



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

June 22, 1981

F/SWC2:GHB

TO: William Gilmartin, Leader, Marine Mammal and Endangered Species
Investigation

FROM: George H. Balazs, Fishery Biologist *George H. Balazs*

SUBJECT: Some conservative management ideas for the enhancement of the
Hawaiian monk seals at French Frigate Shoals

My recent involvement in salvaging an abandoned monk seal pup on East Island has prompted me to consolidate in writing some management ideas for your consideration. The following represents these thoughts.

1. At French Frigate Shoals, monk seals are known to occasionally a) abandon a pup well before weaning age, b) have a pup leave its biological mother and receive maternal care with another mother and pup, and c) have a fully weaned and healthy pup receive maternal care with another mother and pup. As examples, two early-weaned pups were recorded on East Island one week prior to our arrival in June of 1980, and two pups nursed by one mother were present on Whale-Skate in June of 1980, and on East in March and June of 1981.

In the case of (a) of the above, a pup in this condition is clearly doomed and lost to the population. If a mother can be found that has experienced the recent mortality of a pup, the abandoned pup could be transported to her in an adoption attempt. If no such mother is available, or if adoption is not successful, then efforts should be made to raise the pup in captivity, either in Hawaii or on the mainland, for eventual return to the wild.

In the cases of (b) and (c), if left on their own, either one or both of the pups could be expected to be significantly underweight when weaned. Removing one of the pups to captivity, or to an adoptive mother, would therefore enhance the survival of both individuals. If the pair includes a previously-weaned gray pup, this individual could be transported and released on another island within French Frigate Shoals. Presumably it would not immediately find its way back to the receptive mother.

2. In June of both 1980 and 1981 I have found severed pieces of small-diameter intestines at East Island that almost certainly originated from young monk seals. I have concluded that this is the result of shark attack, particularly in view of the fact that amputated and mutilated flippers and tails of green turtles are seen each year. Tiger sharks are reported to be abundant at French Frigate Shoals, but it would appear that relatively few individuals develop a feeding pattern that brings them close to the islands where seals, turtles, and albatrosses breed. It therefore may be possible to selectively eliminate these "rogue" sharks by setting a few baited hooks at key locations.

Admittedly there is some speculation in this hypothesis. However, it could be tested with a minimum of effort and expense and, if correct, would serve as a valuable management aid.

French Frigate Shoals is an ideal location for trying to enhance, in a conservative manner, the endangered monk seal and threatened green turtle. It is the major breeding site for both species, as well as a National Wildlife Refuge with resident biologists, relatively easy access to the various islets, and frequent air transportation to Honolulu. We should consider doing more at this location while such advantages still exist.

August 27, 1981

F/SWC2:WGG

File

Mr. Susumu Ono *+ Rob*
Chairman and Member
Board of Land and Natural
Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Ono:

Within the next 2 weeks we will release the majority of our captive-reared green sea turtles that were obtained as hatchlings from French Frigate Shoals in September of 1980. The enclosed narrative will provide you with the basic plan for this undertaking. Due to funding limitations, some changes in the sites for release may be necessary.

We view this release as a cooperative project with the State of Hawaii and the U.S. Fish and Wildlife Service. Subsequent press announcements that will be prepared will therefore reflect this point.

If you have any suggestions for the enhancement of this release please do not hesitate to contact me as soon as possible.

Sincerely,

William G. Gilmartin
Leader, Marine Mammal
and Endangered Species
Investigation

Enclosure

Identical letter to:
Dr. Robert Shallenberger, FWS

WGG:11

bc: HL
Gilmartin

June 4, 1986

F/SWC2:GHB

Mr. Colin Limpus
National Parks and Wildlife
Pallarenda
Townsville 4810
Australia

Dear Col,

Many thanks for your letter of November 25, 1985 explaining your views and findings on "developmental migrations" of Australian sea turtles. I certainly appreciated your candid remarks that you have no tag recoveries that support the idea of "shifts to different coastal developmental habitat" occurring during the life of a turtle. This negative data certainly seems significant, in view of the fact that you have tagged thousands of turtles of all sizes at various Australian feeding grounds. As I've probably emphasized to you before, our tag recoveries here in Hawaii all show that no movement by immature (or adult) green turtles takes place between resident feeding areas.

~~I look forward to seeing you at WATS II.~~ Best regards.

Sincerely,

George H. Balazs
Zoologist

cc: Balazs
HL

UNIVERSITY OF HAWAII
Hawaii Institute of Marine Biology
Coconut Island • P. O. Box 1346 • Kaneohe, Hawaii 96741

April 28, 1980

Dr. William Aron, Director
Office of Marine Mammals & Endangered Species
National Marine Fisheries Service
Washington, D. C. 20235

Dear Dr. Aron:

The purpose of this letter is to submit testimony relating to the NMFS/NOAA Draft Environmental Impact Statement entitled "Proposed Designation of Critical Habitat for the Hawaiian Monk Seal (*Monachus schauinslandi*) in the Northwestern Hawaiian Islands." My comments will be limited to the two areas which I feel are of greatest importance at the present time.

Absence of a Specific Proposal

In view of the document's title and objective, it is surprising to find that a *complete specific proposal* for the designation of Critical Habitat has not been offered. Instead, three choices (10 fathom, 20 fathom, 3 nautical miles) have been set forth for the public's consideration and selection. Which of these three choices constitute the recommendation of NMFS/NOAA biologists, based on their comprehensive examination of the best available data? It is reasonable to assume that some conclusion was indeed reached in this matter, but unfortunately it is not clearly presented in the document. The closest statement to a recommendation seems to appear in the Summary on page 3, which reads:

"Essential habitat requirements for the Hawaiian monk seal, based on the best available information, have been identified to include pupping and hauling beaches, shallow, reef-protected lagoon waters adjacent to these beaches, and the deeper inner reef waters, lagoon waters and all other surrounding water areas to a depth of **10-20 fathoms** (my emphasis)."

Dr. William Aron
Page 2
April 28, 1980

Are NMFS/NOAA biologists consequently recommending 10 fathoms, 20 fathoms, some value between these two depths, or possibly the three nautical mile option which is mentioned elsewhere? Some conclusion needs to be reached in the document in that, unlike NMFS/NOAA biologists, the majority of the public does not have access to all the available literature and data on the Hawaiian monk seal.

Nihoa and Gardner Pinnacles

Under Habitat Requirements on page 52, the document states that "Existing data clearly indicate that the beach areas utilized by the Hawaiian monk seal for hauling out and pupping are critical to the well being of the species." On page 18, under Proposed Action, it is stated that "This proposed Critical Habitat designation would include beach areas currently utilized by the monk seal for hauling out and pupping on the islands and atolls." Furthermore, "Beach areas refer to all sand beaches, including vegetation immediately behind these beaches, as well as limestone and lava beaches utilized by monk seals as haul-out grounds and pupping areas." In view of these statements, and considering the best available data, the Northwestern Hawaiian Islands of Gardner Pinnacles (25° 00'N, 167° 55'W) and Nihoa (23° 06'N, 161° 58'W) should also be logically included in the proposed designation of Critical Habitat. I have compiled some of the significant data on monk seals at these two locations for your consideration.

Gardner Pinnacles (3 acres)

In *Atoll Research Bulletin* No. 163, Roger Clapp (1972) states that

"The only mammal occurring on Gardner is the Hawaiian Monk Seal which was first noted in 1826 in Hiram Pualding (1831:191). These seals were not seen there again for over 130 years. This absence of records probably stems from a paucity of observations of the Pinnacles rather than an absence of seals since these mammals have been seen quite regularly during recent visits to the islands.

On the first POBSP survey (16 June 1963) the field party saw two seals sunning themselves on the smaller of the two islands. On 16 September 1966, Kridler's field party saw five seals, four resting on the smaller island, another swimming nearby. Six were seen on the second POBSP survey (26 May 1967), again on the smaller island. These seals were hauled out on a ledge about 2 feet above the water surface which was reached by riding the swells. On 1 June 1969 Olsen saw six hauled up on the small island. No evidence that breeding occurs on the island has been found."

Dr. William Aron
Page 4
April 28, 1980

References

- Clapp, R. B. 1972. The natural history of Gardner Pinnacles, Northwestern Hawaiian Islands. *Atoll Research Bulletin* 163, 1-25.
- Coleman, R. 1977. Narrative report, NOAA vessel *Townsend Cromwell*, 7/4/77-8/17/77. U. S. Fish and Wildlife Service, Hawaiian Islands National Wildlife Refuge, Honolulu, manuscript report, 10 pp.
- Fiscus, C., Johnson, A. M. and K. W. Kenyon. 1978. Hawaiian monk seal (*Monachus schauinslandi*) survey of the Northwestern (Leeward) Hawaiian Islands. National Marine Fisheries Service, Northwest and Alaska Fisheries Center, Seattle, processed report, 27 pp.
- Rauzon, M. J. 1979. Survey of Hawaiian monk seal (*Monachus schauinslandi*), Northwestern Hawaiian Islands, 9-25 May 1979. U. S. Fish and Wildlife Service, National Fish and Wildlife Lab, Anchorage, manuscript report, 10 pp.



University of Hawaii at Manoa

Hawaii Institute of Marine Biology
P.O.Box 1346 • Coconut Island • Kaneohe, Hawaii 96744
Cable Address: UNIHAW

November 9, 1981

CONFIDENTIAL

Fish and Wildlife Service
Division of Law Enforcement
Lloyd 500 Building, Suite 1490
500 N.D. Multnomah
Portland, Oregon 97232

Dear Sirs:

During a brief stopover in American Samoa on October 30, 1981, I noted at least four businesses that were selling jewelry made of tortoiseshell derived from the hawksbill turtle (*Eretmochelys imbricata*). From the style, workmanship and information provided by sales personnel, most of this jewelry could be positively identified as originating from either Fiji or Western Samoa. In the case of Burns Philip Ltd., an Australian firm that operates in American Samoa, it was clear that the jewelry is being imported from their sister store in Apia, Western Samoa. In both February and October of 1981, I personally documented that the Apia Burns Philip store buys raw tortoiseshell from individuals living in the Aleipata District of Western Samoa. The store then commissions independent artisans to manufacture assorted jewelry.

The tortoiseshell is obtained from adult female hawksbills that are taken while nesting on three uninhabited offshore islets located in the Aleipata District (Nuulua, Nuutele and Namua). This is the last known nesting area for hawksbills in Western Samoa, and not more than 50 turtles nest there each season. For the past 10 years the Government of Western Samoa has operated a small hatchery project in Aleipata in a commendable effort to increase the number of turtles in coastal waters. The owner of the nesting islets, a Samoan Matai (Chief), has declared that entry to the islets is prohibited except for authorized workers. However, this is difficult to enforce due to the remoteness of the region and the absence of enforcement people.

The line of commerce between the nesting islets in Aleipata, and the retail outlets in American Samoa (specifically Burns Philip), is an excellent, if not depressing, example of international commercial trade hastening the destruction of a local native resource. The number of turtles that are taken from the islets while nesting is directly correlated with the amount of jewelry sold

Fish and Wildlife Service
November 9, 1981
Page 2

in American Samoa, and the length of time that such sale is allowed to continue. In this respect, it is interesting to note that there are currently two passenger liners visiting American Samoa each month, with approximately 700 tourists disembarking from each ship for shopping and sightseeing. The Burns Philip store operates a free and continuous bus service between the docked ships and their retail outlet.

As shown by the attached correspondence, I first brought this matter to the attention of the Fish and Wildlife Service (Enforcement Chief C. R. Bavin) in March of this year. An additional inquiry made in late August has apparently still not resulted in the initiation of corrective action. I therefore hope that this present letter will further emphasize the importance and seriousness of the problem. I would appreciate being informed in writing of the status and outcome of this case.

Thank you for your assistance.

Sincerely,



GEORGE H. BALAZS
Assistant Marine Biologist and
Deputy Chairman, IUCN/SSC
Marine Turtle Group

GHB:ec

Enclosure

cc: C. R. Bavin

February 4, 1982

F/SWC2:GHB

Dr. R. S. B. Wickramasinghe
Dr. T. S. U. de Zylva
Wildlife and Nature Protection
Society of Sri Lanka
Chaitius Road
Marine Drive, Fort
Sri Lanka

Dear Drs. Wickramasinghe and de Zylva:

Dr. Archie Carr, Chairman of our IUCN Marine Turtle Specialist Group, has sent me a copy of your inquiry of 29 January and his response to you. I simply want to take this opportunity to wish you success in your sea turtle project, and offer to assist you in whatever way possible. I have enclosed a number of publications covering my own research here in Hawaii and at other Pacific islands. Hopefully this material will be of some value to you and your staff.

Best regards.

Sincerely,

George H. Balazs
Fishery Biologist

Enclosure

GHB:ey

cc: Balazs ✓

HL



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

8 December 1981

Mr. Mark Gentle
Assistant Fisheries Officer
South Pacific Commission
Post Box D5
Noumea Cedex, New Caledonia

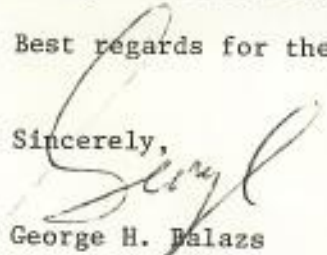
Dear Mark:

I hope that the enclosed migration map and short manuscript will be acceptable for use in the SPC Fisheries Newsletter. My objective was to keep it short, relatively simple, and to the point without "overselling" the need for conservation.

The draft article dealing with the retention of turtle tags that I previously sent to you has now been submitted to the Marine Turtle Newsletter. I would prefer to have it appear in this publication due to its wider circulation among sea turtle researchers. I hope that this has not caused you any inconvenience.

Best regards for the Holidays.

Sincerely,


George H. Balazs
Fishery Biologist

November 26, 1981
National Marine Fisheries Service
PO Box 3830
Honolulu, Hawaii 96812

Mr. Mark Gentle
South Pacific Commission
Noumea


Dear Mark:

I hope that you received the letter that I sent to you a few weeks ago.

I am happy to report that I have now completed assembling a map showing known migrations of sea turtles in the Pacific islands. A short descriptive narrative and reference list have also been prepared. The migration data will be illustrated right on one of your SPC area maps and then photographed to produce a glossy back and white print. I believe that this will be suitable for the publication process of the SPC Fisheries Newsletter. A graphics' specialist is now in the midst of doing this. I can promise that it will all be mailed to you by December 15th, when I leave for California for a 2-week Christmas vacation with my family.

Quite frankly, I'm very impressed by what the map shows. Our turtles really do get around! Some new ideas have opened up to me which I want to discuss with you at a later date.

Best regards,



George Balazs

January 14, 1982

F/SWC2

Mr. W. L. Hobart
Managing Editor
Marine Fisheries Review
Scientific Publications Office
7600 Sand Point Way, N.E.
BIN C15700
Seattle, Washington 98115

Dear Mr. Hobart:

We wish to submit the enclosed manuscript, "Radio telemetry of Hawaiian green turtles at their breeding colony," for publication in Marine Fisheries Review. It has been reviewed by Drs. G. Causey Whittow, Professor of Physiology, University of Hawaii and Robert Shallenberger, Refuge Manager, U.S. Fish and Wildlife Service, Honolulu.

Although not noted on the manuscript, Dr. Dixon's present affiliation is the Southwest Fisheries Center, NMFS, La Jolla, having permanently transferred there in late December 1981.

Sincerely,

George H. Balazs
Fishery Biologist

Enclosures:

Manuscript (3)
MS Transmittal Form 25-700

bc: Dixon
Balazs
HL

lht/



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
SEFC, Galveston Laboratory
4700 Avenue U, Galveston, Texas 77550

F/SEC6:JPM:ohh:5.3

DATE: October 21, 1980
TO: George H. Balazs - F/SWC2
FROM: Dr. J. P. McVey *McVey* F/SEC6
SUBJECT: "Living tag" studies

Your letter to Dr. Klima asking for our experience with Dr. Hendrickson's "living tag" was referred to me. As of this date, it is too early to evaluate the system. All of the grafts appear to have taken, but there is no differential coloring as of this point in time. Drop us a line in a couple of months and we will bring you up to date on this subject.

My best to you and all my friends in Hawaii. Are you still living on your boat?



10TH ANNIVERSARY 1970-1980

National Oceanic and Atmospheric Administration

A young agency with a historic
tradition of service to the Nation

G. Balazs

July 15, 1981

Commander, THIRD FLEET
Attn: N11
Pearl Harbor, Hawaii 96860

Dear Sir:

We would like to request an Entry Authorization pass
for Midway Island for

George H. Balazs

SSN: 564-54-0156

Mr. Balazs will leave Honolulu via a MAC flight to
Midway Island on August 4, 1981, and upon arrival will board
the R/V Townsend Crowwell to continue on to Pearl and Hermes
Reef.

Mr. Balazs has a DD 398 on file with your office as an
employee of the University of Hawaii, and the information
on that form is current with the exception that he is pres-
ently assigned to the National Marine Fisheries Service,
SWFC Honolulu Laboratory on an Intergovernmental Personnel
Act agreement.

The CO, Midway Island has no objections to the arrival
of Mr. Balazs as he will not require overnight accommodations,
but will leave on the vessel the same day. He will be returning
to Midway on August 14 and board a U.S. Coast Guard C-130
bound for Honolulu, so the pass should be valid for that
period.

We appreciate your cooperation in this request.

Sincerely yours,

Mary Lynne Godfrey
Administrative Officer

*P. Mouton
50.000*

CABLE ADDRESS :
"SOUTHPACOM" NOUMEA
TELEPHONE : 26.20.00
TELEX : SOPACOM 139 NM

ADRESSE TELEGRAPHIQUE :
"SOUTHPACOM" NOUMEA
TELEPHONE : 26.20.00
EX : SOPACOM 139 NM



SOUTH PACIFIC COMMISSION
POST BOX 05
NOUMEA CEDEX
NEW CALEDONIA

COMMISSION DU PACIFIQUE SUD
BOITE POSTALE 05
NOUMEA CEDEX
NOUVELLE-CALÉDONIE

In reply, please quote PRO 7/14
PLEASE ADDRESS REPLY TO
THE SECRETARY-GENERAL

24 November, 1981

Mr George H. Balaz
Assistant Marine Biologist
Hawaii Institute of Marine Biology
P.O. Box 1346
Coconut Island, Kaneohe
HAWAII. 96744

Dear George,

Many thanks for your letters of 5 and 10 November and the draft article on turtle tags. We would certainly be interested in using this article in the Fisheries Newsletter but suggest it would be worthwhile including some explanatory diagrams.

You will be pleased to know that René Grandperrin has come back to work in the Pacific. He passed through Noumea last week on his way to take up a ORSTOM job attached to the Fisheries Department in Vanuatu. He said to send you his regards and to pass on the surprising news that GNEOX in Tahiti are just about to start turtle farming experiments.

Regards,

Mark Gentle
Assistant Fisheries Officer

... P.S. As per your request I enclose two copies of the "environmental mini-lesson" on turtles.

MG/vmr.

November 12, 1981

F/SWC2:GHB

Mr. Perry A. Thompson
Southeast Fisheries Center
National Marine Fisheries Service
Pascagoula Facility
P. O. Drawer 1207
Pascagoula, MS 39567-0112

Dear Perry,

Many thanks for sending me the information on incidental capture of turtles in longlines. I greatly appreciate your cooperation and willingness to share this material with me. It is indeed an interesting fishery interaction that appears to warrant further attention.

There is one point that I would like to have clarified. You provided me with Table 2 as the number of hooks set by month for the 1978 Japanese longline fishing effort in the Gulf. However, these data are nearly identical to a Table 2 in the Lopez et al. paper (Mar. Fish. Rev, October 1979) that is captioned "Number of sets and total number of hooks set by month by Japanese longline vessels recorded by U.S. observers. These numbers only represent a portion of the Japanese longline fishing effort in the Gulf of Mexico." Do you have the data, or at least some estimation, of the total longline effort? In other words, what proportion of the total effort (number of hooks) did the U.S. observers actually monitor in 1978?

If a turtle is hooked somewhere in the body with a barbed hook, how do they go about getting the hook out without actually bringing the turtle aboard? This would seem to be a real problem. Is the line cut free without retrieving the hook?

I hope that your work is going well. Again, thank you for your help.

Sincerely,

George H. Balazs
Fishery Biologist

bc: Balazs ✓
HL

GHB:iht

April 3, 1981
Box 1346
Kaneohe, HI 96744

Sean McKeown
Honolulu Zoo

Dear Sean:

For the second time now in 6 months I have been told something that I know nothing about, but perhaps should. The best way for me to learn is to ask you directly. So here goes.

1. How many Phelsuma guimbeaulti, and other species, did you collect from Mauritius and the Seychelles?
2. How many of each died during their return shipment?
3. Have any escaped or been released here in Hawaii?
4. Have any been sold and, if so, at what prices?
5. Are you planning another trip that somehow involves commercial dealing?

In asking these questions, I want to assure you that I have your best interests in mind, and am only trying to ascertain the facts. I want to be able to give an enlightened response to those who may not have the straight story.

Best regards-Aloha,



George Balazs



DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

COMMANDER (OSR)
Fourteenth Coast Guard District
Prince Kalanianoʻe Federal Bldg.
300 Ala Moana Blvd.
Honolulu, Hawaii 96850
Phone: 808-546-7116

4631

7 OCT 1981

Mr. George H. Balazs
National Marine Fisheries Service
Southwest Fisheries Center
Honolulu Laboratory
PO Box 3830
Honolulu, HI 96812

Dear Mr. Balazs:

I regret that the next Coast Guard C-130 flight to Pago Pago will have limited seating available due to cargo requirements and it is already oversubscribed. It is quite probable that our next flight will have more seats and that we can accommodate you.

Sincerely,

R. Z. DEL GIORNO
Captain, U. S. Coast Guard
Chief, Search and Rescue Branch
By direction of the Commander,
Fourteenth Coast Guard District

September 29, 1981

F/SMC2:GHB

Captain R. Del Giorno
Fourteenth Coast Guard District
300 Ala Moana Blvd.
Honolulu, HI 96850

Dear Captain Del Giorno:

I should first like to thank the Fourteenth Coast Guard District for providing air transportation and assistance for the release of our one-year-old green sea turtles on Maui and the Big Island. Your support of this research activity is greatly appreciated.

It is my understanding that sometime during the latter part of October there will be a Coast Guard C-130 flight between Honolulu and Pago Pago, American Samoa. During this same period, I am currently planning to conduct a sea turtle study with personnel of the American Samoa Office of Marine Resources. If space is available, would it be possible for me to travel to Samoa aboard your flight? My baggage requirements would be minimal, probably less than 100 lbs.

Thank you for your consideration of this request.

Sincerely,

George H. Balazs *GH*
Fishery Biologist

GHB:ey
cc: Balazs ✓
HL

March 31, 1982

F/SWC2GHB

Monsieur Nkosi Luta Kingengo
B. P. 5025
Luanda
ANGOLA

Dear Monsieur Kingengo:

Dr. Anne Meylan, Agenda Officer of the IUCN Marine Turtle Specialist Group, has sent me a copy of the letter she wrote to you concerning your interests in sea turtles. I am therefore taking this opportunity to send you a recently published report covering some of our research here in the Hawaiian Islands. If there is any way I can be of further assistance, please do not hesitate to contact me.

Sincerely,

George H. Balazs
Fishery Biologist

Enclosure

bc: Balazs ✓
HL

GHB: iht

Balazs

March 26, 1982

F/SWC2:GHB

Ms. Molly Lutcavage
c/o Dr. Peter Lutz
Rosentiel School of Medicine
and Atmospheric Science
Division of Biology and Living
Resources
University of Miami
4600 Rickenbacker Causeway
Miami, Florida 33149

Dear Molly:

I would greatly appreciate receiving a copy of your Masters' thesis, "The status of marine turtles in Chesapeake Bay and Virginia coastal waters." Larry Ogren recently told me that you have circulated it for review. He was favorably impressed with your work. I have enclosed a self-addressed postpaid envelope for your convenience. Thank you for your help.

Best regards,

George H. Balazs
Fishery Biologist

CABLE ADDRESS :

" SOUTH PACOM " NOUMEA

TELEPHONE : 26.20.00

TELEX : SOPACOM 139 NM

ADRESSE TELEGRAPHIQUE :

" SOUTH PACOM " NOUMEA

TELEPHONE : 26.20.00

TELEX : SOPACOM 139 NM

SOUTH PACIFIC COMMISSION

POST BOX D 5

NOUMEA CEDEX

NEW CALEDONIA



COMMISSION DU PACIFIQUE SUD

BOITE POSTALE D 5

NOUMEA CEDEX

NOUVELLE-CALÉDONIE

In reply, please quote

PRO 7/14

PLEASE ADDRESS REPLY TO

PRO 7/27

THE SECRETARY-GENERAL

26 January 1982

Mr G.H. Balazs,
National Oceanic and Atmospheric
Administration,
National Marine Fisheries Service,
Hawaii Area Fishery Research Centre,
P.O. Box 3830,
HONOLULU,
Hawaii, 86812.

Dear George,

Thanks for your note of 18 January which arrived today. Yes I did indeed receive the turtle migration map and article and my apologies for not replying sooner. It is certainly a most impressive map and will I am sure be of interest to a lot of people. We will be including it in the next issue of the Newsletter which should be ready for printing sometime in March. Have also passed a copy of the map to Arthur Dahl who, if you have no objection, would like to make use of it in the forthcoming Regional Conference on the Human Environment.

Regards,

Mark Gentle

Assistant Fisheries Officer

MG/yr

Gifts and Grants

IPS is most grateful for the gifts of £20 and over, listed below, and for many smaller donations received between November 1980 and March 1981.

Oryx 100% Fund

	£
Conder Conservation Trust (for Cameroon 21 Wildlife Programme)	1000
IUCN (grant for Professor B.C. Clarke - see <i>Grants</i> below)	500
Lt Col G.A.E. Gibbs (for Cameroon 21 Wildlife Programme)	400
Mrs M. McConnell, Peter Nathan Trust, each	100
Mr J.D. Constable	81
Mr S.F. Rostron	61
Mr C. Edwards, Lt Col G.A.E. Gibbs,	
Dr R.K. Haight, Mrs C. Horton, Miss H. Wood, each	50
Miss G. Linscott, Mr. P. Sugden and Marine Environment Fund	30
Mr N.N. Beach, Dr M. Kavanagh, Miss E.D. Medcalf, Mr A. Parfitt, Mrs D. Spearman, each	25

Legacy

Mr W.F. Byrnes	400
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Gifts

Conder Conservation Trust	2000
New Moorgate Trust	1000
Ofenheim Charitable Trust	800
Interim Club	700
Bruce Coleman	172
Mrs M. Hayne, Miss E. Hickox, the Hon Mrs G. Lascelles, Mr S. Marchant, Spirax Sarco, Thomas Lilley Memorial Trust, each	100
Ms S.J. Herbert, Wadhams College, each	50
Mrs D. Tyrwhitt	36
Octopus Books (Bruce Coleman)	25

Oryx 100% Fund Grants

The following 100% Fund grants were approved at the January 13 Council meeting:

- £650 to Professor B.C. Clarke to breed species of Pacific land snails threatened with imminent extinction (including IUCN grant, above);
- £500 to Jack Frazier to study age structures of Mexican olive ridley turtle populations;
- £250 to Dr N.J. Collar for an ICBP project to investigate sites for great, little and houbara bustards in the Middle East;
- £200 to Jean Ngog Nje to study giraffe population dynamics in the Waza National Park, Cameroon;
- £200 to J.M.Y. Robertson to train six Indonesian students in ecological fieldwork;
- £130 to Mr John A.H. Benzie to complete a study of an endemic prawn, *Caridina singhalensis* in Sri Lanka.
- £100 to Dr Boonsong Lekagul to search for white-eyed river martins at the Bung Berapet Reserve in central Thailand;
- £100 to Simon Hooton of the British Trust for Conservation Volunteers to maintain the habitat of the endangered raft spider in Redgrave Fen;
- £100 to Dr Craig MacFarland to draw up management plans for Central American rain forests.

louis henry

foies
gras

B.P. 460
67019 STRASBOURG
TEL. (88) 35 88 41
TELEX 870 718 FIOUS
CCP 1903-87 F STRASBOURG

Mr. SCOTT L. ANDERSON
National Marine Fisheries Service
Po Box 3830
HONOLULU - Hawaii 96812
USA

YH/ab/1190

Strasbourg, November 18th, 1981

Dear Mr. Anderson,

We refer to your letter of November 9th, and inform you that the type of turtle used in our product "soupe de tortue" is calipee (origin : turtles farming - Reunion).

We hope this information will be helpful to you, and remain,

Very truly Yours

LOUIS HENRY

J.P. Leroux
Jean Pierre LEROUX
Export Manager

品名：海ガメのスープ
 内容量：400g
 原料：同エキス、野菜エキス、
 海ガメ肉、マデラワイン、
 スパイス類
 添加物：グルタミン酸ソーダ
 輸入年月日：1975
 輸入者：東京都千代田区内神田1-3-5
 日南通商株式会社

COMPOSITION:

Bouillon cuisiné avec bœuf, légumes divers
 et chair de tortue (2,5 %), matière, œuf,
 extraits végétaux, assaisonnement, gélatine,
 extrait de viande, agent de sapidité (glutamate).

POIDS NET 400 g

INGREDIENTS:

Broth cooked with beef, various vegetables,
 turtle meat (2.5 %), Madeira wine, egg,
 vegetable extracts, salt, pepper, gelatine,
 meat extract, spices, monosodium glutamate.

NET WEIGHT 14 OZ

BESTANDTEILE:

Suppe mit Rindfleisch, verschiedene Gemüse
 und Schildkrötenfleisch (2,5 %) aufgekocht,
 Madeira Wein, Eier, pflanzliche Extrakte, Salz,
 Gewürze, Gelatine, Fleischextrakt, Glutamat,
 Monosodium.

NETTO GEWICHT 400 g

**REAL
 TURTLE SOUP
 CLEAR**

**ECHTE CLARE
 SCHILDKRÖTEN SUPPE**

PRODUCT OF FRANCE

Prêt à consommer - Servir très chaud
 Ne pas faire bouillir

Ready for use - Serve very hot
 Do not boil

Sehr heiß auftragen - Nicht kochen lassen
 Tafelfertig

Louis Henry BP 450, R9
 67009 STRASBOURG (France)

Soupe de Tortue

PACKED FOR
**louis
 henry**
 STRASBOURG - FRANCE
 1829

May 2, 1983

F/SWC2:GHB

TO: Richard S. Showara, Director, Honolulu Laboratory

FROM: George H. Balazs, IPA Fishery Biologist, Honolulu Laboratory

SUBJECT: Southwest Fisheries Center's contribution to the 5-year status review of Pacific sea turtles

HL

The accompanying dossiers and narrative constitute the document I have prepared for the status review of Pacific sea turtles. The bulk of this material consists of the relevant literature that has become available since 1978 when the green, loggerhead, and olive ridley turtles were listed under the Endangered Species Act. The hawksbill and leatherback turtles were listed in 1971, and were "status reviewed" by the Fish and Wildlife Service in 1979. However, literature dealing with all five of these species in the Pacific has been included in this document. Copies of most of the material shown in the master list are present in bound form. As you will note, it is a considerable body of literature. It is my feeling that much of this material has not been readily available to others within the Center and Region offices. With the transmittal of this document, that will no longer be the case.

The second and complementary portion of the document consists of a dossier of pertinent correspondence authored by various researchers, government agencies, private citizens, and others (including myself).

Responses from the public to the February 9, 1983 Federal Register notice for the status review have not been sent to the Honolulu Laboratory, as scheduled in the Regional Director's memorandum of December 22, 1982. Consequently, it was not possible to include this material here.

In a separate report from Dr. Jerry Wetherall, you will receive the results of his population assessment of the Hawaiian green turtle breeding colony at French Frigate Shoals, undertaken with the tagging and resighting data I have gathered over the past 10 years. It has been a rewarding and productive experience working with Jerry on this project. I am appreciative of your role in making his involvement possible.

Lastly, I should mention that a duplicate copy of this entire document has been made to retain here at the Honolulu Laboratory for future reference.

Enclosures

cc: W. Gilmartin, Project Leader, currently at Pearl and Hermes Reef

GHB:vi

bc: Balazs
HL



University of Hawaii at Manoa

Hawaii Institute of Marine Biology
P.O.Box 1348 • Coconut Island • Kaneohe, Hawaii 96744
Cable Address: UNIHAW

March 29, 1983

Mr. Jonathan Barzdo
Wildlife Trade Monitoring Unit
219(c) Huntingdon Road
Cambridge CB3 0DL
United Kingdom

Dear Jonathan:

Many thanks for your letter of 14 March asking for my input on the directory listing all known ranching and farming operations of sea turtles and other species. The ones I can think of are almost certainly already known to you, that is Cayman Turtle Farm, Surinam, and Reunion. There is loose talk about ones possibly starting up in Ecuador, Costa Rica, Mexico, Caroline Atoll, Tahiti, the Bonin Islands, and Mauritius. Undoubtedly, some of the financial backers here are waiting to see just how "loose" CITES international trade restrictions will be after the next meeting. Also U.S. laxity in the review of our import laws.

In your directory, I want to suggest that you also list sea turtle farms/ranches that have failed over the years for either biologic and/or economic causes. This would be consistent with the mention in your letter of recording "financial success" of an operation. Significant failures that you should include are Mariculture, Ltd. at Cayman Island, and the Torres Strait ranching endeavor in Australia. Two interesting case histories could indeed be shown here.

If I can be of added help, please feel free to contact me. I would appreciate receiving a copy of your directory when completed.

Best regards.

Sincerely,

GEORGE H. BALAZS
Assistant Marine Biologist

GHB:ec

cc: Archie Carr
Wayne King
Bob Scott



THE STANDARD OIL COMPANY

MIDLAND BUILDING, CLEVELAND, OHIO 44115

D. R. BRINKLEY
VICE PRESIDENT
TRANSPORTATION

March 16, 1983

Mr. George H. Balazs, Deputy Chairman
IUCN Marine Turtle Specialist Group
University of Hawaii at Manoa
Hawaii Institute of Marine Biology
P.O. Box 1346, Coconut Island
Kaneohe, Hawaii 96744

Dear Mr. Balazs:

Your letter of February 28, 1983, to Mr. A. W. Whitehouse, Jr., Chairman of the Board of Sohio, was referred to me for response. We appreciate your concern over the sea turtles found in habitats along the Atlantic Coast of Panama. As a company which has always taken its environmental responsibilities seriously, we too are concerned about the preservation and protection of wildlife in this region. Although our position as a shipper does not afford us direct control of pipeline and terminal operations, we have and will continue to attempt to influence a safe and environmentally sound operation.

In order to insure that appropriate safeguards are taken to protect the environment adjacent to the pipeline, two actions were initiated in 1982:

1. A major environmental assessment study of the pipeline corridor and marine habitats at both Pacific and Atlantic terminals was undertaken. This study is being conducted by Estudios Ambientales (EASA), which is associated with the University of Panama, under the direction of COPINA, the Panamanian government economic development agency. The study, which will be completed by April of 1983, has included physical oceanography of Chiriqui Lagoon and Gulf of Chiriqui, biological surveys and assessments of habitats and habitat sensitivity in Chiriqui Lagoon, terrestrial surveys and impact assessments of the pipeline corridor and limnological studies of 15 local rivers and estuaries. Preliminary results of these studies have indicated that no nesting of turtles now occurs within Chiriqui Lagoon. Foraging of adult turtles appears scattered and at locations away from the vicinity of the terminal. These environmental studies are public documents and will be released by COPINA upon completion.
2. An Environmental Advisory Committee (EAC) for the Panama pipeline was created. This committee consists of the pipeline's management personnel, environmental experts from the companies which will be shipping oil through the pipeline (including Sohio), and the Panamanian Port Authority (APN). The Port Authority is the Panamanian agency with responsibility for responding to any spill incidents which might occur in Panamanian coastal waters; a function analogous to that of the U.S. Coast Guard here

March 16, 1983

in the States. The EAC has met regularly in 1982 and 1983 as a cooperative effort between the operators, users and Panamanian government to advise in the development of environmentally responsible operating procedures and adequate spill contingency plans.

The Caribbean Conservation Corporation (CCC) was invited to and attended EAC meetings held in September and December of 1982. Its representatives expressed concern relative to the turtles of the general area. This organization's expertise was welcomed by EASA representatives, and it was invited to submit any available data, concerns and suggestions in writing directly to EASA, thereby ensuring the incorporation of this information into the final environmental assessment documents. Data has been received from CCC and incorporated by EASA into preliminary assessment documents. I am sure any additional data which would be provided by the CCC or your organization would be welcomed by EASA.

Again, we appreciate your concerns and assure you that we will continue to fully support reasonable actions by both pipeline operators and shippers to minimize any hazards to the turtles and other wildlife of the area.

Sincerely,



D. R. Brinkley

DRB:paj
011R

cc: G. A. Moss - PTP
L. A. Ramirez - APN

bcc: J. J. Klement
R. E. Farrell
H. A. Glassroth
J. T. Jacobson
R. A. Levine - Arco Marine
R. A. McGimpsey
R. J. Myers - Exxon Marine
H. Bernstein - Northville

NATIONAL MARINE FISHERIES SERVICE
HONOLULU LABORATORY
P. O. BOX 3830
HONOLULU, HAWAII 96818

September 8, 1981

F/SWC2:GHB

Dr. Robert Shallenberger
Refuge Manager
U.S. Fish and Wildlife Service
P. O. Box 50167
Honolulu, HI 96850

Dear Rob,

During my study visit to French Frigate Shoals this past June, large numbers of soft ticks regularly invaded my tent on East Island during the nighttime hours. This was in sharp contrast with anything I had ever observed over the past eight years that I have been working at French Frigate Shoals and other areas in the Northwestern Hawaiian Islands. Both Flint, who was often working at night on Tern Island, also found tick levels to be far in excess of the previous year. It is my understanding from Eric Knudsen that Laysan Island experienced a similar population explosion of ticks this season.

I have communicated this information to Robin Rice of the U.S. Department of Entomology with the hope of gathering background data on soft ticks. Robin has responded enthusiastically with information, as well as the submission of a small research proposal to your office. Personally, I hope that you will give this proposal a special consideration. The diseases carried by soft ticks that can potentially be transmitted to field researchers will be of interest and concern to all of us that spend time in the Northwestern Hawaiian Islands.

Sincerely,

George H. Balazs
Fishery Biologist

GHB:ey
cc: W. G. Gilmartin
bc: Balazs ✓
HL

March 18, 1981

F/SWC2:GHB

Mr. O. Rhett Talbert, Jr.
Belle W. Baruch Institute for
Marine Biology and Coastal Research
University of South Carolina
Columbia, South Carolina 29208

Dear Rhett,

If copies are still available, I would greatly appreciate receiving a reprint of your recent Copeia article entitled "Nesting Activity of Loggerhead Turtle in South Carolina I: A Rookery in Transition." Overall, I found this paper to be well written and informative--you should be proud of this fine accomplishment. I was, however, somewhat surprised to see that on page 715 you mentioned tag loss, tag corrosion, and the need to test new tags, but made no mention of my reported excellent success with Inconel alloy tags. Did you have some particular reason for not noting this advancement in tags for sea turtles?

I wish you continued success in your research efforts.

Sincerely,

George H. Balazs
Fishery Biologist

bc: Balazs
HL

GHB:iht

August 22, 1980

F/SWC2:GHB

Mr. B. R. Van Rensselaer
Customer Service Supervisor
Rolling Mill Products
Arnold Subsidiary
P. O. Box 207
Marengo, Illinois 60152

Dear Mr. Van Rensselaer:

Thank you for your letter of August 15, 1980 concerning my inquiry about the availability of Inconel 625 strip. I am interested in obtaining this material in a size of 0.034 inch thick and 5/16 inch wide. I would require approximately 1,250 feet, which should be a total of about 50 pounds. I would appreciate a quotation for such an order at your earliest convenience.

Sincerely,

George H. Balazs
Fishery Biologist

January 9, 1981

F/SWC2:GHB

Dr. Yoji Kurata
Director
Ogasawara Fishery Center
Kiyose Chichijima, Ogasawaramura
Tokyo 100-21 Japan

Dear Dr. Kurata:

I would greatly appreciate receiving copies of any recent articles or reports that you may have authored which describe your "headstart" and "hatching" project with green sea turtles.

Thank you for your assistance in this matter. I have enclosed a copy of my report on the Hawaiian green turtle that I thought you would find interesting.

Sincerely,

George H. Balazs
Fishery Biologist

Enclosure

GHB:vi

bc: Balazs
HL

Balazs

September 29, 1980

F/SWC2:GHB

Dr. Edward Klima
National Marine Fisheries Service
NOAA
Galveston Laboratory
4700 Avenue U
Galveston, TX 77550

Dear Dr. Klima:

Jack Woody of the U.S. Fish and Wildlife Service in Albuquerque recently sent us a copy of Dr. Hendrickson's progress report dealing with "living tag" studies on hatchling loggerhead turtles at the Miami Seaquarium. Dr. Hendrickson has just completed similar experiments on about 150 green turtle hatchlings here in Hawaii under contract from our Laboratory.

I understand that some young Kemp's ridleys have also been trial-marked in this manner. Your experiences to date, along these lines, could very likely help us in our own efforts. It would, therefore, be greatly appreciated if you would provide us with any progress reports or noteworthy results that have, thus far, been made. Thank you in advance for your help.

Sincerely,

George H. Balazs
Fishery Biologist

GHB:vi

bc: Balazs
HL

HL

September 22, 1980

F/SWC2:GHB

Mr. Mark Gentle
Assistant Fisheries Officer
South Pacific Commission
Post Box D5
Noumea Cedex, New Caledonia

Dear Mark,

Many thanks for sending me a copy of your letter to Colin Limpus. I agree entirely. A turtle tag reward should consist of a decent cash award, or else no cash at all, but instead a project T-shirt or similar novel prize.

I thought that the material on sea turtles that appeared in the latest SPC Fisheries Newsletter really turned out well. If available, I would greatly appreciate receiving 5-10 extra copies; whatever you can spare.

For my own personal interests, I would also like to see a copy of the letter Colin Limpus wrote to you on the original tagging data for X24193. I would, of course, never use the information in a publication (except possibly for our fledgling Newsletter, if and when it ever flies). I am very curious about the migratory connection of Australian and New Caledonian sea turtles.

Have you received any further word from Peter Pritchard about starting a tagging project in New Caledonia?

Best regards,

George H. Balazs
Fishery Biologist

bc: Balazs
HL

GHBalazs:iht

August 1, 1980

F/SWC2:GHB

Arnold Engineering
Railroad Avenue and West Street
Marengo, IL 60152

Dear Sirs:

I would appreciate receiving information on the availability and cost of Inconel alloy 625 strip measuring approximately 5/16 inch wide and 0.034 inch thick.

Sincerely,

George H. Balazs
Fishery Biologist

HL

GHB:vi

bc: Balazs
HL

Identical letter to: Plessey Precision Metals, 3301 Melford Avenue,
Los Angeles, CA 90063

September 4, 1980

F/SWC:GHB

Mr. J. L. d'Auzon
le Secretaire General
Association pour la Sauvegarde
de la Nature Néo-Caledonienne
Noumea, New Caledonia

Dear Mr. d'Auzon

Many thanks for your letter of 12 August concerning my suggestion for an informal bulletin covering sea turtle news in the Pacific region. I was pleased to learn that this idea has been warmly received by your fine organization. I am now waiting for additional comments to be received from other areas before making a final decision on the desirability of this project.

On a separate subject, I wonder if you received the attached correspondence which I sent several months ago? I believe that this would be an excellent sea turtle education proposal that could be implemented in New Caledonia.

Best regards.

Sincerely,

George H. Balazs
Fishery Biologist

Enclosures

GHBalazs:ll

bc: HL
Balazs



SPARK M. MATSUNAGA
HAWAII

WASHINGTON OFFICE:
108 HART BUILDING
WASHINGTON D. C. 20510

HONOLULU OFFICE:
3104 PRINCE KUHIO BUILDING
HONOLULU, HAWAII 96850

United States Senate

WASHINGTON, D.C. 20510

April 4, 1987

CHIEF DEPUTY
DEMOCRATIC WHIP

MEMBER:

COMMITTEE ON FINANCE

COMMITTEE ON ENERGY AND
NATURAL RESOURCES

COMMITTEE ON LABOR AND
HUMAN RESOURCES

COMMITTEE ON
VETERANS' AFFAIRS

Mr. and Mrs. George Balazs, and Family
992-A Awaawaanoa Place
Honolulu, Hawaii 96825

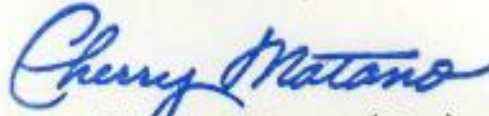
Dear Friends:

Re: Crater Hill

This is just to acknowledge receipt of
your recent communication addressed to
Senator Spark Matsunaga.

Please be assured that the Senator
will be responding to you at the earliest
possible moment.

Yours truly,



Cherry Matano (Ms.)
Administrative Assistant
to Senator Matsunaga

PATRICIA SAIKI
1ST DISTRICT, HAWAII

OFFICE ADDRESS:
1407 LONGWORTH BUILDING
WASHINGTON, DC 20515
(202) 225-2728

DISTRICT OFFICE:
300 ALA MOANA BOULEVARD, ROOM 4104
PRINCE KUHIO FEDERAL BUILDING
HONOLULU, HI 96850
(808) 541-2570



Congress of the United States
House of Representatives
Washington, DC 20515

April 7, 1987

COMMITTEE ON BANKING, FINANCE
AND URBAN AFFAIRS

SUBCOMMITTEE:
HOUSING AND COMMUNITY DEVELOPMENT
INTERNATIONAL FINANCE, TRADE,
AND MONETARY POLICY
ECONOMIC STABILIZATION
INTERNATIONAL DEVELOPMENT
INSTITUTIONS AND FINANCE

COMMITTEE ON MERCHANT MARINE
AND FISHERIES

SUBCOMMITTEE:
COAST GUARD AND NAVIGATION
FISHERES AND WILDLIFE
CONSERVATION AND THE ENVIRONMENT
PANAMA CANAL/OUTER
CONTINENTAL SHELF

SELECT COMMITTEE ON AGING

Mr. and Mrs. George Balazs
992-A Awaawaanoa Place
Honolulu, Hawaii 96825

Dear Mr. and Mrs. Balazs:

I agree that the preservation of Crater Hill and Mokolea Point is an excellent idea.

As a member of the Subcommittee on Fisheries, Wildlife and the Environment, I am in a position to work aggressively toward the purchase of Crater Hill as a national wildlife refuge.

Please be assured that I will do all I can to keep this coastal wildland as a refuge for future enjoyment and appreciation of generations to come.

Sincerely,

A handwritten signature in cursive script that reads "Pat Saiki".

Patricia Saiki
Member of Congress

PS:dy

Same letter
sent to other Hawaii
congressional delegates

MARCH 26, 1987

THE HONORABLE DANIEL INOUE
UNITED STATES SENATE
722 HART SENATE OFFICE BLDG.
WASHINGTON, D.C. 20510

L. R. BALAZS
992-A AWAAWAANOA PL.
HONOLULU, HI 96825

DEAR SENATOR INOUE :

WE ARE WRITING TO LET YOU KNOW THAT WE FULLY SUPPORT THE EXPANSION OF THE KILAUEA POINT NATIONAL WILDLIFE REFUGE ON KAUAI TO INCLUDE THE ADJACENT LANDS OF CRATER HILL AND MOKOLEA POINT. THESE LANDS ARE AVAILABLE AT PRESENT FOR PRESERVATION, PROVIDED FEDERAL FUNDS CAN BE OBTAINED THIS SESSION. WE RESPECTFULLY URGE YOU TO WORK TOWARD THIS HIGHLY DESIRABLE GOAL. COASTAL DEVELOPMENT WILL VERY LIKELY PRECLUDE ACQUISITION IN THE FUTURE, HENCE THE NEED NOW FOR QUICK ACTION AT YOUR LEVEL.

THE HIGH PRIORITY IN OBTAINING THIS PROPERTY, IN OUR OPINION, RESTS IN THE FACT THAT KILAUEA POINT NATIONAL WILDLIFE REFUGE OFFERS THE PUBLIC CLOSE-UP EXPOSURE AND EDUCATIONAL APPRECIATION OF NESTING SEABIRD FAUNA AND OTHER WILDLIFE IN THEIR WILD NATIVE HABITAT. THIS IS A UNIQUE SETTING, OPEN TO THE PUBLIC, THAT IS NOT DUPLICATED ANYWHERE ELSE IN THE HAWAIIAN ISLANDS. FOR NEARLY TWO DECADES THE U.S. FISH AND WILDLIFE SERVICE HAS PERIODICALLY

SENATOR DAN INOUE
MARCH 26, 1987
PAGE TWO

PROPOSED THE CONSTRUCTION OF AN "INTERPRETIVE CENTER" IN HAWAII TO SHOW THE PUBLIC WHAT THEY ARE RESTRICTED FROM EVER SEEING FIRST-HAND IN THE REMOTE NATIONAL WILDLIFE REFUGE SITES IN THE NORTHWESTERN HAWAIIAN ISLANDS. KILAUEA POINT CAN FULFILL THIS LONG-OVERDUE GOAL. IT SHOULD THEREFORE BE EXPANDED, ENHANCED AND PROTECTED THROUGH THE ACQUISITION OF THE MODEST ADJACENT LANDS.

THANK YOU FOR YOUR CONSIDERATION AND ATTENTION TO THIS IMPORTANT, TIMELY ISSUE.

SINCERELY,

LINDA BALAZS
Linda Balazs

Christian Balazs

and
Paul Balazs

GEORGE BALAZS

George Balazs

↔ 8 years old

↔ 1 1/2 years old



Balazs

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

August 12, 1983

F/SWC2:WGG

TO: Richard S. Shomura, Director, Honolulu Laboratory

THRU: William G. Gilmartin, Leader, Marine Mammals and Endangered Species Program

FROM: George H. Balazs, Wildlife Biologist *George H. Balazs*

SUBJECT: Trip report for Western Atlantic Turtle Symposium, Eastern Pacific Turtle Research Meeting, and IUCN Marine Turtle Specialists Group Meeting.

As an invited participant, I attended the Western Atlantic Turtle Symposium (WATS) held in San Jose, Costa Rica, from July 17 to 22, 1983. Representatives from 38 countries came together at this meeting for the purpose of reviewing existing data on the status of the region's marine turtle stocks, and to identify research necessary to achieve effective management and conservation.

A National Report was presented by each delegate during the first day of the Symposium. This was followed by comprehensive panel sessions on the subjects of "Species Synopses" (covering the six species in the region), "Research Techniques," "Habitat Alteration and Impacts," "Conservation," "Culture," "Utilization," "Enforcement and Regulations," "Status of Species," "Management Options," and "Future Actions." "Audience Response" sessions were held nearly every evening to permit full exchange of ideas with the many nongovernmental attendees from Central and North America. I formally served on both the Conservation panel (chaired by P. Bacon) and Management Options panel (chaired by W. Fox). I also contributed as the co-editor (with K. Bjorndal) of the second edition of the WATS Conservation and Research Manual.

The Symposium's schedule was exhausting, but nevertheless extremely informative, interesting, and potentially important for future action in the region. Poster papers, along with various educational materials, were on display throughout the week. Except for the National Reports, there were no formal presentations of scientific papers. Rapporteurs were assigned to each panel session to ensure that all discussions were recorded for the Symposium proceedings. This document is due to be published later in the year. Overall, the Symposium was organized and executed in a superb fashion. The Service clearly made significant contributions to this accomplishment.

Several key points discussed at WATS relevant to SWFC turtle research included:

1. The need to develop reliable population models capable of estimating stock size and trends, especially recruitment to the nesting beaches;
2. The importance at this time of focusing research on the immature wild turtles in their marine habitat. Estimates of natural mortality rates at the immature stages are especially needed;
3. The growing awareness that incidental capture of turtles by longline fishing needs to be quantified and evaluated;
4. The importance of fostering public participation and awareness as part of the effort to recover and properly manage marine turtle stocks.

On July 23, I attended the Eastern Pacific Turtle Research Meeting held from 0800 to 1900 h at the University of Costa Rica in San Jose. This workshop included representatives from countries bordering the Pacific from Mexico to Peru. National reports were presented for all species. Major interest centered on the research of the olive ridley, Lepidochelys olivacea, nesting in Costa Rica and Mexico, but migrating to offshore waters of Peru and other neighboring countries. The decision was made at the conclusion of the meeting to establish a permanent cooperative research group for the region. Several other important points covered at the meeting included 1) the impact of shrimp trawling on eastern Pacific turtles, 2) the heavy direct exploitation of turtles occurring in Guatemala and Mexico; 3) two tag recoveries made from olive ridleys caught in tuna purse seiners; 4) the funding and other cooperative assistance now being provided by the Albuquerque office of the Fish and Wildlife Service.

On July 24 and 25 I attended a meeting of the IUCN Marine Turtle Specialist Group held at Tortuguero, Costa Rica. I have been a member of this international group of turtle researchers for the past 4 years. Seventeen members attended, including my colleague Larry Ogren of the SEFC. Agenda items included an appraisal of survival status categories used for sea turtles, the role and need for sea turtle sanctuaries, and the worldwide catch of turtles by various fisheries. A considerable amount of applied information on research methods was exchanged. This was facilitated by nightly surveys of the Tortuguero beach where green turtles were actively nesting.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

March 11, 1983

F/SWC2:GHB

Mr. James R. Hollyer
Peace Corps Fisheries Biologist
Department of Economic
Development
P. O. Box 862
Apia, Western Samoa

Dear Jim:

Enclosed are several copied pages from a sea turtle "research and conservation manual" I am currently co-editing to be published within the next few months. I'll be sure and send you a copy when it is completed.

I'm not certain what the chances will be of obtaining outside funds to "restart" the headstart/hatchery project. Along with a copy of this letter, I will make serious inquiries on your behalf. I estimate that ca. \$5,000 per year would be more than adequate to cover the expenses of what you described. If this is wrong, please let me know as soon as possible.

The plan to raise the hatchlings in individual containers in an outside tank near the Fisheries building sounds worthwhile. However, depending on their rate of growth, they would probably have to be held a minimum of three to four months. I don't really feel there would be much advantage in just keeping them for one month.

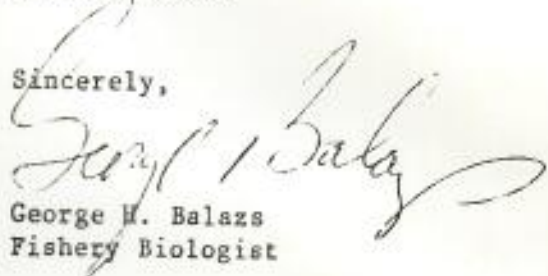
I strongly advise against transporting eggs from Aleipata to Apia for hatching. Cooling of the eggs, as well as embryonic mortality, is likely to result from this long transport. Consequently you will end up with a very low hatch rate that consists mostly of males. Hatch the eggs in Aleipata, then transport the hatchlings, which are then easily moved around without damage.

Tuna is a fine food source for the hatchlings. However, other obtainable items (i.e., clams) fed every so often will give nutritional balance, plus stimulate appetite. There is no "correct feed to body weight ratio" that I can give you. Simply offer all they will eat during several feeding bouts each day. It can be cut back to two feedings per day when they are one to two months old.

I will write to you again within a month when I have something concrete to report. In the meantime, please write to me immediately if there is any change in plans or administrative interest in pursuing a reconstituted turtle project.

Mr. Philipp may recall that one of my principal recommendations for the turtle project was to recruit and assign at least a half-time Peace Corps person to Aleipata to guide Viliamu. I still view this as the better course of action. However, I certainly can understand the funding and personnel constraints now being experienced.

Sincerely,



George M. Balazs
Fishery Biologist

cc: Mr. Alphonso Philipp



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
 NATIONAL MARINE FISHERIES SERVICE
 Southwest Fisheries Center
 P.O. Box 271
 La Jolla, California 92038

June 6, 1983

Handwritten notes:
 6/12
 [Signature]
 [Signature]
 [Signature]
 [Signature]
 [Signature]

TO: F/SWR - Floyd S. Anders, Jr.
 FROM: F/SWC - *Izadore Barrett*
Izadore Barrett

SUBJECT: Five-year status review of Pacific sea turtles

As part of the Southwest Fisheries Center's input to the 5-year status review of Pacific sea turtles, the Honolulu Laboratory conducted an indepth review of the relevant literature on Pacific sea turtles, especially since the several species of turtles were listed under the Endangered Species Act.

The package includes the following:

1. Memo of 2 May 1983 from George H. Balazs to Richard S. Shomura describing the documents.
2. A report, "Status review document for Pacific sea turtles," prepared by the Honolulu Laboratory.
3. A report, "Assessment of the stock of green turtles nesting at East Island, French Frigate Shoals," by Jerry A. Wetherall.
4. A report, "Dossier of correspondence on Pacific sea turtles."
5. "Dossier of literature on Pacific sea turtles, 1978-83 (vol. 1)."
6. "Dossier of literature on Pacific sea turtles, 1978-83 (vol. 2)."

cc: F/SWC2 - Richard S. Shomura ✓

NATL MARINE FISHERIES SERVICE

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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

May 10, 1983

F/SWC2:RSS

To: F/SWC - Izadore Barrett
From: F/SWC2 - *Richard S. Shomura*
Subject: Five-year status review of Pacific sea turtles or
"All you wanted to know about turtles but were
afraid to ask"

As part of the Southwest Fisheries Center's input to the 5-year status review of Pacific sea turtles, we conducted an indepth review of the relevant literature on Pacific sea turtles, especially since the several species of turtles were listed under the Endangered Species Act.

The package includes the following:

1. Memo of 2 May 1983 from George H. Balazs to Richard S. Shomura describing the documents.
2. A report, "Status review document for Pacific sea turtles," prepared by the Honolulu Laboratory.
3. A report, "Assessment of the stock of green turtles nesting at East Island, French Frigate Shoals," by Jerry A. Wetherall.
4. A report, "Dossier of correspondence on Pacific sea turtles."
5. "Dossier of literature on Pacific sea turtles, 1978-83 (vol. 1)."
6. "Dossier of literature on Pacific sea turtles, 1978-83 (vol. 2)."

We would appreciate being kept informed on the progress and results of the 5-year review.

Attachments



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

May 2, 1983

F/SWC2:GHB

TO: Richard S. Shomura, Director, Honolulu Laboratory

FROM: George H. Balazs, IPA Fishery Biologist, Honolulu Laboratory

SUBJECT: Southwest Fisheries Center's contribution to the 5-year status review of Pacific sea turtles

The accompanying dossiers and narrative constitute the document I have prepared for the status review of Pacific sea turtles. The bulk of this material consists of the relevant literature that has become available since 1978 when the green, loggerhead, and olive ridley turtles were listed under the Endangered Species Act. The hawksbill and leatherback turtles were listed in 1971, and were "status reviewed" by the Fish and Wildlife Service in 1979. However, literature dealing with all five of these species in the Pacific has been included in this document. Copies of most of the material shown in the master list are present in bound form. As you will note, it is a considerable body of literature. It is my feeling that much of this material has not been readily available to others within the Center and Region offices. With the transmittal of this document, that will no longer be the case.

The second and complementary portion of the document consists of a dossier of pertinent correspondence authored by various researchers, government agencies, private citizens, and others (including myself).

Responses from the public to the February 9, 1983 Federal Register notice for the status review have not been sent to the Honolulu Laboratory, as scheduled in the Regional Director's memorandum of December 22, 1982. Consequently, it was not possible to include this material here.

In a separate report from Dr. Jerry Wetherall, you will receive the results of his population assessment of the Hawaiian green turtle breeding colony at French Frigate Shoals, undertaken with the tagging and resighting data I have gathered over the past 10 years. It has been a rewarding and productive experience working with Jerry on this project. I am appreciative of your role in making his involvement possible.

Lastly, I should mention that a duplicate copy of this entire document has been made to retain here at the Honolulu Laboratory for future reference.

Enclosures

cc: W. Gilmartin, Project Leader, currently at Pearl and Hermes Reef

STATUS REVIEW DOCUMENT FOR PACIFIC SEA TURTLES

May 1983

BACKGROUND

The purpose of this document is to consolidate all literature and correspondence relevant to Pacific sea turtles since 1978 to provide a biological basis for reviewing the status of the populations. The green (Chelonia mydas), loggerhead (Caretta caretta), and olive ridley (Lepidochelys olivacea) sea turtles were listed in 1978 under the Endangered Species Act (ESA) after 4-1/2 years of evaluations. This initial period culminated in the publication of a Final Environmental Impact Statement (FEIS). The specific action, as stated in the FEIS, was as follows:

"On the basis of the best scientific and commercial data available to NMFS and FWS, the green, loggerhead, and Pacific ridley sea turtles have suffered serious declines, and are thought likely to become endangered species within the foreseeable future throughout a significant portion of their ranges. Consequently the NMFS and the FWS will list and protect these three species under the Endangered Species Act of 1973 (16 U.S.C. 1531-1543) in the following manner: The loggerhead is to be listed as threatened throughout its range. The Pacific ridley is to be listed as threatened throughout its range except for the breeding colony population found on the Pacific coast of Mexico which will be listed as endangered. The green turtle is to be listed as threatened throughout its range except for the breeding colony populations found in Florida and on the Pacific coast of Mexico which will be listed as endangered."

Under "Alternatives to the Action," the FEIS further stated that:

"To not list these animals and provide essential protection would be inconsistent with our responsibilities under the Act. This alternative was not a viable option."

Two other sea turtles in the Pacific, the hawksbill, Kretmochelys imbricata, and the leatherback, Dermodochelys coriacea, were listed as endangered under the ESA in 1971. A formal review of the status of these two species was conducted by the Fish and Wildlife Service (FWS) alone in 1979. Relevant literature and correspondence for these turtles in the Pacific dating from 1978 are contained as part of this present document.

The factors given in the FEIS that contributed to the decline of sea turtles, thereby making it necessary to list and protect them under the ESA, are as follows: 1) destruction, modification, or curtailment of habitat or range; 2) commercial overutilization; 3) natural predation and disease; 4) inadequacy of regulatory mechanisms; and 5) manmade factors affecting their existence--including incidental catch by fishermen. Additional background information on the 1978 listing can be found in C28 of the correspondence dossier.

STATUS OVERVIEW

The most current, complete, and concise status overview presented to date for each of the five species can be found in reference 52 of the literature dossier. The published volume resulting from the World Conference on Sea Turtle Conservation (WCSTC), held in late 1979, contains a substantial number of papers providing a comprehensive and global perspective on biology, status, conservation theory, techniques, and law (33). Included as part of this book is a Sea Turtle Conservation Strategy (34) that was produced by the Conference. Two papers on the options and limitations in conserving sea turtles (47 and 75) describe much of the biological rationale for this Conservation Strategy.

A Marine Turtle Recovery Team has been established for the Atlantic,

Gulf, and Caribbean areas of the United States. A draft Recovery Plan has been prepared (60) and, in 1982, was being circulated for review. The efforts of this Recovery Team, and the problems in general of recovering sea turtle populations, are described in 76.

GEOGRAPHICAL AREAS

Eastern Pacific

Sea turtles occur off the west coast of the United States, but very little seems to be known of their status (53, 54, 65, C13).

Papers presented at the WCSTC on the status of sea turtles off the Pacific coast of Mexico, Central and South America include 35, 40, 41, and 51. The FWS has carried out cooperative contracted research on olive ridleys nesting in Costa Rica (42), as well as on the ESA endangered green turtle breeding colony in Mexico (39). A preliminary report on the accidental capture of sea turtles by Mexican shrimp trawlers has also been completed for the FWS (38). An aerial survey of Michoacan on the Mexican Pacific coast has recently revealed nesting by leatherbacks in greater densities than previously documented. However, due to "severe stresses" on all major populations of this species, the author of the paper considers the "endangered" status still justified (78). Both current (51) and historical (49) information have also been published on the status of sea turtles in the Galapagos Islands of the eastern Pacific.

State of Hawaii

Overall accounts of sea turtles in the State of Hawaii (Hawaiian Archipelago) appear in 24 and 25. The green turtle is the ^{prevalent} most abundant species at this location. Complete summaries of the results of tagging and other research conducted on this population, including most historical

aspects, are presented in 18 and 29. These two papers alone provide a comprehensive review of nearly all available information. The bibliography in reference 18 contains 670 citations for Hawaiian sea turtles dating prior to September 1979. The Conservation Strategy of the WCSTC designated the Hawaiian green turtle breeding population at French Frigate Shoals as one of eight sea turtle colonies worthy of maximum protection by reason of isolation and unique ecology (basking behavior).

References to literature and correspondence found in the present document are listed as follows for specific aspects of the Hawaiian green turtle population.

Breeding population assessment: See accompanying report by J. A. Wetherall.

Growth rates: Recently shown to be much slower in the wild than what occurs in captivity - 13, 15, 23, and 50; corroborated by workers in Australia (64); see also C1 for possible aging technique.

Habitat usage: A telemetry study determined that the breeding population heavily utilizes the inshore waters of French Frigate Shoals - 3 and 46.

Basking ecology: Increased understanding of the thermal ecology and behavior while basking on land - 95 and 96; more basking on Tern Island after closure of U.S. Coast Guard station - 81.

Migrations: Long distance movements regularly made by adult males and females between French Frigate Shoals and resident feeding areas throughout the Hawaiian chain - 15, 18, and 19; found to be one of the best documented when compared to tagging studies conducted elsewhere (71).

Tags and tagging techniques: Use of Inconel alloy tags and multiple

tags applied to each turtle reduces tag loss - 19 and 29; also discussed in

73. Experimental scute grafting offers promise for permanently marking hatchlings -56, 57, 59.

Strandings and disease: Reported strandings on the increase, especially for turtles afflicted with fibrous papillomas - 55, 66, and 92; see also 18.

Predator controls: None instituted, but warranted for tiger sharks on a localized experimental basis; see 15 and 18.

Critical habitat designations: None to date, but terrestrial areas used for nesting and basking have been identified in 11; 46 establishes a biological basis for certain marine critical habitat at French Frigate Shoals.

Reproductive biology: Current research results appear in 29; see also 37 and 58 for an international perspective of the Hawaiian green turtle.

Enforcement: Efforts need to be enhanced to reduce illegal take and promote recovery - 69, 25, 93, and C11; State of Hawaii provided full legal protection in April 1982 after deleting 1974 fishery regulation (25, C3, and C21); however this appears to be nominal.

Educational efforts: Public needs to be better informed about the turtles' protected status, ecological requirements, and biological limitations, i. e., see 27.

Nesting habitat enhancement: Southwest Fisheries Center (SWFC) Honolulu Laboratory personnel break up old cement slab at French Frigate Shoals nesting area - 91.

Historical decline: Further information relevant to the main islands

(12, 86, C19, C23, C25, and C26) and the Northwestern Hawaiian Islands (62).

Hawaiian cultural aspects: Unable to document use in ponds for fish culture enhancement - C18, C20, C22, and C27.

"Subsistence use" question: Historical overview and analysis given in 26a; also discussed in relation to Hawaii in 25, 68, C2,C3, C6, and C24.

Research needs: Outlined by the SWFC Honolulu Laboratory - 82; summarized by WCSTC - 34; not given priority in 1982 draft of FWS Pacific Islands Strategy Plan - C5.

Value to the ecosystem: Evidence that the green turtle can "short-circuit" the detritus cycle, thereby enhancing marine productivity - 89.

Hawksbills also occur in the State of Hawaii, but their range is limited to the main islands where they are present in relatively few numbers. Very little is known of their status since almost no research has been undertaken. Scattered nesting has been documented on the island of Hawaii (11), and apparently occurs regularly each year at the eastern end of Molokai (C10). Reference 18 contains a bibliography of the Hawaiian hawksbill for all literature prior to 1979.

Leatherbacks regularly occur in the offshore waters of the State of Hawaii where they are sighted by fishermen and sometimes become entangled in fishing gear (21 and 25; see also bibliography in 18). The recent stranding of a specimen on Oahu with all four flippers amputated (66), and an emergence on Maui, possibly for nesting (85), are the only records for leatherbacks on shore in the Hawaiian Islands. Leatherbacks have recently been discovered in international waters northwest of the Hawaiian Islands (24) where they are impacted to an unknown degree by large drift nets set

from foreign fishing vessels (22). Possible nesting areas for these turtles could be Malaysia, or the Pacific Mexican rookery described in 78.

Loggerheads are occasionally recorded in Hawaiian waters (25). One was recovered from the stomach of a tiger shark caught at Kure Atoll at the extreme northwest end of the chain (14). Olive ridleys, though relatively rare in Hawaiian waters, have been recorded in increasing numbers during recent years (25 and 66). Since several of these have been juvenile specimens, it is possible that pelagic waters surrounding the Hawaiian Islands serve as development habitat for the species. Since nesting by olive ridleys (as well as loggerheads) has never been found in Hawaii, the source of these young animals may very well be the ESA endangered breeding colony on the Pacific coast of Mexico.

American Samoa

A summary of all known sea turtle observations at uninhabited Rose Atoll is given in 28. No hawksbills have been found nesting at this location in recent years, and green turtles are only present in small numbers. Except for some scattered nesting by green turtles in the Manua Group, Rose Atoll is the sole breeding colony for this species throughout the entire Samoan Archipelago (American Samoa and Western Samoa). Other recent literature summarizing the status of sea turtles (greens and hawksbills) in Samoa consist of 4, 24, and 74. There are no laws controlling the taking of sea turtles in Western Samoa. A small hatchery project designed to restock hawksbills was operational for 10 years (24), but closed in late 1982.

The subject of subsistence use of sea turtles in American Samoa is discussed in 26a and C29.

Territory of Guam

The known status and conservation problems of Guam's sea turtles are summarized in 77. Green turtles appear to be the main species, but very little research has been conducted. Prior to the ESA listing in 1978, there were no regulatory controls on the taking of green turtles or their eggs on Guam (C16 and C17). However, in 1979 legal protection at the local government level was instituted through the "Endangered Species Act of Guam" (88). Some good efforts toward educating and informing the public about sea turtles have been initiated (1, 2, 10, 30, 31, 32, and C15).

Published reports on the home consumption of seafood (36) and patterns of marine exploitation (61) suggest only a minor and opportunistic interest by Guam residents in taking turtles (see also C8). A recently published Territory of Guam Fisheries Development and Management Plan does not mention sea turtles (5).

The Government of Guam is dissatisfied over the "subsistence use" exemption granted in 1978 to their close neighbors in the Northern Marianas, a part of the Trust Territory (U.N. trusteeship). Under the ESA listing, residents of the Trust Territory may take green turtles in the water for personal consumption "... if such taking is customary, traditional, and necessary for the sustenance of such resident and his immediate family." The apparent viewpoint taken by Guam is that for conservation laws to be effective, they need to be applied to the turtle's full range. Further information on this subject is given in 26a, C7, C12, and C16.

Trust Territory of the Pacific Islands

The most current and complete account of sea turtles throughout this area of the western Pacific appears in 77. No recent scientific explorations or research of sea turtles have been undertaken. The Trust Territory is a large area consisting of about 2,200 islands covering 2 million square miles of ocean with 140,000 native inhabitants, mostly Micronesians.

The traditional aspects of subsistence hunting for green turtles in the Caroline Islands are described in 70. Some traditions involving sea turtles at other locations in the Trust Territory are given in 61a and 69.

Recent records exist of sea turtles being taken by foreign longliners fishing in the Trust Territory (21). The magnitude of this catch is unknown.

In 1982 the Northern Marianas requested that the FWS provide assistance in the restoration of sea turtles (87). No actions are known to have been undertaken to date.

Other Areas

To the extent that it is known, the status of sea turtles is given in 24 for the U.S. Pacific islands of Howland, Baker, Jarvis, Johnston, Palmyra, Kingman Reef, and Wake. Plans have recently been announced for the construction of a major munitions disposal plant on Johnston at a coastal site where turtles frequently forage.

The current status of sea turtles at central and south Pacific islands not administered by the United States is described in 20, 24, 26, 79, 83, and 84.

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Directors office.

4-28-83

4/29 AS
RM4

Richard -

I composed this the other night mainly to consolidate my own thoughts and viewpoints on the subject. It may also be helpful to you, and others. Indeed, this "subsistence" subject has become very confusing with all the "outcry" we have heard from the Big Island. I wrote "HromB" under my name, at least for the time being, so no one will wrongly think that the views expressed are of those of NMFS.

George



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

August 4, 1983

F/SWC2:GHB

TO: William G. Gilmartin, Leader, Marine Mammals and Endangered
Species Program

FROM: George H. Balazs, Wildlife Biologist

SUBJECT: East Pacific Workshop on Sea Turtles, and the potential role of
the SWFC in cooperative research of east Pacific sea turtles

On July 24, following the WATS Symposium, I participated in the East Pacific Workshop on Sea Turtles held at the University of Costa Rica. As a result of this meeting, it is my impression that the SWFC could make important contributions to the research of sea turtles in the eastern Pacific. Inadequate data on the status of stocks, as well as incidental catch by shrimp trawlers and purse seiners, represent two problems that need to be addressed. Government and university researchers from Mexico to Peru seemed open to cooperative assistance. A program such as this has existed for some time now between the SEFC and Caribbean countries. The WATS Symposium was an integral part of this cooperative research.

4-4-83

Bill

When time permits before you leave, perhaps you can discuss this with Richard and see if he wants to provide "outside funds" (a few \$/1000?) to restart the Western Samoa hatchery project.

I written preliminary letters of inquiry to WWF and Sea Turtle Rescue Fund.

Gez

George,

I think the enclosed is worthwhile supporting - I did not discuss it with RSE! It will come from my \$ - let's see what that turns out to be (amount wise) in FY 84. - Remind me of this - or put it on my desk for my return.

Bill
It would be great if it could be a cooperative effort of WWF, NMFS, ? - - -

88-4-11

copy



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

March 11, 1983

F/SWC2:GHB

Mr. James R. Hollyer
Peace Corps Fisheries Biologist
Department of Economic
Development
P. O. Box 862
Apia, Western Samoa

Dear Jim:

Enclosed are several copied pages from a sea turtle "research and conservation manual" I am currently co-editing to be published within the next few months. I'll be sure and send you a copy when it is completed.

I'm not certain what the chances will be of obtaining outside funds to "restart" the headstart/hatchery project. Along with a copy of this letter, I will make serious inquiries on your behalf. I estimate that ca. \$5,000 per year would be more than adequate to cover the expenses of what you described. If this is wrong, please let me know as soon as possible.

The plan to raise the hatchlings in individual containers in an outside tank near the Fisheries building sounds worthwhile. However, depending on their rate of growth, they would probably have to be held a minimum of three to four months. I don't really feel there would be much advantage in just keeping them for one month.

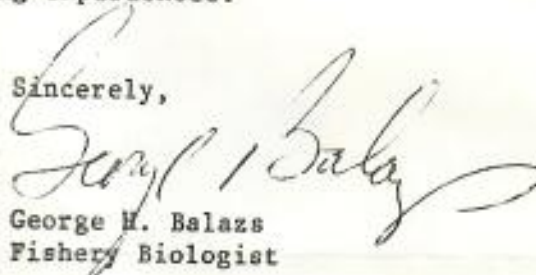
I strongly advise against transporting eggs from Aleipata to Apia for hatching. Cooling of the eggs, as well as embryonic mortality, is likely to result from this long transport. Consequently you will end up with a very low hatch rate that consists mostly of males. Hatch the eggs in Aleipata, then transport the hatchlings, which are then easily moved around without damage.

Tuna is a fine food source for the hatchlings. However, other obtainable items (i.e., clams) fed every so often will give nutritional balance, plus stimulate appetite. There is no "correct feed to body weight ratio" that I can give you. Simply offer all they will eat during several feeding bouts each day. It can be cut back to two feedings per day when they are one to two months old.

I will write to you again within a month when I have something concrete to report. In the meantime, please write to me immediately if there is any change in plans or administrative interest in pursuing a reconstituted turtle project.

Mr. Philipp may recall that one of my principal recommendations for the turtle project was to recruit and assign at least a half-time Peace Corps person to Aleipata to guide Viliamu. I still view this as the better course of action. However, I certainly can understand the funding and personnel constraints now being experienced.

Sincerely,



George H. Balazs
Fishery Biologist

cc: Mr. Alphonso Philipp



6650 HAWAII KAI DRIVE, SUITE 201
HONOLULU, HAWAII 96825

August 5, 1985

G. Balazs
U.S. Dept. of Commerce
National Marine Fisheries Service F/SWC2
P.O. Box 3830
Honolulu, HI 96812

Dear George:

Thanks once again for your notes regarding the plight of the sea turtles.

Actually I think my last letter was just a bit "harsh" and might not give a true picture of my "perspective" so let me make my feeling clear. I personally have both love and admiration for these animals and would not personally harm one even if it were "open season". I just get my blood pressure up at people who criticize but do not support HFN. I guess if I didn't have so much time and money tied up in this rag I'd be far less sensitive.

I knew when I first saw the article in the Star Bulletin regarding the turtle spearing incident off Waikiki you won your point! (I'm sure glad Roland Wasn't an HFN reader). Of course had he been he would have certainly known the law in this regard.

I personally feel that Roland's lack of knowledge and this incident has been good publicity for the turtle's well being.


You may have been alerted to a "turtle slaughter" a year or so ago on a dock in the Hawaii Kai Marina. As I understand it, no charges were pressed based on "indigenous rights" or something. If this is true, I think Roland has paid enough through the embarrassment and grief to be shown the same leniency by the enforcement division of NOAA.

I'd like to hear your comment on what is to be gained should the government choose to pursue this case. I was also surprised to hear that Roland was treated roughly by the Honolulu police officers involved in this apprehension.

Enclosed are photos of Mexican turtle hunters in the Gulf of California (Mexico waters) and their five day catch. They offered to sell us the small one being held up for \$70.00 U.S. \$9.00 a Kilo (live weight). To bad you weren't with me, we could have split the cost and bought his freedom. I was surprised by the quantity of turtle hunters we ran into. Their capture techniques and the way turtles were sold openly in modern super market meat counters, not to mention the pharmacy shelves lined with containers of "turtle oil". I guess if you are a sea turtle the cliché "Lucky you live Hawaii" has extra meaning!

I plan to do an article on Mexico and am wondering how to handle the "turtle hunters", any ideas?

Best Regards,



Chuck Johnston
Publisher/Editor

CJ:ej



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
2570 Dole Street
Honolulu, HI 96822-2396

May 6, 1986 F/SWC2:GHB

MEMORANDUM FOR: F/SWR4 - Gene Witham
THROUGH: F/SWC2 - William G. Gilmartin
FROM: F/SWC2 - George H. Balazs *GB*
SUBJECT: Dead green sea turtle reported at Maakea Harbor,
Maui on Wednesday, April 30th

Informal verbal reports that I received from both Joe and Bonnie late last week indicated that the April 30th turtle stranding on Maui only involved accidental entanglement in some sort of fishing gear. On Friday, May 2d, following the end of our Recovery Team meeting, I contacted DOCARE on Maui in an effort to learn more about this incident. I spoke to Mr. Okamoto, an enforcement officer who had been directly involved. He expressed frustration over his findings, which consisted, in his view, of human take following entanglement. He told me that the turtle, a 60-85 lb green turtle, was found in Maakea Harbor with 200-300 lb test monofilament trolling line wrapped on the front flipper and neck, but not severe enough to have killed it. A 4-ft piece of cord was tied to one of the hind flippers. In addition, manila rope was tied around the neck and anchored to the harbor bottom with a heavy object of some sort. There was some suggestion that the turtle had become further fouled after being "anchored," thereby causing its death by drowning.

I wanted to make you aware of this information, since it involves law enforcement considerations over and above accidental entanglement in fishing gear.

Southwest Fisheries Center
Honolulu Laboratory
2570 Dole Street
Honolulu, HI 96822-2396

May 5, 1986 F/SWC2

Ms. Tanya Moore
Sandy Hill Trailer Park
Kelly Drive #67
Hinesville, GA 31313

Dear Ms. Moore:

I am writing to thank you for notifying our agency about the dead green sea turtle (Chelonia mydas) washed ashore at Ewa Beach on April 29th. An autopsy of this animal conducted at our Laboratory indicated that it had probably been struck by the propellor of a large boat. Another important finding was the presence of metal identification tags attached to the front flippers. We were able to determine that the turtle had been tagged while nesting at French Frigate Shoals in June of 1985. French Frigate Shoals is the principal breeding site for green turtles in the Hawaiian Islands. Nearshore areas along the coastlines of the main islands (such as off Ewa Beach here on Oahu) constitute resident feeding habitat where the turtles live most of the time.

I have enclosed several articles about Hawaiian sea turtles which you may find interesting. Again, we appreciate the assistance you provided.

Sincerely,

George H. Balazs
Zoologist

Enclosure

cc: Balazs ✓
HL

May 14, 1986

F/SWC2:GHB

Dr. Thomas H. Pritts
Leader, Herpetological Studies Project
U.S. Fish and Wildlife Service
Museum of Southwestern Biology
University of New Mexico
Albuquerque, NM 87131

Dear Tom,

Many thanks for your letter of April 21st concerning the olive ridley seen in Ecuador with what appeared to be fibropapillomas. After studying your slides, I am certainly inclined to agree. If you can locate the preserved tissue samples you mentioned, I encourage you to submit them for a positive histological identification to Dr. John Harshbarger at the Smithsonian's Registry of Tumors in Lower Animals. John will be delighted to receive this material and it may very well be the first documentation of a fibropapilloma in a sea turtle other than the green turtle.

I also appreciated receiving your letter of April 22nd, along with the abstract and table of contents of Margie Stinson's MS thesis. In response to your request for ideas on where and how it might be published, I'm afraid I can't provide any firm suggestions at present. I'll look into the possibility of NMFS providing some support. However, with the budget cuts we've received out here, I doubt that this would happen. Right now the Recovery Team budget is exhausted for the remainder of FY86. We started out with only \$2,000 (\$1,000 from NMFS, \$1,000 from FWS).

Margie's best bet for publication may very well be the path taken by most others. That is, to condense and publish each major topic separately in a journal. Unfortunately, this is a lengthy process. Much of Margie's work needs to be made available now, especially results relating to incidental take in the California drift-net fishery. Maybe she could pursue this topic first. In the meantime, could you arrange to send me a copy of the thesis so I can read it? If extras aren't available, a loaner copy would be fine. I'll have it duplicated here and return it to you in a few days. Note that I leave for French Frigate Shoals on May 29th, so it should be sent very soon, if at all possible.

Best regards.

Sincerely,

George H. Balazs
Zoologist

cc: Balazs
HL

October 15, 1986 F/SWC2:GHB

Mr. Voniani Niوماتasere
Drue
Tavuki
Kadava, Fiji Islands

Dear Mr. Niوماتasere:

Thank you for your letter of 29 September 1986. I was very pleased to hear from you and receive the excellent answers to the questions I asked about the tagged turtle you captured. This information is valuable to our research program. Thank you also for offering to report any other tagged turtles that are caught in your area. In addition to Samoa, we have also tagged turtles in Pohnpei, the Marshall Islands, the Cook Islands, and here in Hawaii.

As promised, I am sending you an assortment of literature about sea turtles. You may want to share some of this information with your local school. The children of your village may especially enjoy the color poster showing the different kinds of sea turtles.

I wonder if you would mind answering a few more questions concerning turtles in your area.

1. Do turtles ever come ashore to lay eggs near Drue?
2. Are your nets made especially to catch turtles, or was the tagged turtle caught in a net used mainly to catch fish?
3. What is the size of most of the turtles you catch? Are they large ones like the tagged turtle, or much smaller (under 100 lbs)?

Again, thank you for your help. Perhaps sometime, I will be able to visit your island and have the pleasure of meeting you in person.

Sincerely,

George H. Balazs
Zoologist

cc: Balazs ✓
HL



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

March 27, 1986

F/SWC2:GHB

Ms. Sally Murphy
Wildlife & Marine Resources Dept.
P. O. Box 12559
Charleston, SC 29412

Mr. Earl Possardt
U.S. Fish & Wildlife Service
2747 Art Museum Drive
Jacksonville, FL 32207

Dear Sally and Earl:

Both of you should be commended for accomplishing the incredibly successful sea turtle workshop in Georgia last week. I really appreciated being able to attend this event. It was undoubtedly one of the more productive, and certainly the most informative, scientific meetings that I have been to in years. You have every right to feel proud of your abilities to plan, organize, and carry out a meeting of this complexity. Please do!

Aloha.

Sincerely,

George H. Balazs
Zoologist

April 18, 1986

F/SWC2:GHB

Mr. Mike Morris
94-1087 Awanani St.
Waipahu, HI 96797

Dear Mike,

I am writing to express the appreciation of our agency for your effort in contacting us about the sick green sea turtle found stranded at Kahala Beach. Unfortunately, the animal died a few hours after we brought it to our facility for treatment. An autopsy revealed that considerable necrosis had occurred to all the internal organs. The cause of this degeneration could not be determined. As you know, the turtle had several tumors (fibropapillomas) growing on the front flippers and neck. We have been receiving an increasing number of reports of stranded turtles with these growths.

As promised, I am sending you an assortment of literature about sea turtles, as well as a color wall poster showing the various species. Again, thank you for your assistance.

Sincerely,

George H. Balazs
Zoologist

Enclosure

cc: Balazs
HL

April 17, 1986

F/SWC2

Dr. Thomas H. Fritts
U.S. Fish and Wildlife Service
Branch of Ecology
Museum of Southwestern Biology
University of New Mexico
Albuquerque, NM 87131

Dear Tom,

Many thanks for offering me the opportunity to review the draft narration for your slide program on sea turtles. I feel that this is an excellent educational effort that will be highly beneficial to both sea turtles and people. I commend you for undertaking this much needed project.

I feel that your text is in fine shape, with the exception of four minor comments noted on the attached Xeroxed pages. My only other suggestion would be to include something about Hawaii's green turtle population, but of course I realize that your title geographically restricts your subject matter to the continental land masses of the Americas.

I look forward to seeing the final product which I hope will someday be available here in Hawaii.

Best regards.

Sincerely,

George H. Balaza
Zoologist

Attachment

cc: Balaza ✓
HL

March 26, 1986

F/SWC2:GHB

TO: William G. Gilmartin
Marine Mammal and Endangered Species Program

FROM: George H. Balazs

SUBJECT: Stranded sea turtles--the need to improve our response capabilities.

The number of stranded sea turtles reported to us has increased substantially over the past few years. Last year we documented 56 cases. During 1984, 1983, and 1982 we had 35, 27, and 26 cases, respectively. Thirty one of the 56 cases last year involved MNES personnel responding in some direct manner to collect relevant data and/or transport the turtle to our Laboratory. This year we have already recorded 22 cases and the first quarter of the year is not yet over!

There is a definite need to improve our coordinated response, on an intraagency basis, to all turtle stranding occurring here on Oahu. To do this, I propose that we convene an in-house meeting with WPPO and Gene Witham's law enforcement section. I would like to see all of the basics covered--the essential "who, what, when, where, why, and how" of responding to a report of a sea turtle dead or in distress. The sensitivity of dealing with the public is an especially critical aspect to be discussed.

Please let me know how you would like me to proceed in carrying out this idea.

cc: Balazs
HL



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
Western Pacific Program Office
P. O. Box 3830
Honolulu, Hawaii 96812

April 16, 1986

F/SWR1:ETN

Mr. Frank M. Covington
Director
Water Management Division
Region IX
Environmental Protection Agency
215 Fremont Street
San Francisco, CA 94105

Dear Mr. Covington:

Thank you for your letter of April 10, 1986 to Mr. Eugene T. Nitta requesting a species list for the proposed reissuance of NPDES permit No. TT0020290 for discharges into Majuro Lagoon from the Tobolar Copra Processing Plant. The only known listed species found in the area for which the National Marine Fisheries Service (NMFS) is responsible under the Endangered Species Act of 1973, as amended, are likely to be the threatened green turtle (Chelonia mydas) and the endangered hawksbill turtle (Eretmochelys imbricata). Although turtles are observed relatively frequently in the waters of Majuro, nesting has not been reported, nor has critical habitat been designated or proposed in the area for these species.

Based on the available information it is likely that reissuance of the subject NPDES permit will not affect the sea turtles found in the waters of Majuro. Accordingly, formal consultation will not be required and we will consider the consultation process for this permit action to be completed.

Sincerely yours,
Doyle E. Gates
Doyle E. Gates
Administrator

cc: F/SWR
F/SWC2, Balazs ✓
FWS, Kosaka



4/4/86

George:

Enclosed stuff is on 5th Annual
Sea Turtle Workshop¹⁹⁸⁵. An attempt
was made to publish the proceedings.
As far as I know, we (NMFS) were
the only ones to put together our
section, i.e., "Government papers".
Anyway, Jim Richardson chose
not to complete the package for
some reason.

Hot off the wire! Oil price drop
affects sea turtles in the Gulf of
Mexico. Dry, or partly dry wells &
rigs are being removed (production
people keeping busy, a displacement
activity?). A total of 3-400 lbs of
dynamite being used to blow off



FBI
Return

legs & well. Many turtles & bottle-nosed porpoises being killed, not too mention all the fish population associated with these rigs! The Simon Bolivar Peninsula, just east of Galveston has been area of impact with many strandings of Kemp's ridley including 1 adult female.

NMFS / FWS on top of this. Met with 1 oil co. (Tenneco). Plans are to halt further dismantling until protective measures can be installed (some would ban use of explosives - UW torch (acetylene) only). We'll see what happens SEIS in the making as required by BLM (MMS) of Dept Interior.

Talk later, Tabery

April 7, 1986

F/SWC2:GHB

Mr. Bruce Piercy
1844 St. Louis Drive
Honolulu, HI 96816

Dear Mr. Piercy:

I greatly appreciated receiving your sighting report concerning a live sea turtle with a tumor on its front flipper found sleeping in water 55 ft ^{deep} off Koko Head. For your information I have enclosed several articles about sea turtles in Hawaii, including the summary of a presentation I recently gave on the incidence of fibropapillomas (tumors) in green turtle.

We are interested in documenting as many cases as possible of stranded, injured, or sick turtles. If you see this same turtle again, or observe ~~any~~ others with problems, please do not hesitate to contact me.

Sincerely,

George H. Balazs
Zoologist

Enclosure

cc: Balazs ✓
HL



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

April 3, 1986 F/SWC2:GHB

Mr. Pat Wells
Lignumvitae Key State Botanical Site
P. O. Box 1052
Islamorada, FL 33036

Dear Pat,

I appreciated having the opportunity to meet you in person at the Georgia workshop and to discuss our common interest in tumors on green turtles. It certainly would appear that this unexplained disease is an increasing phenomenon, both in your region as well as here in Hawaii. I hope that enough interest and concern was generated at the workshop to result in specific funding of a research project to determine the cause of the problem.

In your earlier letter you indicated that stranded turtles with tumors were more prevalent on the Florida Bay side of the Keys. Can you please provide me with some idea of the percent occurrence? How many stranded green turtles have you handled during the past year, and how many had tumors? As I mentioned in my presentation at the workshop, 29% of the stranded turtles reported to us in 1985 had tumors (identified histologically as "fibropapillomas").

I look forward to hearing from you again at your earliest convenience. Best regards.

Sincerely,

George H. Balazs
Zoologist

CC FRED BERRY
PAUL RAYMOND
LARRY OGREN



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

March 26, 1986

F/SWC2:GHB

Dr. Jim Wood
Cayman Turtle Farm
P. O. Box 645
Grand Cayman, BWI

Dear Jim,

I just returned from the annual sea turtle workshop in Georgia where both Lew Ehrhart and I gave presentations on our experiences with fibropapillomas in green turtles. A summary of my talk has been enclosed. I was hoping that either you or Fern would be at the workshop to elaborate on what Elliot Jacobson said in his 1981 article, "Virus Associated Neoplasms of Repiles" (copy also enclosed). I spoke briefly with Kim Critchley and he indicated that this disease is no longer a problem for the farm. However, he said that some of the juveniles released have been recaptured with papilloma-like growths.

I would appreciate any information that you are able to offer on this interesting and potentially very important subject. Were you able to develop a satisfactory treatment for your captive turtles afflicted with these growths? Did the disease spread from one animal to another? As you may know, Lew Ehrhart only started seeing these growths in 1983, even though he has been catching and tagging immature green turtles at Mosquito Lagoon since 1976.

Sincerely,

George H. Balazs
Zoologist

cc: Lew Ehrhart