Kitholo Puako Honaunau

97 97

24 MAY 97 9 JUNE 97
GHB Dr Russell Collect Spec
MARC For [illegible]
Forests

Mead

COMPOSITION

BALAZS

GEORGE BALAZS
808-395-6409
MARC'S CELLULAR = 987-6903

100 sheets • 200 pages
9¾ x 7½ in/24.7 x 19.0 cm
wide ruled • 09918

1996 HONAUNAU

Kitholo 25; Puako 19; Honaunau 3;

Kitholo 26; Puako 20;

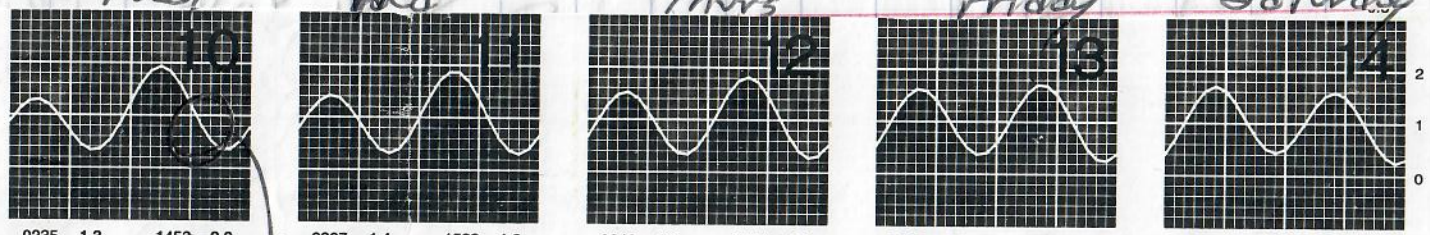
1996 1996

1997

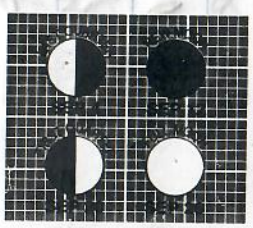
2 of 2

SEPTEMBER 96

Tues 6PM	Wed 6AM	Thurs	Friday	Saturday
10	11	12	13	14
0235 1.3	0307 1.4	0340 1.5	0415 1.6	0451 1.7
0815 0.3	0854 0.3	0932 0.3	1012 0.4	1055 0.4
1453 2.0	1522 1.9	1551 1.9	1620 1.8	1651 1.6
2124 0.4	2147 0.3	2211 0.3	2236 0.3	2304 0.2



9:24PM



net
2 6PM - 730PM
inside along
Halalu gillnet net
7 captures
stopped

Light wt. monofilament net
left channel side. Was there
first. Multiple worn and
Younger fable man.
Been days not there
for several years.
Said that tuna
left up bottom
and go under
to get inboard.
Trolle waiting
out side net. Frank
bell found are tangle
in net - needed air.

KIHOLO #25

10 Sept. 96 TUESday

Depart alone FL 96 ALOHA 4 PM for Kona. AVIS $29.95 day

Objective: ① The recapture and down loa TWO TDR's deployed on 2-3 July 96

② Collect blood samples for plasma banking

NONE DONE ③ TRACE HIND FLIPPERS for SCL & CCL

29.2 30.1 > MAUNA LAI OR SLP

32.9 35.2

NONE found, contact DANNY

53.4 57.6

54.2 57.7

61.3 65.7

Netted ~ 6 pm - 730 pm. Net had been set by Marc Rice upon my arrival. Only 7 catches because turtles are staying just out side gill net. One TDR turtle heard in lagoon upon Marc's arrival at 5 pm, and we heard trying to come in channel while tending net. Worked 7 turtles

9/10/96 Saw small spotted Eagle Ray.

up on beach and released. went on snorkel at ~930pm. Gillnet now got, but table and stuff there still. Under BW to listen with hydrophone. Heard both of them right away. Both caught, but in water column. Used hydrophone to zero in on them and swim area. Both Caught. Also hawksbill H2SS by me. Caught a few greens on return swim. All kept in BW and aluminum boat at composite. 7-10m depth 7 8295.124.
TDR Turtles downloaded. No deep depth seen.
Must wait until later for dive durations.
Don't forget turtles going into shallow ponds.
☆ Wed - Glass cloth "fill" to build up areas.
Turtles trying to "RUB-off" units?

9/11/96 Wed. Depart Kona FL. 281 4 PM

11-12 Sept Wed. Thurs Marc had second group of students to Kona

1220 pm Release Kitsco #25

10-11 Sept 96

LIST OF PARTICIPANTS Kitsco #25

Maren Vitousek

Dawn S. Gilday

Aimee Zuinakis

mikiala Ramler

Angela meyers

Heather Craig

Lilinoe Melrose

Clay Barnett

audrey Cagusa

Elizabeth Horton

Kotaro Kawshima

Stephen Dilley

28 minute download
MK5

Rick DAVIS

Frank Belf

MARC Rice

Sandy Watson

George Watson

HAWAII PREPARATORY ACADEMY

P.O. BOX 428 • KAMUELA, HAWAII 96743-0428
(808) 885-7321

FAX TRANSMITTAL

DATE: 9/14/96 TIME: 1239hrs.

FROM: Marc R. Rice DEPT:
FAX Number (808) 885-8203

TO: George Balazs

COMPANY/SCHOOL:

CITY, STATE:

FAX NUMBER: 808-943-1290

NUMBER OF PAGES (INCLUDING COVER SHEET) TRANSMITTED:

MESSAGE:

George –
Here is the tag data from Wed. night. Hope it is clear.
Thanks,
Marc

Please advise if there are any problems with transmission: Tel. No. (808) 885-7321. Ask for Administration Office.

Night Snorkel - Kiholo 9/11/96

Kiholo - 9/11/96 (Wednesday) - All animal snorkel captured in lagoon except #1
Begin snorkel dive at 2000hrs
End " " " 2200 hrs

#	Tagged	New Tags	Old tags	SCL (CM)	CCL(CM)	Comments
1	NO	RFL V664 LFL V665		65.6	70	Caught in bay at night large animal with no tags Are there more of them out there?
2	NO	RFL V666 LFL V667		45.8	64	Something is wrong with the two measurements, but I don't know which is wrong!
3	YES		RFL Y135	68.5	73	
4	YES		RFL(LOST*) LFL 7785 RH Y303	69.8	74	*RFL healed notch
5	NO	RFL V668 LFL V669		35.1	37.1	Tiny- smalles I can remember catching.
6	YES	HAWKSBILL	H255			Caught twice earlier- found in the lagoon
7	YES		RFL /L 3-4 J607 LFL Y290	51.9	55.2	
8	YES		RFL H269 LFF H268	38.7	41.0	
9	YES		RFL R434 LFL R433	42.6	45.5	
10	YES		RFL V191 LFL V190	49.4	53.0	
11	YES		RFL H292 LFL H291	45.3	48.5	

12	YES		RFL H214 LFL H215	42.7	45.5
13	YES		RFL Y4 LFL Y5	57.9	61.0
14	YES		RFL B241 LFL B240	46.9	50.0
15	YES		RFL N527 LFL N528	55.1	48.0
16	YES		RFL B231 LFL B230	47.3	50.0
17	YES		RFL Y95 LFL Y94	50.8	54.4
18	RECAPTURE from Tuesday (9/10/96) YESTERDAY		LFL Y105		
19	NO	RFL V670 LFL V671		44.0	46.5
20	YES		RFL Y663 LFL K459	63.6	68.0
21	NO	RFL V672 LFL V 673		40.4	43.0

9/11/96 (continued)
Night snorkel Kiholo

Date: Sat, 14 Sep 1996 08:19:36 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Mahalo and Aloha to Marc and Students!

George,

I am happy to hear that the rehearsal was not a waste of time (totally). Power point software is very useful and effective.

We started our snorkel dive around 2030 hrs (after the wind had died down) with two teams of three divers. George, Lori and I were in the boat. George was rowing, Lori (fiance of our admission director) was taking data and I was doing the measuring. When a team would get a turtle, they would bring it to the boat and George and I would measure it (SCL, CCL), read old tags or put new tags on (RFL and LFL only), look it over for any apparent problems and then put it back in the water. Generally, we could keep up with the two teams but there were a couple of times where things backed up. When that happened, we would halt the progress of both teams until we caught up with the processing. There were not obviously "sick" turtles although a couple of the little guys weren't as thick (well fed?) as most but they all appeared to be doing ok. There were no signs of any sort of tumorous tissue on any of the turtles. There were three or four animals with barnacles (Chelonibia testudinaria).

The technique went quite well although I think that I would include another person in the vessel to help handle the animals next time. I would also recommend a head lamp (ours was broken at the time) to do the readings with.

NOTE: I did have some trouble with the new tags in that quite a number of them did not crimp properly- remember the old days. We worked on them until we could get one to close properly. In one instance I put tags on one front flipper and one hind flipper because I felt badly about the other front flipper being abused..... what a softy!

I think that this type of work could be done on an as we catch them basis but, if we want to take the full suite of data and get blood it would have to be done on the shore. A set up on the sand beach of the lagoon would possibly work. We would endeavor to hang several lights above the work area so that it would be easy to see what was happening. We could work up the animals and then release them (with paint marks) right away. We would need to have a small holding area for them just in case there was a backup. This whole process would require a group of students to help you and a group of students to do the capture work. These groups could be traded- each group could fill 5 tubes and then bring them back to work up. The group on the beach could take the tubes and go out to continue the capture work and the group that came in would work with you to work up the turtles. Sounds kind of complicated but something along these lines might work.....

As to the "mystery," perhaps you have hit on something. We still have never caught an adult animals in Kiholo. Are the larger animals outgrowing the area and leaving? Are we constantly getting recruiting into the bay from juveniles which remain in the area for a number of years and then leave? One thing to look at is the size distribution of the animals captured each year. One would assume that, if the animals were all staying in the area, the mean size of the animals would increase over the years. If this is not the case and the mean remains fairly constant over the years, then we would have a static population size that is feed on the small end by recruits and lost at the upper end as the larger animals leave the area. Worth a look? Perhaps a nice project for one of my students....?????

I will try and get the data to you soon.

Thanks so very much for allowing us to do some work on Wednesday night. The students were thoroughly excited about the project and had a wonderful time.

I must say though, that it is very valuable for the students to be able to work with you in a less hurried setting during the daylight so that they can learn more about the process and get the benefit of your conversation and sage remarks! It is indeed a valuable time for many of them.....

==========
Marc R. Rice, Assistant Headmaster
Hawaii Preparatory Academy
P.O. Box 428
Kamuela, Hawaii 96743
mrice@hpa.edu
==========

9/11/96 Night PM Snorkel Kiholo

Sept 11, 96

22	NO	RFL V677 LFL V678		41.4	43.0	
23	NO	RFL V674 LFL V675		50.5	53.5	
24	YES		RFL K402 LFL K401	43.9	46.5	
25	YES		RFL H41 LFL H40	50.8	53.5	
26	YES		RFL H277 LFL H276	47.2	50.5	
27	YES		RFL L 3-4 J629 LFL Y260	53.9	57.3	Healed notch on RFL
28	NO	RFL V679 LFL Y681		43.0	45.0	V680 = BAD TAG
29	YES		RFL Q281 LFL Q282	49.4	52.4	
30	YES		RFL Y668 LFL Z16	46.9	49.3	LFL blue plastic tag

31	YES		RFL J585 LFL J 586	43.5	46.0	3 DB/2 VB second lateral scute left, puncture wound about .75 " diameter - full of lagoon muck
32	NO	LH V802 LFL V683		41.4	44.5	RFL unsuccessful tag 1 DB/2 VB
33	NO	RFL V806 LFL V807		48.7	51.3	

Facsimile Cover Sheet

Recipient	Mr. George Balazs
Organization	National Marine Fisheries Service
Fax Number	808 943 1290,,,,,,,4064

From:

Sender	Marc Rice
Organization	HPA
Phone Number	808 885 8204

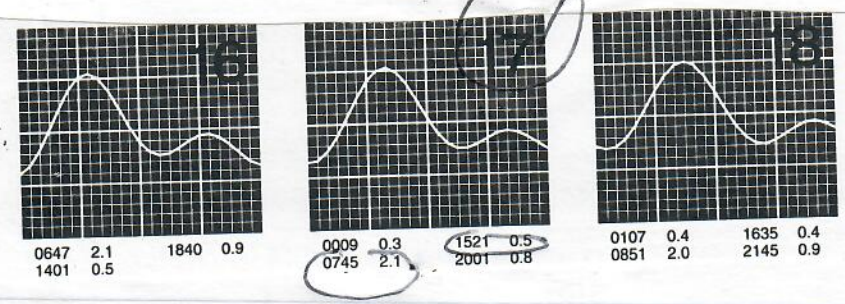
Date	Fri 11 Oct 1996 09:34:33
Pages	3, ~~ex~~ including cover sheet.

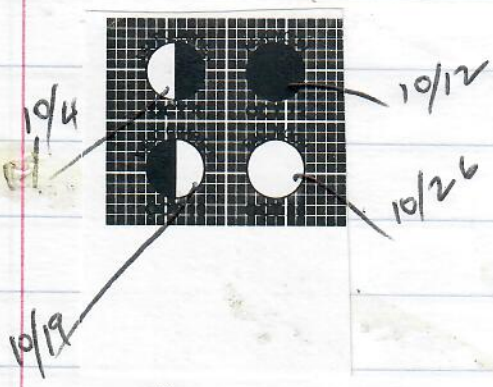
KIHOLO SNORKLE CAPTURE DATA
10/8/96
TIME: 2006 to 2145 hours
Seven students- 6 snorklers, Watson, Rice, + 1 in boat.
Animals worked up as they came aboard (read two front tags, did SCL and CCL)

OLD TAGS	NEW TAGS	SCL	CCL	COMMENTS
LFL Y114 RFL Y113		58.4	61.5	
LFL H51 RFL H52		65.1	70.0	
LFL N720 RFL N719		48.7	53.0	
LFL V190 RFL V191		49.4	53.0	
LFL 7753 RFL 7754		59.7	64.0	
LFL N528 RFL N527		45.1	48.0	
LFL J612	RH ~~B~~808 "Victor"	44.1	47.0	RFL HEALED NOTCH
LFL Y105 RFL Y106		61.7	66.5	FLAKING SKIN ON LFL AND RFL NEAR SHOLDER
LFL V184 RFL V185		48.5	51.5	
LFL H248 RFL H247		47.8	51.0	
LFL V673 RFL V672		40.5	42.5	

LFL K~~417~~ 427 RFL K426		44.3	47.0	
LFL Y111 RFL Y112		57.5	62.0	
	LFL V687 RFL V688	53.9	57.0	
	LFL V689 RFL V690	60.4	64.0	
LFL K452 RFL K453		41.1	43.5	
LFL Q294 RFL Q293		50.4	53.5	
LFL B956 RFL B957		44.9	48.0	
	LFL V692 RFL V691	43.4	46.0	
LFL H58 RFL H59		48.5	51.0	3" FRESH GROVE IN 1ST CENTRAL SCUTE- AXIAL IN ORIENTATION
LFL J604 RFL J603		43.0	45.5	
LFL J621 RFL J620		42.6	45.0	
LFL Q605 RFL Q606		39.8	42.0	
LFL K406 RFL K407		50.6	54.5	
LFL B917 RFL B918		41.1	43.5	

OCT. 96 Thursday





Puako #19
17 Oct 96

Depart Aloha 635am - Thierry Work, Bob Raymer, Allison, GHB

To Puako #24 PBR - 8:30am - high tide. Marc heard and saw one of TDR turtle in shallow for short time, but it turned and left. Not seen or heard again all day. Kanakana anchored offshore

- DeLory need ✓
Stewart
+email WildLife Computers ✓
- Velcro - wet suit material
restraint device
need
call
Also Ikelite "aiviC" for reflector replacement
- Trophy fish Bhupsy
for Kiolo (Symposium) to MTAC
submit

Date: Fri, 18 Oct 1996 09:12:05 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Forwarded mail....

George,

Thanks for the info. I will be sure that everyone understands that the trip is questionable right up to the last minute. We will await your evaluation after Monday's trip.

Thanks for yesterday. I apologize for disorganization. I need to slow down and not try to do so many things as the same time or in close proximity to each other. At least we got a few animals.

I will start to observe PBR #24 on a daily basis and we will put together a team as soon as we feel that we have a reasonably good chance to find them. I will give you the information on the animals as we sight them and you can tell us when and if we can attempt to capture them. Is there any sort of longer term type of notification- capture attemps will be made on Mon, Tues, weds or a particular week as needed???

Rest assured that we will not make a move until you give us the clearance. As a consideration for the future in order to get back to the other sites for our primary job, we could do something similar at Kiholo if we are unable to schedule a regular trip with you. The downloading procedure has been accomplished successfully on several occasions, and I think we have the technique down sufficiently that we could handle it if it became necessary.

I hope that all went well in Kaneohe.

Best,
Marc

Date: Mon, 14 Oct 1996 07:26:13 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Kbay work

George,

Got your phone message yesterday and will do my best to construct a restraining board for the turtle.

I called Marlin Gregor at Sonotronics about the continuously beeping tag (#465) and he has not heard of the problem before. He says it is possible for the tag to get reset and then it should beep for 15_15_15. He also said that the tag can be reset and will send the information on how to do it. All we need is an RCA System Link 4 TV remote to do the job.... He says that the contiuous beeping will not "significantly" lessen the battery life.

I will check into the possibility of bringing some students over for a day or two at Kaneohe. I really appreciate the invitation and would love to help.
More later.

Marc

==========
Marc R. Rice, Assistant Headmaster
Hawaii Preparatory Academy
P.O. Box 428
Kamuela, Hawaii 96743
mrice@hpa.edu
==========
==

Reduce & Tape

Date: Sat, 2 Nov 1996 07:31:12 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Lance Jeffery

George,

Unfortunately, I am certain the memory is full and they are not storing any new data so we won't be able to see that information. We checked them again at 1600 hours and they were not in. A lady at the house on the right of tPBR 24 said that her guest had seen both of them earlier in the week. Both GW and I are wondering if the banging and hammering at the construction side (new sea wall) has any impact on them. There were only three animals in the whole area yesterday- the tide was up and eveything seemed normal other than the construction. Oh well, who can tell what they are up to. Unfortunately, it is too late to get an extension on the permit or we would try several times on Sunday to get them.

I forgot that Tuesday was a holiday.... don't even worry about the sign. I will have Sophia mail it too me. That way you don't even have to worry about it.

Aloha,
Marc

==========

Reduce & Tape

Date: Sat, 2 Nov 1996 09:14:58 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Lance Jeffery

They are putting up more forms for completing the cement sea wall. The hammering is metal on metal and carries well because they are "attached" to the bed rock and the sound is transmitted through the rock. Still, this is just a thought and probably has little or no influence on the critters.

Would you mind setting us up for next week Thursday through Sunday with a capture permit?
Marc

==========

Reduce & Tape

Date: Sat, 9 Nov 1996 15:42:12 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Box for turtles

George,
Not a problem- that will give me plenty of time to hook it up and check it out before traveling to Punalu'u. I have decided to reset the TDR at the site anyway because putting in the sampling protocol up here starts the devise off at over 2000 feet elevation which might be the cause of the spurious readings we got with the Kiholo turtle. We will know more when we download it again.

Got a call from Mary Morrison (big cinder block house) that one of the TDR turtles was in feed at 1300 hours today. She didn't remember which side the tag was on. Also related that John Hindle #68 PBR was out snorkeling and observed one of our TDR turtles. I haven't been able to contact him yet.

Have a great weekend...
Marc

==========

Date: Sun, 27 Oct 1996 20:34:03 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Mokupapapapapapapapappapaa

George,

No you didn't. I remember discussing it with you as we drove by it but I didn't get any articles. As though you didn't have enough to think about.

By the way, made a visual id on #97 at Puako at 1430 hours on Saturday. We are scheduled for a trip to capture one or both on Thursday. Is that OK?

Best,
Marc

Date: Mon, 11 Nov 1996 22:42:44 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Box for turtles

Rejure & Give

George,
Sorry that I didn't get a message off earlier to you. I was busy all day and never even logged on today. I guess you won't get this until you get back on Tuesday or sometime Wednesday. Anyhow, I will get a message to Earl although I am sure that he has gotten the info by now.

Watson's and I went down this morning to check for the TDR turtles and heard and observed #97 right away. Unfortunately, it must have seen us and took off out through the channel to deeper water. We then went down to #68 Puako and talked with John Hindle who said that he had observed one of the "green box turtles" in the area in front of his house. They apparently had been putting papaya peels out and the turtles like them????? He couldn't remember if the tag was on the right side or left.

At 1600 hours I went down and checked the area in front of Mrs. Morrison's house and heard #28. I was able to catch it and download the data. The memory was, as expected, full and contained data for the dates 7/11/96 to 9/10/96- almost exactly two months. I put some new fiber glass and resin on the front and back parts of the tag. The main area of wear was the front and back of the sonic tag. The TDR was remarkably clean and did not show the kind of wear and tear that the sonic showed. Anyhow, it should be good for another two months. The two downloads of data took a little over 26 minutes each and appear to be without major errors.

GW finally made its way back into the water at 1840 hrs. Seemed very healthy and robust- sure as hell was heavy!!!! I'll fax you the information and more details about the capture and download. We will try and capture #97 on Wednesday.....

We will probably get to Punalu'u sometime around 1600 hours on Thursday unless there is some need to get there earlier. Let me know if you think we should get there earlier.

Hope you have a good trip to Maui.

Aloha,
Marc

Date: Wed, 13 Nov 1996 07:44:48 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Box for turtles

Rejure

George,

Welcome back. I trust that the day went well. The capture was done by hand- GW was feeding in 2.5 feet of water right off shore and I waited until the tag was on the right side (head facing out to sea). As soon as it was facing away from shore, I was able to walk up to it and grab the carapace.

We will be trying this morning at around 0900 hours to find #97 and retrieve the data from it.

Is there anything in particular that you need me to bring to Punalu'u- outside of all the normal stuff for camping and putting on the TDR?

Aloha,
Marc

==========

Date: Sat, 16 Nov 1996 09:45:36 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Kawaihae area- off the harbor and adjacent to the harbor

Give

George,

We have not extensively surveyed the area off of Kawaihae in terms of turtle observations. There are many, many observations of turtles in the area outside the breakwater by people on land. Some of these are very close and I have no doubt that if there were any large tumors on turtles they would have been reported. In out diving we have probably observed 20 + turtles over the last two years. None of them appeared to have any growths.

If you like, we can do a more extensive survey of the area some time.

Aloha,
Marc

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HAWAII PREPARATORY ACADEMY
P.O. BOX 428 • KAMUELA, HAWAII 96743-0428
(808) 885-7321

FAX TRANSMITTAL

DATE: 11/12/96 TIME: _____

FROM: Marc R. Rice DEPT: _____
FAX Number (808) 885-8203

TO: George Balazs

COMPANY/SCHOOL:

CITY, STATE:

FAX NUMBER: 808-943-1290

NUMBER OF PAGES (INCLUDING COVER SHEET) TRANSMITTED:

MESSAGE: Here is the data sheet for SONIC #28 Capture.
Will try for # 97 on Wed. Morning -
Best,
Marc

Please advise if there are any problems with transmission: Tel. No. (808) 885-7321. Ask for Administration Office.

TDR Capture: 19° 58.488' N, 155° 50.634 W } PBR#22 Location

Method of CAPTURE =

11/11/96

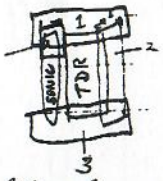
SONIC #28 captured at 1641 by MARC Rice (solo)
put in box & download began at 1655
28 was feeding in area #2 (He sure is heavy -)

Tag looks good - front end of sonic ground down but TDR looks ok. Minor algal growth

1st down Load = 26 min 30 sec.
2nd down Load started at 1726 hours - = 26 min 18 s
CCE 84 cm
CCW = 73.5 cm

Released at 1830 hrs.

Released at 1840 hrs.



1,2,3,4 new strips of fiberglass put on tag
Heavy wear in area #4 (SONIC)

Date: Thu, 21 Nov 1996 21:49:21 -1000
From: mrice@hpa.edu
To: gbalazs@honlab.nmfs.hawaii.edu
Subject: Puako Turtles

George,

Thanks for calling this evening. It was really fortuitous that I happened to be walking by my truck when the phone rang. I had returned from Puako about a 1/2 hour earlier. It is wonderful to hear that the financial picture is positive for the coming year- congratulations!

We looked for the Puako turtle on the 19th from 1345 until 1600 hours. There were only a couple of animals in the area of 24 PBR.

On the 20th we were down there from 1100 hrs until 1200 hrs. but there were only three turtles that we could observe- no sonics.

Today (21st) we were there from 0930 to 1130 hours but there were only 2 or 3 animals in the area. We drove to #56 PBR and listened and observed at that area (where one or both of the TDR turtles had been sited before). There were 10 to 20 turtles in the area, several of them with their backs out of the water feeding but there was no sonic heard.....

I guess we will have to try again next week. I would like to try on Monday, Tuesday and Friday if that is possible. The times from 0600 to 1800
hrs are good. Let me know if this is possible.

While we were down in the area, I drove to Kawaihae and took a GPS reading 20 degrees 01.973 min. N & 155 degrees 49.937 minutes West. This position is at the outer breakwater near the new public harbor. While there, I observed 10 turtles feeding in the shallows right next to shore. I observed them as closely as possible to see if I could see any suspicious lumps but they all looked ok. It was not possilbe to see if there were any suspicious patches or small tumors, etc. We will have to be in the water to get a better view or actually catch some of these animals to be certain.

I mentioned to you the message from Pete Hendricks regarding the tumore turtle at or near A bay- enclosed below:

Cap't. Gary Simonds called me at home this morning from Ocean Sports Anaehoomalu reporting sighting of an adult turtle(about 100 pounds) off Puako yesterday. The turtle had a fiberglass(satellite?) pack on right front shoulder. One of the crew spotted a tagged turtle with tumors.I told Gary about the BHP\ HPA sign project. He is interested in more information -Ocean Sports runs its catamaran & dive boat to Puako often.

I am trying to get in touch with Gary Simonds and will let you know what I find out when I am able to talk with him.

Best,
Marc

Date: Sat, 16 Nov 1996 09:27:29 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Punalu'u

George,

Thanks for the great trip. We really appreciate your willingness to include our little group in the Punalu'u trip. It was very satisfying to see the TDR go out through the surf into the bay- I hope that the little critter is gentle with its valuable cargo. I do believe that the conditions will be much harder on the tags than they are at Puako and Kiholo. If we don't get the tag back in Feb. I bet we won't get it back.

We cleaned everything very carefully when we got back and Chloroxed the table, tubes, brushes, etc. so, hopefully, there is no contamination from Punalu'u.

We got back to Waimea around 1600 yesterday and go things cleaned and put away fairly quickly. The trip back was uneventful although there was some rain.

I forgot to tell you that we went to the public hearing on Monday (11/13) and I said a few words on behalf of the proposed FMA. Earl and Doris' secretary was there to read from a letter of theirs and Mike Hind testified in suport of the proposal. There was no one there who was against the proposal so Bill Devick(?) said he believed that it would go through the board intact and the only holdup would be the Governor's signature.

RE: Puako- We will definately try on Tuesday, Wednesday and Thursday of next week if that is ok with you. The time we would like to have open is from early morning until dusk. We will check several times each day to try and find #97. If we are not successful this week, we would like to try again the following week. Let me know if you feel ok with this proposal.

Thanks again for a great trip.
Best,
Marc

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Date: Fri, 22 Nov 1996 08:22:33 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: PUAKO SIGHTINGS

George,
I spoke with Gary Simonds (capt. for Ocean Sports) about the sightings of TDR and tumored turtle. He says that the TDR turtle was right out in front of #20-30 PBR at mid-water in about 30' of water. It was most definately #28 as it had new white fiberglass material on it.
RE the tumored turtle- one of his divers, Clair, says that she observed a turtle with tumors on the neck and left front flipper (?). He says she is a very experienced diver and does know what a tumor looks like. (He related that he has seen a heavily tumored turtle in Kapoho Bay.) This turtle was seen in the same area - 20-30 PBR. Gary Simonds has agreed to keep us informed of any new and interesting sightings.
Best,
Marc

Marc

Date: Fri, 22 Nov 1996 12:43:40 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: TUMORED PUAKO TURTLE

George,
Just received another call from Gary Simonds regarding the tumored Puako turtle. During his morning dive today he observed the same turtle sleeping in a cave somewhere between 24 and 56 PBR. He is very positive that the turtle has tumors on it - again, on the neck and LFL. He said that animal has tags on the LFL and RH.

Aloha,
Marc

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Date: Wed, 27 Nov 1996 10:04:27 -1000
From: mrice@hpa.edu
To: gbalazs@honlab.nmfs.hawaii.edu
Subject: TDR Turtle

For your information;;;;;

>Date: Tue, 26 Nov 1996 08:20:51 -1000
>X-Sender: bns@ilhawaii.net
>Mime-Version: 1.0
>To: mrice@hpa.edu (Marc Rice)
>From: bns@ilhawaii.net (Bobbie sullivan)
>Subject: TDR Turtle
>Status: O
>
>Hi Marc:
>
>Just to let you know, we saw our old buddy the turtle with the TDR thing on
>the RIGHT side this past Sat., Nov 23, at 13:34. He was lolling on the top
>of the Puako turtle station being cleaned, along with two of his pals. The
>depth there is about 10.5 m, I believe. The water temp was 27 C.
>
>By the way, exactly 60 min later near the end of the same dive, we had a
>brief encounter with a tiger shark. This was the first time we'd ever seen
>a tiger shark -- in Puako or anywhere else -- in 26 yrs of diving. Since we
>dive nearly every day, I have always assumed that sooner or later we would
>encounter at least one of everything that is out there, but to be honest we
>were quite astonished to see a tiger where we did: right near the edge of
>the first dropoff in a place where the water is just 8 m deep.
>
>One final note -- the whales are early this year. We saw our first humpback
>of this season around sunset last evening, a welcome sight.
>
>Hope all is well with you.
>
>Bobbie
>
>#+#+#+#++#+#++#
>
> Bobbie O.Sullivan, PhD
> P.O. Box 385082 Tel: voice/fax (808) 882-7700
> Waikoloa, Hawaii
> 96738 U.S.A. Email: bns@ilhawaii.net
>

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Date: Fri, 29 Nov 1996 12:06:38 -1000
From: mrice@hpa.edu
To: gbalazs@honlab.nmfs.hawaii.edu
Subject: Tiger Shark

Here is the response from Bobbie Sullivan concerning the shark sighting.
Marc

>Date: Wed, 27 Nov 1996 11:24:49 -1000
>X-Sender: bns@ilhawaii.net
>Mime-Version: 1.0
>To: mrice@hpa.edu
>From: bns@ilhawaii.net (Bobbie sullivan)
>Subject: Tiger Shark
>Status:
>
>Hi Marc -
>
>Regarding the tiger shark that we saw: I was just emerging from one of
>those little canyons out into the open when I saw it coming toward us, head
>on. What registered first was "big," and "wide, blunt snout" & I thought it
>might be a whale shark. I twanged once on my tank banger to signal to my
>husband who was a short distance behind me. When I did that, the big shark
>turned to his left a bit -- just enough for me to clearly see its markings.
>Definitely a tiger, not a whale shark! It cruised past about 20 ft away
>from us. It looked at us with relative disinterest & continued on its way.
>It was swimming at what appeared to be a lazy pace, definitely not hurrying
>& did not change its speed when it saw us.
> Although I didn't go up to it with my tape measure, we figure it was
>between 4m to 5m in length based on how it looked relative to the coral
>structures it passed close to. Its tail was particularly impressive. The
>dorsal lobe was humongous. We watched it as it disappeared in the distance
>& waited a few minutes in case it might circle back, but it didn't. The
>encounter left us feeling somewhat stunned, but also quite blessed: nice to
>"meet the landlord" under such benign circumstances!
>
>That's the story. Happy Thanksgiving!
>
>Bobbie
>#+#+#+#++#+#++#
>
> Bobbie O.Sullivan, PhD
> P.O. Box 385082 Tel: voice/fax (808) 882-7700
> Waikoloa, Hawaii
> 96738 U.S.A. Email: bns@ilhawaii.net
>

maybe not a good idea?

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Marc R. Rice, Assistant Headmaster
Hawaii Preparatory Academy
P.O. Box 428
Kamuela, Hawaii 96743
mrice@hpa.edu
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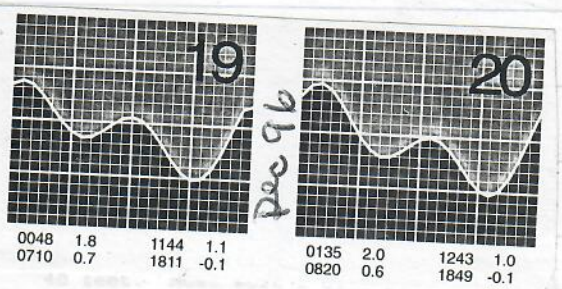

Date: Sun, 1 Dec 1996 21:31:32 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Puako Turtle # 97

George,

Yes, we will always have the thought of the tiger in our minds now, eventhough it (they) has undoubtedly been around all the time....

No luck getting the Puako turtle on Friday, as I think I told you. Went down today to check the area but there were only a couple of animals in feeding as it was a fairly low tide. A California Fish and Game biologist who is staying in the Carlisle's place said that he observed #97 in feeding on Saturday at 1530 hours. I think the little rascal has a copy of my itinerary...

Can we try for all five days next week? As this is the end of our first semester, I am not able to set aside time in a pre-planned way. Would like to be able to pick up and go when there is a break in the action at school. We will try and pick up the track of the "tumored" turtle also. I will call Gary Simonds tomorrow (I'll also try and get his address for you). Let me know what you think on the permit. When is it you leave for Bora Bora? We can certainly do the Kiholo trip in any format you wish. Just let us know what works best for you.

Aloha,
Marc

Date: Mon, 2 Dec 1996 10:52:01 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Puako Turtle # 97

George,

We will work on Thursday, Friday and Saturday to try and capture the turtle. I understand your concern about the neighbors but we have not done anything in the area to cause people to be concerned. We are only monitoring the area with the hydrophone and do nothing to disturb animals. We have the full cooperation of the two people immediately adjacent to the public access and will do everything in our power to maintain go relations with them.

If we don't get this little critter this week we will not try again until you feel comfortable about it.

What about the tumored turtle. Do we need to let the enforcement people know about it? Can we go out during the week and search for it? Let me know what you think.

Best,
Marc

Date: Tue, 3 Dec 1996 11:30:16 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Info

George,
They said it was one of the larger turtles they had seen - I have no way of knowing exactly what that means. I think they were estimating something 100+ pounds. If it is over that, I am afraid that the shipping cage would be too narrow at the base. If this problem was to arise, I was considering afixing a top and a bottom to our plywood box and shipping it over to you. Obviously, I would include a screen window in the top for ventilation and observation. What do you think?
Marc

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Date: Tue, 3 Dec 1996 07:50:44 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Puako Turtle # 97

George,
Thanks! We will concentrate on the three days this week for #97. Next week is our finals week and I will possibly be able to go diving but nothing certain yet. If you wish, we will not do any capture during the time you are gone. I spoke with the divers at Waikoloa yesterday, however, and they say that the time they reported seeing the turtle to me were the only two sightings they have made of the turtle. They said that they have been diving there all last week and this. As you know, the chances of running into this critter are small at best - if we ever see it we might want to get it. Please advise and let me know what we should do during next week.

I too wish I could accompany you on the wonderful trip. Unless I am mistaken, you can see the atoll you are going to from Bora Bora. We almost went out there in 1981 to do some fishing but it was a little too rough for the boat. It is a wonderful place-

I am also glad that the seminar and meetings went well. I look forward to hearing about it from you.....

Best,
Marc

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[43] From: Denise Ellis 12/3/96 8:32AM (2723 bytes: 1 ln)
To: George Balazs, Shawn Murakawa
Subject: Re[2]: Dive trip
---------- Message Contents ----------

I'm sure a few more of the turtles sitting there had tags I just didn't get as close to them as I did the small one. Unfortunately, it was at the end of the dive so I didn't have much time, only spent about a minute counting and examining the tag on that one turtle as we swam by.

_____ Reply Separator _____

Subject: Re: Dive trip
Author: George Balazs
Date: 12/2/96 9:13 PM

Denise- Thanks for this report. We have about 125 turtles tagged along Puako, so am suprised you didn't see any more tags (all four flippers on most + pit). Good recovery though which we will enter as a resighting in TDPS. I think you're correct MN, but I'm at home now and can't access right now. Shawn- please enter and use this message as hardcopy documentation. Denise, note also that we have 2 turtles along there with tdr's, like we did at Punaluu.

Note also that just the other day a reliable diver had a 13 ft tiger swim by her (showed no interest) right at the 8m drop at about 100 Puako Beach Drive. Daytime.

Right now we have a maybe sighting of a tumored turtle along there. If Marc and students find it, and it is tumored, it will be shipped to us for Kewalo. That's why we sent the large cage to him the other day-- as a standby. G.

Got to Puako during the day (entered at cove where sand road starts at end of subdivision swam off to right). Saw about 10 turtles on one dive, 1 - 2 footer swimming, 2 med (~ 2 footers) under ledges and about 7 sitting on or around one particular coral head at about 40 feet. Most were 2 feet plus, one small turtle about 1.5 footer tagged RFL 11050 (a MaunaLani turtle?). 3 or 4 of turtles at coral head had Kole and Yellow tang grazing on their backs (persistant little buggers, one turtle had a bunch grazing as it swam along). Didn't see any being cleaned by saddleback wrasses. Most of my other dives were either too deep or at night, so didn't see at any other site, except one turtle at Papa Bay. All turtles seen were clean.

Date: Wed, 4 Dec 1996 19:06:54 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Info

George,

Sorry I have not responded, our internet connection was down for a bit. The TDR's are set to record temperature every three minutes so that should extend the data recovery time. I would like to take a couple of days worth of temperature data at the bottom of the lagoon and at about 2 meters depth so that I may correlate the temps from the actural TDR with the expected temperature in the lagoon. May I use your onset data logger to do that when we are down there on the 18th or 19th?

I spoke with Wildlife computers today about the (-) readings and they said that it could be- normal zero point drift, drift caused by temperature variation (during basking, for example), or the pressure transponder may be out of adjustment... in other words, there is no way of knowing unless we retrieve the TDR. Consequently, I would like to suggest that when we catch this critter next time, we remove the TDR and replace it with one of yours. In that way I can carry out the tests she recommended and, if there is something wrong with the TDR, we can send it back for repair. Also, we might want to think about replacing the MK3 TDR with one of your MK5 TDR's since the data from the MK3 isn't very useful. Anyhow, something to think about.

I look forward to receiving the TDR's and onset and will get right on the testing.

Aloha,
Marc

Date: Thu, 5 Dec 1996 07:57:20 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Info

George,
Sorry if my message was confusing. I was referring to the Kiholo TDR in my message. It is the one that gave us - readings. Toward the end of the recording period there were some -5 meter readings!
I will test the TDR's as you mention- that is what I had planned also. The temperature measurements at Kiholo are to help me decide if the turtles are truely in the lagoon or not. I don't beleive that there is anywhere outside the lagoon where there are temperatures at 28 to 29 degrees as indicated in the data. I also want to see if the temperatures are indeed that high in the lagoon, etc.

Which TDR do you want to remove? The Puako turtles?

Best,
Marc

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need to discuss during Kiholo #27 w/ MARC

Recaptured by Marc Rice

TDR95125
SON97

Puako Beach Road

For TDPS

Date: Thu, 5 Dec 1996 20:21:19 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Puako Turtles

George,

We started the day out at 0800 by going down to PBR 24 and searching for #97. There was no signal so we proceeded to place 6 of the new signs at each of the public access sites. We checked #24 periodically until 1200 hours when I had to return to campus to teach a class. While we didn't see/hear #97 we did locate the other critter #28 at 56 PBR. It was feeding in about 1.5 meters of water approximately 10 meters from shore. There were 8 to 10 large turtles feeding in the area- Later, back at 24 PBR, Mary Morrison said that if we are looking for the one with the green tag on the right side we should be looking at #56 PBR. She was, I believe, lamenting the absence of her pets. I discussed the possible reasons for it's move, and I think she was more than understanding. She really is very nice and wants to be of assistance to our work. She has spread the word up and down the Puako coast for people to keep a look out for out green tagged friends. So, the morning wasn't a complete loss.

After my class, I met Watson back down at the site (24). It was around 1430 hours and he had observed serveral large animals in the area normally occupied by #97 (to the right of the public access in front of the Morrison hourse). I put the hydrophone in the water and, sure enough, 97 was there. To make a long and nervous story short, we captured 97 in .5 meters of water at 1500 hours. We transported it directly to the turtle box (after which Watson had to get back to school) and I began preparing for the download and repair of the tag. All went well, and 97 was back in the water recording on an empty chip by 1730 hours. I haven't had a chance to look over the data carefully yet, but it looks ok from a cursory glance.

12/5/96

The tag itself was in good shape with normal wear on exposed surfaces. It was interesting to note that the highest point (sonic tag) was worn more posteriorly than anteriorly. Perhaps it is a result of the placement further back on the turtle.

I measured the SCL and it was 64.8 cm. and the CCL was 69.5 cm. The animal looked very healthy and robust with no unusual marks, etc...

I received several envelopes from you today, but I have been unable to read them yet. Tomorrow, perhaps. Thanks for sending them. Also, thanks for the forward about the basking observation at Punalu'u-Humboldt---email address??? Who is this person?

I am pleased that we now have captured both animals at Puako and can relax a bit for the time being. Now all we have to work on are the Kiholo turtles. Thanks for all your patience with us. I / we will try and be a little more efficient next time so we don't drag this recapture thing out so much. I do think that we made more "turtle " friends by being down there so frequently.

All for now. Have a great evening....

Marc

Date: Sat, 21 Dec 1996 14:42:37 -1000 Shzm TDPS,
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Kiholo

George,

Sorry to hear that Christian was so ill. Am glad he is feeling better, however. Yes, it was fortuitous that you decided the signs weren't right for a Kiholo trip.

Sandi, said you called yesterday and she filled you in on what had transpired. Here are some more detailed notes: Thursday 12/19/96

Arrived at Kiholo around 1300 hours and established contact with SON #48 west of Hind point. It was in 10-12 feet of water seemingly just cruising around. We did attempt to capture it on the surface once, but were unsuccessful.

We didn't find SON #465 until around 1700 12/19/96 when I located it in 4 feet of water just off the campsite. I endeavored to pounce on it, but I missed it. The whole camp was watching and enjoyed my embarrassment when I came up empty handed. One thing of note, the shell of #465 was very clean unlike most of the turtles around. We never heard from #465 again (it never returned to the lagoon during the evening). enter as resigh summ. mzc. work here TDPS

We did a night snorkel from 1930 to 2130 hours and followed SON #48 around the lagoon for the whole time. We never set eyes on it but it was certainly giving plenty of sonic signals.... It was a little cold so I finally called off the pursuit. TDR417 Resign

12/20/96 SON48 and The TDR (MK3)

George and I got up at 0445 and went over to the lagoon. At 0515 we spotted and captured SON #48 in the lagoon (East end near the entrance). We returned to the campsite by 0600 and put #48 into the turtle box. Summ TDPS

At 0800 hours I began cutting off the tags. The dremel tool worked great but I used up (broke) all my blades. However, it was enough to get the tag free. Once I lifted the tags off, the remainer of the glass could be pried up and lifted off of the carapace leaving a nice clean area. There are only a couple of small chunks of green fiberglass on the 3 and 4 laterals. Of note, the 3rd and 4th laterals showed a cupping depression with elevated ridges at the edges of where the fiberglass was attached. Maybe bridging the scute joints does impact growth as you mentioned. We will see if this condition corrects itself as time passes.

I decided to put the TDR/sonic on the right 2nd lateral scutes because it was large enough and I didn't want to put the tags back on the abnomal scutes. I know that it will receive more wear there but I thought it best. I also elected to put a new sonic tranmitter on as the other one (48) was heavily worn on the anterior end. I will send it back to get rebatteried.

We put three layers of glass on all sides of the two tags and build up the front area of the sonic because it gets pounded so much. I got pigment but was only able to find black - the others were neon green, yellow, and other similar colors... The final coat of resin was applied with the black pigment. The turtle was released at 1106 after the glass had dried.

Tags attached: TDR = 96-367 = new TDR96367
SONIC = #447 (refurbished tag)

I.E. TDR417 Removed TDR96367 PUT ON + SON 48 Removed SON447B ATTACHED

Sampling protocol:
Depth every minute
Temp every 3 minutes
Wet/ Dry timed

12/20/96

Measurements: SCL= 63.2 cm
CL = 67.5 cm

Tags: RFL= Y107

NOTE = DONE FOR TDPS SON447 NEEDS TO BE CHANGED TO SON447A

RH = N731
LH = Q602

George and team looked for #465 throughout the bay during the morning but were unable to locate it. I will try and get back down there after Xmas and see if I can find it. We need to get it off and replaced!

It was beautiful weather during the trip and we all had a pleasant time. Just wished we could have gotten both of them. (If I had been a little more adept at catching turtles from the boat, we would have--- we missed your expertise..!!!!!)

Have a wonderful weekend.
Best, Marc

7/2/96 = SCL 61.9
9/11/96 = SCL = 62.3

Date: Sat, 21 Dec 1996 22:26:57 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Kiholo

TDR417 (MK3)

George,
Thanks for the kind words. I still should have had the second turtle!
We first tagged #48 on 7/1/96, so it has had 5 and 1/2 months to grow. I don't know, of course, if the apparent change in the scute structure is new or not. I don't have anything in my notes to indicate that it was unusual when we put it on, and I think you would have commented if there was something unusual.
I hope some of my pictures will show the changes, but there are rather subtle for a photo to pick up.
It is kind of funny that you mention not wanting to dive on turtles in rocky environments... I ended up with a bit of a facial contusion and something of a black eye when it was all over. I was, as you can imagine, the brunt of some joking by the members of the camping group. My wife and mother were also rather unflattering in their comments. Such is the life of a fearless hunter, NO???
I am willing to go with a direct contract to me as long as you think it would work. I would put the funds into a separate account which I could then use to fund the trip to Tahiti, etc. Your call. I will do whatever is necessary, of course.
HPA received $2500 from the Hinds and some $5500 from Earl Bakken again recently as funding for the 96-97 tagging year. We must be doing something right for them all to keep supporting us. I think the Kiholo FMA designation will be a nice feather in our cap. I also would like to put some signs similar to the Puako signs up at Kiholo. We observed two animals basking at Kiholo during the evening of the 19th. I have not forgotten your suggestions about some sort of a plaque at Kiholo. I just haven't been able to come up with a location and a design that makes sense yet.
Hope Christian is feeling better soon. I know how he feels, having just had a similar virus. These little beasts can sure be neasy at times!

Best,
Marc

Date: Mon, 23 Dec 1996 22:16:42 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: MK3 data

George,
I am sorry to say that I don't think the MK3 data will do us much good. It is mostly (-) numbers which I can't figure out. In fact there are some (-) numbers in the double digit range which are totally incomprehensible. I will look more carefully at the data but I don't expect it to show much.
I was thinking some more about the contract possibilities and got to thinking about taxes. If the money comes to me personally, I will have to pay taxes on it. If it goes to the school, I don't. I can still have the money placed into a special account for travel, etc. What do you think?
How did the car shopping go. Are you a three car family yet? I hope you have a great holiday.

Aloha,
Marc

DUE TO "DRying" out of the water(?) as per conversation w/ Bob Delong 1/6/97

Date: Thu, 26 Dec 1996 10:35:54 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Kiholo new TDR96367 and SON447B

reduce

George,
Merry Christmas. I am glad to hear that all is well with the Balazs family and that Santa treated everyone well. I bet that Christian is stoked to have "Wheels" of his own.

We had a great holiday season. Four family members where here for the holidays and it has been a very busy time. I sometimes think that I need to take a vacation to get over the vacation!

I am planning on calling the Wildlife people again with questions about the bizarre data we have been getting. I will let you know what transpires.

I agree that fiberglassing the MK5's onto a single scute seems to do no damage- that is the reason you decided to do it that way and you were right. There appears to be no impact on growth or scute structure at all. Now that we have the MK5's we can attached them to most turtles without overlapping scutes. With smaller turtles (I am looking at the plastic model you gave me) it would be possible to attach the MK5 on one scute if we turn its long axis perpendicular to the long axis of the turtle. Then, we could put the sonic tag on the opposite side, also perpendicular to the long axis. The wear would be more on the sonic but it is easier to build up the sides that it is the end. Also, with smaller turtles, the momentum of collisions with rocks is bound to be less that it is with the bigger animals. Just a thought.

As for the collision with sonic # 465, it was a glancing blow and physical damage was minimal. Emotional damage to my ego was devastating, however, and it may take years for Watson to stop ragging me about the miss! I will just have to live with my failures!

Kiholo: I have a call into Robbie to see if there is some time that I can get down there during the coming week but I know that his family is often down there over the holidays. I will let you know. If it is possible, I would like to try and retrieve #465 and monitor #447B while we are there. I don't know what your schedule is this coming week, but will keep you informed of the availability of the key. Would the first few weeks in January be a possibility? Nope

I know you are going back to Tetiaroa soon. While we are talking about trips, do you have any time to do Mauna Lani, Puako (offshore), Kahalu'u, etc. during the next few months? When do you plan to go back to Punalu'u? I sure hope that we can see what is going on with the TDR down there, expecially since we know that it has been out basking.

Enough for one message. Have a great day.

Aloha,
Marc

Date: Thu, 2 Jan 1997 16:15:24 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Please read this message after reading my other recent one.

George,

The signs have all been put up at Puako. We haven't been able to get the BHP foundation people over to do any publicity yet, but will when we can. I suspected as much about this Dominy fellow, but thought I ought to check it out.

The 14-15th might be a good day for us to do a trip to Kiholo. I am assuming that you would want to come over on the morning flight (15th)? If you want to spend the night, we can go on the 15-16th. Which ever is most convenient for you. Watson and I have come to the conclusion that it is best to let the turtles come into the lagoon and really settle down for the night before we invade the area. Consequently, we would suggest a little later night snorkeling time - starting around 2100 hours perhaps.

If #465 doesn't return to the lagoon again, we will have to try and capture it while it is feeding in the shallows during the day. I hope that I can do a better job of it next time!

Punalu'u: We would very much like to be allowed to participate if it is ok. Otherwise, I can give you the info to do the download.

Mauna Lani or Kahalu'u ???? on Feb. 4 or 5?
Puako (offshore) for March 5
Mauan Lani or Kahalu'u on April 16th.

We also would like to do Honokohau and Koloko Nat. Park (at least a survey) sometime this year if possible.

Is that enough to keep you busy for a bit???

Aloha,
Marc

Reduce

Date: Sun, 12 Jan 1997 21:20:26 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Schedule

George,

Yup! No shark stories lately. I may have told you already, but Bobbie has commented that she and her husband are much more alert and "their head swivels frequently" during thier dives now.

I was down at Puako today and, just like yesterday, was unable to hear anything. The tide was very low and I was not seeing any turtles feeding. I listened all along the area but nothing. When I got back to the truck, my mother (she has grown very fond of riding down and helping me monitor) said that she saw several heads off to the left side (in front of Cindy's house). I decided I should walk over and take a look. There were four turtles in the little pool feeding, and, much to my surprise, one of them was #28. I couldn't figure out why I had missed hearing it as I had checked that pond with the hydrophone. So, I went back and picked up the hydrophone and tried to pick up # 28-- nothing. The hydrophone and receiver seem to be working fine so I am guessing that the sonic is dead. It has only been on about 7-8 months, but these things happen some times. I had the hydrophone within 3 feet of the tag at one point. I will test the hydrophone on a tag in the office tomorrow but I think the sonic will have to be replaced. The TDR has been on for 60 days since the last download and needs to be downloaded again.

Would you be comfortable with us trying to capture #28 week after this one? Can you give us a permit that will cover a few days again? Because we are unable to hear the turtle, we will have to find it visually- it may take some time..... Let me know what your thoughts are about this.

See you soon.

Aloha,
Marc

Reduce

Date: Sun, 12 Jan 1997 12:12:05 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Schedule

George,

I had forgotten about the address for Gary Simonds. I do not have his home address but his phone number is 883 0298. I will try and remember to give him a call on Monday to get his address. It has been quite rough over her for awhile and I don't think there is much diving going on. We haven't heard any thing else from the Ocean sports people since late November.

As for Bali, we had gamma globulin shots and took malaria pills. I did not have any problems with my health while I was there. Just drink only bottled water (which you can get there) or beer. We stuck to some of the more touristy type of restaruants just to avoid the problems associated with "eating downtown" local food. I don't know where you are going to be staying, but their tourist industry is fairly well developed and you shouldn't have any problems "staying healthy."

I have given some thoughts to the symposium. I am going to try and find a reasonable airfare there and see what I can work out. It is a long shot at this time. Also, I don't want to "use up" a trip in case something exciting comes up that involves field work (Midway, Taiwan, Tahiti, etc.) If I use up all my trip time, I will be really upset when something comes along and I can't go....

I am not too sure what the shark stories comment is about????

Have a nice Sunday,
Marc

Reduce

Date: Tue, 14 Jan 1997 09:09:06 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Take to Kiholo

I am working on student papers for the marine affairs symposium so I can empathize with you.
The elastomer helps to hold the tags in place- that was the big problem at Kiholo last time. Also, it leave a little space for tag removal when we cut it off. Otherwise the tags are lying right on the carapace and cutting them off becomes somewhat more delicate. We can certainly do without it - I know it is very expensive.

See you at the gate around 1515 hrs.
Best,
Marc

Date: Fri, 17 Jan 1997 13:46:19 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Puako Capture

Reduce

#97

George,
I have mailed two packages to you today. One is the data for the two downloads of the MK3. I printed out the first few hours after the release and the last few hours before capture in each case. The one thing that I noted is that the battery voltage was below recommended values during the second recording period. I should have changed batteries when we redeployed the tag. I wonder if this caused the unusual readings? Second, I send some catalogs and the video tape of WOW. Watson was saying that the only tent he sees that is large enough would weigh about 20 lbs. Well, you can look over the cats and see what meets your specs.

Best,
Marc

Date: Tue, 21 Jan 1997 11:40:03 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Puako

Reduce

George,
We tried and missed this morning. Both turtles were in the area but way out away from the usual feeding sites. We lost sight of #28 early on and I believe that it went outside somewhere- we didn't do anythiing to scare it but it did leave the area.
#97 (the one with the working sonic) was on the reef feeding about 75 meters from shore. We laid the net and attempted to corral it but it made a fortuitous turn and went out between us. A botched attempt, unfortunately.
We will try again at around 1300 hours.
A note from Kiholo. Students in our 7th grade were down the day after we left and witnessed a small shark eat a small turtle right off the island. I will go down to speak with them tomorrow and see if I can get the story straight. There does seem to be little doubt that the predation took place.

MARC

Marc

Date: Wed, 1 Jan 1997 20:49:54 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Kiholo

PUAKO

George,
Happy new year. I am sorry that I have been out of touch for a few days- the holidays and all.... I have been monitoring the turtles at Puako occasionally and there have been quite a number of animals back in the area at 24 PBR- should make the residents happy. #97 has been in feeding each of the four times I have been down there. #28 was in feeding on one of those days. The water was really rough out on the reef but the turtles were in feeding in the calm waters right in front of the Morrison's house (to right of public access). I also checked the area in front of #104 PBR and there was a turtle basking on the rocks there. I meet a couple of your kids there who live in the area and they say that there are often animals out basking. I showed them our sign and explained about basking because they said that they often had to help the turtles back into the water! One of the kids said his dad does some turtle tagging??? His name is Ryan Dominy and he supposedly works with Steve Dollar. Ever hear of him?
I haven't gotten with Watson yet to figure out dates for trips but will try and get that information to you ASAP. How does your calendar look for a Kiholo trip during week of 14 Jan? We will have been back in school one week by then and I will have adequate time to plan a trip.
I will do some searching about the archival information about Pacific storms, etc. I haven't looked for it in a couple of years and don't have the bookmark any more. I am sure I can find something.

Aloha,
Marc

KiHOLO #26

14 JANUARY 1997 TUES.

Depart Acoe 220pm Ft. 270 Acoe

Objective: (1) TO ~~Recover~~ Recapture and Download TDR MK5 SON 465 (deployed Kiholo, Last downloaded Kiholo #25 9/10-9/11/96 deployed 7/2-7/3/96. Seen by MARC 12/20/96 but not captured.

(2) Even though only deployed a month ago 12/20/96, recapture and download SON 447 MK5 TDR 96367 (mine) deployed by Marc 12/20 which replaced MK3 TDR 417 Son 48.

(3) Examine for health, tag/recapture, and removal

Arrived Kiholo ~4PM. They had already caught by beach net MK5 SON 447B just deployed 12/20/96. Black pigment was used. Nice fiberglassing job - an 2nd Lt. Right. A second turtle was also caught in net. Downloaded Son 447B. Renewed fiberglass with Thick gloss mat and resin w/green pigment. Released before sunset.

prior to releasing San 447B

1/14/97 Checked sluice and pools with hydrophone
TUES. Lagoon also and bay. Nothing heard.
Marc pointed out that lagoon must cause sonic signal to bounce around. If turtle is in there, signal is always heard. Not so for bay and elsewhere. Apparently signal gets blocked if turtle is behind rocks - coral head.

> ~930pm captured turtles in lagoon by using Achilles pushed by students. Watson, me, and Rice inside working up turtles. Twenty two captured - released right away after CCL, SCL, Notch, tags, PIT tag scan.

Sleep ~ 1130pm

1/15/97 Up ~ 730am. Marc checked lagoon w/hydro -
Wed. nothing - no SON465. San 447B just released last night heard in bay.
Motored outer Kiholo Bay to LUAHINIWAI Point listening for San 463. Nothing heard. Whale and calf seen + spinner dolphins. George reports seeing ~10 turtles on lava ridge UN near Luahiniwai; none seen to have tags. Post sighting.
Depart Kiholo ~ 1PM; depart Aloha 220pm FL 89

1/14/97 Hand Snorkel

845pm Kilto Lo LAGOON

TAGS	STRAIGHT	Curved
① H52, H51, H53 (7F7F520DIF)	65.3	71.0
② H268, H269, K428 (NO PIT)	38.8	41.0
③ R434, R433, NO PIT	43.9 43.6(N)	46.0
④ Y669, E18, N732, B265 (1F72563661) blue plastic good condition	60.8, 60.8(N)	66.0
LHF AMPUTATED & HEALED		
⑤ 7753, 7754, Q657 (LH) [NEW TAGS] (LAST CAUGHT?)	60.6, 60.2(N)	65.0
R.H. Q658		
⑥ K442, RFL HEALED SLIT, B223, K444	48.8, 48.3(N)	51.5
7F7 DO F4 E07		
⑦ H294, H295, H296 NO PIT	45.5, 45.3(N)	48
⑧ H219, H218, LH(NEW TAG Q559)	50.1, 49.9(N)	53
RH HAS HEALED NOTCH ~~PIT TAG~~ NOT SCANNED for PIT Tag.		
⑨ ALL NEW TAGS LFL Q660, RFL Q661	56.9, 56.7(N)	6
LH Q662,		

1/14/97 SNORKEL
9:30PM KIHOLO LAGOON

	TAGS	STRAIGHT	NOTCH	CURVED
(10)	NEW TAGS: LFL Q663 RFL Q664, LH Q665	52.6	52.3	56.5
(11)	V673, V672, NO PIT LH 1/4 AMPUTATED RH HAS A HOLE	40.6	39.9	43.0
(12)	Y244, Y243, NO PIT NEW TAG: RH Q666	59.4	59.2	64.0
(13)	R443, R442, R444, NO PIT	46.5	46.5	50.0
(14)	R492, R491, B229, B228 1F7736 1D17	45.0	44.7	47.0
(15)	K636, K635, K637, NO PIT	41.1	40.9	43.5
(16)	R48, R47, 7F7F5B5101	45.8	45.5	48.0

1/14/97 SNORKEL

KIHOLO LAGOON 10:00PM

	TAGS	STRAIGHT	NOTCH	CURVE
(17)	K430, K431, K432, NO PIT	44.0	43.3	46.5
(18)	3526, 3527, N71, NO PIT	58.7	58.7	62.[illegible]
	Y15 NOTE: SHARK BITE SCRATCHES POSTERIOR CARAPACE AND PLASTRON. - Perhaps 1-2 months old			
(19)	H220, H221, B916, R463 2210662A7A	47.8	47.5	51.5
(20)	7777, 7776, Y116, Q292 NO PIT	65.1	65.1	70.0
(21)	Z16, K465, B224, Y668, 1F6C60080D (BLUE PLASTIC - IN GOOD CONDITION)	47.9	47.3	51.[illegible]
(22)	K440, K439, B955, K441, 22101D273B	47.9	47.6	51.[illegible]

end

+2 on data pages by net 1/14/97

Friend of John Wilson - need send - JAN WEBER P.O. BOX 4881 KAILUA-KONA 96745 808-329-9163 "ECO-ADVENTURES"

KIHOLO #26

DAWN YOUNG + MILO at Kiholo - Summer HPA Summer YOUNGPD@IDT.NET

EMAIL CARLOS DIAZ. JOHN (and ANN) MOVING TO Puerto Rico

- BALAZS - Print historicals for 22 Rec. this trip, & several earlier.
- Send the Audubon tape TO MARC TO DUP
- Call Kim Holland - Remote logger
- DOWNLOAD TWO ONSETS MARC USED TO VERIFY Temp. of TDR'S MK5
- I have MK3 12/26/96 Removal Given to me by MARC 1/15/97
- Scuba lagoon to share up turtles in center on the bottom where we don't catch,

Assemble

- Look at MARC'S MONITORED TIMES TO VERIFY/COORDINATE WHERE TURTLE IS AN FOR TDR segments of data, compile case histories

MARC

- DATA MK3 so GMB can send to company (Wildlife Computers)
- MK5 7/11/96 down/loaded (date wacky) from Sm 465 - [heard saw but (LATTER PORTION ONLY) didnt catch 12/20/96]. Didn't hear or see 1/14-1/15/97.

all! Send to me

- JIM RISITO FURUNAL "brand IDEA" Color LCD to detect hard turtles vs rocks vs MUD
- Send "WOW" TAPE TO ME
- Price quote for work?

Need

Net/Seine in front of HIND POINT High tide daytime to see if they are from Lagoon

Date: Tue, 21 Jan 1997 19:40:16 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Bali

[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]

TDR 95125 TAken off and

George,

I do have a guide book on Bali and Lombok. I meant to bring them down to Kiholo but forgot. That is happening much too often lately- forgetting. I will bring it to Punalu'u or mail it to you soon.

We returned to Puako at 1300 today and were successful in catching #97 (which we had missed in the morning). Here is the transcript of the events:

From 1300 - 1440 we watched both animals to see if they would get into a position where we might be able to get both of them. #97 moved in very shallow, but #28 remained out in the deeper areas where we really didn't have a good chance of catching it. We decided to get #97 which was in 1 meter of water about 5 meters off shore at the public access/right. George and I were the only ones there at the time but our stealth and cunning carried us to victory. We caught #97 at 1500 hrs.

The turtle was placed in the box and I cleaned up the tag and got ready for the download while Watson kept an eye on #28. The download of data took 21 minutes both times (data base approximately 76% full- last downloaded on 12/5/96. The data does not look good as the depths are all between 50 and 70 meters - sample below:

```
Total memory available for data collection = 130816 bytes
Memory filled with data = 100178 bytes
Unit started at 16:48:15 on 05/12/96
TDR> 10
Protocol 1.  Sampling interval = [1,3,10,0]*60 seconds.  Date 05/12 at 16
:49:00
Dry for 17 data points
Hour: 17  Battery voltage: 2.9008
Dry for 47 data points
65.5,,
65.0,25.1,
66.0,,
66.5,,
66.0,25.7,
65.5,,
68.0,,142
68.0,26.2,
69.0,,
66.0,,
74.0,26.2,
```

The unit start time and data are all messed up and the data is obviously wrong- unless this guy is diving much deeper that we suspect and staying down for days at a time!!! The temperature and light data look ok.

Below is the end of the data stream:

```
Dry for 9 data points
Hour: 15  Battery voltage: 2.9204
Dry for 12 data points
62.0,,159
```

62.0,26.0,
62.0,,
62.0,,
62.0,25.7,
62.0,,
62.0,,
62.0,25.4,
62.0,
TDR> b
Mk5 Microprocessor-controlled Time-Depth Recorder, version 5.3
Recorder number 95-125. Your identifier = Marc R. Rice
Time is 15:46:15.21
Date is 21st January 1997

Currently defined sampling protocols and conditions are:

Protocol 11- Sample rate: Depth (m) every 1*60 second(s)
Temperature (C) every 3*60 second(s)
Log(light) every 10*60 second(s)
Condition: Wet, dry timed
Delay Count = 1
Duty cycling not enabled.
Geolocation is disabled.
Low-voltage cutoff is enabled.

The present date and time are correct, so I don't really know what to make of the odd data. I will, as I mentioned, confer with Wildlife.

Total memory available for data collection = 130816 bytes
Memory filled with data = 100178 bytes
Unit started at 16:48:15 on 05/12/96

So, Watson and I talked about what to do with the TDR. We decided that there was no sense in leaving the tag in place if it was gathering bad data, and I did want to get another set of data, so we decided to replace the tag with one of yours. I did not have time to give a call and discuss it with you- sorry. I will be happy to replace the tag so that you aren't short. I brought the old tag back and will call Wildlife tomorrow to see what they think went wrong. I did not delete the data so that I can retrieve it from the tag if they can figure out what is wrong. I hope that we did the right thing.

I put elastomer on the new tag and placed it in the footprint of the old tag. We left the sonic in place as it should have plenty of battery left to last for another few months. Removing the tag was fairly easy with the 12
volt dremel tool and the new wheels we had. The Elastomer is really a help as it gives room to cut under the tag without touching the carapace. Thanks for bringing the elastomer over to me.

We got the new tag in place at 1700 hrs and let it dry for an additional 30 minutes (by the way, I used your green pigment and it looks great!)

The turtle was released at 1730 hours and appeared healthy and very eager to get away from us.

Condition: The turtle appeared healthy and there was really minimal wear on the sonic/tdr. The SCL is 64.8 and the CCL is 70.0. Pictures were taken.

Because it was so late and because #28 remained out in the deeper areas where it would have been sketchy to attempt a capture, we decided to give it another try tomorrow. #28 was in the area this morning and from 1330 until 1730 this afternoon- hopefully it will return tomorrow.
I have to go do some things here at school right now. If you have any questions or comments, I will get to them later.
Aloha,
Marc

Date: Wed, 22 Jan 1997 07:50:15 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Bali

PUAKO SON TDR9525

George,

Just got off the phone with Melinda at Wildlife. She does not, of course know the answer to the problem associated with the data. She does say that a likely cause of the pressure sensor malfunctioning is a blow to the sensor. I assured her that that was entirely a possibility although the data was reading odd from the very point of return. It is possible that we did something in the capture.

Anyhow, I am sending the tag back to them and they will try and download the data and run a correction program. They may be able to save the data if the sensor has a consistent error as a result of the situation. I think, in retrospect, that we have been quite fortunate to get the relatively clean data that we have given the conditions that these tags are subjected to.

If we are able to catch #28 today, we will remove all tags and try to clean up/off the fiberglass on the carapace. You are right, we have been spending more time than we should working on this project- school work is suffering.

We can pull the other tag at any time, but, now that it is in place, I would like leave it there for the next data cycle. Objections? If they are unable to refurbish the old tag, I will order one from Wildlife to replace yours.

Date: Wed, 22 Jan 1997 13:39:15 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: TDR's

Removed SON

PUAKO

George,

Great about the TDR's. We successfully captured #28 today at 1115. We also netted 5 or 6 others (including #97 which was in feeding) which we let go immediately. We brought #28 up to the box I cut the tag off and the entire patch of fiberglass popped right off. The scute is nearly totally devoid of fiberglass. We put the turtle back into the water by 1200 hours. It seemed to be in good shape and was anxious to get back to sea.

I haven't been able to download the data yet but will do so before Punalu'u hopefully.

Marc

Date: Wed, 22 Jan 1997 17:20:52 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: TDR's

George,

I had to cut the fiberglass around the tag before it was anything like lose. I don't think any but the most damaging impact could have knocked it off. Changing the elevation will not change the stored data any. If might affect any new data but, since the memory is full anyhow, we won't get any new data points.

Will you be coming to Punalu'u tomorrow night or on Friday morning?

I printed your comments and gave a copy to Maren earlier today.

Marc

Faxed to MARC -
1/28/97 TDR's MK's
TDR 96-368 & 96369

Date: Sat, 8 Feb 1997 11:34:25 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re:Kiholo

wed? Rear

George,
Welcome back. Glad your trip was interesting- no, you can have Jakarta- I'll settle for a description from you.
We will be going down to Kiholo This Tuesday so would appreciate permit coverage for the same time intervals as last week. The surf is still barreling in but I think I will go down there regardless to listen in the lagoon.
I have read the materials on the recording receiver and datalogger and will forward them to you on Monday so that you can have a look at them. It looks like we could accomplish our goal of determining when the animals where in the lagoon and when they were not using this equipment. It could also be used at other sites as the need warranted.
We are also scheduled for Kiholo on Feb. 20 and 21. Had to move the date forward a couple of days to avoid conflict in other areas.

Aloha,
Marc

Date: Sun, 9 Feb 1997 21:16:23 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re:Kiholo

Advance

George,
Had scheduled three trips in Feb. to monitor and try and capture #465. If we are able to capture/download/retag #465 this next week then we would only monitor the during the third trip. Otherwise, we would attempt to capture #465 during the 20-21st trip.
Please, if we don't catch our animal this week, fax us a permit for the next week. Our times should be about the same both weeks= 1200 hours during the first day until 1600 hours on the second day.

Perhaps we can talk a bit before your head for the middle east...
Best,
Marc

Date: Tue, 18 Feb 1997 12:43:20 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: UAE

Reduce

George,

Thank you very much for calling. I am excited to hear about both of your trips as it sounds like you enjoyed them both. Even better was you knews about Christian's scholarship at Tulane. What a relief that must be. Also, what a wonderful compliment.

We will try our best to find turtle #465 this time, but the weather has not been cooperative lately. I will email you the results. The notes from the 2/11/97 trip to Kiholo are below.

Kiholo Trip
Monitor #447 and #465

arrival 1320 hrs.... 2/11/97

C. McCrystal
Kristine Ness
Clayton Barnett
George Watson
Marc Rice

1400 hrs. The tide is quite low.
surf very high- breaking accross entire outer bay.
several small animals feeding near Hind point
several (11+) small animals feeding off beech north of awai.
1416 hrs- all of area C checked no sonic signals
Checked the entire lagoon but there were no signals. There were really very few animals in the lagoon. I guess they must be out feeding in spite of the high surf.

1530 hrs. saw hawksbill 15 feet off of north rocky shore in area of C4. It came to the surface and breathed three times and then went down.

Monitoring 1640 hours- C4 area/ channel entrance.
By 1700 there were quite a few animals entering the lagoon.
1829- #447 entered the lagoon and seemed to settle into area C2/3.
1942- #447 still in same area (Ness and McCrystal monitoring)
2009- #447 C2/3 area

2/12/97

0200 hrs. trip back to lagoon
#447 in C2/3
rest of lagoon quiet. No other sonics recorded.
0235 hrs. departed lagoon and returned to campsite.
0800 hrs.
Day is clear and the wind is light and varialbe. The surf has dropped down somewhat but it i still breaking all the way across the bay on occasion. The surf makes it very difficult to monitor the turtles.

0800 hrs. no sonics in the lagoon.
0900 monitoring south side off Hind point- no sonics heard. Numerous animals feeding on sides of bay as well as in the middle.
0945 monitoring south side off Hind point- no sonics heard. Numerous animals feeding on sides of bay as weel as in the middle.

Continue here

Date: Sun, 23 Feb 1997 22:29:49 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Kiholo Trip 2/20-21

Reduce to pass

George,

Welcome back. Below is a rough record of our trip to Kiholo. As you can see, we weren't able to find #465.

I will be going to San Francisco for a few days on Wednesday. I'll speak with you before then, I hope....

Aloha, Marc

Kiholo Trip
2/20-2/21/97
Thursday- Friday
Tide high at 1400 hours
Wind onshore at 5-10 kts.
Partly cloudy

SON

Arrive Kiholo at 1335 hrs. Put Achilles into the water and immediately saw sonic turtle. Thought for a moment that it was 465 but soon realized that it was 447. B TDR 96367

SON TDR 95124

1430 to 1600
We cruised from the south side of the bay up past Bakken's house and then turned around and came back out about 400 meters. Turned in to shore off of Hao Pt. and then went into the lagoon. Came back out of the lagoon and across the bay to the camp site. At no time did we pick up any sonic signals.

1630 hours- 447 B up in shallow water in area Bay 29. This animal was probably up in the shallows all the time but we could not pick it up from the boat.

50

NOTE: the area between 29 and campsite in shallow water was estimated to have 50 turtles feeding. Many were very small but plenty of good sized ones also. If this estimate is accurate, there may be as many as 150 turtles feeding along the shore from Hind Point to the end of the beach in front of the Paul Mitchel estate. !

1805 - #447 B in Area C3/4

Full moon out with few clouds. Beautiful evening no wind to speak of.

I am not going to get up in the middle of the night to monitor #447 B, but I will try and get up and monitor it before it leaves the lagoon.
2000 hours - #447 B in area C3/4
0530 hours - #447 B in area C3/4
0615 hours - #447 B in left lagoon and began feeding right outside of island. There were 15 to 30 animals feeding along the south edge of the island.
0800-1100 hours - #447 B was out off of Hind's point. It didn't seem to move very far and was found in the same area over the three hours period. There were several other turtles out in the same area but I don't know what they were doing. The water seemed to be around 3-5 meters deep.
Struck camp and left Kiholo at 1200 hours.

1100 hours monitored bay from shore. No sonics anywhere to be heard.
1110 one small green in island channel near east end of island.
JET SKI came into lagoon and then came back out again.
1115 NO sonic signals in lagoon
1115 turtle hauled out at A3 point and one hauled out on south side.
Took pictures of both animals- 45-50 cm animals and they seem to be very calm.
1140 small turtle 35-40 cm. hauled out in the area A1- this may be the same one that we have observed before coming out on that rock.

The terrestrially emergent turtles are hauled out in the hottest part of the day. They are coral white and it is very hot- they seem to be quite comfortable!
Terminate monitoring at 1200 hours.

Date: Tue, 18 Feb 1997 12:43:20 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: UAE

1997

George,

Thank you very much for calling. I am excited to hear about both of your trips as it sounds like you enjoyed them both. Even better was you knews about Christian's scholarship at Tulane. What a relief that must be. Also, what a wonderful compliment.

We will try our best to find turtle #465 this time, but the weather has not been cooperative lately. I will email you the results. The notes from the 2/11/97 trip to Kiholo are below.

Kiholo Trip
Monitor #447 and #465

arrival 1320 hrs..... 2/11/97

C. McCrystal
Kristine Ness
Clayton Barnett
George Watson
Marc Rice

1400 hrs. The tide is quite low.
surf very high- breaking accross entire outer bay.
several small animals feeding near Hind point
several (11+) small animals feeding off beech north of awai.
1416 hrs- all of area C checked no sonic signals
Checked the entire lagoon but there were no signals. There were really very few animals in the lagoon. I guess they must be out feeding in spite of the high surf.

1530 hrs. saw hawksbill 15 feet off of north rocky shore in area of C4. It came to the surface and breathed three times and then went down.

Monitoring 1640 hours- C4 area/ channel entrance.
By 1700 there were quite a few animals entering the lagoon.
1829- #447 entered the lagoon and seemed to settle into area C2/3.
1942- #447 still in same area (Ness and McCrystal monitoring)
2009- #447 C2/3 area

2/12/97

0200 hrs. trip back to lagoon
#447 in C2/3
rest of lagoon quiet. No other sonics recorded.
0235 hrs. departed lagoon and returned to campsite.
0800 hrs.
Day is clear and the wind is light and varialbe. The surf has dropped down somewhat but it i still breaking all the way across the bay on occasion. The surf makes it very difficult to monitor the turtles.

0800 hrs. no sonics in the lagoon.
0900 monitoring south side off Hind point- no sonics heard. Numerous animals feeding on sides of bay as well as in the middle.
0945 monitoring south side off Hind point- no sonics heard. Numerous animals feeding on sides of bay as weel as in the middle.

1100 hours monitored bay from shore. No sonics anywhere to be heard.
1110 one small green in island channel near east end of island.
JET SKI came into lagoon and then came back out again.
1115 NO sonic signals in lagoon
1115 turtle hauled out at A3 point and one hauled out on south side.
Took pictures of both animals- 45-50 cm animals and they seem to be very calm.
1140 small turtle 35-40 cm. hauled out in the area A1- this may be the same one that we have observed before coming out on that rock.

The terrestrially emergent turtles are hauled out in the hottest part of the day. They are coral white and it is very hot- they seem to be quite comfortable!
Terminate monitoring at 1200 hours.

==========
Marc R. Rice, Assistant Headmaster
Hawaii Preparatory Academy
P.O. Box 428
Kamuela, Hawaii 96743
mrice@hpa.edu
==========

Date: Wed, 26 Feb 1997 11:50:45 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Off to San Fran

George,
Just wanted to let you know that Pete Hendricks enformed me that the Kiholo FMA designation was signed by the Gov. on Feb. 18 and goes into effect on 2/28. They are putting signs up in the very near future.
Talk to you when I get back.
Aloha,
Marc

1997

Date: Tue, 11 Mar 1997 20:02:40 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Puako

George,
I went down yesterday and put up the last of the turtle signs. There had been one beach access without a post to attach it to. Pete Hendricks said he put one up and now we have signs at all the access points. I had one guy say the he didn't know turtles came out on the rocks to bask (talked to me while I was getting ready to put up the sign). When I asked him how he heard about it, he said he had read one of our signs....
Yea!
We also stopped and listened for #97 ab 24 PBR but heard nothing.

Hope all is well with you.
Marc

==========
Marc R. Rice, Assistant Headmaster
Hawaii Preparatory Academy
P.O. Box 428
Kamuela, Hawaii 96743
mrice@hpa.edu
==========

Date: Sat, 15 Mar 1997 21:21:01 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Sonotronics gear etc.

George,
I believe that the remote archival monitoring equipment from sonotronics might give us a clearer understanding of what the turtles at Kiholo are doing. With it we should be able to determine (at the very least) exactly when the animals are in the lagoon. This would allow us to interpret the data more accurately. Right now we really don't know for sure what the animals is doing or where it is based on the dive, time, temperature data. I looked carefully at the possibilities for deploying the data logger last time we were at Kiholo. I think that we could put the hydrophone very near the entrance to the lagoon and have the actural receiver and datalogger on land so we wouldn't have to develop a waterproof case for the equipment.

Also, we could use the equipment in other areas to monitor the coming and going of turtles with sonic tags (Puako, Punalu'u, etc.). I guess I would say that if the funds are available and it wouldn't break the bank, I would like to try it out.

I will. send you the exact description of the receiver and the data logger on Monday or Tuesday. I want to confirm with Marlin at Sonotronics that we are looking at the right stuff. I have already spoken with our computer people and they assure me that we can download the data much like we do now.

I am ready for the Punalu'u trip- just let me know what you decide on dates.

Africa is shaping up for June 16 to August 1. I think I will need three of 4 gold cards for this trip. I will certainly let you know as soon as we have something concrete as far as dates.

Thanks for the copy of the Bali paper. I enjoyed reading it! Also, thanks for your suggestions for Maren's paper. I got the paper off to the committee today at around 1000 hours which is just under the wire.....

Hope all is well with you!
Marc

Date: Wed, 19 Mar 1997 15:05:42 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Sonotronics gear etc.

Reduce

George,

Yes, I have two hydrophones on hand here. I haven't checked the spare lately, but I will soon. Also, I was just down at Puako and made visual and acoustical contact with #97. It was in 1/2 to 1 meter of water feeding between 1330 hours and 1400 hours. The tag looks to be in good shape.

The last download of #97 was on 1/21/97 so we will need to consider another capture and download. I know that you were interested in freeing up the Puako turtles and terminating that portion of the research. Do you want to completely remove the tag next time we download?

So, the paperwork is getting to you..... are you ready for a little relief. Travel to the Big Island where the stress level subsides and the pleasure level rises--- anything for next week on the horizon?

Marc

Date: Wed, 19 Mar 1997 10:19:18 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Sonotronics gear etc.

Reduce

George,

I have received the sonotronics catalogs (thanks), and I have spoke with Marlin at Sonotronics. I believe that we can do the remote data acquisition with the following items:

1.	USR-90 Dual Input Scanning Receiver	$2000
2.	DL-95 PC Compatible Data Logger	650
3.	1 mg. PCMCIA Card	125
	total	$2,775

all ordered +

All of these items are carried by sonotronics and Marlin has been alerted to the fact that you may be ordering these items. There is still some questions as to how we will do the data download, but I am sure that we can work it out without any serious problems. I will speak with you about the possibilities when we next meet or over the phone...

Marlin and I talked about getting more hydrophone, but I decided to wait and see exactly what we might need. If, however, it is easier to put everything on one purchase order and money is not a big issue we could use the following:

1.	DH-2 Directional hydrophone	$400
2.	DH-3 Omni Directional hydrophone	280

These are a luxury items and we can do the project without them if need be.

Hope this is enough information for you to go on.

Aloha,

Marc

Date: Thu, 20 Mar 1997 21:02:57 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Sonotronics

Reduce

George,

After speaking with you on the phone, I recounted the TDR's and think that perhaps you only should have one left.

a. one TDR on Kiholo turtle (sonic 447)
b. one TDR on Puako Turtle (sonic 97)
c. one TDR on Punalu'u Turtle (sonic (257)
d. Two TDR in my office

total 5

all MK55

As I recall, you ordered six TDR's and, if so, then I think that you might have one left somewhere in your office. If your office is anything like mine, it could be hard to find!

Marc

Date: Sat, 22 Mar 1997 22:08:35 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: 96-370

Thanks for the long message. I would like to leave things open from around 0800 to 1400 hours as I haven't been able to determine what schedule #97 is on right now. I suspect that I will be able to locate it around 1100 hours though. Let me know what you feel comfortable with.

The question regarding TDR deployment at Kiholo is, when will we be able to get back there to do it? If the equipment was to arrive in mid-April, I think I could get it up and running in a couple of weeks. That would allow us to put it in the field in time to catch the last half of a 14-16th April deployed TDR. You are correct, however, our cup is pretty full on this trip. It just depends on where we want to direct our resources.

I agree about the "tumored" turtle. I won't believe it until I see it! Still, the two "eye witnesses" seemed pretty reliable. We did look into caves (broke the shadow barrier). Yes, an average day.

I will check the download data on the TDR at Puako. If it looks good, and everything seems to be working fine, I will repair the damage and leave it on. If there is a significant depth offset error, I will try and correct it and, if not, I will take everything off.

Aloha,
Marc

Date: Thu, 27 Mar 1997 08:56:02 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Puako Capture Attempt

SON

George,

I went down to Puako three times on Wednesday to search for #97 without luck. Will try again today.
Our searches yesterday were:
0830-1030
1330-1430
1610-1730

The wind is really howling here and the conditions are not the greatest, but it was a mute point because our little turtle must have known we were coming.

I will try again today.
Marc

Date: Fri, 28 Mar 1997 09:49:58 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Puako Capture Attempt

There were about 10 turtles in the area feeding during the times I was there. Unfortunately, none of them had a sonic. I was also there this morning and there were a couple of animals feeding, but I was unable to hear any sonic signals...

Kiholo:

I will see about two additional tents. We can probably squeeze them out so that each of you has a tent. We can charge Alonzo and Jill $45 for the food for the three days- OK?
Marc

Reduce

Date: Sun, 30 Mar 1997 09:28:06 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Next week

George,

I spoke with ~~Mildred~~ Melinda (?) at WC a couple of days ago and she said that she was able to download the data from the TDR I had sent back to her and that she was going to pressure test it to see if she can develop a correction factor. During our conversation we discussed the kind of wear and tear that the tags are receiving and she indicated that they can build up an epoxy rim around the sensors so that they are not so exposed to bumping and scraping. I was wondering if you would mind (since you will be away on the mainland) if I called her and asked if she could do something with the three TDR'S you just ordered? If there was an additional cost, I could cover it so that you wouldn't have to redo the purchase order.

Let me know what you think.

Marc

==========

Reduce

Date: Sun, 30 Mar 1997 11:02:37 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Next week

George,

Got your message and your concerns. The wear and tear was specifically noted on the surface of the depth sensor where the silicon layer over the sensor was worn off. The main concern she expressed with the sensors is that of impact, not so much abrasion as we see on the fiberglass area. Yes, you should speak with them yourself and see what the story is. She says that they build up the tags that are being placed on seals (wherever that is). Anyhow, it was a thought and is worth investigating.

I figured the cost thing would be a real problem, sorry. The buildup of algae, etc in a protected areas around the sensors is something that I hadn't fully considered. You may be right, the areas needs to be wiped clean by normal abrasion!

Happy Easter,

Marc

Reduce

Date: Wed, 2 Apr 1997 12:58:37 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Sonotronics

George,

SON

I have not been able to capture #97 (Puako) yet although I did see it this morning at 0900 hours. It left the area before I had a chance to nab it. I will try again this afternoon.

Some problems with the Kiholo trip. I have just found out that there will be two large groups staying down at Kiholo on 14-16 April. Parker School will be there Monday-Tuesday and the Makali'i (Hawaiian voyaging canoe) will be be there on Tuesday-Wednesday.

We can still go but we would have to camp out on the penninsula and we would have some trouble getting in. Also, there would be way to many people in the area to do the kind of capture work that we were thinking about.

I know it is probably going to creat problems for you, but do you think we could postpone the trip for one week and go the following Monday (April 21--23). I apologize this.... I thought I had everything under control. Let me know what you think about all this...

Marc

DOWNLOADED

Recovered

SON97 TDR95 371 Reduce

Date: Wed, 2 Apr 1997 21:25:44 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Puako Turtle

George,

Success! We were able to catch #97 at 1700 hours this evening. It was feeding on that center island where they normally bask. It was feedin right at the edge of the water and I was able to pounce on it. Downloaded the data twice and took a cursory look at it- it seems to be fine. I patched up the tag and release it at 1835 hrs.

The turtle looked very healthy. The SCL = 65.0 cm and the CCL = 69.5 cm.

I am quite happy that we were able to get this one out of the way. I was getting a little tired ot driving to Puako several times a day!

Hope you trip was a successful one.

Marc

Date: Sun, 13 Apr 1997 22:20:54 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Kawaihae Turtles

George,
Turtle sighting at Kahalu'u by one of my students
Tags:
RH K517
LH K518

ORIG. 3/16/94 SCL=69.3 Kahaluu Beach Park

5/15/94 Resighted KAHALUU Beach PARK

~~1135 hrs.~~
4/13/97

~~NEAR KAWAIHAE HARBOR~~

Aniaml observed by student snorkeling between north bathrooms and church-in shallows feeding. Turtle very "friendly" and not bothered a bit by snorkelers.

I will work on some ideas about monitoring, TDR, etc.

See you at the Puako Launch Ramp sometime around 0800+ hrs. Anything you want me to bring for you (wts.?)?

Aloha,
Marc

PUAKO #20

4/16/97 WEDNESDAY

A/L Depart FL82 Aloha ~6302m to ho
AVIS #34 Total

Prime Object: Scuba Puako region searching for previously reported turtle w/C

need to verify
Kawaihae = 20° 01.97 min N
155° 49.94 min W

TWO Scuba: Excellent ocean conditions
1st = ~30 PBR South to ~104 PBR MAX 30' ~50 min
11 captures.

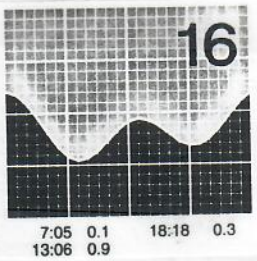
2nd = PANIAU (surfing AREA) 25' - 50 MIN
South direction again to about the end of PBR. Never dove here before for turtles. 8 captured. None with tags. Cleaning station found along ridge off sho
Turtles there very tame. New are not known before to Marc. Not seen by me.
"ORCHID" Hotel is nearby. Mauna Loai seen at point.

Depart Aloha 5 PM FL97

needs

(1) Size frequency - Dan Akaboshi analysis?
How about tagged - vs - untagged
first 3 years data vs last 3 years data

(2) 4/2/97 download SON97
PUAKO TDR96371.
This was replaced for TDR95125
removed 1/21/97 and sent to factory.
Blower to depth sensor.



(3) Call Gary Simonds 883-0298 Capt. for ocean sports
Tumored turtle seen late 96 (?)
(CLAIRE saw also) - in front of 20-30 PBR
Seen sleeping cave 11/24/96 Between 24-56 PBR
11/21/96 off Puako "satellite pack on right shoulder" = TDR
Morning Dive

(4) Hot-spot MAPS of Ciguatera - DAR? - Hokama?
Mention HOT KONA to JAN.

(5) Change PUNALUU TO ~~early June~~ late July

(6) Phone Paul Jokiel

(7) Latest Marc could go to FFS

(8) 10 day delay to control box - to guard against our being wrong that it's the turtles' last (westing)

(9) Danny AKAKA reports (saw him at the KONA AIRPORT) "2-3 wks ago" dead turtle found at Orchid.

(10) New Logbook w/ DATA PAGES for Kinole #27

Date: Mon, 14 Apr 1997 22:23:33 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Environmental Data for the data turtle (fwd)

George,
We are all set for the dive on Wednesday. I will have weights for you and we will meet you at the dock sometime around 0800 hrs (or whenever you get there).

Re: Jobs we can perform in the remaining couple of months

1. We can count some of the TDR work we are doing as time and materials provided. We are doing the TDR downloads and preliminary data summaries. We have a bit of customized software that allows us to summarize the TDR data in a way that best fits the type of data that these green turtles are presenting.

2. When the recording sonic monitoring equipment arrives, we can deploy it and monitor it over the next few months. This will require development of appropriate sampling protocols, planning and placement of the hydrophone in a safe/secure area. We will have to build a secure case for the receiver and the DL95 data logger (it will have to withstand environmental factors and possible human damage). We will have to go down to Kiholo to retrieve data every two weeks (this is a guestimate but probably pretty accurate and dependent upon the amount of contact time the unit has with sonic animals). We will need to summarize the data and put it into a form that is useable.

3. The Kawaihae censusing project- we could do a series of visual transects along the outer Kawaihae reef area to estimate the turtle population in the area. This could also spin off into a tagging program in the area as we become more familiar with the areas where the turtles feed and where they rest.

All of these projects require a substantial amount of logistical support, including everything from trucks to dive gear to boats. Perhaps we can discuss one or all of these possible projects when you are here on Wednesday.

I did want to let you know that I will be gone from June 13 to August 1 this summer. This may impact the Punalu'u project so I may need to train someone to do the download on sonic #257. Let's see, we downloaded last on April 4 so we should download again on June 4. When do you normally go over for their summer program?

I have rambled on enough for now. More tomorrow.
Aloha,
Marc

Date: Wed, 16 Apr 1997 21:30:06 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Article on temperature increases in Kbay seawater (fwd)

George,
Thanks to you also. It was a great day. I was pleased to finally get back out into the field without my computer and the thought of catching one particular turtle. I was also glad that we were able to explore some new territory this time. Great day all around....

Paul is referring to the area south of the breakwater were the shark heiau is located- in front of Spencer Park. This whole areas is called Pelekane Bay. I don't know what he saw when he was out in the area checking out his coral transplant sites.

I will work out some arrangement where the truck and trailer can drop me off at Kawaihae to meet you. Then, I can ride to Kiholo with you once we have looked around the harbor area...In the meantime, George and the students can get the campsite set up and everything shipshape... That sound possible for you?

I think that I will be able to sleep well tonight...

Best,
Marc

Reduce

Date: Sun, 27 Apr 1997 14:10:44 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: FFS TAGGING TRIP

George,
The best date for me to take off for FFS would be August 30 or after (that is late in August!). Our new faculty arrive on August 11, and our orientation/workshops/etc. begin on August 18. The first week of school for us is August 25 to 30. I feel that I could only cajole my way out of here after the first week of school. I hope that this might fit in with your schedule, but if it doesn't I certainly understand. I appreciate your thinking of me for this project. It sounds very interesting and exciting, and I would very much like to assist you.
Aloha,
Marc

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Reduce

Date: Mon, 28 Apr 1997 13:10:21 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Favor- Nomads of the Sea

George,
I will look into the Nomads of the Sea Video. I think we can make some reasonably good copies from the one we have.
I received the "service order" from your office today and we will begin the snorkel survey tomorrow. Are there any further directions you would like to pass on about the protocol for the surveys? Let me know and I will encorporate them into the work tomorrow and Wednesday.
I also received the historical data today. Thanks very much. I am very interested in taking a look at the data to see if we can see some trends or new ways of looking at this population. I am going to give a copy to Dan Akaboshi who wants to use it in the size frequency analysis.
Frank Bell got one Kiholo turtle tracking session done over the weekend at Kiholo. #447 was back over feeding right off the picnic tables again. Do you want me to send this material to you as I get it done or keep it together and send it all at once?

Aloha,
Marc

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Reduce

Date: Wed, 7 May 1997 22:13:19 -1000
From: mrice@hpa.edu
To: gbalazs@honlab.nmfs.hawaii.edu
Subject: Kawaihae Survey

George,
Hope your week has been going well. We went down to Kawaihae this afternoon and reran the transects along the breakwater. The counts were 24, 26,23,13 and 22 turtles. There were certainly a lot of them in the area near the south end of the transects.
I will put the data in tabular form tomorrow and get it off to you. I did take some video of the area during my transect, and I will send it to you to take a look at. There are plenty of sleeping areas in the shallow water where we did the swim, and I suspect that a night foray into the area would allow us to catch quite a few animals.

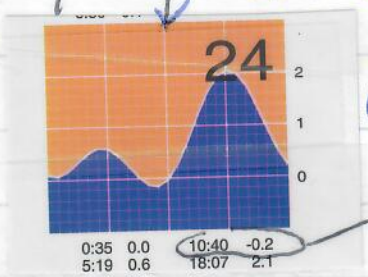
Aloha,
Marc

HAWAIIAN 248 P2
Depart 755am
SATURDAY
24 MAY 97
Survey and algae collections
of Kiholo, Pusko &
Kawaihae with
Dennis Russell

24 MAY

NOON

SATurday 1997



Need
Trace
Dennis
complete
Necro

9:30am met Marc Rice and Georgine Busch need to send
at upper Kiholo Gate. Walked around
Bay. Turtles feeding near Makaha and
off Hind point. Lots of Turbinaria
washed up on shore. Two turtles seen
in camp pond - foraging not seen. Dennis
sampled Chlorela? Spirulla? unicellular
eaten by turtles (see eating it years ago).
Marc listened and heard Son ——
TDR
and saw it near Hind Point.
We all spent about an hour
snorkeling in bay and perimeter.
In center on flat bottom I
saw thick stands of long
Turbinaria growing. Near shore island
I found SPARCE Acanthophora on top

- Need - Alphabetized Listing of algae in order to number code
- Sealed in plastic food samples
- Sent Georgine Busch HC1 Box 16 KAWAIHAE Village, Kamela HI 96743-9701

Phone = (808) 882-1657
PAGE 925-6896 FAX - 882-7384
EARL BARKER'S on secretary on Big IS.

- MTSG chinese for Dennis + Jiwetherall FFS abstract.
- Dennis found Codium at Waialae (Kahala Oahu) Beach Park.
- Separate by Discrete foraging are by source - Stomach, Stranded (sick/notsick), ~~Stom~~ Mouth, fecal.

5/24/97 of coral head. Entire bottom of
SAT. Hind Point is fine silt-ladden.
But if you pick up a loose rock and shake it to clean it, underneath silt there is dense red Gelidium (Pterocladia).
~Noon - drove to Puako / 24PBR.
Several beach-goers and spearfishermen going offshore. Thick, spongy turf on shallow Pahoehoe. Warm water (see turtle TDR). No TDR turtle heard here by Marc. Dennis says that Thick Turf is comprised of different algae at different sites here. He found Acanthophora

4104190E33

SEA TURTLE TAGGING FORM

PIT not read?

1F27452944

Redin

New PIT

CAPTURE DATE, LOCATION AND METHOD: [illegible]

4/16/97 PUAKO HAND SCUBA

PERSON RECORDING DATA: Kikuala

OLD TAGS: Healed Slit [illegible]

Healed Slit [illegible]

RH - K323

LH - K324

TUMOR SCORE: 0

NEW TAGS: RFL [illegible]

LFL [illegible]

OTHER NEW TAGS: [illegible]

[illegible]

STRAIGHT CARAPACE-LENGTH: 54.2 WIDTH: 42.0

NOTCH LENGTH: 53.3 DB: L.O. VB: L.O.

CURVED CARAPACE LENGTH: 57.5 WIDTH: 50.0

HEAD WIDTH: 8.4

SEX: MALE, FEMALE OR UNDETERMINED

PPS: YES OR NO OR NE: Y

TAIL LENGTH: T 13 C 9

RIGHT FRONT FLIPPER WIDTH: 9.9

SAMPLES COLLECTED:

PLASTRON LENGTH: 41.9

WEIGHT: 46.0

DESCRIPTIVE REMARKS:

Apparent PIT tag not found when scanned. Double-check on next visit

Due to weak batteries? or inexpensive reader? or loss of pit tag?

PIT 221A6BA45A

Not read

(9)

CAPTURE DATE, LOCATION AND METHOD: 4/22/97 Kihoro Beach Beach net

PERSON RECORDING DATA: JE

OLD TAGS: RFL Y124, LFL Y125, LH Q599

NEW TAG: 4102707A33

TUMOR SCORE: 0

OTHER NEW TAGS:

STRAIGHT CARAPACE-LENGTH: 60.1 WIDTH: 47.6

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

CURVED CARAPACE LENGTH: 64.5 WIDTH: 57.5

HEAD WIDTH:

SEX: MALE, FEMALE OR UNDETERMINED

PPS: YES OR NO OR NE

TAIL LENGTH: T C

RIGHT FRONT FLIPPER WIDTH:

SAMPLES COLLECTI

PLASTRON LENGTH:

WEIGHT:

DESCRIPTIVE REMARKS: RH Healed notch, 3.6 Lig IM

PIT 1F2B271778

Not read

(33)

CAPTURE DATE, LOCATION AND METHOD: Kihoro 4/21/97 Lagoon - Hand

PERSON RECORDING DATA: JE

OLD TAGS: RFL Y102, LH K649, RH K650, LFL Y103, L3-4 Y104

NEW TAG: 4104012479

TUMOR SCORE: 0

OTHER NEW TAGS:

STRAIGHT CARAPACE-LENGTH: 66.9 WIDTH: 52.0

NOTCH LENGTH: 66.7 DB: L.O. VB: L.O.

CURVED CARAPACE LENGTH: 70.5 WIDTH: 66.5

HEAD WIDTH:

SEX: MALE, FEMALE OR UNDETERMINED

PPS: YES OR NO OR NE: yes

TAIL LENGTH: T C

RIGHT FRONT FLIPPER WIDTH:

SAMPLES COLLECTI

PLASTRON LENGTH: 54.9

WEIGHT:

DESCRIPTIVE REMARKS: 4.3 Lig IM

(SATURDAY continued) 5/24/97
Site visits w/ Dennis Russell
Marc Rice

aways out channel. We say 6-7 turtles feeding in one limited area not real close to shore. Dennis snorkeled by them and watched.
Photo by Fusako MARC's sign of Dennis and (for sale)
Dennis and El then drove to Kawaihae. Dennis snorkeled. 6-7 turtles seen by me from the breakwater - first one/third region from new harbor construction. Note gravel is now on seawall forming a "road" that can be driven on. Dennis saw more turtles than this looking underwater. All feeding. Reaching under rocks finding Anarsia, which Dennis collected. No tumors seen.

OBJECTIVE = Collect algae from foraging areas where turtles don't have TMRS.

9 JUNE 97 Depart Aloha FL 36 745am
Monday after missing 620am flight due to fuss burning out in 1976 cad.

TIME OF TIDES = Low high = 719 AM = 0.6 ft
High Low = 1153 A.M. = 0.2 ft
High high = 719 PM 1.8 ft.

Saw ~~return~~ tracks from BASTAG SUBOBULT (last night)

915-1015 am PUAKO photo Low tide
sample numbers (track may show in photo)

Left Puako
P1 Red Turf in previously seen forage area
P2 Turbinaria - whole rosette
P3 Padina

P4 Acanthophora + fine red

Right Puako
P5 Sandy Turf
P6 ~~Sandy turf~~ shallow loose turf

Kahaluu Beach photos
1115 - 1145 am low tide
K1 left - red turf
K2 Right - Wall Base - Ulva
K3 " " " Red turf

1045 AM
Kiholo upper gate padlock & chain
Couldn't drive down - so went to Kahaluu to collect

6/9/97 Federal 9 zip lock bags w/ small amount of sea water in each. Inside soft insulated carrier. This inside 34 quart red cooler with small blue ice at each end with newspapers crumpled for absorb. Duct tape around seam of lid.
Monday

Checked in at Fedex 1240 pm (1 pm cutoff)
15 lbs. #5396664932
1-800-463-3339. Due for delivery in St. Petersberg by 10:30 AM 6/11 wednesday

Dr. Jon Landsberg, FL Marine Research Institute
FL Dept. of Environmental Protection
100 8th Avenue S.E.
St. P., FL 33701-5095
Tel. (813) 896-8627

KM 84 has 2 signs Bishop estate, about protecting Hawaiian Resources.

Near Kahalau, at "white Sands Beach" and other shoreline areas toward Kailua Kona on Alii Drive I noted lots of turf

Puako to Kahalu'u Beach Park
a 25 miles estimate

"The Congo" next to GABON (city = Liberdad)

6/9/97 Monday red algae on black lava - visible due to low tide. Present all year round?

Need - Photo-plots AT PUAKO by MARC (TRIPOD)
Need scoop net. Also - collect Total ~~area~~ an area "plot" nearby.
Need - Lanai
MARC'S TENT/Gear for shipment to FFS.
Need - Collect Pterodadia on Maui (Tumor sites)

Bishop Museum Occasional Papers - My Necker Report
My Kahoolawe report

Fibro Sarcoma - give disease to other ~~turtles~~ cats?

Drove to Puako and met Marc and Scuba class. Turtle hauled out, dry, on Pahoehoe offshore. Second turtle came and pushed it away. Later, yet another turtle displaced that one. When tide rose high enough so no longer dry, the last turtle abandoned basking.
Waited until ~ 4PM when we saw TDP96371 offshore a bit. Tried to use scoop net, but

6/9/97 when walking out the turtle
Monday either heard or saw us and
left (but did not panic).

Marc reports seeing a turtle of
Puaka at 31 ft. depth eating Turbinaria
taking ~ 1/2 of tops off in one bite each.

Many other turtles seen feeding in area - s
very close to shore.

Depart 630 PM Aloha FL 279
ARRVE Honolulu ~ 710 PM.

Date: Thu, 1 Feb 1996 16:34:45 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: tag number

George,
I don't remember the date of the capture, but I did reach down and catch the turtle some time last year (I think!) You measured it and tagged it but I do not remember the tag numbers. Glad to hear that the floater is doing ok- seems that if it can rest comfortably in 2' of water, it could stay at any depth!
Have a nice evening....
Marc

1996

MAUNA LANI Turtle By Ruddles Pier The one They feed

==========
Marc R. Rice
Hawaii Preparatory Academy
Kamuela, Hawaii 96743
mrice@hpa.edu
==========
==

Need Tag No. / History

Have not brought to Honolulu

[21] From: Denise Ellis 2/16/96 11:06AM (1258 bytes: 22 ln)
To: George Balazs
cc: Shawn Murakawa
Subject: Puako sighting (2-15-96)
---------- Message Contents ----------

Talked to Christine Gabriel she said turtle (~2-2 1/2 ft) was up on rocks 1/2 in a tidepool, seemingly resting. Didn't know if that was normal behavior so assumed it wasn't healthy, someone came up to the group she was with and said they'd seen 3 doing the same thing the week before. They were 30-40 ft away observing through binoculars, they did not see any tumors, tags or line. I mentioned it may have been basking, but if they did happen to see it again in the same area to let us know. She was interested in getting more info about the behavior and turtles.

A separate mention: Saw dead turtle floating in Kawaihai Commercial Boat harbor around the 18th of Jan. Badly decomposed (eyes eaten away and shell whitened). No tumors or tags noted. Approximately 3 ft in size. No other injuries noted.

Address:
65-1158 Mamalahoa Hwy
#8A, Suite 182
Kamawela, HI 96743
Ph: (808) 885-3460

Date: Sat, 23 Mar 1996 15:53:02 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Two items I need to talk to you about before I leave

George,
Went down to Puako and spent some time observing and video taping the basking turtles. There were at least 8 animals in the shallows and two basking. A very popular site- actually, we could have run a whole tagging operation right off the shore there. I meet with Cindy Carlisle (she called you earlier-she got your sign). They are nice folks and are simply looking out for the turtles. We will work together over the next few weeks/months to get a sign that everyone can live with. She feels that the Puako Community Association will be able to put up some money for the signs.

Aloha,
Marc

Date: Thu, 28 Mar 1996 15:27:31 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Kiholo Turtles- still lost!

George,

I took the boat down to Kiholo on Wednesday (3/27/96) and monitored for our lost turtles. Unfortunately, there was not a sound out in the bay or in the lagoon. Also, noted only two turtles in the lagoon eventhough we were there for approximately 2 hours. Sure seems to be a smaller population visible lately! or is it just my imagination.

We held the hydrophone to the entrance of the lava tube but there was not symphony of sonic tags- not a single sound.

I haven't given up hope yet...
Marc

Date: Wed, 3 Apr 1996 16:41:21 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Napoopoo Turtle.

George,

Talked to Carol Lee Gamble-Kreeger(still not certain about the last name) about the turtle at Napoopoo with netting on it. She says that it frequents the shallows in front of her house and that the netting is caught around the front flipper and "it appears to be coming out of the mouth." She said that Charlie Nahale and one other fellow came by from enforcement and spent about an hour with her. She seemed satisfied with their attention. They had told her that they would call you and I confirmed that they had. I explained the difficult situation you were in, being in HNL and all and that we would try and come down there soon to take a look. She claims that she can find the animal most mornings in front of her house. She will only be here until the 11th of this month so I think we might try and go down there on Sunday, if it is ok with you. Perhaps, assuming that we get this planned and carried out, you could wear your pager on Sunday so that we can contact you should the need arise. Let me know if this plan is ok with you. I am very congnizant of the problems created by having non-NMFS people doing this kind of thing. Please be blunt whenever it is necessary- we can take it. If you don't think we should do something like this, just say so. Also, please feel free to ask us to run errands for you (like this instance) whenever you feel we can help. You know that I will tell you if we can't help. One of the things I value about our program and relationship is the fact that we can tell each other what we think--

Thanks for the quick turn-around on the dead turtle. I will call Alan Brown back and let him know about the animal- he was curious since he saw the tags.

Best,
Marc

Date: Sun, 7 Apr 1996 19:35:14 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Possibility

George,

It would be great if you could come over on Tuesday evening. We have two extra bedrooms at my house and would be honored to have you stay with us. We could, if you were particularly adventuresome, even do a night snorkel or SCUBA dive at Puako but that might be a stretch for a couple of older fellows (especially since you have to fly the next day)! If you come over on Tuesday, you wouldn't have to get up quite so early on Wednesday.

We could go up to breakfast at HPA at 0630 in the morning and leave from there for Puako...(with our frozen turtle, of course).

Thanks for the kind words about our efforts. We felt good about having tried, but do wish we could have found something. We snorkeled the bay from 0900 to 1030 (7 people on line) but saw not a turtle. After a brief rest, we went on a SCUBA dive (three teams) and spent another hour searching the area. I saw one small turtle (40-45 cm) but it wasn't entangled with netting. That was the only turtle we saw all day. It was a good exercise for the students and we made some friends on the bay- two very positive things. Plus, it was a beautiful day! We will try again with a group of students sometime in a week or two.

I did give Carolee Krieger your NMFS phone number just in case she wanted to call for some reason. She was very thankful that you would allow us to come down and try to find the little rascal.. I'll give you her Santa Barbara address tomorrow if you want to send her anything...

All for now.

Aloha,
Marc

1996

Date: Mon, 8 Apr 1996 09:10:00 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Possibility

George,

The address for the Napoopoo couple is
Carolee and David Krieger
808 Romero Cyn. Rd.
Santa Barbara, CA 93108
Phone 805-969-0824
Fax 805 565 3394

The Puako Lady is
Cindy Carlisle
411 Spruce
Boulder, CO 80302

Cindy has already gone back to Colorado and Carolee will be going back this Wednesday, I believe.

Just let me know when you will be over here and we can meet at some location. Perhaps, if I can be of assistance, we can meet at Puako or we can get situated up here first and then go down. Whatever you wish is fine....

Marc

==========

Date: Fri, 10 May 1996 08:45:42 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Thank You! (fwd)

George,

So disconcerting news! I have been working with the TDR's and found that number 406 was not communicating properly. Consequently, I was working with #417. I put it into the pool last night to do an accuracy test and when I opened it this morning the red light was on which indicates that it was malfunctioning also. I immediately got on the phone with Roger at Wildlife and spoke with him. He talked me through the reset operation for 417 and we got it back in operation. He thought that there was a little condensation inside which caused the tag to fail and recommended that I send both tags back to him for immediate repair. I have fedexed both tags to him for arrival monday morning and he will work on them immediately and get them back to us by Wednesday. I also ordered one new MK5 tag to try out at some point and as a backup for the others. This tag is has a depth range of 0-125 meters with an accuracy of - ior + .5 meters. The battery will last for 3+ years and the unit can be rebatteried at the factory. While this does put a small amount of suspense into the operation, Roger assured me that he could and would have everything back to us on Wednesday.

I am sorry to lay this on you but I thought it was the best way to go and so went ahead and did it.....

Hope you had a successful day in K Bay...

Marc

==========

Reduce & Paste

1996

Date: Tue, 18 Jun 1996 09:03:33 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Wildlife Computers

George,

Just finished speaking with Sandy at Wildlife Computers. I was able to purchase another of the MK%'s for $900 and it will be coming soon- surely in time for the July 2nd deployment. They are doubtful whether the MK3 can be fixed- Roger will look at it later. Apparently, his father died and he has not been at work for some time.

I told them that we may want to purchase a couple of more MK5's and she said that they will all be gone for the month of July. We would not be able to order them until August unless we did it immediately. The tech lady asked if we could/would use the clear epoxy instead of the buoyant/opaque like we have now. The clear expoxy tag weights 50 grams as opposed to 40 grams but the clear is much easier for them to trouble shot, if necessary. I told her I didn't think it would be a problem but I said I would have to confer with you first. What do you think?

Anyhow, we have one more tag coming and we will have 1 MK3 and 2 MK5 tags available for deployment on the 2nd. We can decide later exactly how many we want to deploy.

Just got a call from my wife that some poachers were observed lifting turtles into a boat at 2400 hours last night off of #80 Puako Dive. The police stopped them at the boat ramp but there were no turtles, only some slipper lobsters which they were fined for. We'll see if there are any carcasses that wash up on the beach. Perhaps your enforcement branch is aware of the call/ but probably not. Glad there are people watching the coastline that late at night.

Aloha,
Marc

Reduce glue

Date: Wed, 18 Sep 1996 08:21:12 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: George: buoyant epoxy

George, Program Review
Hope you presentation goes well today. I observed #28 at PBR 24 yesterday at 0900 hours so it is still around. 97 was not available! Below is a note from Bobbie Sullivan:

16 Sep 96
Hi Marc -

If you see a gap in your turtle dive data for the past 2 mornings, we know why. We saw the turtle with the box on the RIGHT side grazing in the shallows for quite awhile yesterday morning (15 Sep 96 @ 09:48AM). We saw it as we were wading into the water in front of house #40. It was with two other turtles, all munching away on that brownish mossy limu that covers rocks in the shallows (don't know what it's called). The water there was about waist high on us -- about 1 m? We watched for a bit then did our dive. When we waded back out of the water at 10:15AM we noticed that subject turtle was still in the same area, -- still munching away -- but its two buddies had left. Water temp, by the way, was 28C.

Today, Sep 16, we saw the same turtle grazing in almost the same spot at about 12:15PM. Don't know how long it had been there. We watched from the shoreline rocks for about 10 min. It was still there when we left. Water temp in the shallows today at that time was 29C.

Seems that the rascal may be invading other pastures on occasion.

When are you available to come on over and do the TDRs at Puako?

Marc

HAWAII PREPARATORY ACADEMY
P.O. BOX 428 • KAMUELA, HAWAII 96743-0428
(808) 885-7321

FAX TRANSMITTAL

DATE: 4/30/97 TIME: _____

FROM: Marc Rice DEPT: _____
FAX Number (808) 885-8203

TO: George Balazs

COMPANY/SCHOOL: _____

CITY, STATE: _____

FAX NUMBER: 808-943-1290

NUMBER OF PAGES (INCLUDING COVER SHEET) TRANSMITTED: _____

MESSAGE: George -
Here is a preliminary workup on the data we gathered yesterday at Kawaihae. Let me know what you think - I was surprised by the number of animals we saw!

Marc

Please advise if there are any problems with transmission: Tel. No. (808) 885-7321. Ask for Administration Office.

GREEN TURTLE CENSUS 4/29/97
KAWAIHAE
Directions to Divers

PURPOSE: Develop an understanding of the number and distribution of green turtles that use the outer Kawaihae reef as a forage ground.

Methods: We will conduct swimming transects at given depths in specified directions covering the extent of the Kawaihae reef. Two divers will swim side by side observing an area 10 meters wide (5 meters on either side of the dive path). One diver will be the primary observer/recorder and the other diver will assist in observations and navigate.

The observing/recording diver and the assistant will look for sea turtles that occur within the 10 meter path. When a turtle is observed, the recorder will write down the time, size of turtle (small, medium, large), behavior (swimming, resting in reef, feeding), and note if there are any unusual bumps (tumors) on the turtle. Do not deviate from your path to investigate a specific turtle unless there is something very special that needs checking (suspected tumor). If you deviate, please resume the survey path as soon as possible.

The time at the beginning and the end of the survey should be noted as well as the time that any turtle is seen.

RECORD ALL INFORMATION ON THE UNDERWATER SLATE LEGIBLY.

Kawaihae Turtle Survey
4/29/97
1620 to 1720 hours
Tide = .5 feet and rising
Cloud cover- 50 %
Wind- onshore, 5 kts
Sea State- Calm with .5 foot swell

5 Teams were deployed to run timed swimming transects from the outer Breakwater to the turn in the main breakwater of the inner harbor.

The transects were labeled 1-4 and shoreline. Each dive team timed their transect and wrote down the time of each observation. I have used their total time and the distance they traveled to locate each observation. Obviously, the degree of accuracy is questionable but should give a reasonable approximation of the location of the turtles observed. It was also possible that one dive team could "scare" a turtle out of their area into that of another team's area resulting in double counting of that turtle. The estimated location of each observation is indicated by a dot on Figure 1. The chronology of turtle sitings for each transect is found in Tables 1-5. Turtle size was estimated as small (<45 cm.), medium (45-70 cm.) and large (>70 cm.). Again, these estimates are subject to great variation and error.

A total of 61 turtles were counted on the 4 swimming transects. An additional 5 were counted during the shoreline walking transect. The majority of the turtles were located in the area south of the main breakwater (Army Corps cement barrier). Most of the turtles were seen as swimming, but this may have been due to the approach of the divers. The surveyors indicated that they felt the turtles were fairly skittish and very alert to the presence of the divers.

RESULTS:

Table 1. Transect 1

Time	Size (SMall, Medium, Large)	Behavior (Swimming, Resting, Feeding)	Tumors
1621	SM	S	
1623	M	S	
1623	SM	S	
1626	SM	S	
1630	SM	S	
1632	SM	S	

total = 6

Table 3. Transect 3

Time	Size (SMall, Medium, Large)	Behavior (Swimming, Resting, Feeding)	Tumors
1621	M	S	
1622	M	S	
1623	SM	S	
1624	M	S	
1624	M	S	
1626	M	S	
1629	M	S	
1629	M	S	
1631	M	S	
1652	SM	S	

total = 10

Table 4. Transect 4

Time	Size (SMall, Medium, Large)	Behavior (Swimming, Resting, Feeding)	Tumors
1623	M	S	
1624	M	S	
1625	M	S	
1625	M	S	
1625	M	S	
1626	M	S	
1626	M	S	
1626	M	S	
1626	M	S	
1628	M	S	
1629	SM	F	
1630	M	R	
1644	M	S	
1646	M	S	
1709	M	S	

total = 15

Table 5. SHORE LINE TRANSECT

Time	Size (SMall, Medium, Large)	Behavior (Swimming, Resting, Feeding)	Tumors
1630	M	SURFACE	
1634	M	SURFACE	
1643	M	SURFACE	
1650 (inside harbor)	M	SURFACE	
1654	M	SURFACE	

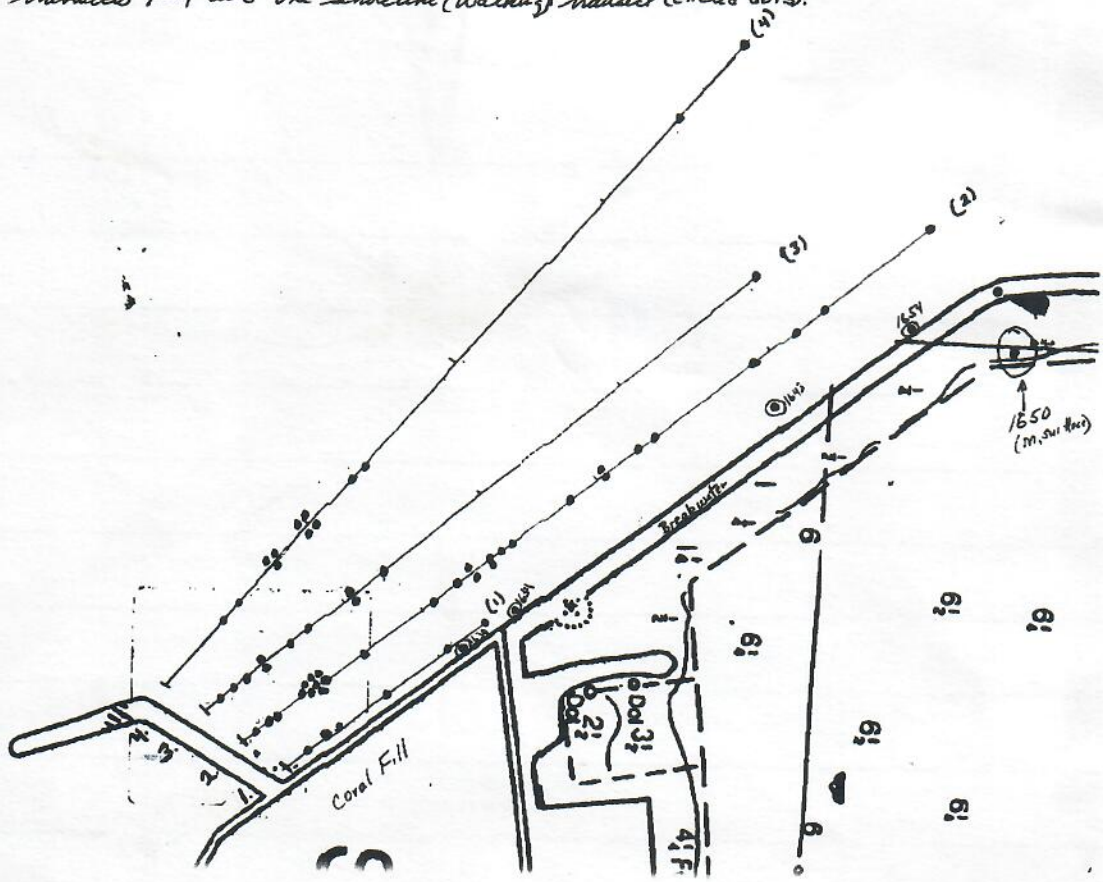
total = 5

Table 2. Transect 2

Time	Size (SMall, Medium, Large)	Behavior (Swimming, Resting, Feeding)	Tumors
1620	M	S	
1622	SM	S	
1623	SM	S	
1624	M	F	
1624	M	R	
1624	M	S	
1624	M	S	
1624	SM	R	
1624	SM	S	
1628	SM	S	
1631	M	S	
1638	L	S	
1638	M	R	
1640	M	S	
1640	S	S	
1641	M	S	
1641	M	S	
1642	M	F	
1643	SM	S	
1646	L	S	
1648	L	S	
1650	SM	F	
1652	M	F	
1657	L	S	
1659	L	S	
1700	SM	S	
1703	L	S	
1709	L	S	
1709	L	F	

total = 30

Figure 1. Location (estimated) of turtle sightings along transects 1–4 and the shoreline (walking) transect (circled dots).



Date: Thu, 24 Apr 1997 21:02:59 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Kiholo

George,

Wow! All of our fears have been confirmed- they are still there and more are coming. Where do they all live? Thanks for sending the historical information. It is an interesting if disconcerting dilema.

Best,
Marc

DEPARTMENT OF DEFENSE
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000

3 June, 1997

REPLY TO ATTENTION OF

V543

2587062-7 00
ANIMAL, REPTILIAN TURTLE
V543 T BALAZS
TPL/BHW/DPS/dvj

George H. Balazs
National Marine Fisheries Service
2570 Dole Street
Honolulu, HI 96822-2396

4-16-97
PUAKO

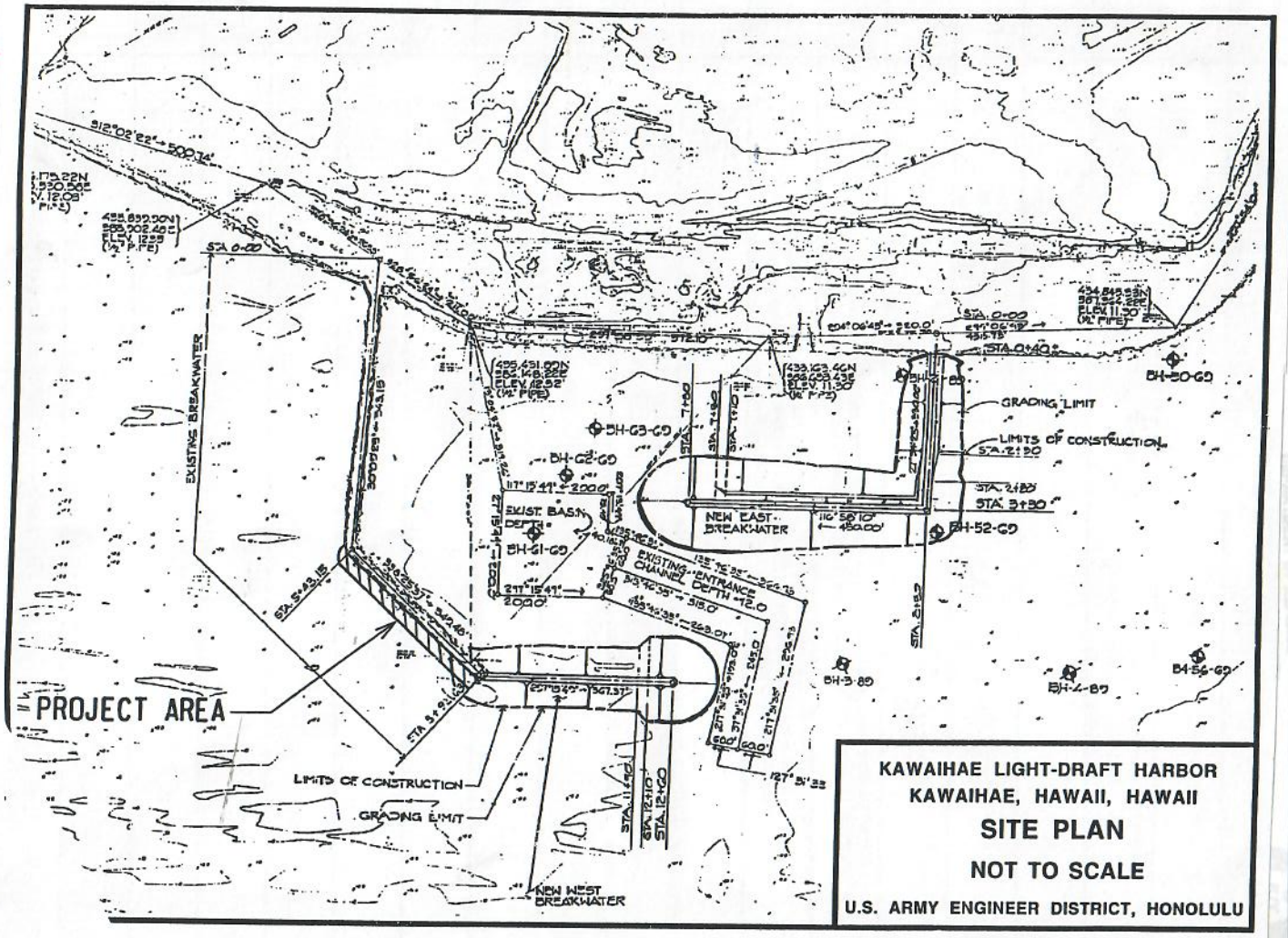
AFIP DIAGNOSIS:

V543 Eyelid, right dorsal (per contributor): Granuloma, focal, with epidermal hyperplasia and focal ulceration, Green Sea Turtle (*Chelonia mydas*), chelonian.

COMMENT: The small growth noted at the time of tagging is a granuloma. Special stains, including those for bacteria and fungi, did not reveal the cause of this lesion. There is no evidence of neoplasia in the sections we examined. Surgical excision should be curative.

Thomas P. Lipscomb, DVM, DACVP
LTC, VC, USA
Chief, Division of Veterinary Pathology

Bruce H. Williams, DVM, DACVP
MAJ, VC, USA
Division of Veterinary Pathology



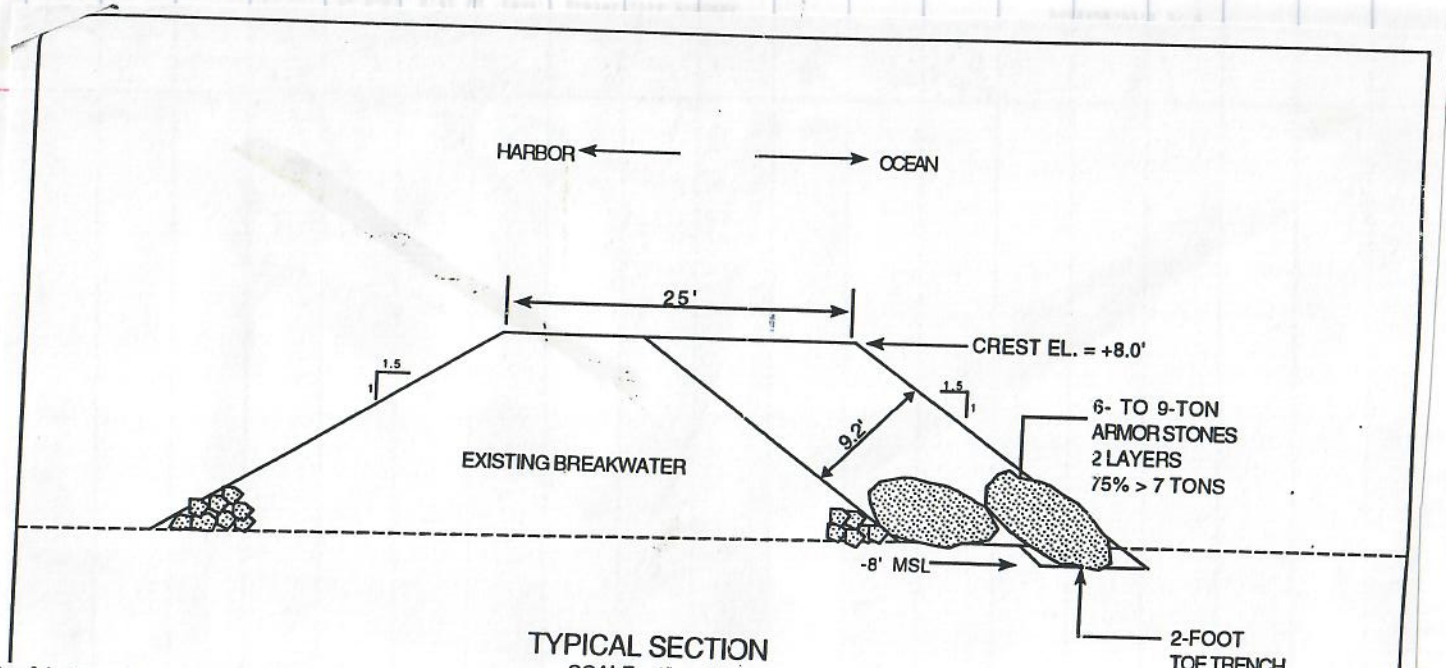
KAWAIHAE LIGHT-DRAFT HARBOR
KAWAIHAE, HAWAII, HAWAII

SITE PLAN

NOT TO SCALE

U.S. ARMY ENGINEER DISTRICT, HONOLULU

Figure 1



TYPICAL SECTION
SCALE: 1" = 10'

Kawaihae Hawaii

KAWAIHAE SMALL BOAT HARBOR
West Breakwater Modification

U.S. ENGINEER DISTRICT, HONOLULU

Figure 2

Date: Mon, 14 Apr 1997 08:33:19 -1000 (HST)
From: Eugene Nitta <enitta@honlab.nmfs.hawaii.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Possible expansion of Kawaihae Harbor

Reply

The Kawaihae Small Boat Harbor is a previously approved project with an EIS and Section 7 completed for it. The activity the Corps is proposing is a slight modification of that. They are adding 1-2 layers of armor stone to the exitisting breakwater to address over-topping on the west facing segment. The Corps has "requested" consultation on this portion of the modification. There are turtles in the area. John is supposed to provide some cursory observations about them after his last trip out there for the coral transplant project.

Gene

On Sun, 13 Apr 1997, George H. Balazs wrote:

> Gene- What is the status of this, can you tell me please? John Naughton
> has suddenly started talking about it out-of-the-blue. Is it a "done
> deal?" i.e. Corps have approval etc.? Is a Section 7 underway? Has a
> Section 7 been requested? Has an EA been done? Or EIS? Or is this some
> piggy-back on an earlier approval-permitting process?
>
> Urgently, I really would like to know where this is at, what's going on.
> As you know, that coast line (West Hawaii) remains to the best of our
> studies the only tumor-free turtle area in the state.

HAWAII PREPARATORY ACADEMY

P.O. BOX 428 • KAMUELA, HAWAII 96743-0428
(808) 885-7321

FAX TRANSMITTAL

DATE: 5/6/97 TIME: 2045 hrs.

FROM: Marc R. Piri DEPT:

FAX Number (808) 885-8203

TO: George Balazs

COMPANY/SCHOOL:

CITY, STATE:

FAX NUMBER: 808-943 1290

NUMBER OF PAGES (INCLUDING COVER SHEET) TRANSMITTED:

MESSAGE: Here are my first 2 attempts at surface counts at Kawaihae! I don't know how the map will come through, so let me know if you can read them.

Best,
Marc

George,

Here are a couple of attempts to do some surface counting at Kawaihae. The counts were each for 30 minute periods. Let me know what additional information we need on this kind of census,and I will make the necessary changes in procedure.

Best,
Marc

Turtle Surface Count
Kawaihae, Hawaii

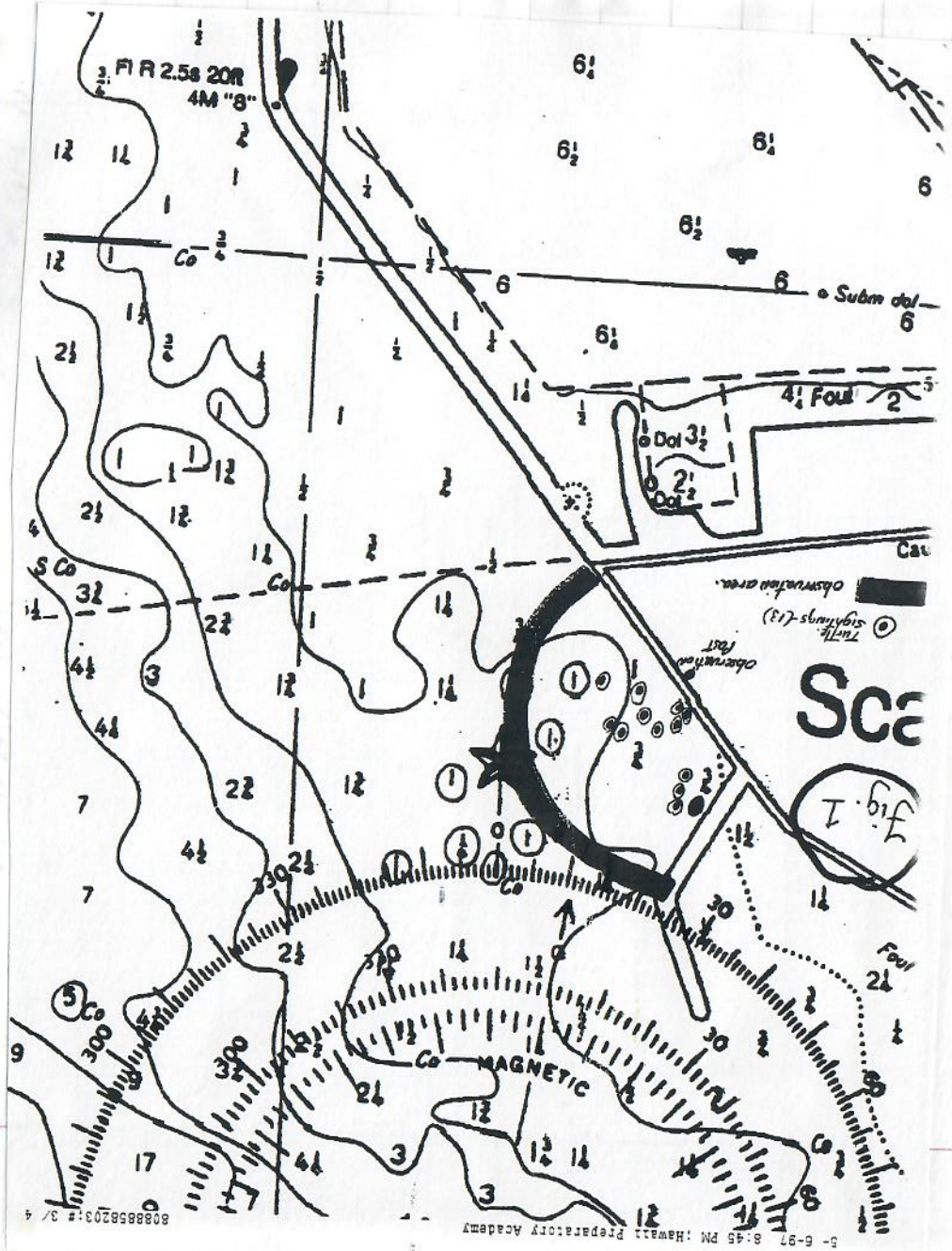
Date: 5/4/97
Time: 1130 hrs.
Location: 1/2 way between outer breakwater and Army Corps cement sign (Figure 1).
Weather: 5% cloud cover, wind onshore at 10 kts. Seas choppy, tide .75 feet and rising.

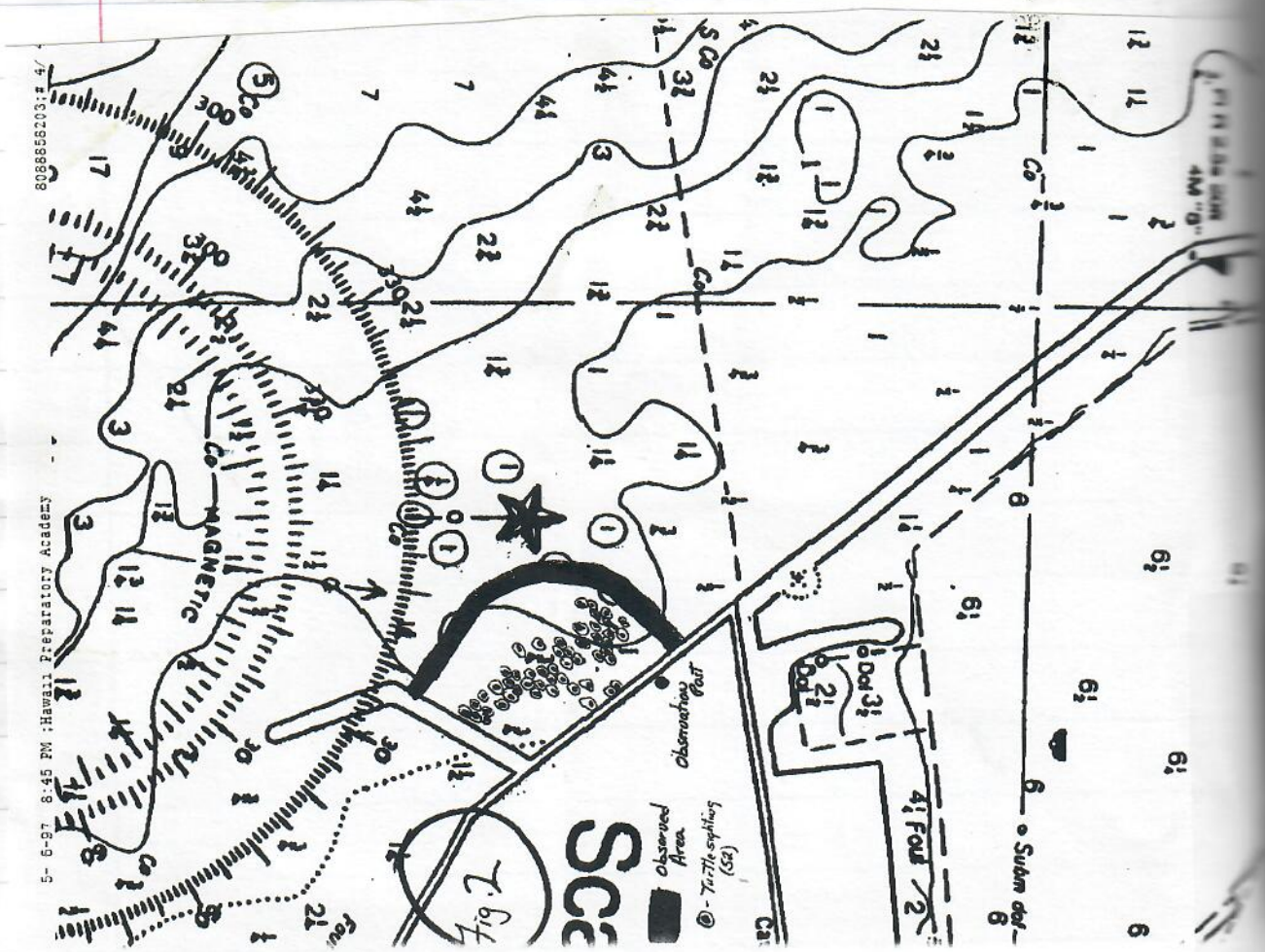
There were 13 turtles observed on the surface during the 30 min. observation period from 1130 hrs. to 1200 hrs (Figure 1). The surface was choppy, and it was somewhat difficult to see the turtles. binoculars were used effectively, however. There did not seem to be a large number of animals in the area.

Date: 5/6/97
Time: 1625 hrs.
Location: 2/3 way between outer breakwater and Army Corps cement sign (Figure 2).
Weather: 5% cloud cover, wind onshore at 10 kts. Seas choppy, tide high at 2.0 feet.

There were 53 turtles observed on the surface during the 30 minute observation period from 1625 hrs. to 1655 hours (Figure 2). The area to the south of the observation position could not be observed readily because of the suns reflection off of the water. The activity during this observation period was much greater that on 5/4/97. At times there were as many as 5 turtles on the surface at one time, and observation and recording of data was somewhat rushed. I am sure, because of the chop and the rushed circumstances, that I missed a few surfacings. The surfacing animals seemed to be concentrated in the areas where transect # 2 occured on 4/29/97.

We will be doing another transect tomorrow afternoon and we will be able to see if we get counts that are similar to what we saw previously.





Date: Wed, 7 May 1997 08:05:02 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Kawaihae

George,

I faxed a couple of 30 minute counts to you last night. They are of the Kawaihae area on Sunday (midday) and tuesday (afternoon). Please let me know if you received them and if they are legible.

I have tried to free up some time during this next week, but have been unable to do so. The first time I will be able to do anything is after graduation on the 23rd. Sorry.

I will be sending the material on the latest Puako dump to you today.

Aloha, Marc

==========

Date: Sat, 10 May 1997 21:48:49 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Kawaihae Survey

Reduce

George,

Did another survey of Kawaihae today- It was beautiful and calm so thought it would be a good time to watch from the surface. I will forward the info next week.

Also checked on #97 at Puako and it was in the shallows feeding. The tags (sonic + TDR) looked to be in good shape.

Aloha,

Date: Fri, 16 May 1997 07:29:27 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Kiholo

Reduce

George,

I received the necropsy reports and the information on the sonotronics hardware yesterday. Thanks.

I have secured permission for us to drive down to Earl's place and park. We can walk in from there. Georgine Busch (Bakken's secretary) asked if she could tag along and see what we were doing and I told her that would be fine (I couldn't very well do anything else). Hope that doesn't cause any problems for you.

See you on the 24th.

Marc

Date: Mon, 26 May 1997 22:03:35 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: Kawaihae

Reduce

George,

Glad that Dennis was able to get some samples of probable forage algae at Kawaihae. Guess we will have to catch a couple of the Kawaihae turtles and see if we can't get a crop lavage or something in order to see what they are eating. Might be tough to catch the critters out there though.

Yes, some sort of non-SCUBA trip would probably be best, however, I could certainly put together a few SCUBA divers to do something like Mauna Lani if that was of interest. The same goes for Honaunau. Kahalu'u would be the one area where we could do a full snorkel type of capture. I don't remember when our last trip there was.

Hope you had a good memorial day weekend.

Marc

Date: Fri, 30 May 1997 08:08:43 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: flooded hydrophone

Reduce

George,

I have spoken with Marlin at Sonotronics and he concurs that the coaxial cable as been compromised and the hydrophone needs to be replaced. He said that they will replace the hydrophone for 1/2 price. I have sent the damaged hydrophone back to him and told him that you will be contacting him to arrange the purchase of a replacement. I, of course, leave that decision up to you. I don't know how many hydrophones you have around your facility over there. I have only one left and would like very much to have a backup. We will need to have one to deploy with the USR-90 AND DL-95 equipment. I would like to have two on hand here in addition so that there is a backup if needed.

I would like to try and download the Puako turtle again before I leave. Would it be possible to do it on June 5 and June 6? Please advise. I propose that we catch the animal, check the tags and data. If everything seems ok, reset the TDR5 and let it go for one more cycle. That should carry us through the summer.

Any more work on the Punalu'u trip?

Hope all is well with you.

Marc

CAPTURE DATE, LOCATION AND METHOD:

PERSON RECORDING DATA:

OLD TAGS:

TUMOR SCORE

NEW TAGS: RFL

LFL

OTHER NEW TAGS:

STRAIGHT CARAPACE-LENGTH: WIDTH:

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

CURVED CARAPACE LENGTH: WIDTH:

HEAD WIDTH:

SEX: MALE, FEMALE OR UNDETERMINED

PPS: YES OR NO OR NE

TAIL LENGTH: T C

RIGHT FRONT FLIPPER WIDTH:

SAMPLES COLLECTI

PLASTRON LENGTH:

WEIGHT:

DESCRIPTIVE REMARKS:

CAPTURE DATE, LOCATION AND METHOD:

PERSON RECORDING DATA:

OLD TAGS:

TUMOR SCORE

NEW TAGS: RFL

LFL

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STRAIGHT CARAPACE-LENGTH: WIDTH:

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PPS: YES OR NO OR NE

TAIL LENGTH: T C

RIGHT FRONT FLIPPER WIDTH:

SAMPLES COLLECTED

PLASTRON LENGTH:

WEIGHT:

DESCRIPTIVE REMARKS:

Diving with a Difference - We Care

DIVE MAKAI CHARTERS

POST OFFICE BOX 2955
KAILUA-KONA, HAWAII 96745
PHONE & FAX: (808) 329-2025

FAX TRANSMITTAL

To George Burgess

Fax 619-226-3944

Hi, George —

Turtle Towers was awesome today hovering over the reef & had ? never in that small area — not being chased — one Left hind flipper J441 over the — have yr my records have turtle on 12/3/94. Approx. shell size 25"

Hope you've had a chance to enjoy the video —

Hope all's well —

Gina

P.S. One my daughter saw not your Punaluu one — this one too big! >25! Was not sure of prefix but #on that other

NOT FOR TDPS

07-27-1995 11:13AM

Shawn —
TDPS. 2 entries, sighting only, scuba & J441

Diving with a Difference . We Care

DIVE MAKAI CHARTERS

POST OFFICE BOX 2955
KAILUA-KONA, HAWAII 96745
PHONE & FAX: (808) 329-2025

Att: George Balazs

Capt. Tom Shockley

Capt. Lisa Chaquette

11/7/96

Hi, George -

LF - J 431 @ Turtles today (it was incredible - wear helmets - watch for low flying turtles!!) Shell approx. 27"! Looked fine & healthy! Will be in Hon. Mon & Tues. Will holler if I have a chance.

All well here -

Turtle Towers - Lisa
Kailoko

Copy to MAEC + Pedum

Diving with a Difference - We Care

DIVE MAKAI CHARTERS

POST OFFICE BOX 2955
KAILUA-KONA, HAWAII 96745
PHONE & FAX: (808) 329-2025

Capt. Tom Shockley

Capt. Lisa Choquette

9/25/96

Hi, George:

"Turtles" was "T.I.A." (Turtle International Airport) today! - a.k.a. "Duck-flying turtles". Non-interfering observation doth have its (pleasant) hazards!! They do run into us!! Porter (guide) was watching 1 turtle, oblivious 2 the 1 coming down that ~~wack~~ whacked him in the head!! I'm sure they know we're there!! I roared!!

2 w/ tags were there, 1 left early on! The other's tags were so algae covered, couldn't read, BUT - RR tag was missing. Approx. 26" shell - F-B (meas. rock alongside)!!

(over)

Finding her now would be the problem!!
Piggy - dear, dear Piggy! A character!!
Her history as I have it:
(I confess to measuring her the other day!!)

She's a "Happy Wanderer"

1st interaction - 7/2/87

WOW!! Squid Diet??

10/13/88 - 20" x 17 1/4"
5/17/89 - 20 3/4" x 18 1/4 - Tagged!!
9/13/90 - 23"

9/21/96 - 24"

Quit feeding her sometime in 90-91!!!
We have eels we haven't fed in over 5 years - still come looking for loving!! One - Wacky - will lie on his back to have his belly rubbed!! Unreal!! He comes & finds us!!!

Thanx for brochures!

Come on over!!

Gina

P.S. You may get a call from my daughter, Becky - the ZOOKEEPER Hon. Zoo - Rep. Hampl. asking you to speak to their Herpetological Club - she's President!! Good luck!!

TDR 417 (WKB)
SON 48
KIHOLO

Tag information--

Tag Number	Date Tagged	Tag Type	Tag Position
0F757E1B	07/02/96	PIT	PIT
N731	03/05/91	I681	RHF
Q602	07/02/96	I681	LHF
SON48	07/02/96	SON	SON
TDR417	07/02/96	TDR	TDR
Y107	03/01/89	I681	RFL
Y108	03/01/89	I681	LFL

Historical information--

Date	Type of Encounter	Location	Tumor Score	Nesting Activity	Straight Length	Since Last Encounter Interval Month	Since Last Encounter Interval Year	Since Last Encounter Growth-rates cm/mon	Since Last Encounter Growth-rates cm/yr	Overall Interval Month	Overall Interval Year	Overall Growth-rates cm/mon	Overall Growth-rates cm/yr
03/01/89	Near Shore	Hawaii, Kiholo	0	-	47.2	---	---	---	---	---	---	---	---
10/24/90	Near Shore	Hawaii, Kiholo	0	-	51.6	19	1.6	0.2	2.7	19	1.6	0.2	2.7
03/05/91	Near Shore	Hawaii, Kiholo	0	-	51.8	4	0.3	0.0	0.7	24	2.0	0.2	2.3
07/02/96	Near Shore	Hawaii, Kiholo	0	-	61.9	63	5.3	0.2	1.9	88	7.3	0.2	2.0

TDR205
TDR 95124 (mks)
SON 88

KIHOLO

Tag information--

Tag Number	Date Tagged	Tag Type	Tag Position
6D506341	07/02/96	PIT	PIT
K691	02/08/94	I681	LHF
SON465	07/02/96	SON	SON
SON88	09/30/95	SON	SON
TDR205	09/30/95	TDR	TDR
TDR95124	07/02/96	TDR	TDR
Y664	04/25/90	I681	RFL
Y665	04/25/90	I681	RHF
Z13	04/25/90	R	LFL

Historical information--

Date	Type of Encounter	Location	Tumor Score	Nesting Activity	Straight Length	Since Last Encounter Interval Month	Since Last Encounter Interval Year	Since Last Encounter Growth-rates cm/mon	Since Last Encounter Growth-rates cm/yr	Overall Interval Month	Overall Interval Year	Overall Growth-rates cm/mon	Overall Growth-rates cm/yr
04/25/90	Near Shore	Hawaii, Kiholo	0	-	58.9	---	---	---	---	---	---	---	---
10/24/90	Near Shore	Hawaii, Kiholo	0	-	59.5	5	0.4	0.1	1.5	5	0.4	0.1	1.5
04/22/92	Near Shore	Hawaii, Kiholo	0	-	62.6	17	1.4	0.2	2.2	23	1.9	0.2	1.9

Date	Type of Encounter	Location	Tumor Score	Nesting Activity	Straight Length	Since Last Encounter Interval Month	Since Last Encounter Interval Year	Since Last Encounter Growth-rates cm/mon	Since Last Encounter Growth-rates cm/yr	Overall Interval Month	Overall Interval Year	Overall Growth-rates cm/mon	Overall Growth-rates cm/yr
02/08/94	Near Shore	Hawaii, Kiholo	0	-	64.6	21	1.8	0.1	1.1	45	3.8	0.1	1.5
09/30/95	Near Shore	Hawaii, Kiholo	0	-	67.1	19	1.6	0.1	1.6	65	5.4	0.1	1.5
07/02/96	Near Shore	Hawaii, Kiholo	0	-	68.5	9	0.8	0.2	1.8	74	6.2	0.1	1.5

Date: Tue, 15 Oct 1996 11:36:41 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Puako Trip

George,

I hope your day is going well and everything is under control. We are all set for the Puako trip on Thursday. The tide is high in the morning and low around 1200 hrs. I propose that we have Watson bring the Kamakani and anchor it offshore to act as a repository for captured turtles. We will all assemble at 24 PBD and make capturing the two TDR turtles first priority. We will bring a net just in case it is necessary in order to capture the critters at high tide. Will you be bringing your net along?

Subsequent to capturing the TDR'S we will have a group of SCUBA divers available to swim out from shore and do some hand capture off the ledge- this will probably be more productive during the low tide after noon. The animals can be brought back to the Kamakani for safe keeping and from there they can be ferried in to shore or brought around to Puako for workup- or some other scenario.

I have constructed a turtle box some 3' X 3' X 18 inches. I thought that we could try it out and make modifications if necessary.

I am coming to Honolulu to a water quality conference tomorrow and I will try and call you sometime just to check in since I won't be able to get my mail until tomorrow night. If you have time, I would be pleased to meet you for lunch somewhere....my treat!

Best,
Marc

==========
Marc R. Rice, Assistant Headmaster
Hawaii Preparatory Academy
P.O. Box 428
Kamuela, Hawaii 96743
mrice@hpa.edu
==========

sent Kiholo data ① Tagging ② Weaver cust 10/96

Reduce & paste

1996

Date: Fri, 18 Oct 1996 21:45:52 -1000
From: mrice@hpa.edu
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: DoubleCheck

George,

You are correct. I was thinking that a listing by date of the animals caught at Kiholo over the last 10 years might allow Dan Akaboshi a chance to construct some graphs of the size frequency distribution over time. So, a list of recaptured and newly tagged turtles would be just fine.

If turtles are moving on after a period of time (perhaps after a certain number of years or after they reach a particular size), and, if new animals are moving into the area, the size frequency curves might remain relatively constant over time. In fact, if the number of new recruits was increasing over time (as the population growth over the last 10 years would seem to indicate, we might see an increase in the lower size classes. The number of animals in the larger size classes, assuming they remain in the Kiholo area, should also increase over time. If however, the larger animals are departing for areas as yet unknown, the upper end of the frequency distribution may be truncated.

On the other hand, what if the size classes leave the area at random? I would think that the size frequency distributions would shift slowly to the right as the animals get larger- at least we should see a larger representation of the largest size classes....

Anyhow, thanks for your assistance with this. I assure you that, one way or another, this data will be analyzed and your efforts will not be wasted...

By the way, what is the growth rate of animals at Puako? Is it significantly different than it is at Kiholo?

Aloha,
Marc

Reduce & paste

Date: Mon, 14 Oct 1996 07:33:50 -1000
From: Marc Rice <mrice@hpa.edu>
To: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>
Subject: Re: DoubleCheck

George,

My fax was actually two pages but it might have been too long and printed out on three on your end. There were 25 entries, the last one being tag number LFL B917.

I have a question for you. Would it be possible (and permissible) to get a printout of the straight carapace length of turtles caught at Kiholo by date caught from 1987 on? One of my students is working on the size frequency distribution of the captured animals over the years. We do realize that the data may be biased for any number of reasons but it might still be instructive to look at the data anyhow. If this is not something you want to have a student do, or if it is too time consuming to pull out, I certainly will understand. The student who will be working on this is Dan Akaboshi (Japanese citizen whose father works in Ecuador as an aquaculturalist). Let me know what you think.
Best,
Marc

==========
Marc R. Rice, Assistant Headmaster
Hawaii Preparatory Academy
P.O. Box 428
Kamuela, Hawaii 96743
mrice@hpa.edu
==========

Diving with a Difference - We Care

DIVE MAKAI CHARTERS

POST OFFICE BOX 2955
KAILUA-KONA, HAWAII 96745
PHONE & FAX: (808) 329-2025

Att: George Balazs

Capt. Tom Shockley

Capt. Lisa Choquette

9/22/96

Hi, George - = TAG NO.

Ran into "Piggy" again yesterday - frisky & well! Have seen lots of ~~tagged~~ turtles @ T.T., but no tags recently! (Turtle towers)

Kaloko

All is Well -

Lisa

P.S. Hauled out Piggy's record - 1st made contact over 9 yrs. ago - 7/2/87

Molokai

6/95 - 2 males FFS - MAUI

9/95 - 1 female - EWA

1 JATA (1-TMR, 1-NO TMR)

2 KBAY

3 - 1992 Aug.

KBAY 2 Aug. 1993

- 1994

- 1995

1996 None

1997

Need TO label IN TDPS

Tag No. = Piggy

Need all "sat's" entered IN TDPS for FFS

HONAUNAU #3 6 NOV. 96
LIST OF PARTICIPANTS Wed.

Dawn S. Gilday
Ali Ann Dirga grade 6
Chris Benley grade 6
Elizabeth Horton "
Aimee Zvinakis "
Mikiala Ramler "
Audrey Equsa 10
Lisa Jardine 12
Kristin Ness 11
Heather Craig 12
Lilinoe Melrose 12

BF 10 NTRONNAU (GRUPO)
KITHOLO 26
PUAKO 20 (IVAPREZ)