interested in sea
 >>turtle
 >>related images and any you might have of George Balazs in those early
 >>years.
 >>My husband and I have a webpage called Turtle Trax that is dedicated to
 >>Hawaiian green sea turtles. FFS is part of their history.
 >>
 >>Best regards

```

>>
>>      ^
>>      0 0      Ursula Keuper-Bennett
>>                  mailto: howzit@turtles.org
>>
>>  /V^ \      / ^ \
>> /V   Turtle Trax   V \      http://www.turtles.org
>>
>>

```

>>"The remoteness and isolation from family is just as
 >>indefinable. The helplessness in times of family
 >>emergency (and there were several) and the primitive
 >>communications (no cell phones or Internet back then)
 >>could be very depressing."

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>>
>>      \   \   /
>>      \   V   /
>>      /   /   \
>>
>>      malama na honu

```

---Tom Marquette
 re. the French Frigate Shoals

Date: Thu, 18 Nov 1999 22:17:22 -0500
 From: Ursula Keuper-Bennett <howzit@turtles.org>
 To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
 Subject: Re: Request from your database

Keuper

Zeus confirmed at Honokowai March 92 (photo from another diver) and then every summer 1993 to our Aug 29th morning dive to NorthHouse with you. So yes sir, either Zeus gets back fast or...

I suggest you have a WORD with him next time you're there.

Note. In that pic of Zeus with flippers tucked. You can see his nails there. So he had them in 1994 when that pic was taken. Hasn't now --sheared right at the skin. So he's doing SOMETHING with them.

Plus sir, I think Zeus is old.

There are honu we'd have fits about if we didn't sight them. Zeus is number one. Completely faithful to Honokowai. Every single summer. ONLY male with that record.

Now there's another remarkable honu --Zeus...

('night. Cutting out early.)

At 04:49 PM 11/18/99 -1000, you wrote:

>I don't know, and right now there's no extra part of my brain to focus on
 >this.

>
 >Question: Zeus. Unless he goes to FFS and comes back quite early each
 >year (before you get to Maui), it would appear he isn't "doing his duty"
 >as a Big Boy like him should be doing with the girls. Correct?

Date: Fri, 19 Nov 1999 16:16:13 -0500
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: In my own defence

Refine

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You mentioned SUS's this morning and I've been thinking about it today. I know you used it with gentleness and Peter uses it too now. In fact one of the reasons I asked you yesterday about tagged males is Peter has a cool theory that if it came from me'd be one heck of an SUS.

But I need to put things in historical perspective here. I'm going to remind you of some SUS's that came true. And they're SUS's because I thought them up not Peter, ok?

SUS - faces. You can tell turtles apart by their faces. (1989 when we had three turtles to deal with. I noticed their faces were different.)

SUS - The algae blooms were being caused by runoff through the ditches. Dr. Steve Dollar shit on us for that one back in 91. Now a week ago you sent me a clipping that says Dollar changed his conclusion to "runoff" as a problem. (Not that I believe that. I don't LIKE Steve Dollar on any side I'm on)

Primary FP cofactor is eutrophication. OK, so I thought that would make honu concentrate more in an area and fuel vertical transmission instead of dinos. BUT. I still called eutrophication.

There are others I've developed re: residency and male/female behaviours but you're "lagging" behind trying to prove me right on them George. And the newest one from Peter is romantic and would take YEARS to prove.

Here's my SUS for Zeus. Either he snapped them during mating at the Shoals or he was involved in a clamp-fight with another male. I'd love to know if freshwater male turtles clamp-fight...

P.S. My headache's almost cleared.

At 10:01 PM 11/18/99 -1000, you wrote:

>This is noteable and likely should be commented upon in the Fidelity
>symposium paper. Why are his nails worn down? From breaking up all that
>coral, as we are pointing out in the Destruction symposium paper!

>
>Naturally I don't know for certain, but it's not a bad speculation, a bit
>firmer than an SUS.

Date: Sat, 15 Jan 2000 07:18:53 -0500
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Cc: Peter Bennett <honu@turtles.org>
Subject: Happy 35th

'morning.

Congratulations George. Lucky Live Hawaii with the Honu!

At 06:35 AM 1/11/00 -1000, George H. Balazs wrote:

>Another topic- Something significant in my life nearly wizzed by me/us.
>35 wonderful years living in The Land of Aloha. 35 years in Hawaii-Nei.
>35 years in Paradise. 35 years being (pretty much) Exactly where I wanted
>to be. I say "pretty much" because truth is it was Tahiti I wanted to get
>back to, Hawaii was similar (and closer than California), so Hawaii it was
>and is.

>
>35 years January 15, 2000, as near as we can recall to the exact date.
>Please send this message back to me on that day and say, Congratulations,
>George "Lucky Live Hawaii" with the Honu!

>
>You live here too. All the time. Within and through TRAX.
.....

IN 1/11/00
1/15/00
1/15/00
1/15/00
1/15/00

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Date: Tue, 30 Nov 1999 12:45:25 -1000
From: skippy_hau@exec.state.hi.us
To: williams@mauigateway.com, glynnis_nakai@fws.gov, wild@aloha.net
Cc: gbalazs@honlab.nmfs.hawaii.edu
Subject: Nest Five Excavation

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

Draft Summary for Nest Five (DO NOT RELEASE-PRELIMINARY INFORMATION)

WAIOHULI NEST #5 (19 September 1999)
Latitude: 20° 45' 15" N Longitude: 156° 27' 47" W
EMERGENCE: None
EXCAVATION: Monday November 29, 1999 (Day 72)
November 29, 1999

fdone

SUMMARY

Excavation by Glynnis Nakai & Skippy Hau
Time 17:02 to 17:40 (main 17:05 to 17:25)
Nest diameter 28 centimeters; depth 39 centimeters

ESTIMATED EMPTY SHELLS	154
WHOLE EGGS (UNDEVELOPED/UNHATCHED)	10
=====	
LIVE HATCHLINGS (RELEASED)	157
WEAK HATCHLINGS	2
ESTIMATED TOTAL	169 (157/169=93%)

After excavating nest four on 30 October 1999, we inspected the fifth nest and found the nest was disturbed. It appears a mongoose may have reached the top part of the nest. Sand and a wire mesh was placed above nest. An unknown amount of eggs may have been taken from the top part of the nest.

Found wire mesh and plastic lawn edging placed around nest (Nov. 13, 1999): A path was cleared to ocean from nest. We observed disturbance depressions in sand before excavation. Appears be displacement of sand by hatchlings. First live hatchling about 16 centimeters below surface. Second hatchling with pea sized egg yolk; not fully formed right front flipper and right hind flipper. Two weak hatchlings held overnight. Tried to release one hatchling at shoreline but was washed up by waves.

* Two hatchlings alive but weak.

4/20/00 *THURSDAY* *HIHWMSP - 9:30am* *Turtle TO NOON.*
Standing Response
presentation to volunteers
by Claire & Joy Lynn running program.
See p. 95
NAMES FOR CARDS

Date: Thu, 16 Dec 1999 11:49:57 -0500 (EST)
From: Ursula Keuper-Bennett <howzit@turtles.org>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Continuous FP histories

Handwritten: 145
Handwritten: m

1999 allowed me to add Zeus to the regression pile. Looked GOOD didn't he? And Kaula? We SAW his eye tumour erupt in 1998. Nothing this year. Complete regression. In fact had Kaula not let us get close we'da never known he HAD FP back in 98.

And Hoa? Subtle eye tumours erupted in 98. Fine this summer and Hoa sprouted a long tail, George.

All males! Ratio now 11 to 3!

BUT.

Shredder A240 has tumours for first time in 99. I'm betting SHE'LL regress. Also if memory serves we had at least three-four new honu who are clearly regression cases (tumour artifacts in eyes) only with no prior history we can't prove that. We'll need a subsequent sighting.

Jeez! And I FORGOT! Remember that male we recognized at the Wharf? That's a regression case too! That pushes the ratio up to 12:3!

Hey. I got lots of things I haven't told you about Honokowai and the FP there. Don't want to flood you. Remember at the Wall how you said one day we'd write about "the ups and downs of FP at Honokowai"?

That's the brass ring, sir. That's why you're spending so much time on me --teaching, supporting, example-ing. And it's why I pay such close attention!

Message too long...sorry. I best let you go. Warm regards.

On Thu, 16 Dec 1999, George H. Balazs wrote:

> Date: Thu, 16 Dec 1999 06:09:57 -1000 (HST)
> From: George H. Balazs <gbalazs@honlab.nmfs.hawaii.edu>
> To: Ursula Keuper-Bennett <howzit@turtles.org>
> Subject: Re: Continuous FP histories

> that would be wonderful maybe this symposium's paper should have been
> part II regression. This is the first time you've told me that.

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Date: Mon, 30 Aug 1999 22:25:37 -1000
From: Ursula Keuper-Bennett <howzit@TURTLES.ORG>
To: CTURTLE@LISTS.UFL.EDU
Subject: Some last pics of last dive for those interested

To: CTURTLE friends,
We fly out tomorrow and have some final pics to share. Most will feature George Balazs so I hope his friends and colleagues will find these of special interest.

This summer, George showed up mid-August to dive with the honu and to determine the extent of fibropapilloma (FP) disease in the Honokowai population.

He liked them so much he wanted to come back. Fate and timing meant that George would accompany us on our last dive day of the summer. That was yesterday.

The Last Dive Aloha Day is our time to say good-bye to the honu and give thanks to the ocean for safe passage.

We present orchid/carnation leis to the turtles, say our good-byes and try to drink in their beauty deeply enough to last us the ten months we'll be away from them. Often we do this through tears.

The following video freeze-frames are from yesterday's dives made even more special because of George's presence.

Balazs looks at three honu resting around a coral outcropping we discovered during our first week in July. At that time we named it in George's honour and placed an NMFS temperature logger there --which means it's doomed to collapse by Summer 2000.

<http://www.turtles.org/ghbmtbalazs.jpg>

This is Zeus and George.

<http://www.turtles.org/ghbzeus.jpg>

We've known Zeus since 1992. The turtle has progressed from not showing up at

all with George around, to leaving as soon as he approaches to /esterday...
Letting Balazs appreciate fully how Number One Zeus really is around here.

On our way back to shore, we found Polzbarney in a place we call the Graveyard. Only tumoured turtles go there and once sighted in this area we never see them the following summer. Hence the name "Graveyard".

George looked closely at our friend

<http://www.turtles.org/ghbpolzbarney990829am.jpg>

and confirmed the young honu is "much worse" than last time they met.

Yesterday's final dive of the summer was just so special, words fail so I won't even try. We're just grateful George was there to share it with us.

Anyway...

For those still reading I have good news. Some of you have been asking about Tutu, the tagged female regression case we mentioned at the very end of the regression paper we presented in South Padre. She was the turtle with white blemishes on neck and shoulders and we feared this might signal a return of FP.

In July we didn't see Tutu and after the first two weeks we asked George if she showed nesting at the Shoals. George said no. And since she wasn't at Honokowai that meant she must have been "misplaced". Fortunately Tutu knew exactly where she was and where she ultimately wanted to be.

Three days ago, we saw our old friend again sporting white engraving on her shell --proof she'd been to the Shoals this season.

<http://www.turtles.org/tutua142.jpg>

We informed George she arrived home safely and he was almost as happy as we were at the news. Best of all, those 1998 white neck and shoulder blemishes are gone, and we can now answer the question, "Is regression permanent?"

It is for another year...

Last, as laypeople we've learned a lot from scientists and especially George Balazs. We learned something new yesterday after our last dive. While we were

rinsing our gear, I turned to George and said,

"I bet you've never had to say good-bye to the honu, huh..."

He smiled gently and said, "Nahhh, I just pack up one place and work with them some place else next day."

And there was quiet.

I don't know what he was thinking but me, I realized we experience something every year that Balazs has never had to. Having to say good-bye like that.

The ache.

I don't envy him when George finally has to bid them farewell-- never having had practice and all. We've learned he loves the honu even more than we do.

<<http://www.turtles.org/ghbzeus2.jpg>>

Aloha to all.

```
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      0 0
    /V^ \   / ^V \
   /      \   /      \
  Turtle Trax   http://www.turtles.org
```

Ursula Keuper-Bennett
mailto:howzit@turtles.org

"She is the size, shape and color of a large boulder. Her shell alone is over a yard long, remarkably smooth and flecked with small patches of barnacles and a few threads of green algae. For once the common name lacks the grace of the scientific one. 'Green sea turtle' is blandly descriptive. 'Chelonia mydas' fairly sings."

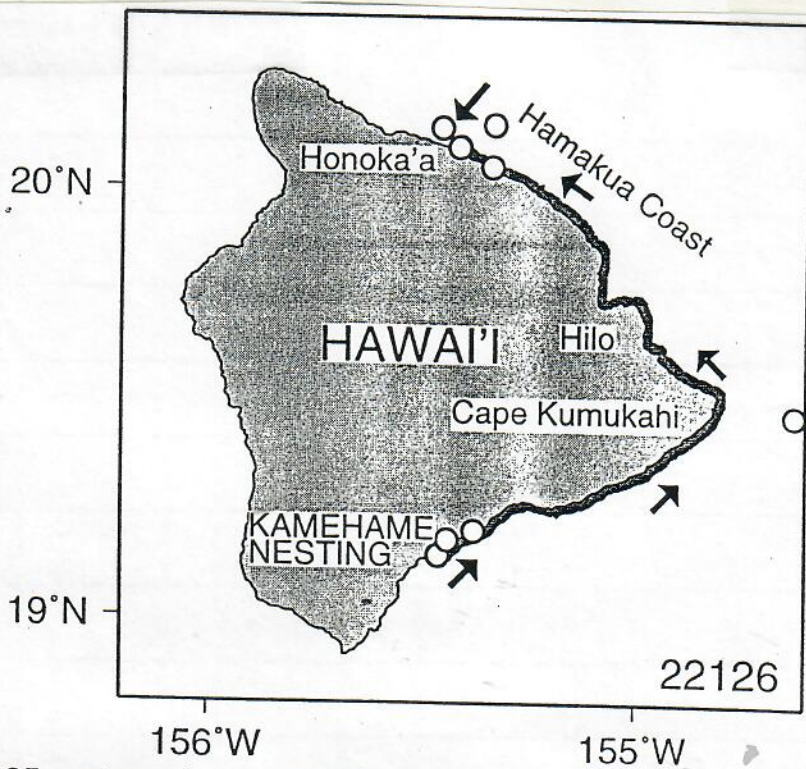
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  \  \  \  /
  /  |  v  |  \
malama na honu
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--Osha Gray Davidson
The Enchanted Braid

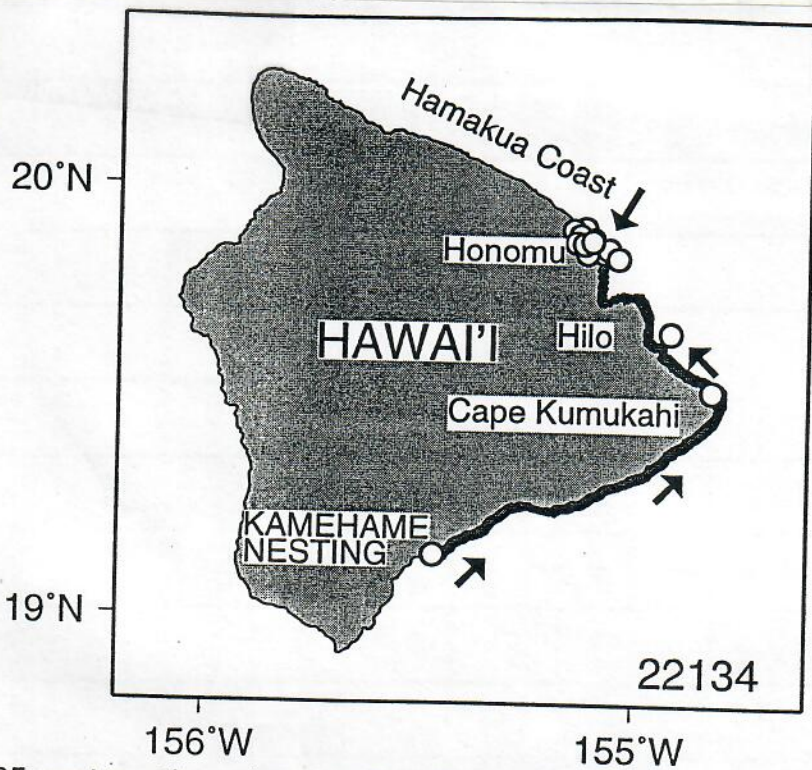
147

in a clockwise direction to Paopao on the Hamakua Coast

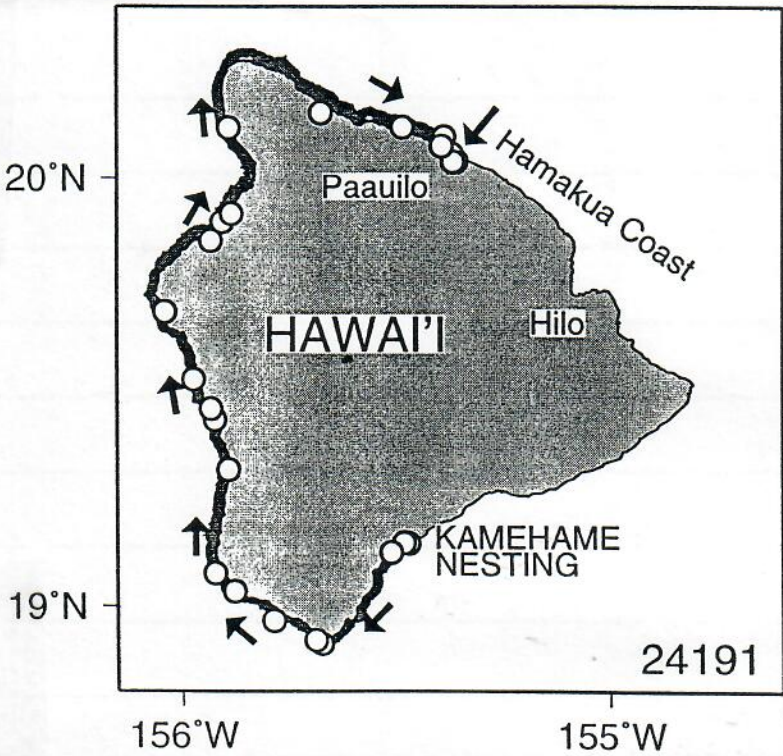
148



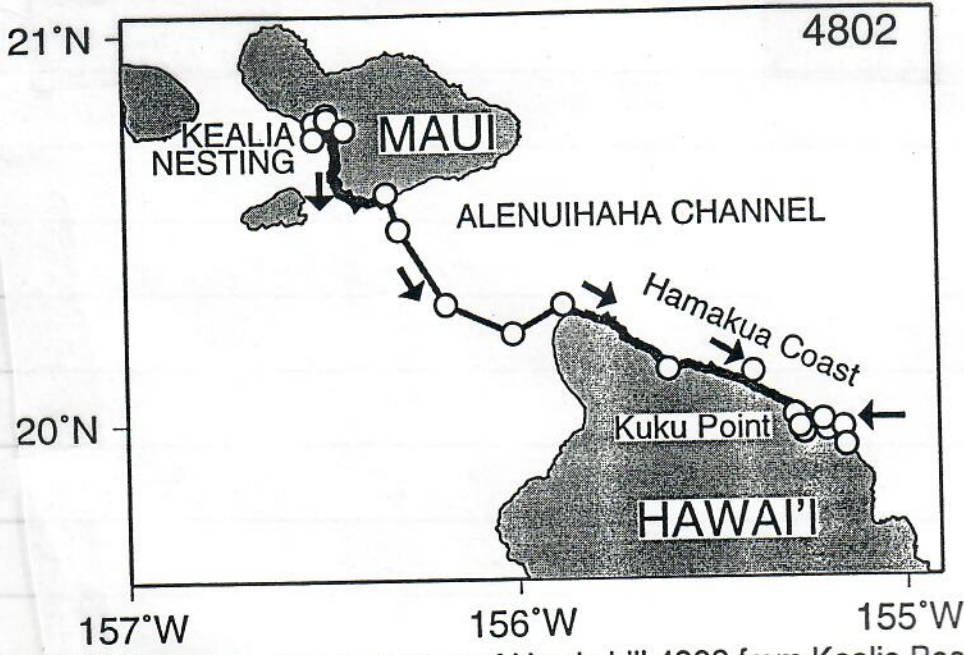
1995 post-nesting migration of Hawksbill 22126 from Kamehame Beach 180 km in a counter-clockwise direction to Honoka'a on the Hamakua Coast.



1995 post-nesting migration of Hawksbill 22134 from Kamehame Beach 135 km in a counter-clockwise direction to Honomu on the Hamakua Coast.

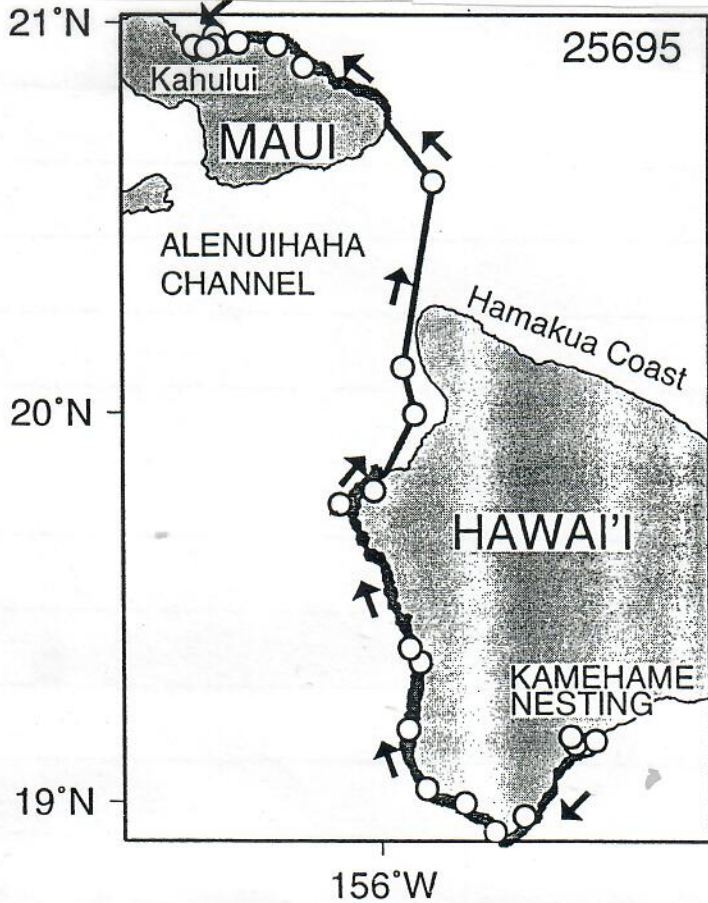


1996 post-nesting migration of Hawksbill 24191 from Kamehame Beach 255 km in a clockwise direction to Paauilo on the Hamakua Coast.



1997 post-nesting migration of Hawksbill 4802 from Kealia Beach, Maui 240 km to Kuku Point on the Hamakua Coast of the Island of Hawaii.

157



1996 post-nesting migration of Hawksbill 25695 from Kamehame Beach 315 km to Kahului Bay on the Island of Maui.

TRANSMITTAL SHEET



U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center - Honolulu Laboratory
2570 Dale St. • Honolulu, Hawaii 96822-2396
Commercial: (808) 983-5732
Telefax: (808) 983-2902

TELEFAX FOR: ANNE
FROM: GEORGE
DATE: 15 MAY 96
TELEPHONE EXT: 983-5733

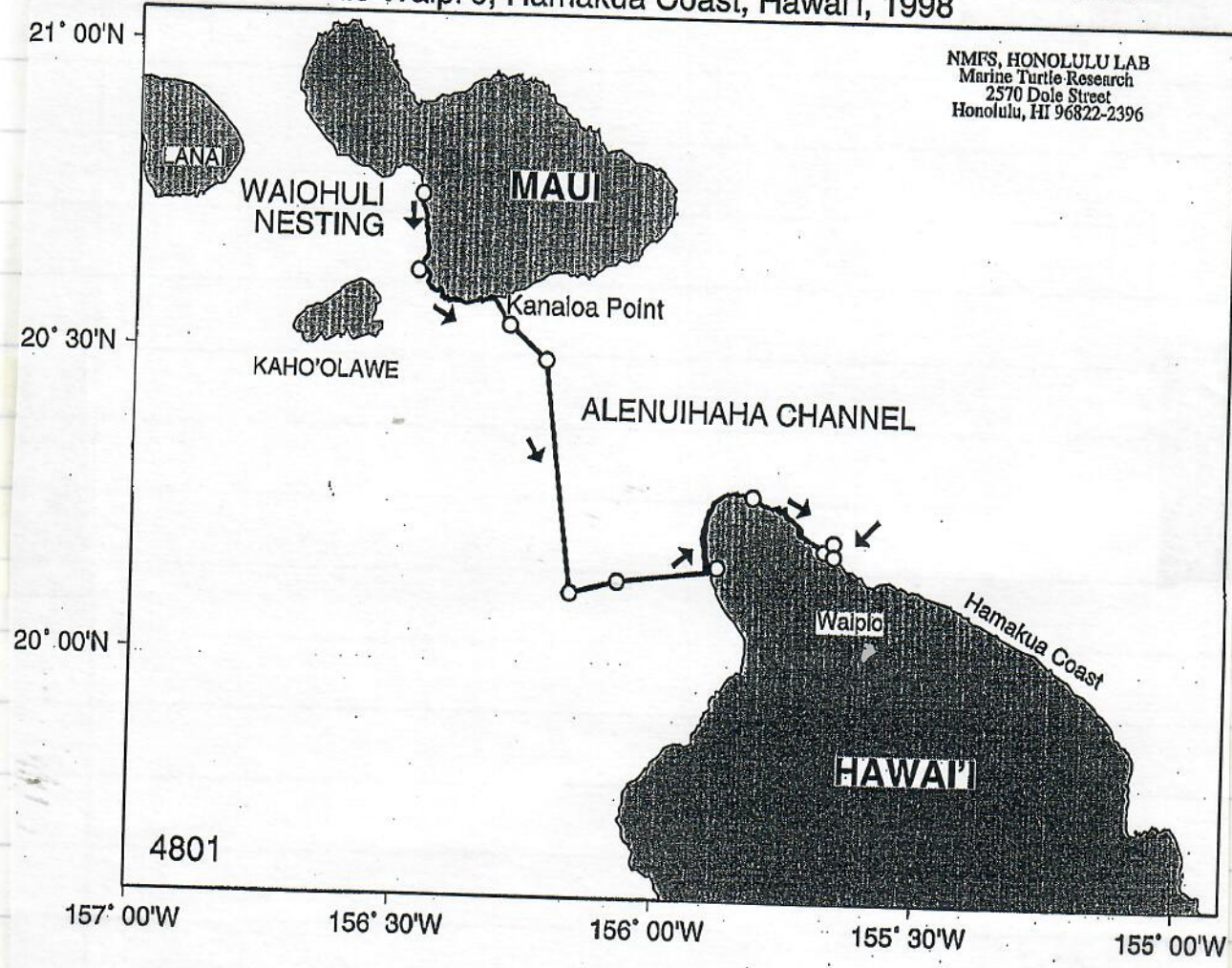
NUMBER OF SHEETS TRANSMITTED (including this page) 7

MESSAGE:
The 3 tracks from Maui were done by me in collaboration with Bill Colvett. Anne - A promised results of Hawksbill satellite tracking studies. Seven females tracked post nesting - 4 at Kamehame (Hawaii's most important Hawksbill beach), and 3 along South Maui. 2 of latter went to Hanalei, 1 to N. Molokai. 3 to Hanalei, 3 to Hanalei, 4 from Hanalei, 1 to Hanalei, 1 to Hanalei, 1 to Hanalei, 1 to Hanalei. Exciting Animals!



Post-nesting migration of hawksbill 4801 from Waiohuli, Maui to Waipi'o, Hamakua Coast, Hawai'i, 1998

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

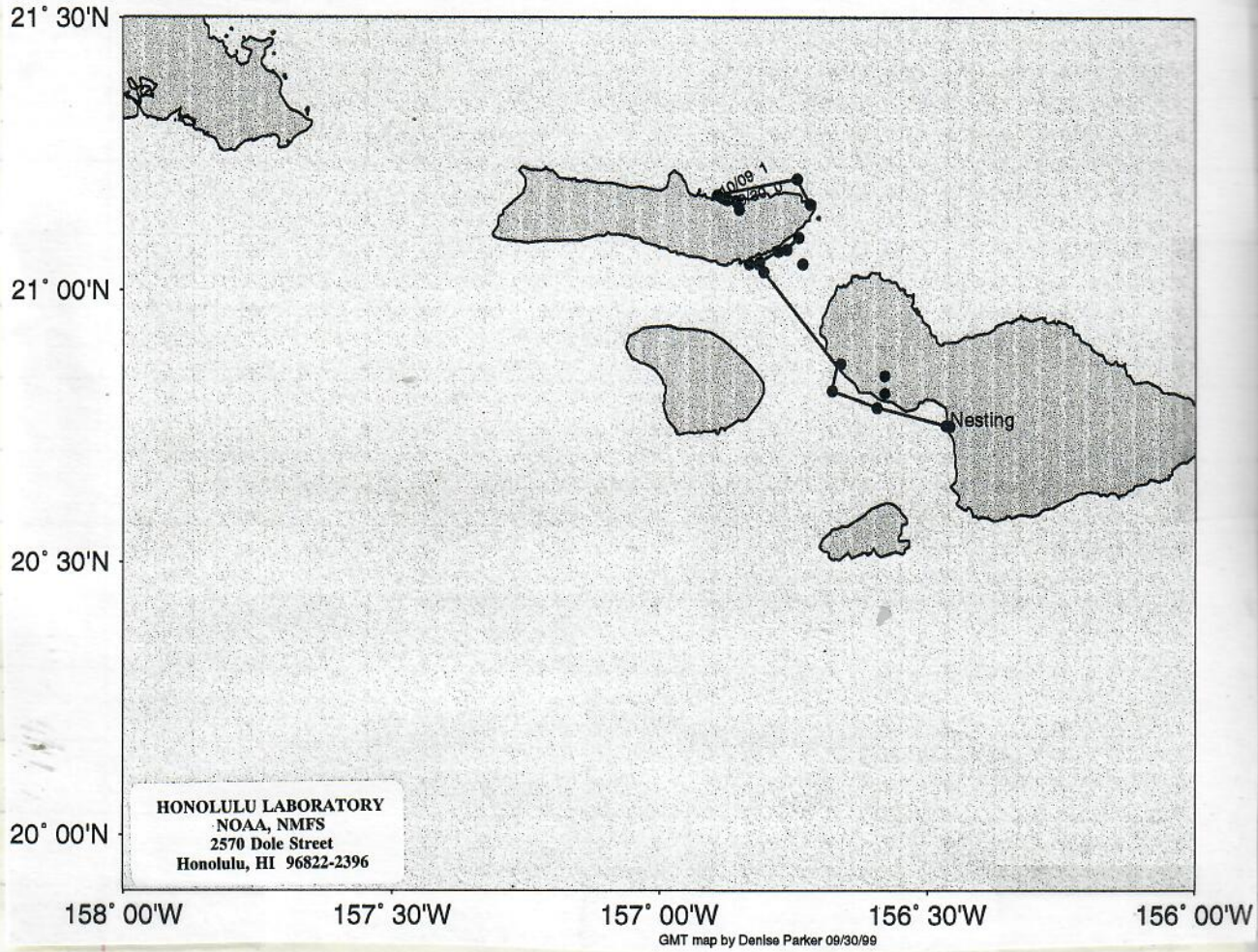


4801

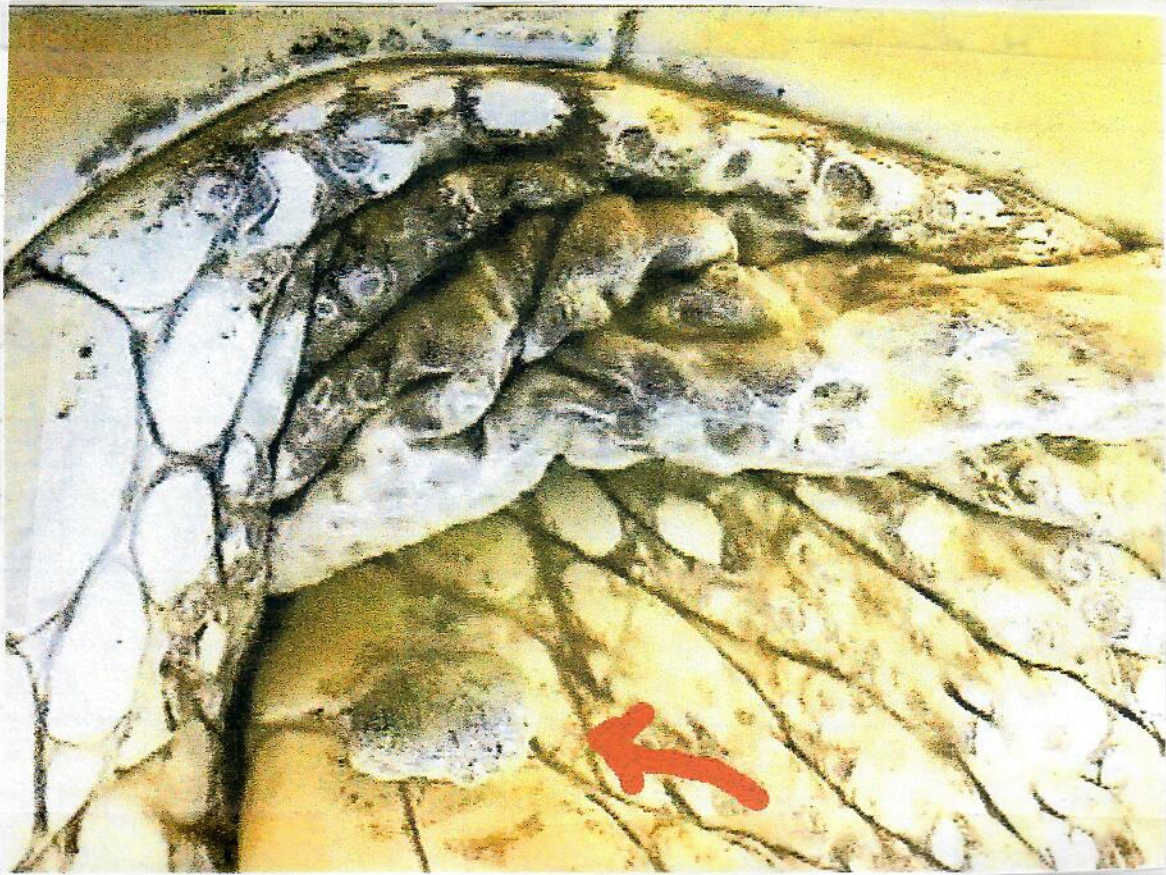
GMT Map by Denise Ellis 01/27/99

152

Hawksbill 25692 September 1999, Waiohuli, Maui to Pelekunu, Molokai



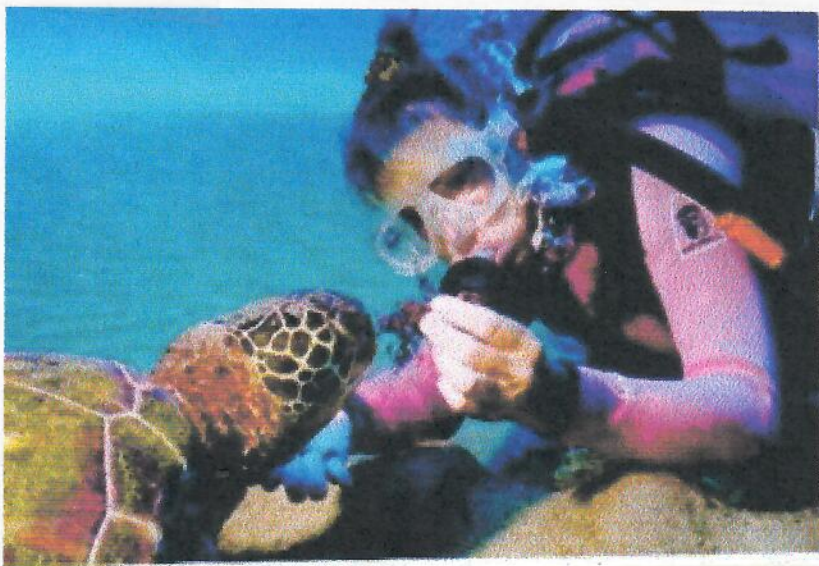
153



156

www.majimarmaid.com/
theresafeeding.jpg

10/99



MAUKA/LAHAINA SIDE. 2/3 THE WAY UP.

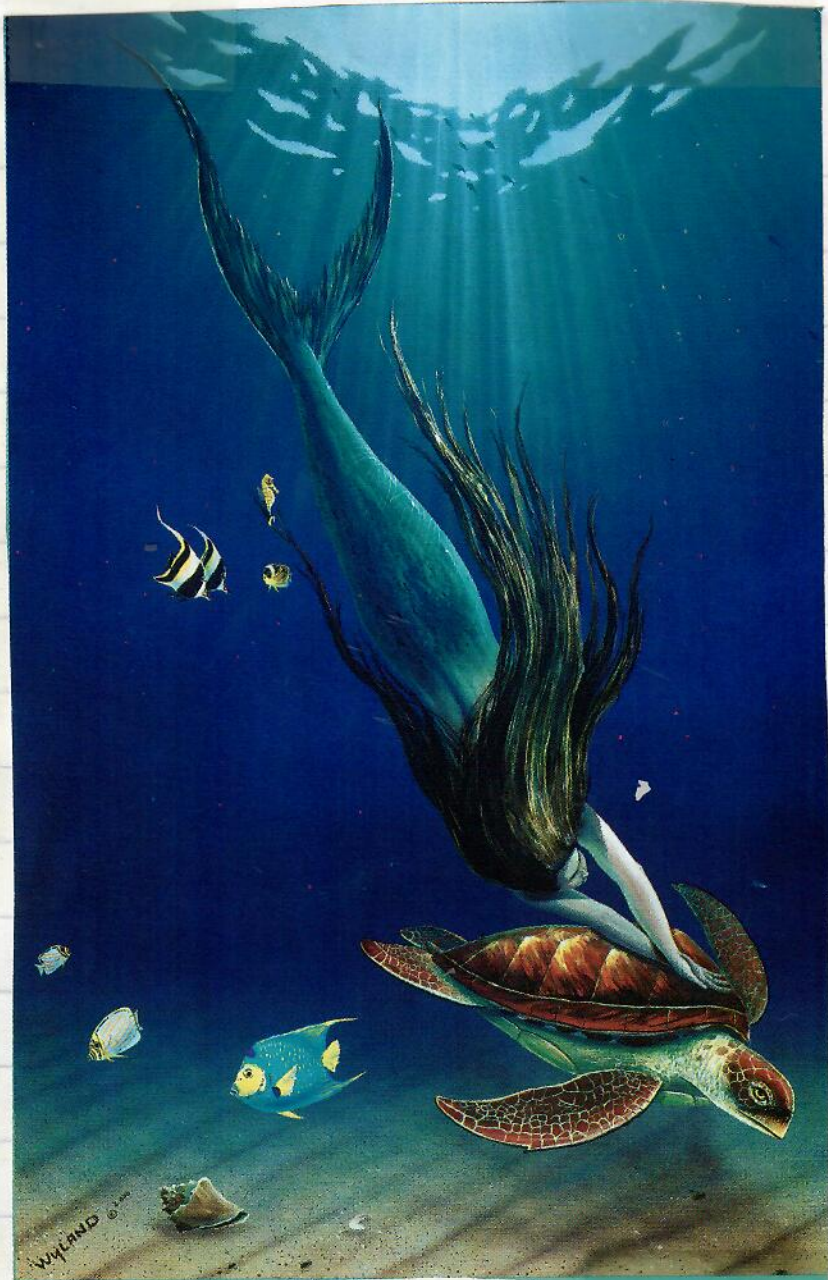
157
100



157
100



160/21



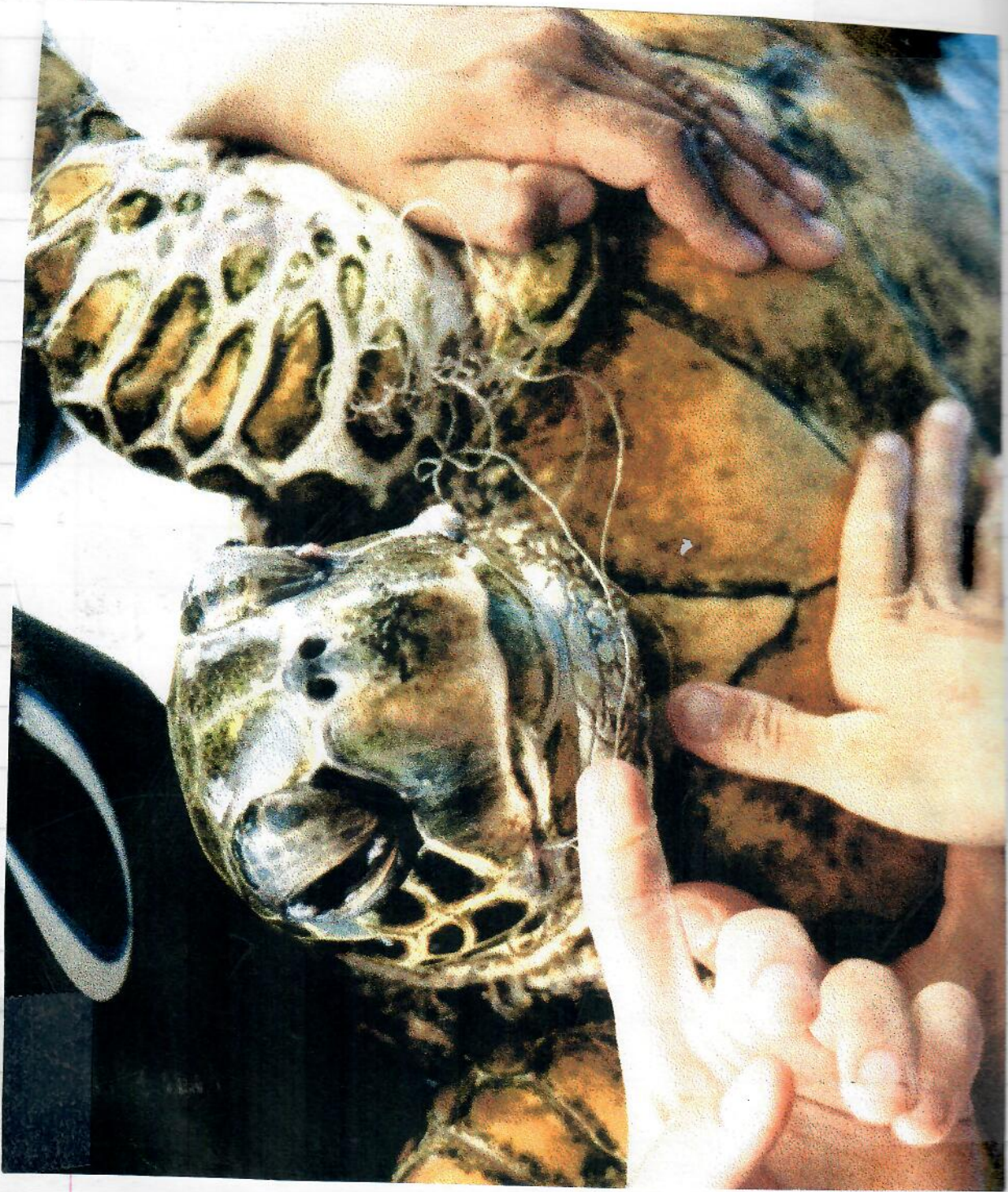
"Mermaid and the Turtle" by Wyland

161

2/1



162



163



1998 deploy
 Mai 4801 →
 END POINT
 of Migration

Pololu

Date: Wed, 19 Jul 2000 17:39:34 -1000
 From: Ursula Keuper-Bennett <howzit@turtles.org>
 To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
 Subject: Important tag request

Histor

408C on RHF. Would appreciate any and all info from your agency and then we'll happily provide ours.

Tag Information: Tag Number Date Tag Type Tag Position
 407C 6/23/96 RHF LHF
 408C 6/23/96 RHF RHF
 41350A4E64 6/18/99 LHF
 4136372172 6/18/99 LHF

Date	Type of Encounter	Locations	Tumor/Rank	Nesting/Act	Straight Carapace	Interval		Growth-Rates		Overall	
						Month	Year	cm/mo	cm/yr	Month	Year
6/23/96	Nesting	East	0	X	88.5	---	---	---	---	---	---
6/6/98	Nesting	East	0	M	---	35.0	2.9	---	35.0	2.9	---
6/17/98	Nesting	East	0	C	---	---	---	---	35.0	2.9	---
6/18/98	Nesting	East	0	N	---	---	---	---	35.0	2.9	---
6/30/99	Nesting	East	0	M	---	---	---	---	36.0	3.0	---

----- Forwarded message -----
 Date: Mon, 24 Jul 2000 20:32:05 -1000
 From: Ursula Keuper-Bennett <howzit@turtles.org>
 To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
 Subject: Re: Pleastron is gray with very pale yellow

Redline!
Manu

I'm scanning today's photos. I mean real photos and will send to you ASAP. It sits besides honu. It acclimated because it would look at honu and watch how they reacted to us (they didn't and she took her cue from them). We have lots of footage. Prefers resting with honu. If honu she's with leaves, she will too.

Behaviour similar? This turtle doesn't scratch for one thing. We'll watch her better tomorrow. Yes, she lets us close. Close enough to clip piece of skin. But, we're best to do it. If you want some skin, it suspect it must be done on a day you're not there! Or far away.

Finally, you're in a spot. If this ISN'T a black, you must tell me what kind of turtle it is. She's no honu, sir.

At 08:23 PM 7/24/00 -1000, you wrote:
 >Surely Mexico by birth, that would be the best educated guess at present.
 >Does it interact with honu? Behavior similar? In what ways? And what ways
 >not? Any sign of flipper tags? Lastly, does it let you get close, real
 >close? Close enough for me to get close and... snip a tiny piece of skin
 >from a hind flipper?
 >
 >I never received your message saying what days are bad for me to dive
 >with you. Aloha, George

----- Forwarded message -----
 Date: Mon, 24 Jul 2000 10:57:55 -1000
 From: Ursula Keuper-Bennett <howzit@turtles.org>
 To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
 From: Peter Bennett <honu@turtles.org>
 Subject: Re: Important tag request (fwd)

Manu

Mahalo for the info so quickly. The tumour info was especially what I was waiting for. She's a regression case George (confirmed this sighting)... and she's still got one remaining tumour right shoulder.

Here's our other info. First, sighted 1993, we note a "small gray tumour on elbow" Then get this, photographed by Rob Hawes while vacationing at Honokowai March 1995 but we never saw her that year.

Sighted by us 1997 Get this. Sighted by you on your January 1999 trip here but not by us the subsequent summer Sighted at Reef? 2000 07 18am dive one remaining tumour on right shoulder, browned (REGRESSION CONFIRMED)

re: when are good days we already answered that. Your messages just keep bouncing.

At 09:01 AM 7/24/00 -1000, George H. Balazs wrote:
 >408C. first tagged nesting at East 6/23/96. There again in 6/99. Also had
 >407C applied and in 99 two pit tags inserted. SCL 93.5. No tumors noted.
 >
 >Question: Between now and the 4th of August, what day(s) would be not
 >good days for me to fly over to dive with you for the day? Aloha, George

165

----- Forwarded message -----
Date: Mon, 7 Feb 2000 00:17:48 EST
From: CBRmaui@cs.com
To: gbalazs@honlab.nmfs.hawaii.edu
Subject: tagged turtle

+ Reduce my book
Maui

167

Aloha George,

A friend told me you are interested in knowing the location of tagged green sea turtles. If this information is helpful, please let me know and I can write you with other sightings. I am a dive master with Ed Robinson's Diving Adventures on Maui and I also work with Hannah at Hawaii Wildlife Fund.

I was scuba diving at the St. Anthony's Wreck off Maui's Kihei/Wailea coast today (Feb. 6) in 65ft of water and saw turtle #J630. Some of the tags said University of Hawaii but one just had the number. The turtle was looking real healthy and was medium sized, about 2 1/2 or 3 feet from head to tail. Her tail was short so I'm assuming she was female. She was resting inside the pilot house of the wreck and went up to the surface and back down a couple of times while we were there (30 minutes).

There are usually about 3 or 4 turtles there it seems. Today there were at least 2, one bigger than J630 with no tags.

The customers were interested in the tagging process. Is it done at the French Frigate Shoals?

Aloha,
Carrie Robertson
Ed Robinson Diving Adventures

Date: Mon, 7 Feb 2000 00:17:48 EST
From: CBRmaui@cs.com
To: gbalazs@honlab.nmfs.hawaii.edu
Subject: tagged turtle

Aloha George,

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There are usually about 3 or 4 turtles there it seems. Today there were at least 2, one bigger than J630 with no tags.

The customers were interested in the tagging process. Is it done at the French Frigate Shoals?

Aloha,
Carrie Robertson
Ed Robinson Diving Adventures

168

----- Forwarded message -----

Date: Sat, 18 Mar 2000 14:16:11 EST
From: ALIGON@aol.com
To: gbalazs@honlab.nmfs.hawaii.edu
Subject: Fwd: Turtle

To save
Maui
Book

Aloha George,

Just passing on information about another sighting of the K-12 turtle. It was apparently in the same exact location as I last reported to you a couple months ago.

Allan Ligon
336a Ailana Place
Kihei, HI 96753
(808) 874-3911
aligon@aol.com

Maui

----- Forwarded -----
From: dougpilot@yahoo.com at EXTERNAL
To: aligon@aol.com at EXTERNAL
Subject: Turtle

Allan,

Doug Williams and I dove Turtle Valley today 3/16/00 and we saw the tagged turtle under the same ledge. Tag K-12

It looked like a large female but I did not have anything to get measurements for you.

Doug

PS: Diving Kam 3 tomorrow at 0800 and Sunday we will be diving the south end of the beach at Ulua. Hope you and Katy can join us.

=====
dg Pilot
gpilot@yahoo.com
rather be diving!

Date: Sat, 18 Mar 2000 14:16:11 EST
From: ALIGON@aol.com
To: gbalazs@honlab.nmfs.hawaii.edu
Subject: Fwd: Turtle

Aloha George,

Just passing on information about another sighting of the K-12 turtle. It was apparently in the same exact location as I last reported to you a couple months ago.

Allan Ligon
336a Ailana Place
Kihei, HI 96753
(808) 874-3911
aligon@aol.com

Maui

[Part 2: "Included Message"]

Date: Thu, 16 Mar 2000 18:45:59 -0800 (PST)
From: Douglas Pilot <dougpilot@yahoo.com>
To: Allan Ligon <aligon@aol.com>
Subject: Turtle

Allan,

Doug Williams and I dove Turtle Valley today 3/16/00 and we saw the tagged turtle under the same ledge. Tag K-12

It looked like a large female but I did not have anything to get measurements for you.

Doug

PS: Diving Kam 3 tomorrow at 0800 and Sunday we will be diving the south end of the beach at Ulua. Hope you and Katy can join us.

=====
Doug Pilot
dougpilot@yahoo.com
I'd rather be diving!

170

Weekly Summary--Week 7 (98/08/15)

Arribada--the arrival

"Arribada" is a Spanish word meaning "arrival." This term is used to describe the nesting phenomenon of the ridley turtles, which appear to hold a meeting off a specific coastline and then decide simultaneously that the time is right to lay their eggs. Thousands of female turtles can be involved in an arribada.

At Honokowai, we experienced an arribada this week, and it was both rewarding and exhilarating. Oh, the turtles didn't arribad or anything but it was an "arribada" nonetheless.

Experts arrived.

The first one to scramble up our beach was George Balazs of the National Marine Fisheries Service in Honolulu. Soon he was accompanied by Marc Rice of the Hawaii Preparatory Academy, and Denise Ellis, George's dive partner and colleague at the NMFS.



Experts arrived.

The time they spent with us was as intense as it was important in our scheme of things. Until now, the turtles here have had pretty much just the two of us. We did the video, the photos, the writing, the fussing and fretting, but our efforts were amateur--except for the fussing and fretting. We're pros at that.

All this time the honu have had to content themselves with our limitations. This week we got some idea what it must have felt like to see the U.S. Cavalry come charging up over the hill.

The education of Peter and Ursula

We're still euphoric over what happened during the six dives we had with George and his crew. We learned so much!

Regular readers might recall that we wrote about a new problem we are seeing here at Honokowai: a type of barnacle we nicknamed Clingons.

George tentatively confirmed that the barnacles, which we'd reported to him earlier in the summer, were the same ones he'd seen only three times before, and only on dead or "near-dead" turtles sent to him from Maui.

The honu not only cooperated with George and Co., it was almost as though they were volunteering their services! Some turtles we'd rarely sighted showed up so George could have a look at them. For example, 1998 Turtle 28 appeared after a lengthy absence. George captured it and examined the

animal's overall health--it was poor.

For some reason none of us could determine, the turtles chose the first two mornings of George's visit to feed in large numbers in the shallow waters just two or three condos north. While we've often seen a few heads popping out of the water there in the past (no more than half a dozen), on these mornings they seemed to be holding a convention.

Later, we started a dive by snorkelling up to that area to see if we could determine what they might be eating. To our untrained eyes, the bottom seemed to be mostly the seaweed *Acanthophora*, which we've seen juveniles eating from time to time. Naturally, we figured that's what they'd been after. George, however, has analyzed the stomach contents of many Maui turtles and he almost always finds that they've been feeding on a different seaweed: *Pterocladia*. The mystery was solved when Denise picked up a fuzzy lump and shook it. Underneath she found--*Pterocladia*!

Much to our delight, we got many lessons like this one crammed into two and a half days. We were left exhausted but happy, and George, Marc, and Denise have our sincerest gratitude.

It's clear from our farewells to George and his colleagues that they enjoyed their Honokowai experience and that they love these honu too. We told George frequently how sweet and beautiful and **big** Honokowai grows the greenies. From his up-close and personal look at them, we know he also thinks these honu are cool.

Polzbarney update

On Wednesday, George and his crew captured Polzbarney with our help (we showed them where to look). We videotaped and photographed the capture, but as soon as they got her onto dry land, we were having a tough time dealing with it all. We both said it felt like betraying a friend, even though our brains told us it was the right thing to do... that other turtles would benefit from what George might learn about Polzbarney's disease.

When we heard George say, "...mouth tumours", our eyes reddened and tears welled. We then hugged each other and broke down and cried, since we knew how devastating mouth tumours usually are.

George, Marc, and Denise examined her, took tumour biopsies, and inserted a PIT tag. While we tried to photograph and videotape the procedure, there were times we had to stop and let out some more tears. Our good friend could do no better than to be in the gentle and expert hands of George Balazs and his assistants. We knew this and were very happy Polzbarney was getting that kind of caring.



George, Marc, and Denise examined him, took tumour biopsies, and inserted a PIT tag.

Still, to see this special little friend that we've seen since 1995 on her back and out of her element was as distressing for us as it probably was for the sweet honu.

Polzbarney [1995 Turtle 15]

We first sighted this young turtle in July of 1995. We could identify this youngster easily even from a distance because of the many barnacles calling her plastron home.

Because she'd chosen to stay close to shore and right on the path we took when we began our dives, we saw her on almost every one of our 120 plus dives that summer. We named her Alzbarney after a man who used a boogie board to swim out and observe this little turtle a couple of times each day. He called her Barney, but we already had a Barney, so we compromised on Alzbarney.

Then we encountered a slightly embarrassing problem. We found out that the man's name wasn't Al, it was Paul. At the time, we were loathe to change Alzbarney's name since we considered this bad luck, although we couldn't explain why.

By selecting as home a little coral overhang (63K.JPG) that was so near to shore, Alzbarney was guaranteed a steady stream of visiting snorkellers. She soon learned exactly how close to allow humans to come before lifting to leave. She quickly became skilled at how much distance to keep between herself and a pursuing human.

In 1996, Alzbarney was at her regular post and we sighted her on our first dive that year. We were worried. There seemed to be just the smallest hint of trouble in both her eyes--the earliest signs of a fibropapilloma pre-eruptive tumour.

Other than that, Alzbarney had grown and was clearly prospering. Still, we knew her odds are no good at Honokowai. Predictably her friend, Paul, vacationed again on Maui that year and snorkelled out to observe her every day.

Again in 1997 we sighted Alzbarney on the first dive. This time it took only one glimpse to confirm this turtle now had fibropapilloma (FP) disease. Yes, her eyes gave it away--both showing a hint of white in the posterior corners, but there was something more definitive.

There was salt and pepper in and around both her shoulders, and several white spots on her right shoulder were now unmistakably eruptive. Alzbarney had the smallest of tumours--but tumours they were.

That summer, her friend Paul arrived later than usual and again, every day he made sure he visited his friend, the turtle. At this point we couldn't stand it any more. The situation demanded a name change. This turtle's good friend had paddled out every day, sometimes several times, to visit with her.

This was definitely Paul's Barney, and so Alzbarney's name was officially changed to Polzbarney. We are much happier about this arrangement.

We are saddened by Polzbarney's fibropapilloma tumours. Youngsters are affected the most by this disease. It cuts Honokowai youngsters down within two, three years of them showing the first signs of FP. The odds are not good for Polzbarney.

The fact is that in 1998 we expect her condition to be worse, particularly her eyes and shoulder tumours.

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All three of us are over it now. Peter and I feel only satisfaction. Polzbarney returned to her home ledge by the next day and demonstrated no fear of us--although she seemed a bit more cautious than she'd been before she was grabbed. Her prognosis is not as bad as we first feared. Although there were small mouth tumours, they are not yet impeding her breathing or ability to feed. We fervently hope that they never will.

On behalf of Polzbarney, 1998 Turtle 28, and ourselves, we'd like to take this opportunity to say mahalo nui loa to George, Marc, and especially Denise for the compassionate and gentle way they treated the "landed" Honokowai honu.



...especially Denise...

This just in

As we were putting the finishing touches on this week's update, we received the following from a friend of the turtles. We often get similar email, but this one is kinda cute and it seemed to put a nice finishing touch on a wonderful week, so we thought we'd share it with you.

Hi!

My name is [K. R.] I love sea turtles! I think it is very sad that sea turtles have to suffer for our pollution!! If I were older than 11, I would love to help and make sure any animal wasn't hurt. Well got to go!! Bye!!!

HAWAIIAN REEF FISH



Moorish Idol (Kihi Kihi)

Teardrop Butterfly (Kika Kapulauhau)

Fourspot Butterfly (Lau Hau)

Longnose Butterfly (Lau Wiliwili-Nukunuku-Oio)

Fantail Filefish (O'ifi Uwi' Uwi)

Threadfin Butterfly (Lau Hau)

Lemon (Milletseed) Butterfly (Lau Wiliwili)

Saddle Wrasse (Hinalea Lauwili)

Blue Cravalle (Ulua)

Raccoon Butterfly (Kikakapu Kapuhili)

Potter's Angelfish

Ornate Wrasse (Pa'awela)

Rainbow Cleaner Wrasse (Hinalea)

Spiny Puffer (Capu Kawa)

Lionfish (Nohu)

Yellow-tail Wrasse (Coris) (Lolo)

Sargent Major (Mamo)

Rectangular Triggerfish (Humu Humu Nuku Apua'a) State Fish of Hawaii

Ornate Butterfly (Kikakapu)

Raccoon Butterfly (Kikakapu Kapuhili)

Yellow-tail Wrasse (Coris) (Lolo)

Unicornfish (Kala)

Achilles Tang (Paku Iku)

Freckled Hawkfish (Piji Koa)

Needle Fish (A'ha)

Blue Parrot Fish (Uhu)-Male

Finger Coral

Zebra Moray Eel

Trumpet Fish (Numu)

Cauliflower Coral

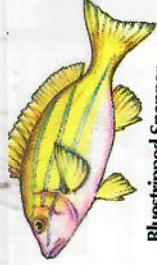
Pebble Collector Urchin



Bluestripe Butterflyfish (Lau Haa)



Pinktail Triggerfish



Bluestripped Snapper (Taape)



White-spotted Damselfish (Alo'ilo'i)



Convict Tang (Manini)



Juvenile Yellow-tail Wrasse (Lolo)



White-spotted Puffer



Red parrot Fish (Uhu)-Female



Bird Wrasse (Hinalea I Iwi)



Rainbow Butterflyfish (Lau Haa)



Hogfish ('A 'Awa)



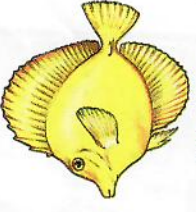
Bluespotted Grouper



Blue Boxfish (Moa)



Striped Squirrelfish (Ala Ihi)



Yellow Tang (Lau 'Ipala)



Whitespot Goatfish (kumu)



Orange-spined Tang



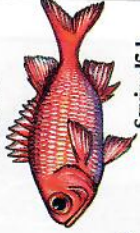
Pennant Fish (Banner Fish) (Kihī Kihī)



Yellowstriped Goatfish (Weke)

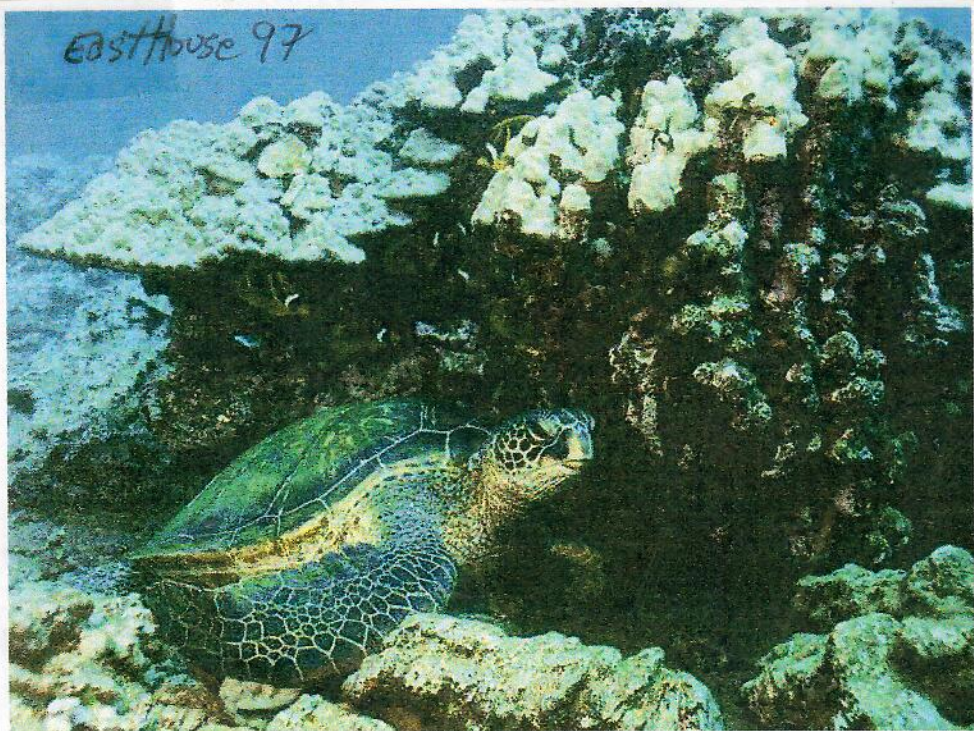


Squirrelfish (Merpachi)



Yellow Tang (Lau 'Ipala)

178



179

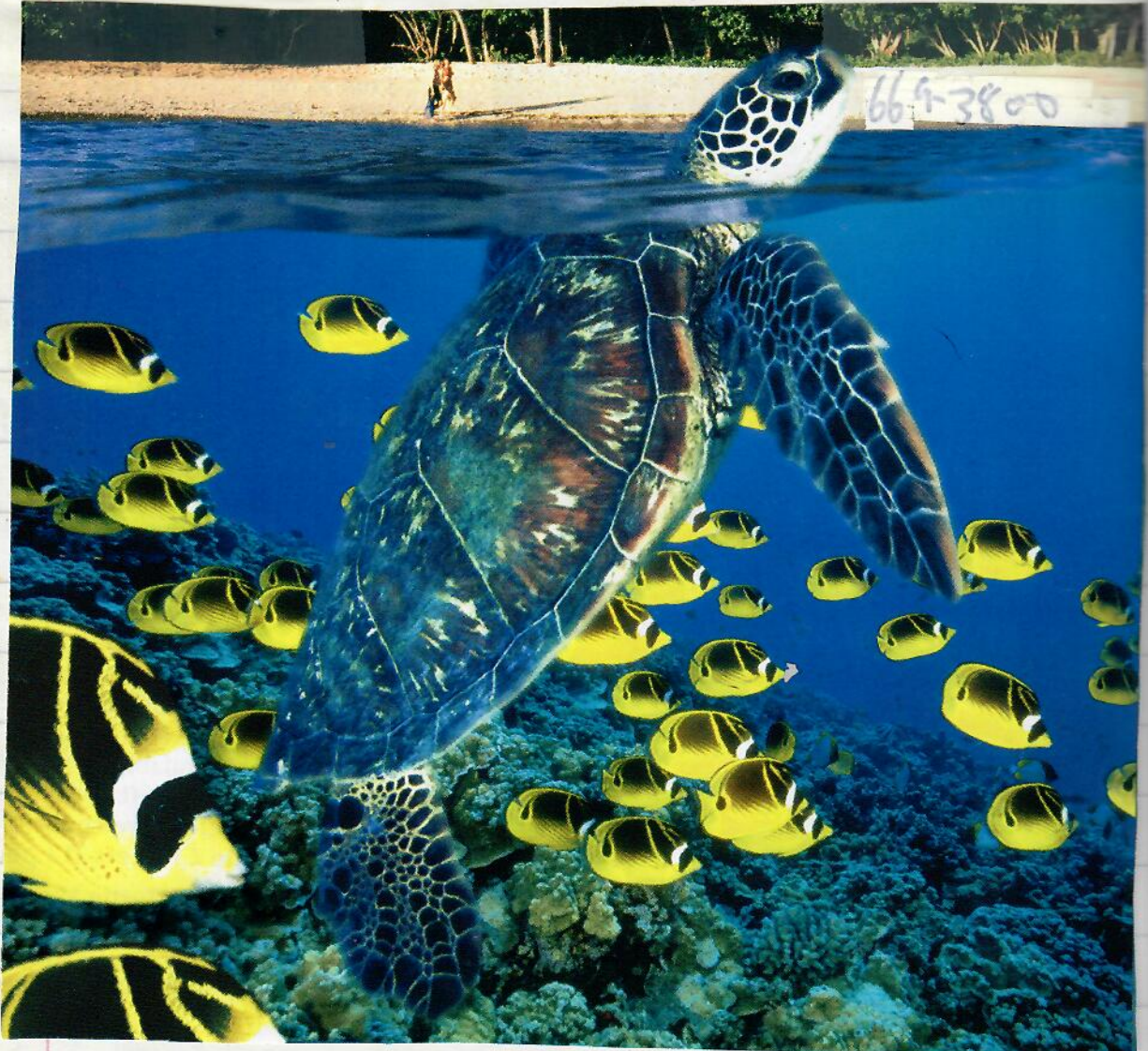
Scratching post 92

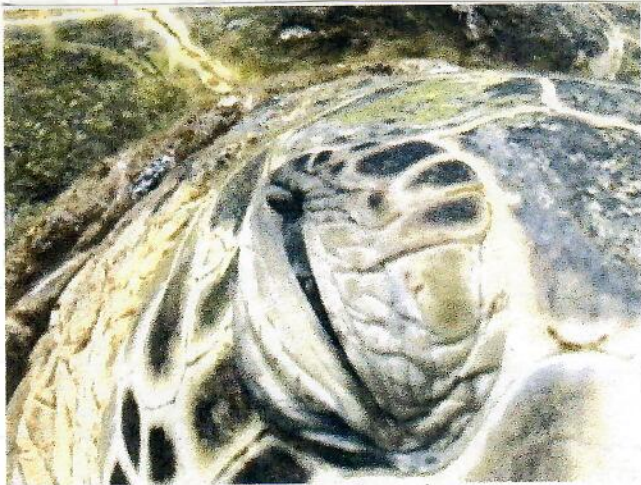


Scratching post 97



180





99_35rteyeclose.jpg



Uwapo1997.jpg



Uwapo1999.jpg



uwapo99lteye.jpg

182

See Pol 189

LOCATION, SIZE, AND NUMBER OF TUMORS

	#1	#2	#3	#4	Total	Remarks
RT. EYE		1				1#2 posterior necrotic
LT. EYE	3					2#1 anterior, 1#1 red not obvious
MOUTH		2				1#2 LSH, 1# RSH
NECK	1	3				
RFF				1		dorsal, multilobed
LFF		1				
RHF						
LHF						
CLOACA/TAIL						
SEAMS/SCUTES						
INTERNAL						
Total	4	7		1	(12)	

OTHER INFORMATION:

Polzbarney 3/9/00
 407751φ D6D
 A1φ 37A3A1E

Approximate Tumor Size Categories:

#1 = detectable patch to 1cm diameter.

#3 = >4cm to 10cm.

#2 = >1cm to 4cm.

#4 = >10cm.

Overall TUMOR SCORE:

3

183

LOCATION, SIZE, AND NUMBER OF TUMORS

	#1	#2	#3	#4	Total	Remarks
RT. EYE						
LT. EYE						
MOUTH						
NECK						
RFF						
LFF						
RHF						
LHF						
CLOACA/TAIL						
SEAMS/SCUTES						
INTERNAL						
Total						

OTHER INFORMATION:

Approximate Tumor Size Categories:

#1 = detectable patch to 1cm diameter.
#3 = >4cm to 10cm.

#2 = >1cm to 4cm.
#4 = >10cm.

Overall

TUMOR SCORE:

see page 187

LOCATION, SIZE, AND NUMBER OF TUMORS

	#1	#2	#3	#4	Total	Remarks
RT. EYE	1	1				#2 posterior #1 large anterior
LT. EYE	1	1				#2 poster #1 anterior (Large)
MOUTH	1 3					#2 on glottis #1 LSH, #2 RSH (small)
NECK	2	1				
RFF	1		1			#3 right shoulder = 9.5 x 5.5cm #1 2cm anterior of #3
LFF	1					#1 like site of former biopsy skin barn surrounded but not on
RHF						
LHF						
CLOACA/TAIL						
SEAMS/SCUTES						
INTERNAL						
Total	7	6	1		(14)	

OTHER INFORMATION:

Honokowai, MAUI new

1-21-99
POLTZ banner

41037A3A1E



LHF

#LSH = 1#1, 1#2

Approximate Tumor Size Categories:

- #1 = detectable patch to 1cm diameter.
- #2 = >1cm to 4cm.
- #3 = >4cm to 10cm.
- #4 = >10cm.

Overall TUMOR SCORE:

2

186

SEA TURTLE TAGGING FORM

CAPTURE DATE, LOCATION AND METHOD:

1-20-99 HONOKOWAI 1015 AM Hand

1145 am Release → 2 PM seen sleeping in same hole as captured.

PERSON RECORDING DATA: DME

Scuba AT PB Ledge

OLD TAGS:

TUMOR SCORE

2

NEW TAGS: ~~RFL~~ 4077393660

LFL

OTHER NEW TAGS:

LHR 40773D3042

STRAIGHT CARAPACE-LENGTH: NT WIDTH: NT

NOTCH LENGTH: NT DB: L.O. VB: L.O.

CURVED CARAPACE LENGTH: 53.5 WIDTH: 46.0

HEAD WIDTH:

SEX: MALE, FEMALE OR UNDETERMINED U

PPS: YES OR NO OR NE

TAIL LENGTH: T 9.5 C 6.5

RIGHT FRONT FLIPPER WIDTH:

SAMPLES COLLECTED:

PLASTRON LENGTH:

7cc Blood taken

WEIGHT: 31 #

digital of L anterior shoulder
pictue 1+2 #3 w/ marks light
index finger pointing at "new" type

DESCRIPTIVE REMARKS:

1/2 barnicle is alcohol for DNA

photos taken -

skin barnicles taken "new" + "old" via
new from L shoulder, old from LR shoulder + #3

1 #3 RHF

1 #1, 1 #2 legs

#2 girths 1 #1 L JH 1 #1 R JH near shore

moderate emaciation

leech eggs

Healed indentation 5-7 marginal left.

1.0 ml (Q, OX)

motor tool 60 on B lateral left tr
white PAINT

Diver AD 65 830-10102m 1-20-99

CAPTURE DATE, LOCATION AND METHOD:

Hand SCUBA

1-21-99 HONOLULU (PB ledge) - "Poltz barniey"

PERSON RECORDING DATA:

Dms

OLD TAGS:

4077510060 - LFF

NEW TAGS: RFL

LFL

TUMOR SCORE

2

OTHER NEW TAGS:

Need LFF



41037A3A1E

STRAIGHT CARAPACE-LENGTH:

NT

WIDTH:

NT

NOTCH LENGTH:

NT

DB:

L.O.

VB:

L.O.

CURVED CARAPACE LENGTH:

66.0

WIDTH:

59.0

HEAD WIDTH:

SEX: MALE, FEMALE OR UNDETERMINED

U

PPS: YES OR NO OR NE

TAIL LENGTH:

T

C

RIGHT FRONT FLIPPER WIDTH:

SAMPLES COLLECTED:

PLASTRON LENGTH:

skin barnicles taken not separated. 1 sample will be taken from ^{anterior} LFF tumor (#3).

WEIGHT:

70.0 #

2 vials in alcohol labeled A
2 vials in formalin labeled F (posterior)

DESCRIPTIVE REMARKS:

mototool "PB" - 3 lateral L+R, yellow paint

4cm, 3.8cm, 4.2cm = 3 dorsal barnicles

3.6mL LQ (OX) - (gives on that dosage)

picture taken of #1 under #3 tumor on Right shoulder.

Pictures taken of dorsal R Head, Uhead, straight on, ventral PC in RJH tumor. Shoulder tumor, RJH tumor...

5 laterals on Right, 4 laterals on left, 6 centrals

188

See page 90

SEA TURTLE TAGGING FORM

CAPTURE DATE, LOCATION AND METHOD:

3/9/2000

DMP
GIB

Honokowai, Maui

head under coral head
near Polzbury ledge
HAND/SCUBA

PERSON RECORDING DATA:

DMP

OLD TAGS:

Empty grid for old tags with a diagonal line drawn through it.

TUMOR SCORE

0

NEW TAG



RH

OTHER NEW TAGS:

RA



STRAIGHT CARAPACE-LENGTH:

49.5

WIDTH:

38.3

NOTCH LENGTH:

49.2

DB:

L.O.

VB:

L.O.

CURVED CARAPACE LENGTH:

54.0

WIDTH:

45.5

HEAD WIDTH:

8.0

SEX:

MALE, FEMALE OR UNDETERMINED

—

PPS: YES OR NO OR NE

4

TAIL LENGTH: T

10.5

C

7.0

RIGHT FRONT FLIPPER WIDTH:

Empty box

SAMPLES COLLECTED:

PLASTRON LENGTH:

39.2

All collected
6925-1-5/11

3 cups (1-1 each each)
keech eggs 1 - (1/10)

WEIGHT:

37.0

Shoulder skin tissue

DESCRIPTIVE REMARKS:

6 cc blood

+ "Blood Spot Collection Card"
dorsal/ventral photo on DMP's LAP

N = 200 cups
1200 vials
from on sample labels
6925-1-1 et

MARCH 9, 00
DMP GHB

SEA TURTLE TAGGING FORM

See file 189
See page 90

CAPTURE DATE, LOCATION AND METHOD:

3-9-00 130PM POLZ BARNEY Left eye
Hand ~~scuba~~
- 130PM

PERSON RECORDING DATA: DMP/CHB

OLD TAGS: LH 41037A3AIE NEW TAGS: RFL

TUMOR SCORE
3
LFF 467751060

OTHER NEW TAGS: 410PM Release

STRAIGHT CARAPACE-LENGTH: 62.9 WIDTH: 50.4

NOTCH LENGTH: 62.5 DB: L.O. VB: L.O.

CURVED CARAPACE LENGTH: 67.5 WIDTH: 61.0

HEAD WIDTH: 9.8 SEX: MALE, FEMALE OR UNDETERMINED U
PPS: YES OR NO OR NE N

TAIL LENGTH: T 14.0 C 10.0

RIGHT FRONT FLIPPER WIDTH: 10.6

PLASTRON LENGTH: 58.6

WEIGHT: 72 #

DESCRIPTIVE REMARKS:

cryo 20 can
12 vials frozen
1- leech
10- skin swab
SAMPLER TAKEN
#0060-1, 2 etc.

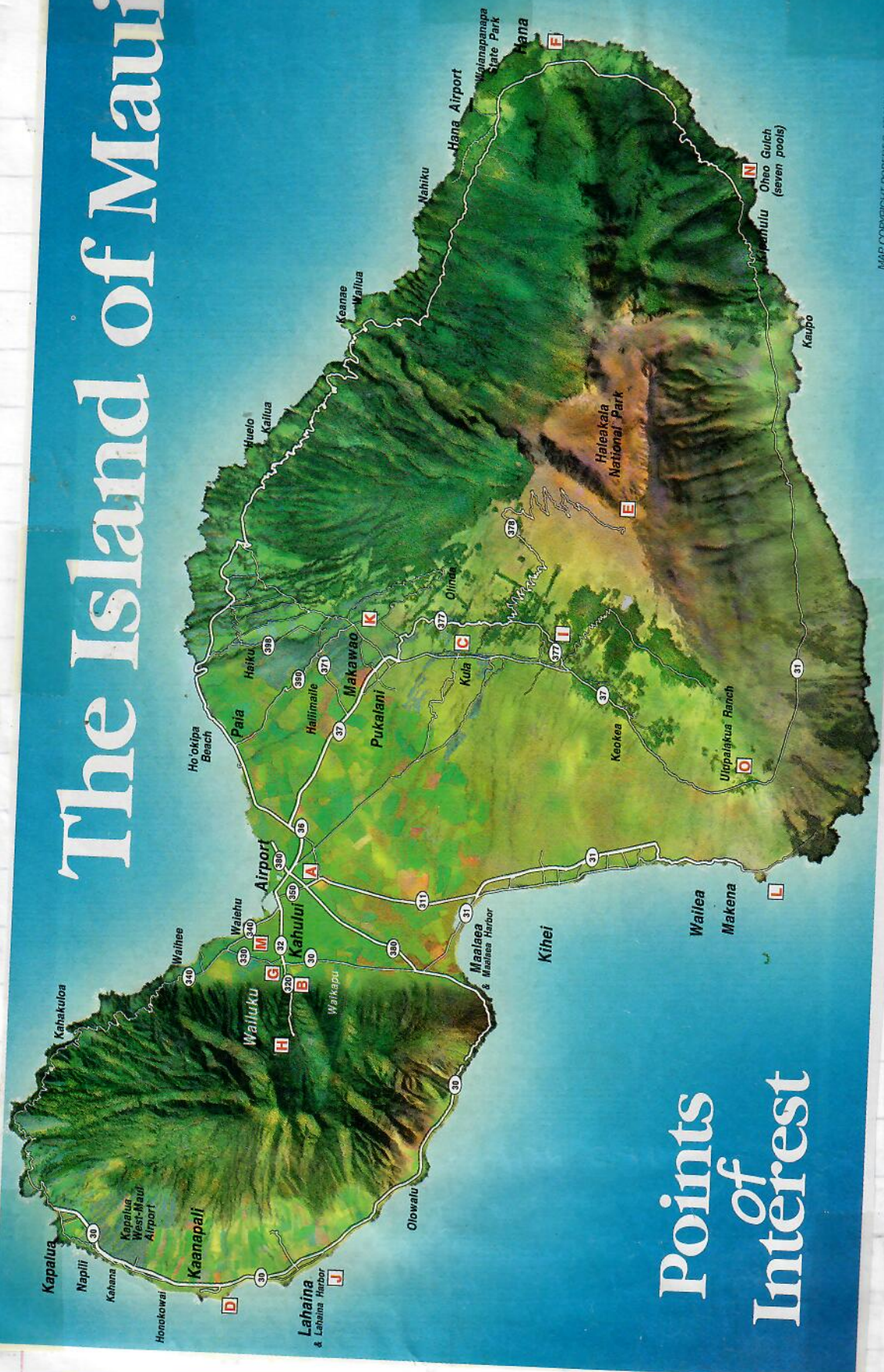
Photos
Algae mouth sample
Photo neck Photo digital barnicles, 1 RH, 2 LH.
Photo LFF barnacles, 2 profile photos
of cryofreezing.
bcc Blood taken

1#2 LTH, 1#2 RTH, possible small pump on glottis
Left eye BALL likely NO VISION
possibly collapsed - unable to find eye ball.
cryofreeze 4 tumors - 1#2 LFF, 3#1 neck (3 small + 1 large)

Released 410PM - Vigorous, strong.

190

The Island of Maui



Points of Interest

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Turtle Watch

Two Hour Trips



From
\$19

Island Princess

Conveniently Located in Lahaina Harbor

Comfortable Catamaran

Room for 49 passengers; we take 24

Sailing

Snorkeling

Equipment

Soft Drinks

TURTLES

2 hour trips

3 daily departures 667-6165

Prices subject to change and 4% GET and 2% Harbor Fee



and Turtles

Turtles

191
"MAUI Activities & Attractions"
www.mau.org 10-99

Green sea turtles are reptiles whose ancestors evolved on land and returned to the sea to live about 150 million years ago. They are one of the few species so ancient that they watched the dinosaurs evolve and become extinct.

As reptiles, green sea turtles, like all other species of sea turtles, possess the following traits:

- They are cold-blooded, meaning that they get their body heat from the environment rather than making their own.
- They breathe air.
- Their skin has scales.
- Their name is derived from the fact that their inside body fat is green.
- Adult green sea turtles can weigh up to 500 pounds.
- Green sea turtles live an average of 25 years.
- Where juvenile turtles go to mature is unknown at this date.



www.mau.org

courtesy: www.islandmagus.com

4 Tumors Freeze-trawled 3x
2 large #2's (1 week, 1 LFF)
2 small #2's (week)

192



The awesome Hawaiian Sea Turtles are one of the many sights you'll see at our second site Kalaeloa a.k.a. "Turtle Town"*



MOLOKINI SNORKEL and Turtle Town
 Includes Continental Breakfast, Deli Lunch & Drinks
 (live specimen show)

Ocean Activities Center 879-4485

[Faint handwritten notes in pencil, including the number 77 and some illegible text.]

[Faint handwritten text, possibly a name or date.]

193

193

MORE ABOUT...

NONI

Scientific name: *Morinda citrifolia*.

Market value: Fruit, though every other part of the noni tree has been used for healing—root, bark, leaves, flowers and seeds.

Medicinal claims: Strengthens the immune system, energizes the body, laxative.

Products: Fruit: capsules, fruit leather, juice, tincture; leaf: tea, tincture; additives for soaps.

Quirk: Smells like blue cheese.



'AWA

Other names: Kava, *Piper methysticum* (intoxicating pepper).

Market value: Root.

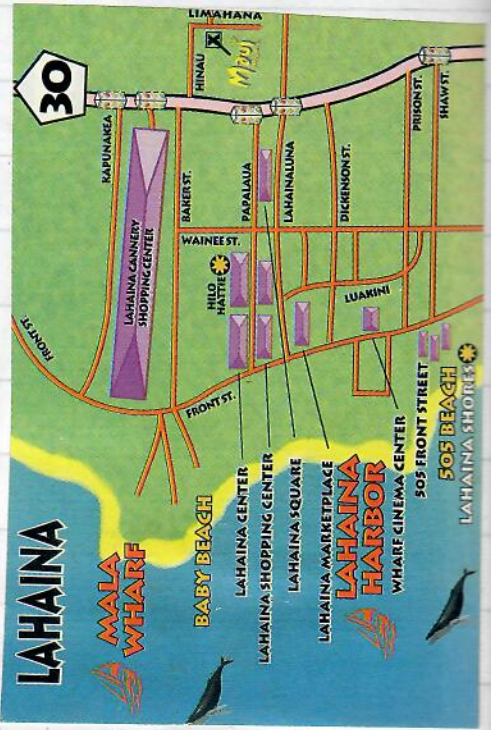
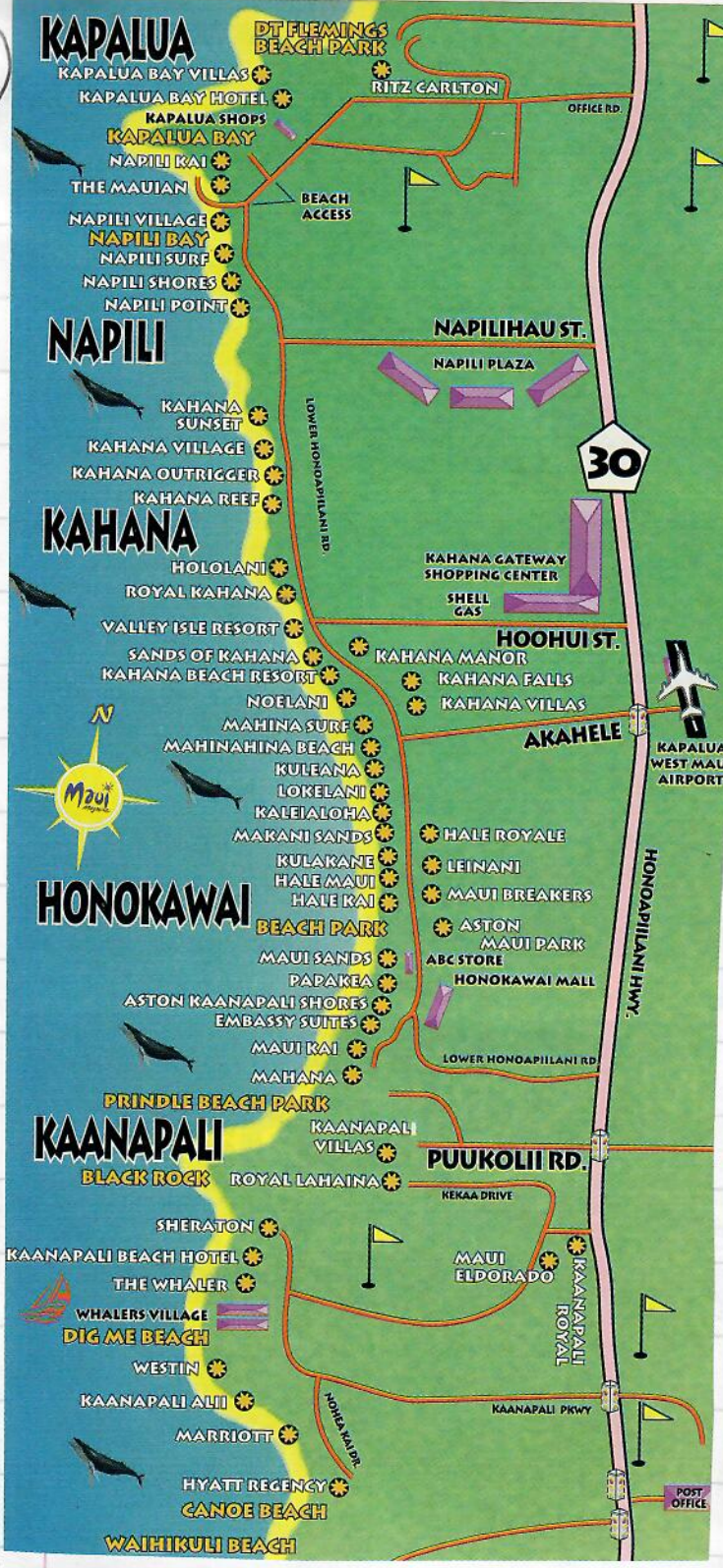
Medicinal claims: Diuretic, produces calming effect.

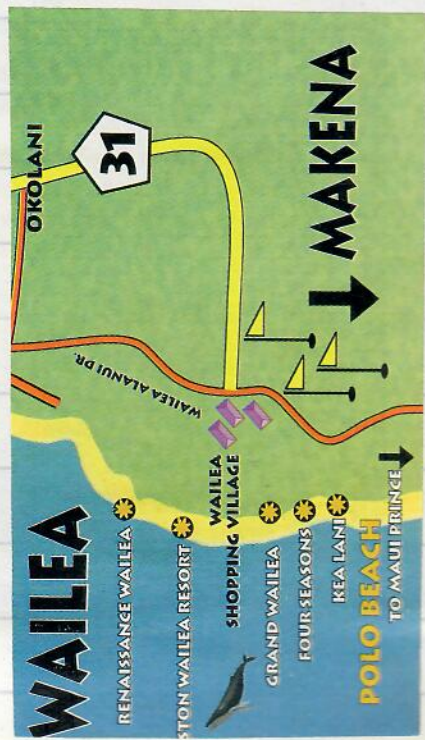
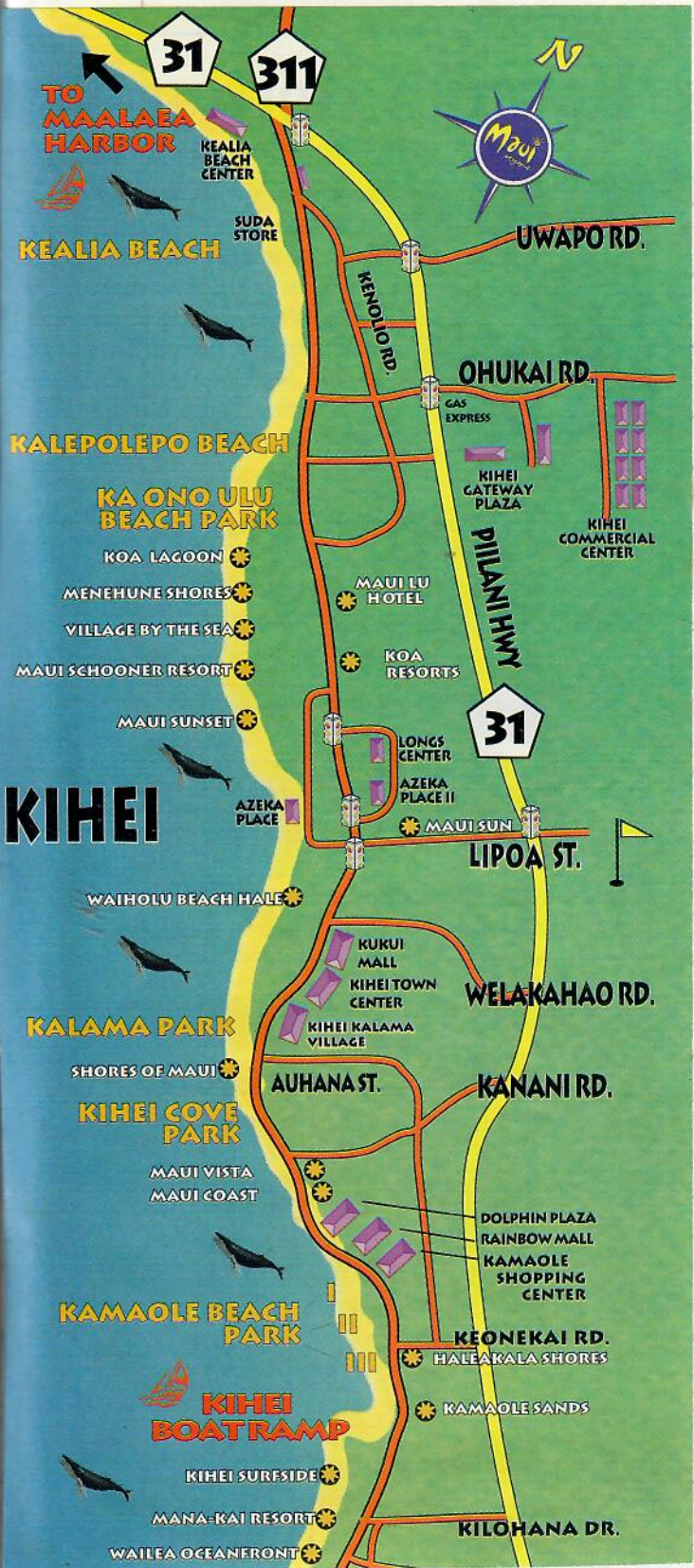
Products: Root: powder, tincture, drink; root/stems/leaves: tea.

Quirk: Tongue and gums become numb when ingesting 'awa.

—D.F.

194







Map 2
Kapalua-Maalaea
Kaanapali-Lahaina



LAHAINA CANNERY MALL
 361-5304 — MALL HOURS:
 9:30 A.M.-9 P.M.



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POCKET-SIZE COMPANION
IN ENGLISH & JAPANESE.
LAHAINA HISTORICAL GUIDE

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KAHANA

NAPILI

KAPALUA

1. NAUJAN/NAPILI VILLAGE
2. HALE NAPILI
3. NAPILI SUNSET
4. THE NAPILI BAY/NAPILI SURF
5. ONE NAPILI WAY
6. NAPILI POINT
- 6-A. HONOKEANA COVE
7. COCONUT INN
8. NAPILI SANDS
9. KAHANA SUNSET
10. ALAELOA

11. KAHANA REEF
12. KAHANA OUTRIGGER
13. HOLOLANI
14. ROYAL KAHANA
15. BOSS FROG'S DIVE SHOP
16. KAHANA VILLA
17. VALLEY ISLE RESORT
18. SANDS OF KAHANA
19. KAHANA BEACH
20. KAPALANI ESTATES
21. MAHINA SURF
22. NOELANI
23. MAHINAHINA
24. POLYNESIAN SHORES
25. HOYOCHI NIKKO
26. HALE MAHINA
27. KULEANA
28. LOKELANI

29. HONOKAI
30. HONO KOA
31. HALE ONO LOA BEACH PARK
32. KALEIALOHA
33. NOHONANI
34. KULAKANE
35. MAKANI SANDS
36. HALE MAUI
37. PIKAKE
38. MAUI SANDS
39. PAKI MAUI
40. HALE KAI
41. HONOKOWAI VILLA
42. KAAPALANI SHORES
43. EMBASSY SUITES
44. OCEAN ACTIVITY CENTER
45. MAUI KAI
46. MAHANA

47. HONOKOWAI
48. HONOKOWAI PT.
49. MELROSE MALL
50. MAUI KAAPALANI VILLAS
51. ROYAL LAHAINA RESORT LU'AU
52. MAUI ELDORADO
53. SHERATON MAUI

BUCKLE UP!
IT'S THE LAW.

MAUI DRIVE GUIDE
Honolulu Publishing Company, Ltd. © 1998

■ = HOTELS & CONDOMINIUMS
DIRECTORY ON PAGE 13

SEE KAAPALANI
DETAIL MAP

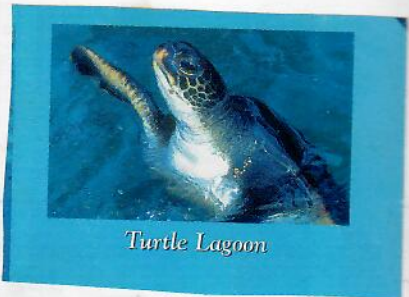
198

SAVE \$40⁰⁰
(PER COUPLE)

BOOK & RECEIVE A FREE SUNSET SAIL OR WHALE WATCH

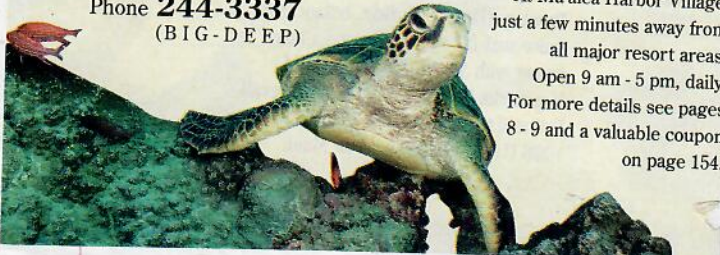
69⁰⁰

DIVE MOLOKINI 69⁰⁰
DIVE LANAI 99⁰⁰

Dive Maui's pristine marine preserve at Molokini crater. Loaded with tropical fish and sometime home to the Hawaiian monk seal, white tip reef shark and the occasional whale shark. Cont. breakfast & lunch inc.


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 (BIG-DEEP)



At Ma'alea Harbor Village, just a few minutes away from all major resort areas. Open 9 am - 5 pm, daily. For more details see pages 8 - 9 and a valuable coupon on page 154.



7-5565
 in Lahaina



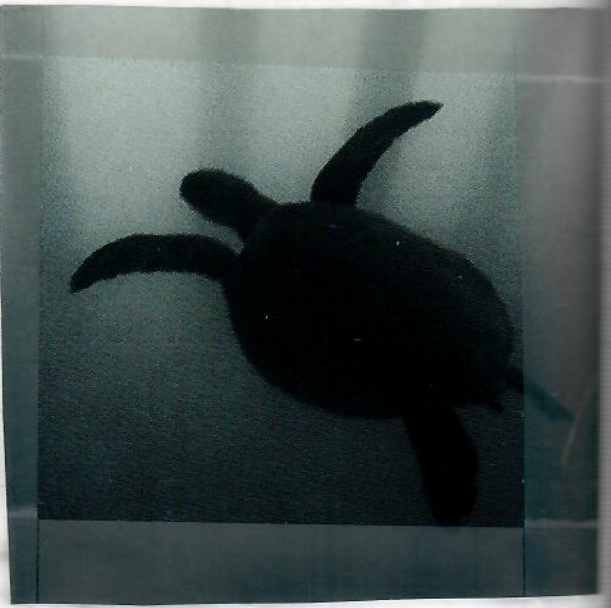
- Kanaio Sea Cave Adventures
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- 6 and 24 Passenger Private Charters Available

(Destinations weather permitting)

www.BlueWaterRafting.com



Nothomanji skippy.jpg 2- -07



(199)

Date: Wed, 10 Jun 1998 09:39:36 -1000 (HST)
From: Shawn Murakawa <smurakaw@honolab.nmfs.hawaii.edu>
To: "George H. Balazs" <gbalazs@honolab.nmfs.hawaii.edu>
Subject: Re: Dr. Landsberg

- 1) Collect around 30g algae (not too much salt water) in plastic bag
- 2) Pour water from bag into graduated cylinder
- 3) Add water to make 100ml
- 4) Take algae out and weigh 30g of algae
- 5) Pour 100ml water + 30g algae back into bag
- 6) Seal then shake bag 30 times
- 7) Decant 50ml of water into larger labeled plastic bottle then add 10ml of 10% buffered formalin, swirl
- 8) When ready, swirl bottle 15 times
- 9) Pipet 10 ml (couple ml from top of vial) water/formalin mixture into scintillation vials
- 10) Put parafilm on top of scintillation vials before sealing

Rinse measuring containers between each sample with salt water and be sure to change pipets with each sample. If you have any questions please feel free to email her at home.



No Hawaii skippy3.jpg

2-88



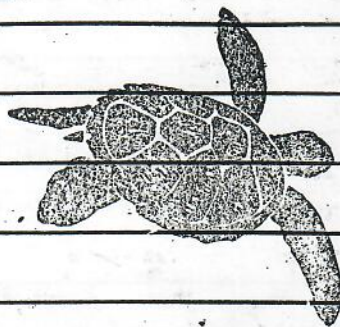
No Hawaii skippy4.jpg

2-88

200

Straight carapace length

Straight carapace length (cm)	mL Liguamycin
35-39.9	0.5
40-44.9	1.0
45-49.9	1.7
50-54.9	2.3
55-59.9	3.0
60-64.9	3.6
65-69.9	4.3
70-74.9	4.9
75-79.9	5.6



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

Curved carapace length

Curved carapace length (cm)	mL Liguamycin
40-44.9	0.7
45-49.9	1.3
50-54.9	1.9
55-59.9	2.5
60-64.9	3.1
65-69.9	3.7
70-74.9	4.3
75-79.9	4.9
80-84.9	5.5

Dear Mr. Heacox,

2-φφ

You don't know me but we have something in common. We both watch over the same community of sea turtles swimming around Honokowai, West Maui. You watch them in the "winter" from Pikake. We watch them underwater while staying at Nohonani.

George Balazs has told us about you --how you carefully watched/counted turtles each day of your vacation. I guess that's another thing we have in common. We count them too. We stay at Nohonani July and August every year. By the end of our vacation we count well over a hundred turtles.

But there is a group of resights we see summer after summer. You'll have likely seen a monstrous shell break surface. That's Zeus. He's lived at "Reef2" (directly opposite the Pikake) since 1992. Another large shell will surface there too. His name is Kaula and we've known him since 1989. A whole decade.

If you see two tiny shells from your lanai surfacing they are Makana and Akebono. Honokowai has 'em BIG and small!

g = 1,000 mg
= .001 g
= .01 g
= .1 g
= 10 g
= 100 g
= 1,000 g

We tell the story of your turtles (the very ones you've watched so faithfully all these years) on a webpage called Turtle Trax. I hope one day you can visit it.

They're at <http://www.turtles.org>

Turtle Trax also features the work/contributions of George Balazs, the honu's pioneer researcher. George is every bit as charismatic as his subjects and almost as interesting!

The turtle in the poster is Aikane ("friendly"). It's the best photo I've ever taken. I took it in 1993 and even though I now have better camera and flash, I've never had a better turtle!

nother

But I think you'll enjoy the videotape the most. Those are all honu you've been watching --Honokowai honu. Much of the footage was shot at Reef2 --opposite Pikake. The little honu in the video? They are certainly the ones you see feeding on the seawall each morning and evening.

deas

I've also given you "raw" tape at the end. Just bits and pieces of last summer --just so you can see what they do underwater. George has dived with your honu too and enjoys them a great deal.

He's told me how much he's appreciated your important sighting reports over the years. We're just writing to let you know that we appreciate them as well.

Warmest aloha
Ursula Keuper-Bennett
Peter A. Bennett

I have not / you are not
I have to
I have seen / I saw
I have done / I did

Affect or Effect?

To "affect" is to influence. To "effect" is to cause.

● Punctuation

A **comma** is used to indicate a pause within a sentence, and to group words that belong together.

A **colon** is used prior to a list or long quotation.

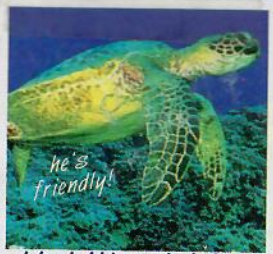
A **semicolon** indicates a greater pause than that which is indicated by a comma; and is often used between groups of words separated by commas.

An **apostrophe** is used to indicate the possessive case of nouns as in *Jenny's pen*; to form a contraction as in *I've* or *they've*; and to form the plural of a letter or number as in the three *R's*, *7's* and *11's*.

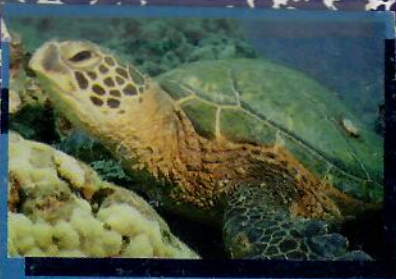
An **hyphen** divides words in syllables such as compound words like *twenty-five*.

A **quotation mark** indicates the exact words someone spoke. Use with titles of songs, short stories, chapter titles, short plays, television programs, magazine articles and poems.

Underlining is used with the titles of books, movies, newspapers, magazines, long plays and poems.



I took this cool photo at Turtle Town - our second snorkel stop.



The awesome Hawaiian Sea Turtles are one of the many sights you'll see at our second site Kalaeloa a.k.a. "Turtle Town" *



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