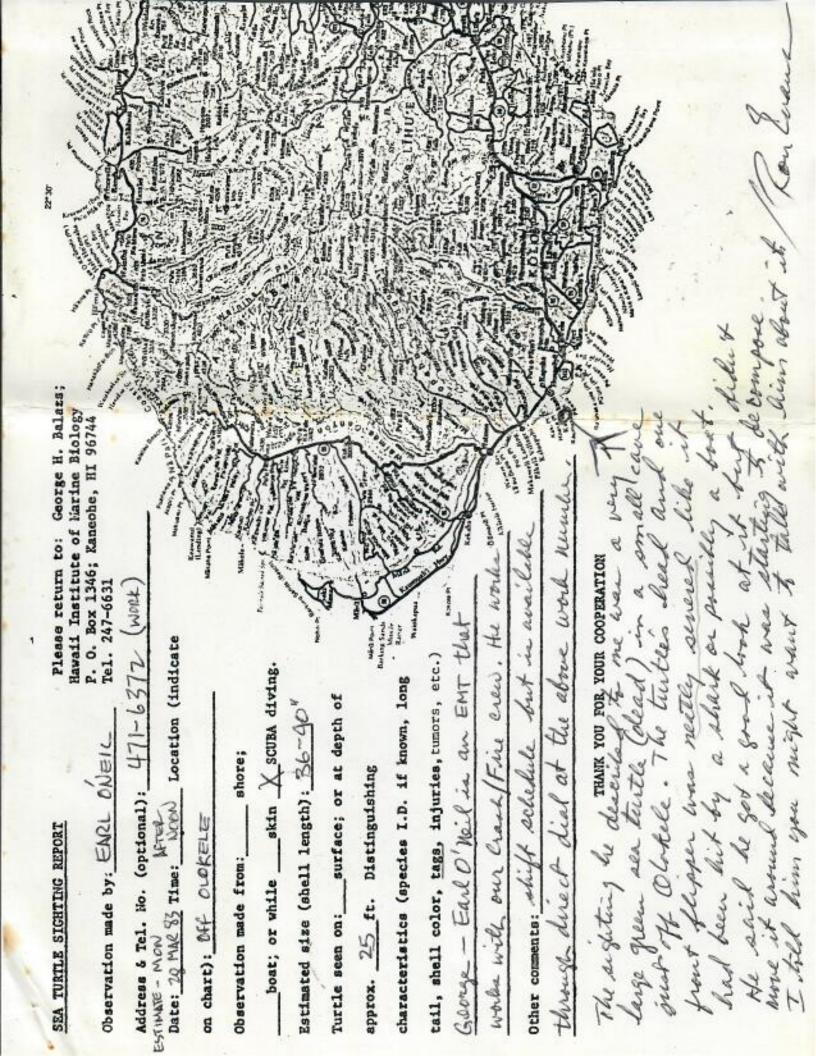
1980s TURTLE SIGHTINGS GEORGE BALAZS FILE PART 2 OF 2



SAT. 16 APR 83

COMMANDING OFFICER
PACIFIC MISSILE RANGE FACILITY
HAWAIIAN AREA
BARKING SANDS, KEKAHA, HAWAII 96752

Dear George, Sorry I have been so long in gelling these pictures to you. Our Photomate was on leave for a month and them got overloaded with Range work the early part of the year. I've been working at keeping notes in my dive log that I can transfer to sighting reports. Have encouraged others here to do the same but not many of them keep loge so the cooperation may not be too good. I hope there reports/ slike will still be of some walne to your . Sincerely, Tontown



3-Tuerres

SEA TURILE SIGHTING REPORT

Please return to: George H. Balazs; Hawaii Institute of Marine Biology P. O. Box 1346; Kaneohe, HI 96744 Tel. 247-6631

Observation made by: ICON CUANS F. 0. Box 1346

Address & Tel. No. (optional): 471-6251 FM

Date: 30 Thu 83 Time: 1420 Location (indicate on chart): SHERATON CAVES

Observation made from: shore;

boat; or while skin X SCUBA diving.

Estimated size (shell length): (3) 34-34" (SKK) Turtle seen on: surface; or at depth of approx. 55-60 ft. Distinguishing

characteristics (species I.D. if known, long

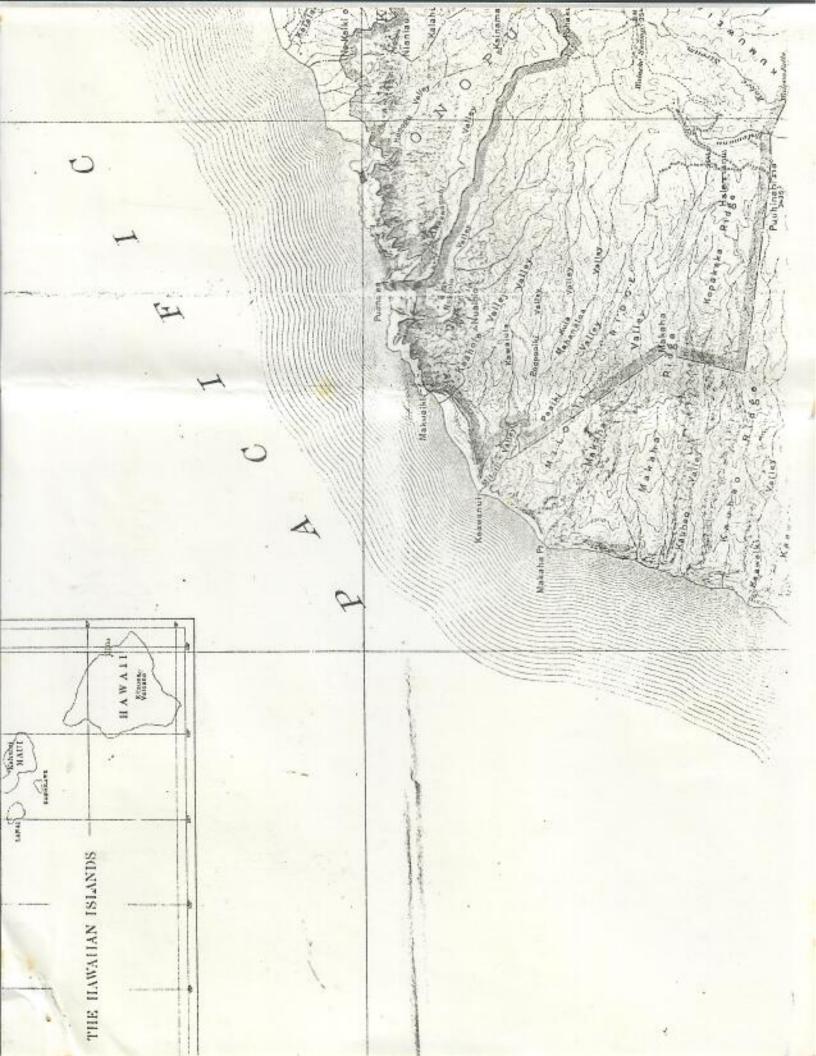
GREEN SEA TURTLES, No TAGS, TURTLES

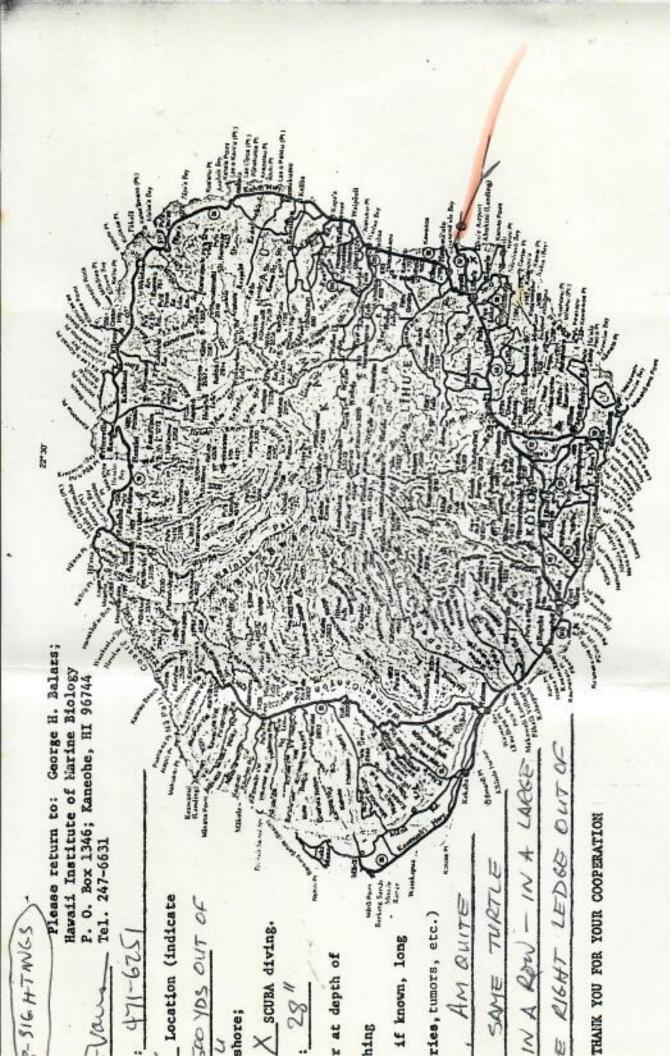
EXITED CAVES AS WE SWAM IN. SICK TURNED

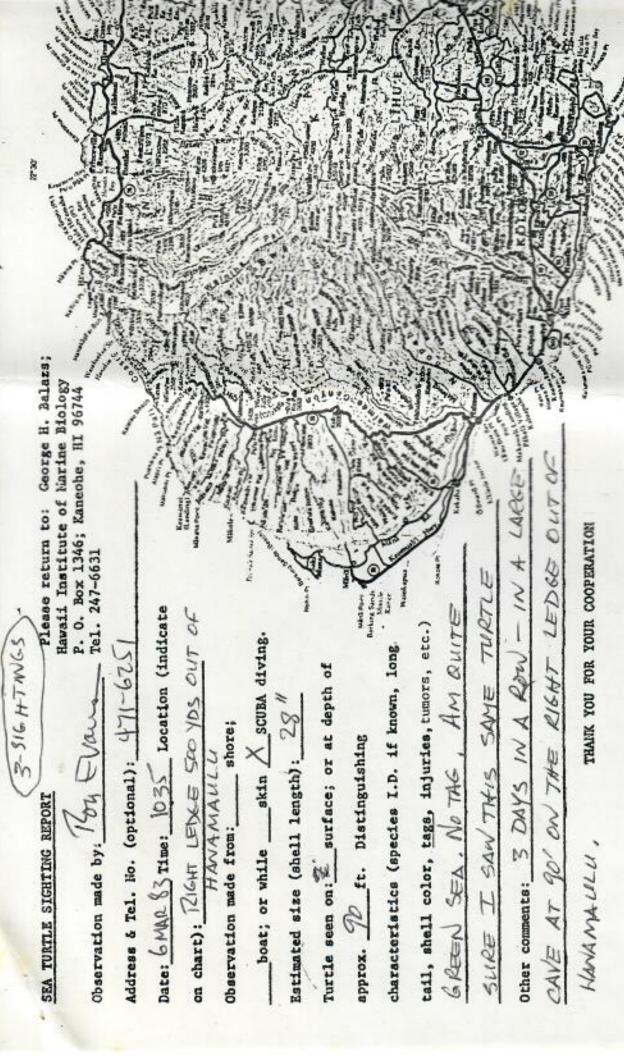
Other comments: WAS SLOW AND SWIMMING LIKE HE

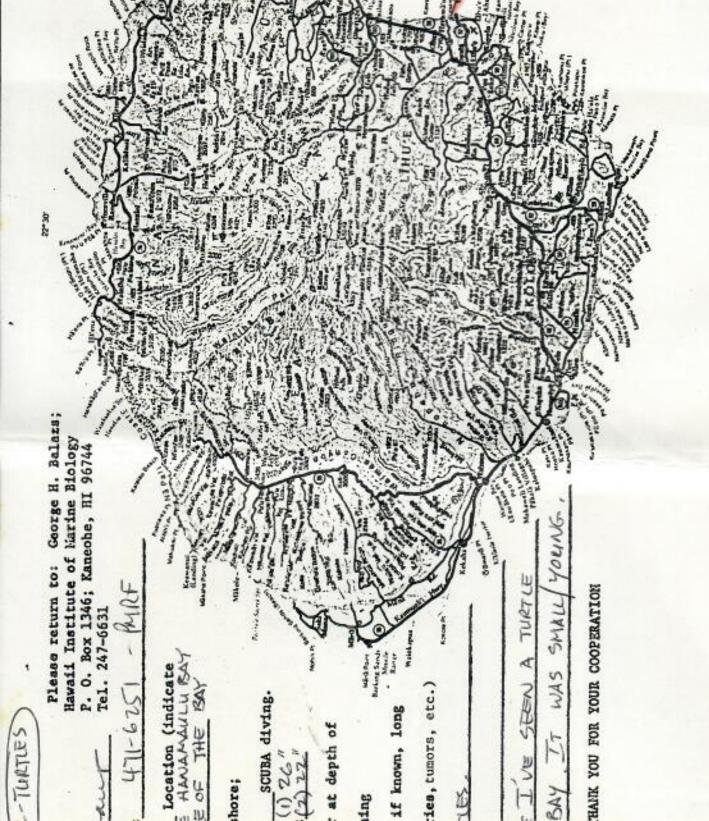
couldn't see AND DIDN'T WANT TO MANEON.

SINCE THE HURRICANE. I PERSONALLY SAW HIM GHOT TAIL ON 3 DIFFERENT WEEKENDS BUT HAVEN'T SEEN IT REPORTED SEEING THIS POOR GUY AROUND THE CAVES GLIDES ENCLOSED OTHER DIVERS HAVE THAM YOU FOR YOUR COOPERATION SINCE LATE FEB.

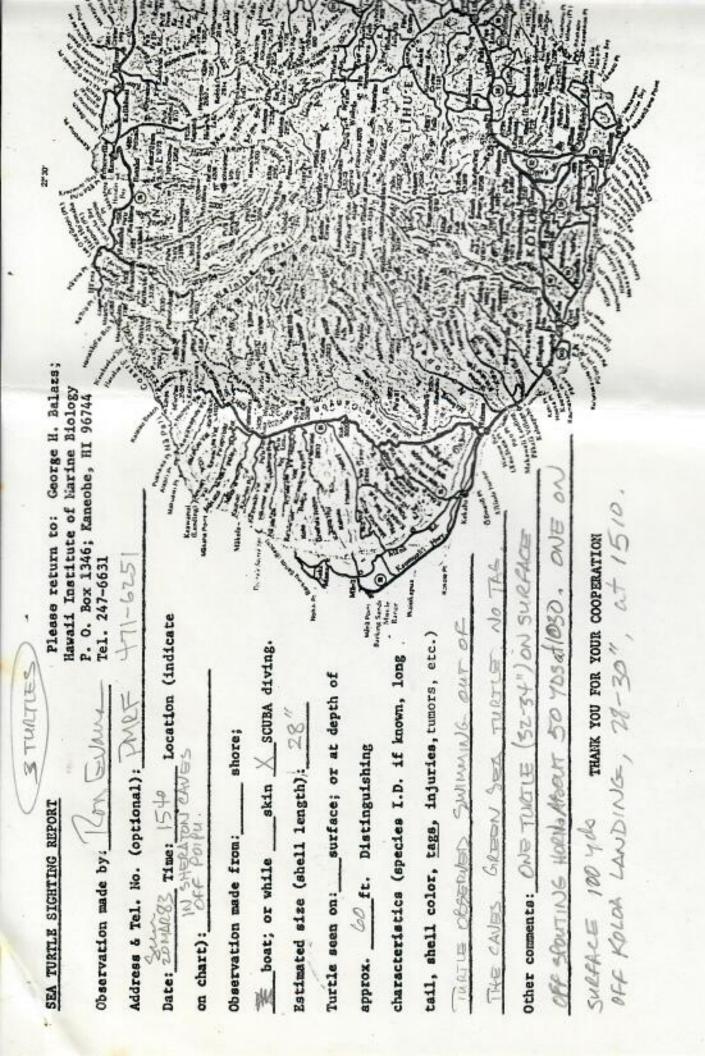


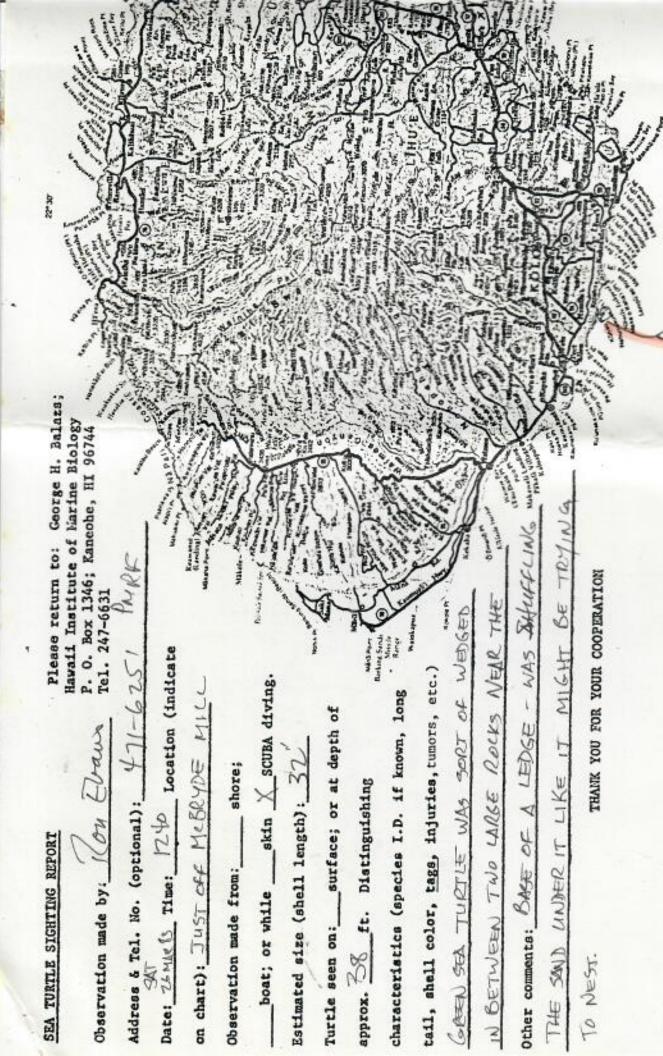






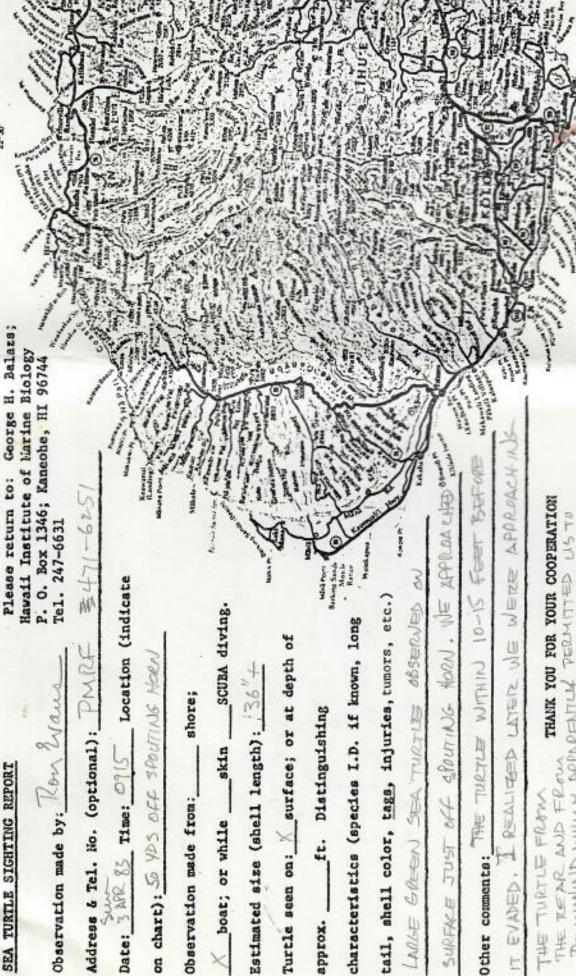
Please return to: George H. Balazs; Hawaii Institute of Marine Biology P. O. Box 1346; Kancobe, HI 96744 LT WAS SMALL YOUNG. Other comments: TIRST TIME I VE SEEN A TURTLE FATHERETER SHOWED THANK YOU FOR YOUR COOPERATION Tel. 247-6631 Date: 12 MM283 Time (2) 1340 Location (indicate tail, shell color, tags, injuries, tumors, etc.) on chart): (1) IN THE MIDDLE OF THE BAY 1529-124 SCUBA diving. characteristics (species I.D. if known, long Turtle seen on: X surface; or at depth of 2-TURTUES Estimated size (shell length):(2) 22," shore; THAT FAR UP IN THE BAY BUTH GREEN SATURIES approx. ft. Distinguishing Observation made by: Nor Co-Noat; or while skin Address & Tel. No. (optional): SEA TURTLE SIGHTING REPORT Observation made from: WEPT.



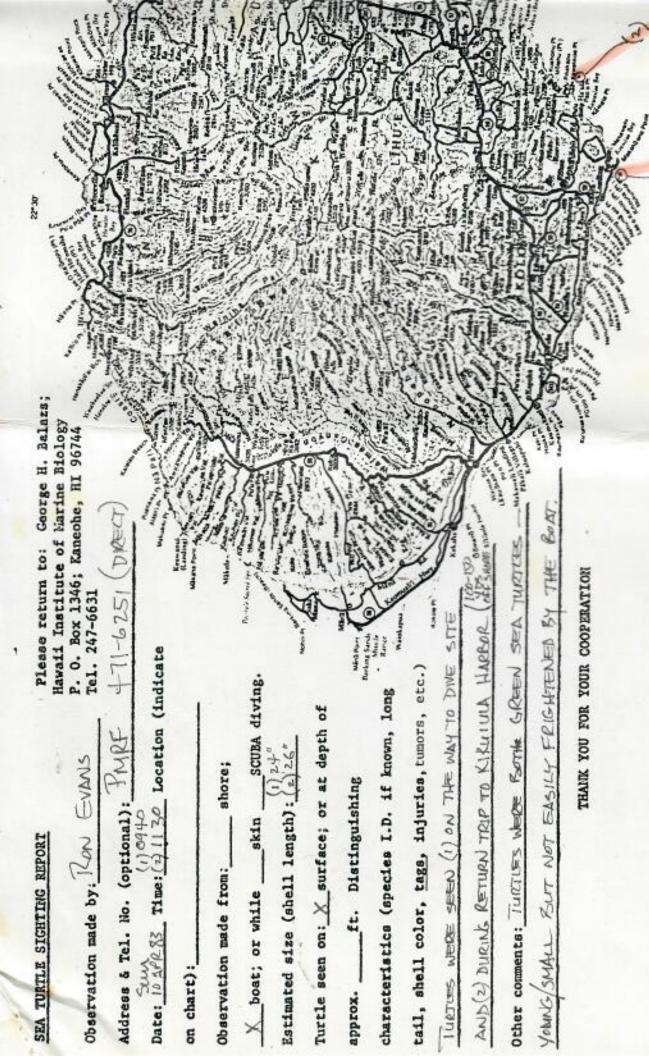


Please return to: George H. Balaza;

SEA TURTLE SIGHTING REPORT



DRUNNIND WHICH SPPREEDTLY PERMITTED US TO THE TURTUE FROM



Observation made by: M. Harker	Hawaii Institute	(Please return to: George H.Balazs; Hawaii Institute of Marine Biology; P. O. Box 1346; Kaneohe, HI 96744;	
D / Boy 3		7426768	
Address & Tel. No. (optional): P.O. BOX 3	30, 10,000	7720100	
Date: 19 May Time: 430 pm Location (indica	ite		
on chart): Brennecte's Beach Poipo	\bigcirc		
Observation made from: X shore; & bodysoupping	Y ~		
boat; or whileskinSCUBA diving.	6	± ≈ .	
Estimated size (shell length):		080	
Turtle seen on: X surface; or at depth of			
approxft. Distinguishing		5	
characteristics (species I.D. if known, long		('	
tail, shell color, tags, injuries, etc.):		1	
(Information on turtle parts recovered from f	ish or sharks would	ld also be greatly	
2 brown shelled turt	40		
Other comments:			

Observation made by: (Please return to George H. Balazs; Hawaii Institute of Marine Biology; P. O. Box 1346; Kaneohe, HI 96744; Tel. 247-6631) 337-/656
Address & Tel. No. (optional): PMRF BAKKING SANGE KEKAHAS H)
Date: 27 Nov 7 Trime: 1630 Location (indicate
on chart):
Observation made from: \square shore;
boat; or whileskinSCUBA diving.
Estimated size (shell length): 15-2FT KAUAI
Turtle seen on: surface; or at depth of
approxft. Distinguishing
characteristics (species I.D. if known, long
tail, shell color, tags, injuries, etc.):
SENTEN 2-3 TURTLES, BROWN IN COLDE, SUST BEYOND FIRST
SURF LING SO YOS OFF SHORE, SAME PRED DS ZIBNOV
Other comments: SIGNTING, IN BSURE COBEL AREN SOUTH
er Hauss Daris

TURTLE SIGHTING REPORT (Please return to George H. Balazs; Hawaii Institute of Marine Biology; P. O. Box 1346; Kaneohe, HI 96744;
Observation made by: Tel. 247-6631) 337 165 4
Observation made by: Tel. 247-6631) Address & Tel. No. (optional): PMRF BARKING SANDS KEKAHO HI
Date 25 Nov Time: 1600 Location (indicate
on chart):
Observation made from: X shore;
boat; or whileskinSCUBA diving.
Estimated size (shell length): 2-4FT KAUAI
Turtle seen on: X surface; or at depth of
approxft. Distinguishing
characteristics (species I.D. if known, long
tail, shell color, tags, injuries, etc.):
SIGHTED 3-6 TURTHES, BROWN IN COLOR, APPEARONTLY
FERDING JUST BEYOND THE SURF 4NE 50-10070S OFFSWARE
Other comments:

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs, Hawaii Institute of Marine Biology; P. O. Box 1346; Kaneohe, HI 96744; Tel. 247-6631)

Observation made by: LCOR MEILING P. 0. Box 1346; Kaneohe, HI 96744; Tel. 247-6631)
Address & Tel. No. (optional): PmeF
Date: 6 Apr Time: 12 45 Location (indicate
on chart):
Observation made from:shore;XHelo
boat; or whileskinSCUBA diving.
Estimated size (shell length): 32" KAUAI
Turtle seen on: X surface; or at depth of
approxft. Distinguishing
characteristics (species I.D. if known, long
tail, shell color, tags, injuries, etc.):
THIS TURRLE OFF NOTHLY PT WHICH IS I MILE NORTH OF
USUAL SIGHTING POSITION
Other comments:

SEA TURTLE SIGHTING REPORT	(Please return to: George H. Balazs, Hawaii Institute of Marine Biology; P. O. Box 1346; Kaneohe, HI 96744;
Observation made by: PH2 Scatt Address & Tel. No. (optional): 335 4: Date: 12/79? Time: 1630 Location (on chart):	THE PERSON NAMED IN COLUMN 2 I
Observation made from:shore; X Aboat; or whileskinSCUBA di Estimated size (shell length): 30" Turtle seen on: X surface; or at depth	ving. KAUAI
approxft. Distinguishing characteristics (species I.D. if known, tail, shell color, tags, injuries, etc.)Green Turtle	
Other comments: 50 w/s offshore of	of Aerial Targets compound heading

west out to sea



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Box 87 Kilauea, Kauai, HI 96754

3 April 1979

George H. Balazs Hawaii Institute of Marine Biology P.O. Box 1346 Kaneohe, HI 96744

Dear George:

Enclosed are the turtle sighting reports from Kilauea Point to date. Most of the recent, good, sightings were made by Heidi Russell of YACC, and I gave her the patch you so kindly sent. She is extremely proud of it. Unfortunately Heidi will be leaving at the end of this week so I am not sure how good future observations will be. We will try to continue in some fashion, however, if you feel the enclosed data are useful.

I will be on the mainland from April 8 - May 9 so you could send me your comments on the input from here on turtles after May 9.

I was over in Honolulu for Hank Hansens retirement luncheon and I called you on Monday, March 26. Sorry I missed you, nobody home.

The trip to Kaula was great.

Sincerely, Vernon G. Vernon Byrd



SEA TURTLE SIGHTING REPORT FOR KILAUEA POINT, KAUAI

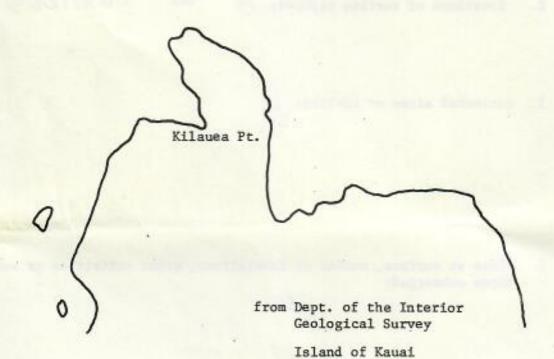
1. date, times, tide, weather and sea surface conditions:

DEC 6, 1978 9:25 - 9:40 OVERCAST 12'-8 SEC. CHOP

- 2. locations of turtles sighted: O No SIGHTINGS
- 3. estimated sizes of turtles:

4. times at surface, number of inhalations, other activities at surface, times submerged:





SEA TURTLE SIGHTING REPORT FOR KILAUEA POINT, KAUAI

1. date, times, tide, weather and sea surface conditions:

DEC 5. 9:20 AM - 9:40 AM 10 FT. - 8 SEC. TIDE- HIGH

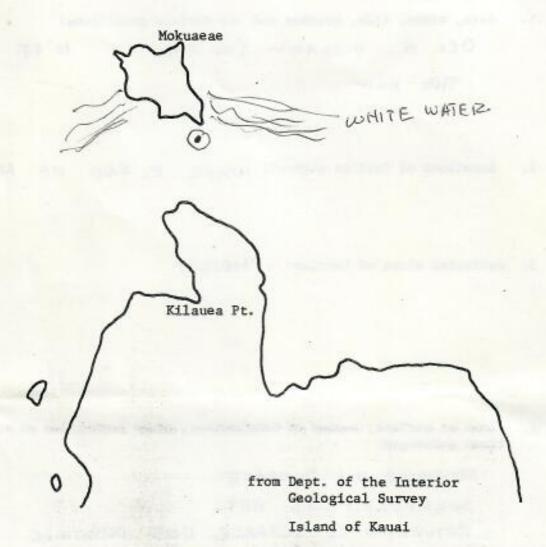
- 2. locations of turtles sighted: INSIDE E, END OF MOKU AEAE
- 3. estimated sizes of turtles: MEDIUM

 times at surface, number of inhalations, other activities at surface, times submerged:

SUBMERGED SS SEC.

RETURNED TO SURFACE 1:05 BREATHING.

SUBMERGED NOT SEEN AGAIN



1. date, times, tide, weather and sea surface conditions:

DEC 12, 1978 9:45 VERY STRONG GOSTH WINDS

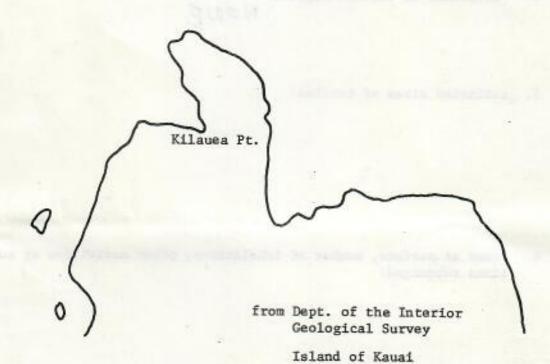
locations of turtles sighted:

NOWE

3. estimated sizes of turtles:

 times at surface, number of inhalations, other activities at surface, times submerged:





File Sea Turtles

SEA TURTLE SIGHTING REPORT FOR KILAUEA POINT, KAUAI

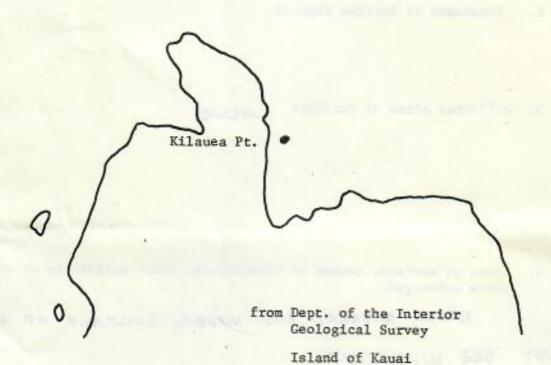
- 1. date, times, tide, weather and sea surface conditions:

 DEC. 19, 1978 3:05 3:20 WAVES 9' at 840e,

 WINDY
- locations of turtles sighted:
- 3. estimated sizes of turtles: LARGE

 times at surface, number of inhalations, other activities at surface, times submerged:

NOT SEE INHALATIONS.



1. date, times, tide, weather and sea surface conditions:

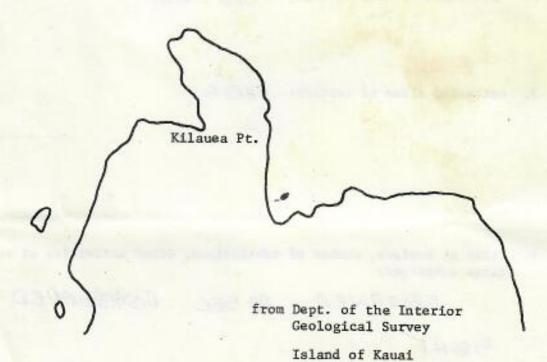
DEC 26,1978 3:40 PM. 3:55 NO WIND, CLEAR

- 2. locations of turtles sighted: SEE MAP
- 3. estimated sizes of turtles: LARFE

 times at surface, number of inhalations, other activities at surface, times submerged:

OBSERVED 20 SEC. DISHAPEADED FROM





1. date, times, tide, weather and sea surface conditions:

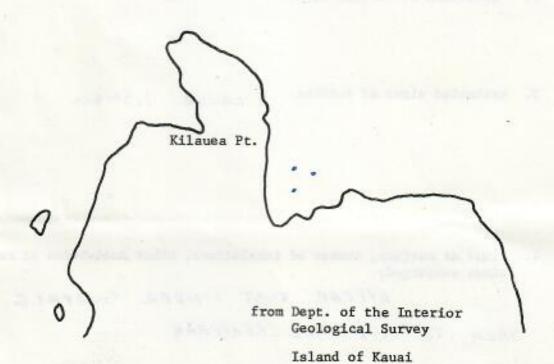
PEC 27, 1978 3:15-3:40 PM SLIGHT WIND CLEAR WAVES 10'-8 SEC

- 2. locations of turtles sighted: Court
- 3. estimated sizes of turtles: 2 LARGE 1, SMALL

 times at surface, number of inhalations, other activities at surface, times submerged:

SEEM TO DIVE AND REAPPEAR



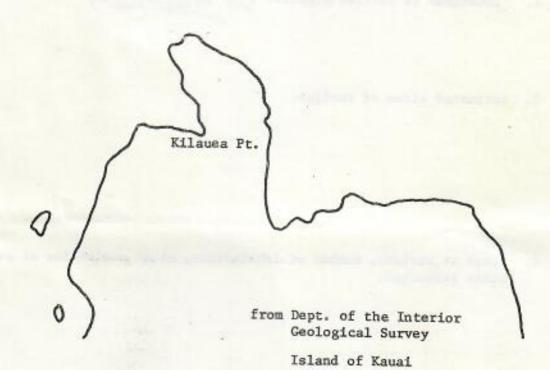


- 1. date, times, tide, weather and sea surface conditions:

 JAN 3. 1979 CLEAR, LIGHT WIND 10'- 85EC. 10:30 MM.
- 2. locations of turtles sighted: NO SIGHTINGS
- estimated sizes of turtles:

 times at surface, number of inhalations, other activities at surface, times submerged:





- 1. date, times, tide, weather and sea surface conditions:

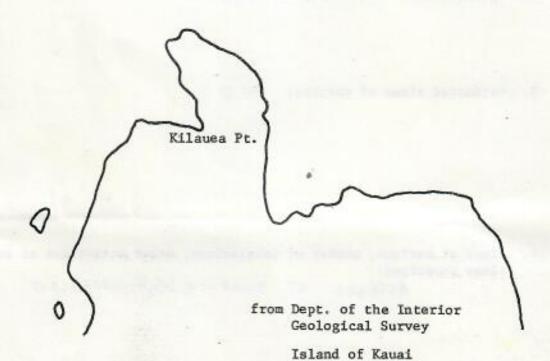
 JAN 9, 1979 11:00 OVERCAST, CALM 12'-7SEC.

 12 | 0W +ide
- locations of turtles sighted: MAP
- 3. estimated sizes of turtles: MED

 times at surface, number of inhalations, other activities at surface, times submerged:

APPEARS AT SURFACE 10/25UP MEDGED





- 1. date, times, tide, weather and sea surface conditions:

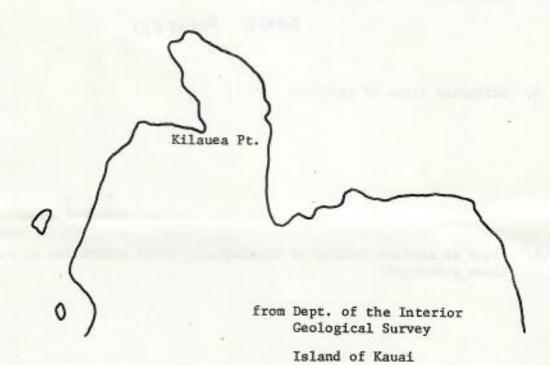
 JAN 15,1979, 3:30, RISWE, OVERCAST, WAVES 16-8 ARC. VERY STRONGENE WIND GALE Y.
- locations of turtles sighted:

NONE SIGHTED

estimated sizes of turtles:

 times at surface, number of inhalations, other activities at surface, times submerged:





- 1. date, times, tide, weather and sea surface conditions:

 JAU 25, 10:20 16:35, CLEAR, MORMAL TRADE WIND

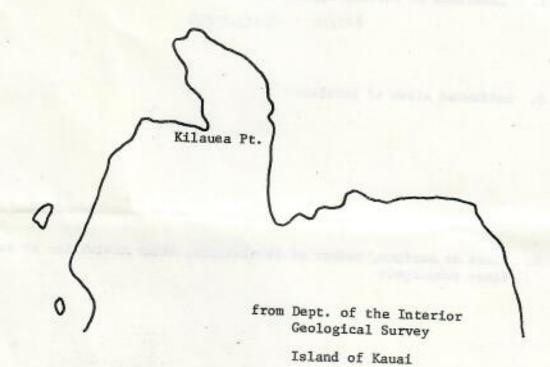
 7'-8 Mc.
- locations of turtles sighted:

HONE SIGHTED

3. estimated sizes of turtles:

 times at surface, number of inhalations, other activities at surface, times submerged:





1. date, times, tide, weather and sea surface conditions:

JAN 26, 1979, E. 50,- 1:05, NORMAL TRADE WIND, CLEAR, 5 - 7 Sec

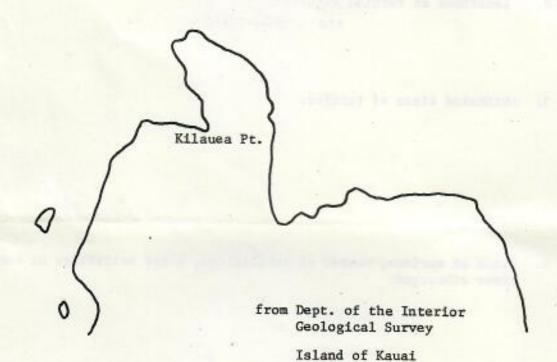
2. locations of turtles sighted:

NO SIGHTINGS

3. estimated sizes of turtles:

4. times at surface, number of inhalations, other activities at surface, times submerged:





1. date, times, tide, weather and sea surface conditions:

JAN 30, 9:25 AM, GAIL WARNINGS, CHOPPY 5'-7 ALC.

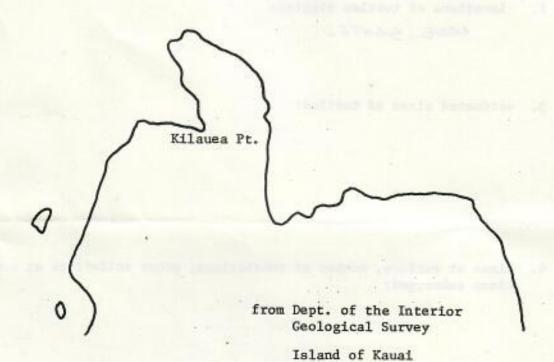
locations of turtles sighted:

NONE SIGHTED

3. estimated sizes of turtles:

 times at surface, number of inhalations, other activities at surface, times submerged:



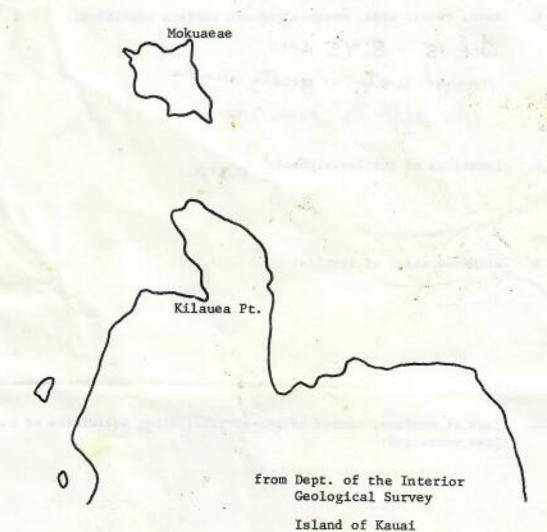


1. date, times, tide, weather and sea surface conditions:

Jeb. 15 8:45 AM. rough water of gusty winds I hr. after 1/2' high tide

- 2. locations of turtles sighted: none
- estimated sizes of turtles:

 times at surface, number of inhalations, other activities at surface, times submerged:



date, times, tide, weather and sea surface conditions:

2-20-79, 1130, 8" high tide, partly cloudy, windy & choppy

2. locations of turtles sighted:

next to foam line

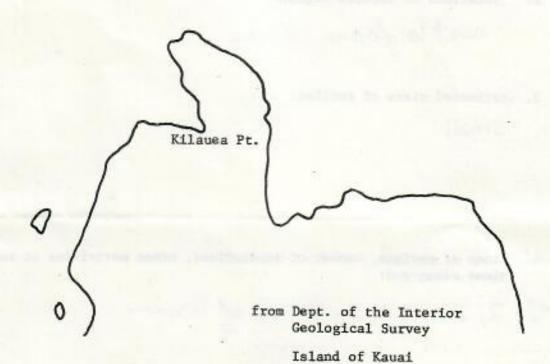
3. estimated sizes of turtles:

Small

 times at surface, number of inhalations, other activities at surface, times submerged:

#1-2, 2 each uptotal of 2 min.





- 1. date, times, tide, weather and sea surface conditions:

 Jeb. 21'79, 0950-1050, wind calm, sky clear, sea Surface calm

 3.4 ft. Swell, tide-about thr. after 6" low tide.
- 2. locations of turtles sighted: (See reverse)
 #1-5 10-15 M. off rock at edge of white water
 # 6 50 M. off shore, but in foam line
- 3. estimated sizes of turtles:

#1-4 20-24" #5 smaller, about 18" #6 20-24"

about I sec. each

 times at surface, number of inhalations, other activities at surface, times submerged:

20,00 @ 80 sec., in halations, (\$20, I. 15, I. 10, I., 15, I., 15 I.)

10:00 @ 80 sec., in halations, (\$20, I. 15, I., 10, I., 10, II.)

10:09 @ 63 sec., 5 11 , (\$15, I., 20, I., 8, I., 10, I., 10, II.)

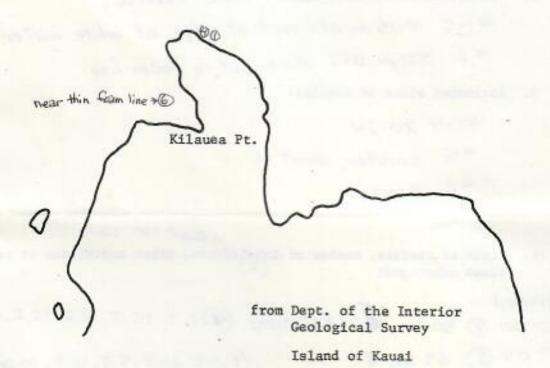
10:2i @ 57 sec., 7 11 , down * up 10 bec. later + 2 I + down (*5, I., 10, I., 5, I., 8, I., 10:25 @ 56 sec. 6 11 , (*10, I., 10, I., 13, I., 7, I., 10, I., 6 I.*)

10:38 @ 128 sec., 16-11 (*7, I., 5, I., 10, I., 8, I., 7, I., 10, I., 10, I., 8, I., 8, I., 6, I., 10, I., 10,

prepared by George H. Balazs, Hawaii Institute of Marine Biology, P.O. Box 1346, Kaneohe, Hawaii 96744 Telephone 247-6631



with the second second



date, times, tide, weather and sea surface conditions:

3/1/79, 1/00, 2 hrs. before o' low tide mostly clear & sunny, water calm

2. locations of turtles sighted:

(Over)

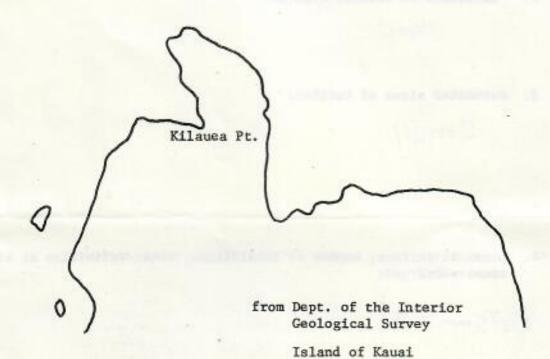
estimated sizes of turtles:

Small .

 times at surface, number of inhalations, other activities at surface, times submerged:

451/2 min. 4 I





1. date, times, tide, weather and sea surface conditions:

March 9,79; 10:30; gusty winds; 8 ft. wells 4 choppy)

cloudy, 2" law tide

- 2. locations of turtles sighted: Lee reverse
- 3. estimated sizes of turtles:

1. med.

a. med.

3. med.

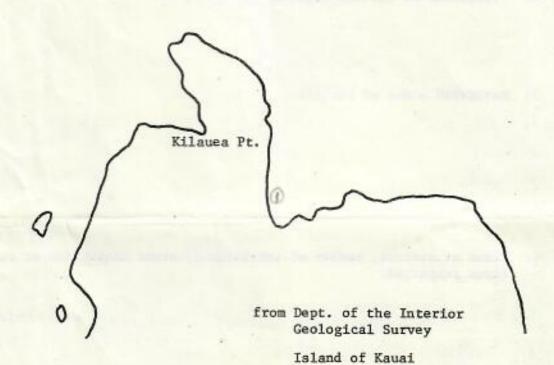
 times at surface, number of inhalations, other activities at surface, times submerged:

1. only seen for 10 sec. beforeit went down - linkalation

2. Imin, 5 inhalati

3. 1/2 min, 9 I.





1. date, times, tide, weather and sea surface conditions:

march 13, 79, 11:00, 12 ft. high tide cloudy, light wind, mostly calm, 4 ft swells

2. locations of turtles sighted:

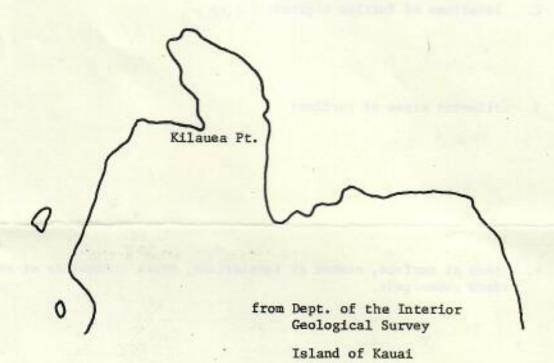
3. estimated sizes of turtles:

1. medium

 times at surface, number of inhalations, other activities at surface, times submerged:

1. 1 ming 4.I



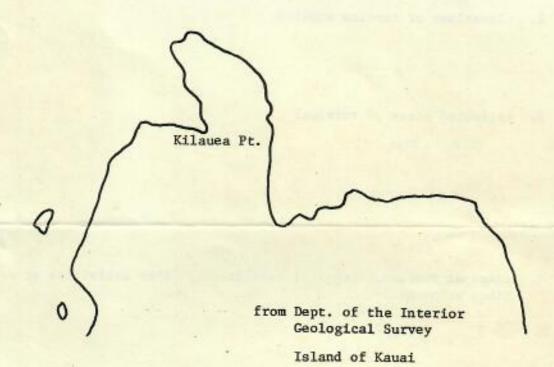


- 1. date, times, tide, weather and sea surface conditions: 3-29, 10:30, Calm, mostly sunny, 2 hours before 0 tide
- locations of turtles sighted:
- 3. estimated sizes of turtles:

medium

- times at surface, number of inhalations, other activities at surface, times submerged:
- 1. 3I, 30sec





1. date, times, tide, weather and sea surface conditions:

4-3-79, 10:30, G'hightide, partly cloudy, windy

- locations of turtles sighted:
- 3. estimated sizes of turtles:

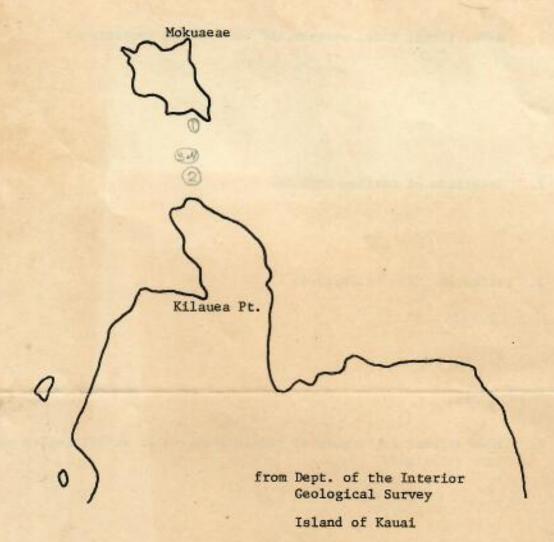
1 large 2 large 3#4 small

> times at surface, number of inhalations, other activities at surface, times submerged:

1. I min .; 5-I

2. 10 sec; 1 I

344. I min, 9 I , came up & went about together



GEORGE R. ARIYOSHI BOVERNOR OF HAMAII



STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF CONSERVATION AND RESOURCES ENFORCEMENT

1151 PUNCHBOWL STREET HONOLULU, HAWAII 98813

February 17, 1981

DIVISIONS:

CONSERVATION AND
RESOURCES ENPORCEMENT
CONVEYANCES
FISH AND GAME
FORESTRY
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Mr George H Balazs Assistant Marine Biologist University of Hawaii at Manoa P O Box 1346 Kaneohe, Oahu 96744

Dear Sir:

The attached map will indicate turtle sightings along the coastal areas of the Island of Kauai. The sightings have been most frequent during rough seas during the months of December and January and through out the summer months.

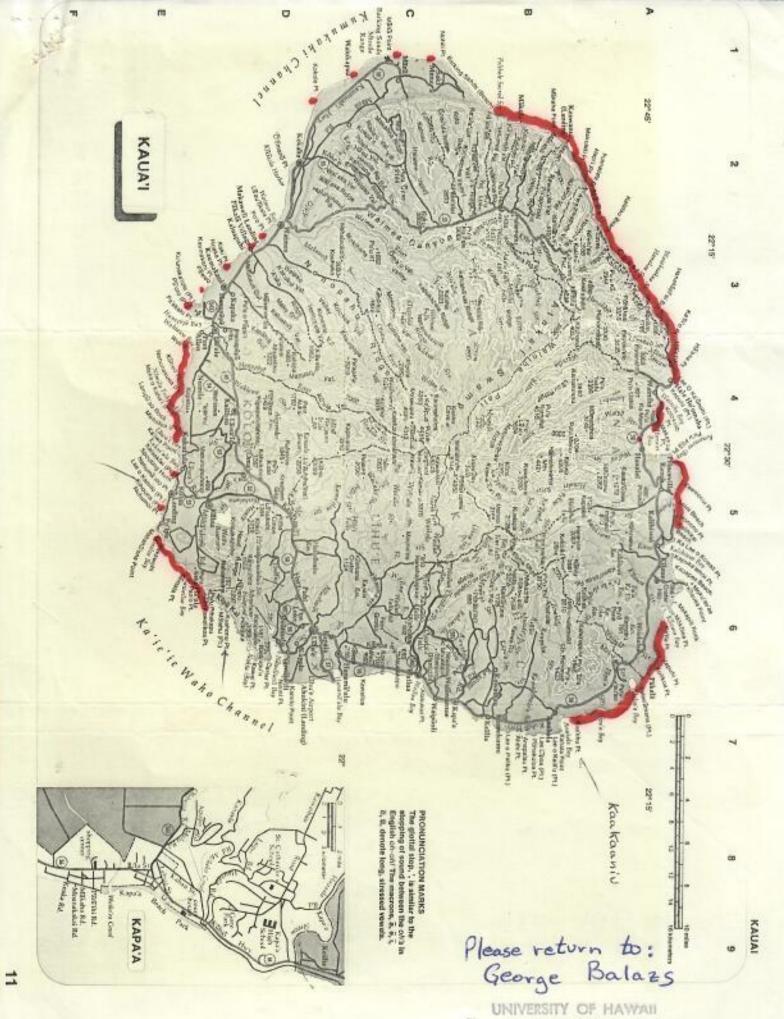
No nesting areas have been seen during recent years by any staff personnel.

Divers and shoreline fishermen have occasionly reported that the turtle population has increased to a great extent since the Federal law banning capture was incepted several years ago.

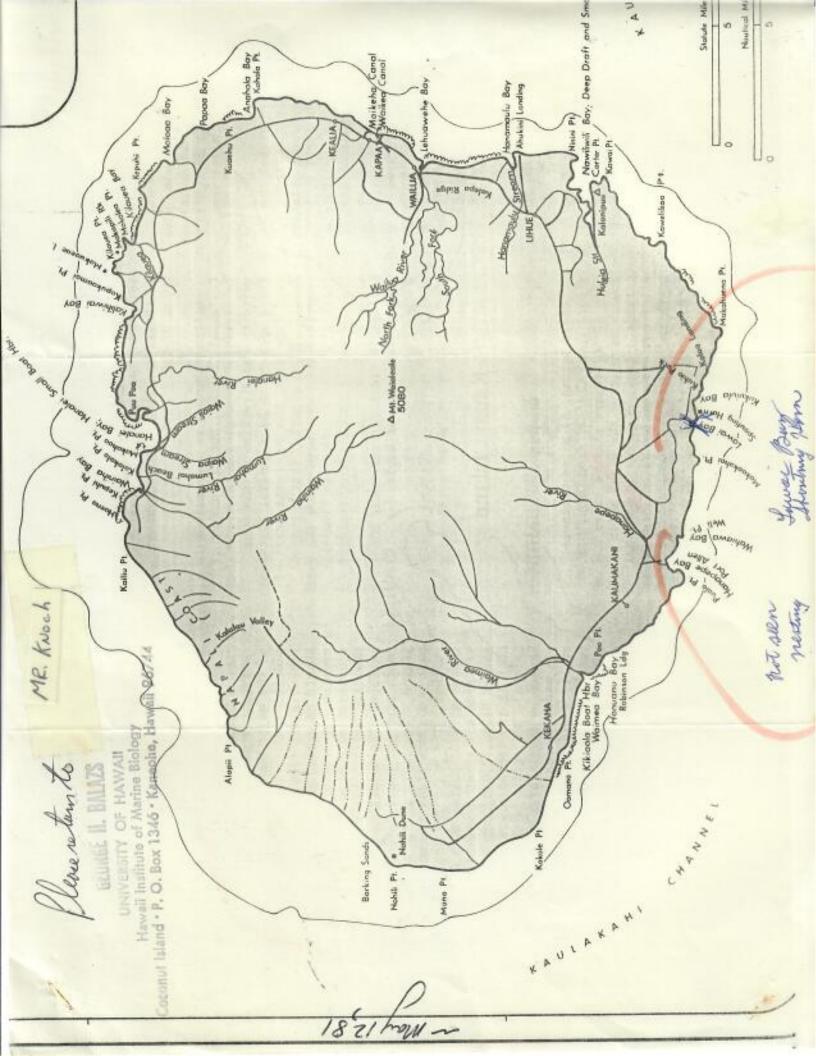
Please feel free to call me at 245-4444 for any further information.

Attach: map w/turtle areas in red

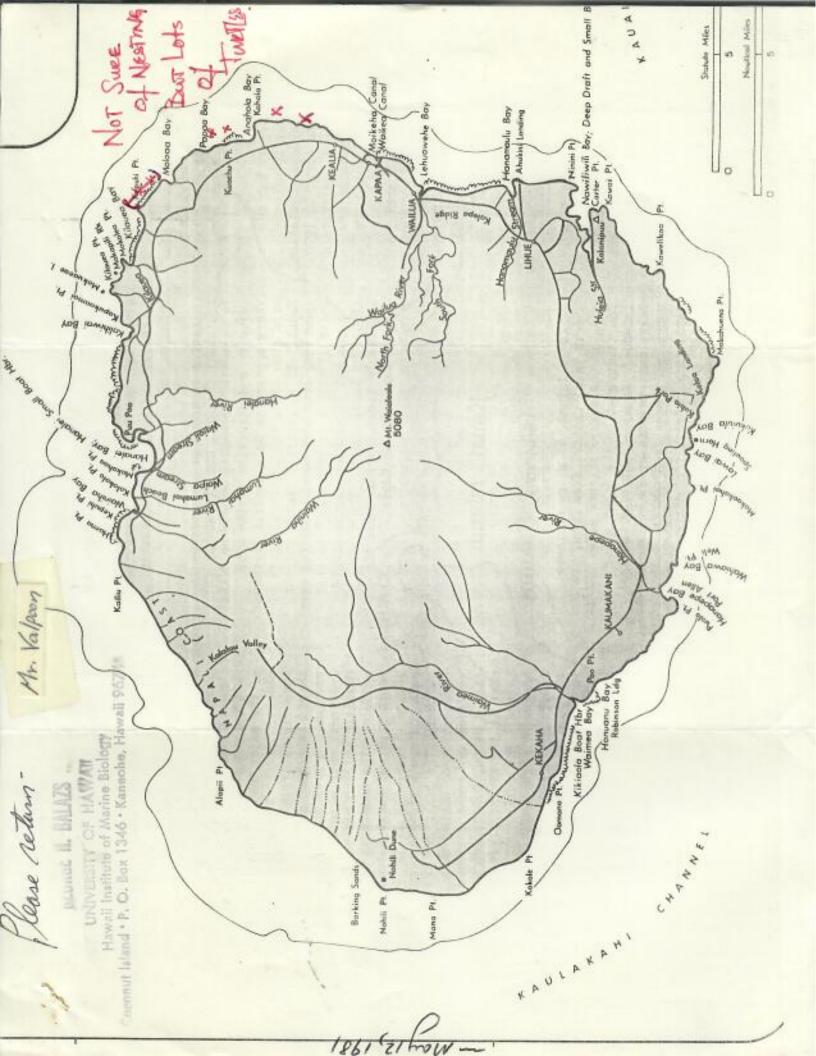
Tagalamur



UNIVERSITY OF HAWAII
Hawaii Institute of Marine Biology
Coconut Island • P. O. Box 1346 • Kaneohe, Hawaii 96744









Steorge 7/22/75 I have just finished a very interesting as well as informacine that weth you Roach from the Mes mor. He was involved with the Kausi Cartal some Resource Survey (see allacted pyen) on Kauac. Il relaced to me many interesting buts of information and said he waved be happy to answer any questions - saw many lurteed move long = 3 fut (corapace length) And more under 2' - will have a completed paper, maps interested by you 76 of you are - suggests content uf Liko SEIF To Den Del. Dancer, Di 96714 Beolagual Dean Leader weten grapue - suggests additionie source of lunce information (see addresses) on leach of - pup attende que people éauna

laute regulation and conservation is

one of aparty - no one peems a same much are heing depleased. - Nepali Canot site of major lutter trees Ju Herbere may have info. on turtle Copulation / nesting / having 1 bask

MOP HOTLINE a sea grant program

Maile Way .#6 phone 948-8433



July 10, 1975

Student Projects

Now is the time to be thinking of future student-originated projects. Any of you who think you might have ideas for individual small-budget projects, do not hesitate to call on us for an appointment (John McMahon or Francis Oishi, 948-8433).

NSF - SOS Opportunities

There is a tentative plan to propose a project involving ecological study to the National Science Foundation - Student-Originated Studies program. The proposal will be due this coming November, so basic research and proposal work should be done now to study the feasibility. All those who have basic interests in ecology should see Francis or John (948-8433).

Survey of Hanauma Bay

Tentatively there is a MOP proposition to undertake a survey of users of Hanauma Bay. This undertaking may be in conjunction with the State of Hawaii and may also involve construction research. Hilo MOPers lend an ear! This also applies to Kealakekua Bay in Kona. Full or parttime pay may be possible. Serious inquiries only. Deadline is July 24. Call Francis or John (948-8433).

Art, Anyone?

Anyone interested in helping with a mural for the MOP office? We need help with designing, suggestions for designs, drawing, painting, etc. If interested, call Francis or John.

Outdoor Sportsman's Show

For those of you who helped to design, construct, sit and answer questions, and also who aided in the cleaning up, let me take this opportunity to thank you for your effort in making MOP's display a well-presented and successful one. We have received many pleasant and encouraging comments about it. Special mahalo to Francis Oishi for working so hard and coordinating MOP efforts.

Sincerely,

John McMahon, Director

Project of the Month

This month's star project is the Kauai Marine Parks Study under Project Leader Jon Roach from Hilo MOP. This project involves detailed assessment of coastal zone resources at selected sites on Kauai. It also includes a sociological survey of shoreline users so that the people who make decisions about coastal utilization will know what the people want from the coast. The project is coordinating with the State of Hawaii; County of Kauai; U.H. Sea Grant Program; U.H. Planning and Urban Studies Program; as well as MOP.

Help Wanted

MOP is looking for someone to assist the Undergraduate Coordinator, Francis Oishi, with his office duties. These duties include interviewing MOPers, assisting with student-project planning, writing the Hotline, and generally helping the program to function. Part-time. If interested, contact Francis or John.

KAUAI COASTAL ZONE RESOURCE SURVEY PRELIMINARY REPORT: HAENA AND HANALEI BAY

The purpose of the survey is to describe selected coastal sites on Kauai.

Research objectives include measuring certain physical parameters and conducting underwater transects to determine the quantity and diversity of fish, algae and invertebrate populations representative of each study site.

The sites studied so far are Haena and Hanalei Bay on the north side of Kauai. In Haena 58 invertebrate-algae and 57 fish transects were taken and Hanalei Bay had 58 invertebrate-algae and 58 fish transects taken. This data is being stored in the Hawaii Coastal Zone Data Bank, and analysis for the final report will be conducted in August and September 1975.

HAENA

The Kauai Coastal Zone Resource Survey began on June 6, 1975, at Haena. The study area included the inshore reef flat and the unprotected offshore area within the boundaries of Ka Ulu a Paoa Heiau and Kailiu Point and the area offshore from Taylor Camp. We observed three different reef areas at Haena: the intertidal reef flat, shallow hilly region, and the dropoff and trench region.

The intertidal flat is rock covered with sediment. Much of the area is exposed at low tide and at high tide is subject to strong current. These conditions dictate what types of organisms are present. The algae present are mostly shallow water types or those which can withstand exposure to air such as <u>Tubinaria</u> and <u>Sargassum</u>, green algae <u>Microdictyon</u> and <u>Dictyospearia</u>, and funnel-shaped <u>Padina</u>. The corals present are limited to a few species. <u>Porites</u> and <u>Cyphastrea</u> are found in the areas which are never exposed. The sea urchin <u>Echinometra</u> with pink, black or white spines, found burrowed into the substrate,

are common. A large number of cone shells of various types are present. The fish life is limited to a few common shallow water species of damselfish (Eupomacentrus jenkinsi) and hinalea (Thalassoma duperrevi, Coris venusta, Stethojulis balteata). The reef flat encircles and shelters a small sand beach. The sand habitat supports a consistent but wary population of weke (Mulloidichthys vanicolensis), kala (Naso unicornis), and needlefish (Belone platyura). The inshore area is easily accessible to snorkelers and spear or pole fishermen.

The offshore area has interesting topography of gentle rolling hills ending in a 20-45 degree slope to the sand. The "hill" region supports a similar fish population as found inshore on the reef flat, however with a greater frequency and diversity. Additional species observed include damselfish .

(Plectroglyphidodon johnstonianus, P. imparipennis, Chromis vanderbilti, C. ovalis), hawkfish (Paracirrhites arcatus, P. fosteri), a large excited school of akule (Selar crumenophthalmus), and juvenile forms of several types of fishes. All these species are ocmmon to shallow, surgy zones. The hills are trenches usually filled with sand. The tops of the hills are flat and support colonies of Porites lobata, green in color; Montipora flabellata, purple; and the hemispherical heads of Pocillopora sp. Algae found abundantly in these areas include Laurencia, Pterocladia, Asparagopsis (limu kohu) and Tolypiocladia.

The offshore area is not recommended for inexperienced divers due to waves, current and surge.

The final region studied is the gradual slope of the reef to the sand at depths of 40-50 feet. This region is characterized by good relief and rugged terrain composed of holes, boulders and extensive coral growth in shelf-life outcroppings. Botryocladia and Halimedia are examples of the types of algae

which grow in the reef-sand interface where heavy sedimentation occurs. A diverse fish population finds shelter in this region: large schools of palani (Acanthurus dussumieri), weke and kumu (Mulloidichthys vanicoensis, M. auriflamma, Parupeneus porphyreus), aweoweo (Priacanthus cruentatus), nenue (Kyphosus cinerascens) and humuhumu-ele'ele (Melichthys niger). Also sighted were large uhu (Scarus perspicillatus), mu (Monotaxis grandoculis, aholehole (Kuhlia sandvicensis), menpachi (Myripristis murdjan), nohu (Scorpaenopsis gibbosa) and groupers (Cephalopholis argus). Butterfly fish (Chaetodon quadramaculatus, C. multicinctus) are present but in nominal amounts. Large turtles and a recurrent school of porpoise are also present. Fish seem little disturbed by divers and even curious. Visibility is good, approximately 23 meters, with little surge action at this deeper depth.

The reef populations of fish, coral and algae, found off Taylor Camp in 20-30 feet of water, are similar to the populations found at the "dropoff" zone. Here the characteristic topography is trenches, crevices and caves. The trenches at times are 10-15 feet deep and partially filled with sand. Although the marine fauna and topography of this area are the more picturesque, wind, wave, and surge conditions off Taylor Camp are not conducive to boat or shore diving. This offshore area is exposed to consistent northeast tradewinds and accompanying wind-blown swells.

HANALEI BAY

The second site studied on the north shore of Kauai was Hanalei Bay, an area noted for its winter surf, offshore fishing and congenial people. The marine topography of the bay is quite different from the offshore areas of Haena. Approximately 70-80% of the bay is sand. The primarily basalt substrate on the northeast side and southwest tip of the bay support coral and algae growth and accompanying reef fish populations. Biological surveys were

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restricted to the waters of Hanalei Bay proper; the seaward boundary being the imaginary line drawn from Maka-hoa Point at the southwest extremity to the headlands above the Hanalei River (site of the Club Mediterranean).

On Hanalei's southwest side, a shallow reef borders much of the bay & extending approximately 700 meters from shore before abruptly dropping to the sand. Several isolated reef patches are to be found in the bay surrounded by sand and at depths of 15-20 feet. Another separate and distinct reef area is located at the northeast extremity of the bay at the mouth of the Hanalei River.

The reefs on the southwest and northeast sides of the bay can be divided into three areas: the outer reef slope zone, and the middle and inner reef flats. The outer slope is broken with ledges, overhangs, and depressions, and drops almost vertically to the sand. The slope is covered mostly by Montipora Sp., a coral forming characteristic shelf-like outcroppings. The middle flat reef is of the "basic" type. In the basic reef, the coral cover consists of Porites, Montipora, Leptastrea and Pocillopora species. The first three corals are encrusting corals and the last grows to form hemispherical heads. The algae cover is Laurencia, Asparagopsis (Limu Kohu), Tricoglea, Tolypiocladia and Jania species. The macroinvertebrates include the common white wana, the garbage urchin and the long-spined black wana. The majority of the inner reef is strewn with rubble and isolated patches of the finger coral Porites compressa. This fragile coral is protected from wave action by the outer reefs.

The reef in the middle of the bay is an isolated patch which is surrounded by sand. This reef is in deeper water (15-20 feet) and fits the "basic reef" description for the substrate coverage.

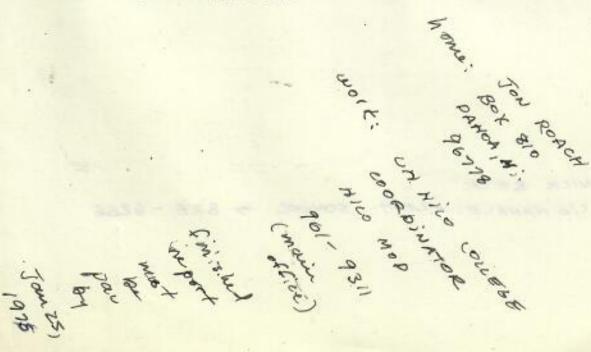
The reef fish population varies in two areas of the bay; the reef flats and the reef slope. The reef flat has an extremely large dominating population of 'o'ele uwiwi (Pervagor spilosoma). These file fish are found everywhere in the

bay but especially on the reef flat clustered around <u>Pocillopora</u> and <u>Porites</u> coral heads. Other species present include the more common hinalea, damselfish and hawkfish. Octopus and several species of puhi were also observed on the shallow flat.

On the reef slopes many more species of fish were seen. Along the southwest dropoff, schools of weke (M. vaniclensis), palani (A. dussumieri), goodsized kumu (P. porphyreus) and kala (N. unicornis) were seen. On the isolated reef patch a large school of papio (Caranx melampygus) and snappers (Lutianus kasmira) were common. Along the northeast slope at the mouth of the Hanalei River, schools seen include weke (M. vaniclensis), hinaleas (S. balteatus) and nominal populations of butterflies (Chaetodon lunula, C. miliaris, C. mulficinctus).

During the study period, June 25 to July 7, the wave, surge and wind conditions in Hanalei Bay were very conducive to boat and shore diving activities, but it should be kept in mind that conditions change drastically during the winter months (especially wave conditions).

At depths of 10 feet and more, visibility at Hanalei compared well with Haena at 18 meters; at the shallower depths visibility was less due to a ubiquitous layer of fresh water.



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VICK BECK YO HANALE; ELEM. SCHOOL > 826 - 6266

SEA TURTLE SIGHTING REPORT	(Please return to: George H. Balazs; Hawaii Institute of Marine Biology; P. O. Box 1346; Kaneohe, HI 96744;
Observation made by: STEVE SMHTH	Tel. 247-6631)
Address & Tel. No. (optional): Sunset to	14121 CONDOS 742-6175 RM 403
Date: /-/0+// 67 Time: 4:30 Location (indi	cate
on chart):	
Observation made from:shore;	**
boat; or whileskinSCUBA divin	s. (2)
Estimated size (shell length): 18-24"	200
Turtle seen on:surface; or at depth of	
approxft. Distinguishing	
characteristics (species I.D. if known, lon	g S
tail, shell color, tags, injuries, etc.):	
(Information on turtle parts recovered from appreciated).	fish or sharks would also be greatly
Other comments: Iday WE SAW ONE	turtle The Next day a swimming
close together to mi offshore.	
THANK YOU FOR Y	OUR COOPERATION

Sunset Kahili Condominium Apartments
Poipu Beach NR 1, Bin 76 -- Kisha, Kawai Hawaii 58756

TURTLE SIGHTING REPORT (Please return to: George H.Balazs; Hawaii Institute of Marine Biology; Observation made by: John Tachi bana P. O. Box 1346; Kaneohe, HI 96744; Tel. 247-6631) Address & Tel. No. (optional): 3327 A Kuhio Huy Like Date: 1-3-82 Time: 130 Location (indicate on chart): Maloga Bay , Kanan Observation made from: shore; boat; or while __skin __SCUBA diving. Estimated size (shell length): /3 \ Turtle seen on: surface; or at depth of approx. ___ft. Distinguishing characteristics (species I.D. if known, long tail, shell color, tags, injuries, etc.): (Information on turtle parts recovered from fish or sharks would also be greatly appreciated). -Other comments: Leagu - my rance is Whe information - what little three is - was given to me by John or alvin. THANK YOU FOR YOUR COOPERATION

