1976 INCOMING

HIMB CORRESPONDENCE
OF G. H. BALAZS

Karl W. Kenyon - 11990 Lakeside Pl. NE - Seattle WA 98125

10 May '76

Dear George:

Many thanks for the page from the Midway News sheet that concerned protection of the Monk Seal habitat there. It is encouraging that the administration is making this effort.

From some years of experience with the military I fear, however, that frequent reminding will always be necessary — primarily because of the frequent turnover of personnel.

I'm sure a copy of our report — with what turtle data we got in it — will be sent to you before long.

Best wishes & please keep us posted on what goes on out in turtle & monk seal land.

Sincerely,
Karl

Defenders
OF WILDLIFE

May 7, 1976

George H. Balazs
University of Hawaii at Manoa
Hawaii Institute of Marine Biology
P.O. Box 1346, Coconut Island
Kaneohe, Hawaii 96744

Dear Mr. Balazs:

I have just finished packing up a box of 25 magazines. They will be in the mail today. They may take a while to get there as we can only afford slow boat mail.

I am very sorry that you had to write again. I can't imagine what happened to the first batch of magazines. You must be anxious to get your copies.

The 25 copies that you are receiving are the last of that issue for distribution. At this point, we are out and will not be reprinting. You might want to be aware of this when you distribute some of your copies.

Again, my apologies for this unfortunate delay. Many thanks for your patience.

Sincerely,

Deborah Duff

Deborah Duff
Editorial Assistant

1244 NINETEENTH STREET, NW • WASHINGTON, DC 20036 • (202) 659-9510

University of Toronto
DEPARTMENT OF ZOOLOGY

RAMSAY WRIGHT ZOOLOGICAL LABORATORIES
25 HARBORD STREET
TORONTO M5S 1A1, ONTARIO, CANADA

September 10, 1975

The Director
Hawaii Institute of Marine Biology
P.O. Box 1396
Kaneohe
Hawaii, 96744
U.S.A.

Dear Director,

A few weeks ago I was in transit through Hawaii and was able to visit briefly with Mr. George Balazs at your Institute. One aspect of his work that struck me as especially important was the tagging of green turtles and recovering them later after they had spent the intervening time in natural conditions. This work if continued long enough to get reliable growth rates could then be used (in combination with data from the nesting grounds) to estimate the number of years it takes these turtles to mature. Such information would be enormously valuable to those working on conservation of marine turtles. It was my impression, however, that these were some uncertainties about the funding of this project. I hope you will excuse my taking the liberty of writing to you about this, but it would be a great pity if this work, already started, could not now be continued. To the best of my knowledge nobody else at the moment has had the luck or enterprise to be able to capture and recapture juvenile sea turtles in sufficient numbers, and so there is a unique chance here of obtaining some much needed information on sea turtle biology.

Yours sincerely,

Nicholas Mrosovsky

Nicholas Mrosovsky
Professor of Zoology

IUCN Marine Turtle Specialist Group

Defenders
OF WILDLIFE

February 18, 1976

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

Dear Mr. Balazs:

I am sending you separately 25 copies of our December issue as you requested, in lieu of cash payment for the use of your transparency in that issue.

I am disturbed that your transparency was returned with scratches; I do not know how they came to be, of course, but will see to it that our handling procedures here are improved, if that is what is needed. That will do you no good, I realize, but may help other contributors, and, of course, Defenders.

Your earlier inquiry was not handled promptly here because of the confusion attendant on the resignation of Wayne Barrett as editor, and the delay in my taking over as his replacement. We are straightening things our as quickly as may be.

Again, I regret the damage to your photograph, and the delay in answering you. We shall strive to do better.

Sincerely,

Frank Sartwell

Frank Sartwell
Editor

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April 26, 1976

Received from GEORGE BALAZS, 75 each 35mm slides for use in the Bird-Seal-Turtle book.

All original slides will be returned to Mr. Balazs after color separations are made and book is printed.

For: WORLD WIDE DISTRIBUTORS LTD

Vincent F. Sage

THE JUNIOR LEAGUE OF HONOLULU, INC.
2950 MANOA ROAD
HONOLULU, HAWAII 96822

April 14, 1976

Mr. George Balazs
Hawaii Institute of Marine Biology, Coconut Island Branch
Kaneohe, Hawaii 96744

Dear Mr. Balazs,

The Junior League of Honolulu is delighted that you will be able to speak to us at our April 21, 1976 General Membership Meeting. We are most interested in learning about marine education in Hawaii and how we can protect our state's most precious natural resource, the waters that surround us.

As you are probably aware, the Junior League is an educational and charitable organization to promote voluntarism, to develop the potential of its members for voluntary participation in community affairs, and to demonstrate the effectiveness of trained volunteers. The enclosed brochure describes some of the more recent projects that we have undertaken in the community.

The meeting will be held in the Special Events Room of the Ala Moana Liberty House department store which is located on the third floor. A closed business meeting of the Junior League of Honolulu will be held at 9:00 a.m. We would appreciate your arriving about 10:00 a.m. as your part of the program will begin at 10:20 a.m. The program will end promptly at 11:30 a.m.

The format planned for the morning is a panel discussion allowing approximately 10 to 15 minutes for each speaker. An open question and answer period will follow for approximately 20 minutes. Speaking with you on the panel will be Dr. S. Arthur Reed and Dr. Leighton Taylor.

The Junior League of Honolulu is looking forward to your presentation and truly appreciates your taking time from your busy schedule to speak to us. If you have any questions, please don't hesitate to call me, day or night, at 373-3422.

Most sincerely,

Jean Rolles

Jean Rolles
Education Chairman

need conservation message at Aquarium

need for conservation

The EAST-WEST CENTER

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April 9, 1976

Dr. George H. Balazs
Hawaii Institute of Marine Biology
University of Hawaii
P.O. Box 1346
Coconut Island
Kaneohe, Hawaii 96744

Dear George:

Thank you very much for your note and for the literature and helpful suggestions. We will see how best we can analyze our leatherback data; and I will contact you further, if necessary. In case you ever pass through Malaysia, do contact me at the Department of Zoology, University of Malaya, Kuala Lumpur, Malaysia.

With warm wishes,

Yours sincerely,

José

Dr. J. I. Furtado
Senior Fellow

cs

University of Toronto
DEPARTMENT OF ZOOLOGY

RAMSAY WRIGHT ZOOLOGICAL LABORATORIES
25 HARBORD STREET
TORONTO M5S 1A1, ONTARIO, CANADA

May 10th 76

Dear George,

Thanks for the tear — Pat never sent me one, so I was pleased to see it.

I hope your growth project goes well — I'm still disturbed over the accuracy problem — if you look at the latest paper in George Hughes' series (Marine Turtle of Tongaland #8), you will see that they got some, quite a few, of their animals

getting smaller with one the curve measures!!

Gram cowacking finally just about dealt with — I hope to get a couple of weeks in Suriname in July

IUCN sputters on — it is likely that the turtle group will be reorganized — but when, that is always the question with IUCN.

Best regards,

Nicholas

University of Toronto
DEPARTMENT OF ZOOLOGY

RAMSAY WRIGHT ZOOLOGICAL LABORATORIES
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TORONTO M5S 1A1, ONTARIO, CANADA

March 9th 1976

Wayne
King's test
continued battle
commercial - Interior
WWF
Pritchard - Pigeons
Schulz - new paper

Dear George,

Thank you for letting me know the position so promptly, it certainly is disappointing , I had looked foward to to it. But this summer at least I just cannot risk waiting around , the time constraints are to tight. However, maybe things will gradually become better organized, and next summer it is likely that I will be in Vancouver for the Canadian Psychological Association meetings, which usually are about 10 th of June or thereabouts. Vancouver is half way to Hawaii, and one might be able to work it out then.

hibernating
Ridley

It would therefore still be worth having your thoughts and reactions about which island to work on, and whether, if one planning again from the start, there is much to choose between June or July. Obviously there is no hurry on this.

I still cannot lay hands on that bit about the Ponape leatherback, it must be somewhere in a heap of stuff on leatherbacks; if it is urgent, let me know and I will have another attempt to find it.

Best wishes,

I think Mance is trying his best at the IUCN. I have just written to him to ask him who is a member of the group, because I really need to know if I am to be a secretary and do a newsletter. So we will see if he sends any definite information.

Nicholas

I am thinking ofvisiting Surinam instead of Hawaii, if I can fit it in but would do very different things there.

RUTGERS
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OF NEW JERSEY

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P.O. BOX 231 • NEW BRUNSWICK • NEW JERSEY 08903

February 18, 1976

Dr. Wayne King
New York Zoological Society
Bronx Park
Bronx, New York 10460

Dear Wayne:

I have received the report of your meeting (January 15, 1976) with representatives of Mariculture, Ltd. and with the prospective purchasers. The data provided by Mariculture were quite interesting, and certainly support the conclusions that you arrived at. I estimate that the chances that Mariculture will be producing its own eggs in significant quantities in two years are zero. I am also perfectly prepared, as a scientist intimately familiar with this problem, to state that the chances that they will be self-sufficient in five years are also zero. I will go further: based on the known biology of the green turtle, Chelonia mydas, and on the evidence supplied by Mariculture, itself, the probability of their being self-sufficient in eggs at any time in the forseeable future is vanishingly small. One can only feel sorry for the Drs. Mittag. They will lose whatever capital they inject into this impossible project -- as have all the investors who preceded them.

As you know, I have had some communication with the Commerce Department about this matter. They are involved in a delaying action which is further damaging world populations of green turtles. I would think that the Commerce Department, of all agencies, would be able to figure out that wiping out the world's most valuable reptile for the short-term benefit of one bankrupt, foreign company makes no commercial sense. I would think that someone in the Commerce Department would be able to look at Mariculture's data, as you have, and perceive the folly of going yet another round with another bunch of ignorant, starry-eyed investors in this hopeless scheme.

We have been involved with Mariculture ever since it started, and although you and I (and Balazs, Mrosovsky, and Carr) have been accused of being prejudiced against them, every one of our predictions (and none of theirs) has been confirmed -- in spite of the enormous infusion of capital and scientific talent and the commercial protection accorded to Mariculture during nearly a decade of operations. If anything, things look bleaker for self-sufficiency now than they did five years ago.

Nevertheless, it always is "give us another few years to develop our systems" -- in the meantime, a great species is being exterminated.

The fact that Commerce has been going along with this perpetual stall means only three things to me: Either (1) their analysts are mentally negligible, or (2) someone in Commerce is being paid off, or (3) the pro-mariculture group is bringing political pressure to bear. Any way you cut it, the whole business is rotten to the core.

I'm sorry to send you such a blunt and tactless letter, but I am weary of this endless debate on a subject that is ecologically and morally so open and shut. I feel as if I had spent the last 8 years of my life reading bureaucratic memoranda on whether we should or should not grow fig trees on the moon. If anything good comes of the Mariculture saga, it will most likely be that we shall be able to prove that the Commerce Department must not be allowed to have anything to do with endangered species in the future. This will be small consolation for the loss of the green turtle.

Best regards,

David

David W. Ehrenfeld
Professor of Biology

cc: J. Tyler
A. Carr
N. Mrosovsky
G. Balazs
A. Mence
P. Pritchard

U.S. APPEAL

WORLD WILDLIFE FUND

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PRESIDENT

910 SEVENTEENTH STREET, N.W.
WASHINGTON, D.C. 20006
PHONE 202 296-0422 296 6114

13 Jan 76

Dear Dr. Balazs - 4662160

Thanks so much for looking at this for us. If you have any further comments or changes please call me on Monday

Sincerely

Tom Lovejoy

SINCE NINETEEN-HUNDRED "THE VOICE OF CONSERVATION"

November 26, 1975

Dr. Thomas E. Lovejoy
World Wildlife Fund
910 17th Street N.W.
Washington D.C. 20006

Dear Tom:

Hal Coolidge recently asked me if I could find time to do an investigation of the green turtle survival situation in the U.S. Pacific Trust Territory Islands, particularly Ujelang in the Marshalls, but in all the other areas that time would allow. He suggested I apply to WWF for funding; since the islands come within the United States from the political aspect, I assume that this application could be handled by WWF U.S.A. independently.

I would be able to take about five weeks at the end of January and through February for this work, if it is approved for funding. The enclosed grant application should be more or less self-explanatory, but if I have omitted anything important please let me know. I would also most appreciate it if you could give me any informal estimate of the chances of WWF funding in advance of the January Directors Meeting so that I could start developing plans in the appropriate direction. My personal resume information and list of publications should already be on file in your office.

Glad to have seen you in Washington for Archie Carr's presentation, but sorry we didn't have time for any discussion. Hope you had a good Africa trip.

Sincerely,

Peter C.H. Pritchard, Ph.D.
Vice President - Science and Research

PP/jf

FLORIDA AUDUBON SOCIETY

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SINCE NINETEEN-HUNDRED "THE VOICE OF CONSERVATION"

GRANT APPLICATION TO THE WORLD WILDLIFE FUND

(UNITED STATES NATIONAL APPEAL)

APPLICANT

Peter C.H. Pritchard, M.A., Ph.D. Vice President for Science and Research of the Florida Audubon Society. Member, IUCN Marine Turtle Specialist Group; formerly Special Investigator for the Group.

PROPOSED WORK

To conduct a preliminary study of marine turtle distribution, exploitation, and survival status in Micronesia.

BACKGROUND

At the IUCN Marine Turtle Specialist Group meetings held in Morges, Switzerland in 1969 and 1971, it was established that a vital priority in the proper conservation of the sea turtles of the world was the drawing up of a complete inventory of world sea turtle populations, and, where possible, to determine the migration patterns and life histories of these turtles by means of tagging and related programs. Substantial progress has been made in the ensuing years towards this goal;

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several members of the Turtle Group have documented previously unstudied turtle populations in many parts of the world. Work by the applicant, for example, has revealed the largest known leatherback turtle nesting beach on the coast of French Guiana, and also mapped the distribution of the green turtles of the Galapagos Islands.

Preliminary accounts are now available regarding the turtle populations of many of the islands and archipelagoes in the Pacific Ocean. The turtles of Galapagos have been described by Pritchard (1971); those of Hawaii by Balazs (1975); those of Easter Island by Harrisson (1971); those of Fiji by Bustard (1970); those of French Polynesia, Western Samoa, Tonga, American Samoa, and New Caledonia by Hirth (1971). The islands of Micronesia, however, remain uninvestigated, and we only know of turtles in this area from incidental remarks from scientists of other disciplines (e.g. Fosberg 1969).
McCoy, 1974
Hendrickson, 1972

Throughout the Pacific Islands, the green turtle (*Chelonia mydas*) is typically the most plentiful species, with hawksbills (*Eretmochelys imbricata*) as the second most abundant. Loggerheads (*Caretta caretta*) have been reported from a few areas, but appear to be very rare; individuals of the wide-ranging leatherback turtle (*Dermochelys coriacea*) are caught sporadically in many areas, but I know of no oceanic island where this species is caught regularly. Throughout the Pacific islands, the general pattern is that turtles are disappearing fast, or have already disappeared, around inhabited islands,

but may continue to exist in reasonable numbers on islands that are both uninhabited and not too close to inhabited islands.

NESTING SEASON

In some areas of the tropical Pacific, turtle nesting has a closely defined season; for example in the Galapagos Islands nesting takes place from January to March, with very little nesting in other months. On the other hand, in northern Australia nesting occurs year-round. In the Hawaiian Islands National Wildlife Refuge, nesting occurs from May to July.

Data are not available to delineate the season (if any) in the Marshall Islands with any accuracy. However, Dr. Ray Fosberg informs me that he has seen nesting turtles or evidence of nesting in different parts of the Marshalls in July - August and also in February, and it appears possibly that nesting may occur throughout the year.

PROPOSED SCOPE OF WORK

The applicant proposes to visit the islands of Majoro, Ponape, and Truk by scheduled airline, and, if time allows, to continue the journey to Koror in the Palau Islands and Guam and Saipan in the Mariana Islands. Interviews will be conducted with local officials, fisherman, and (if available) naturalists to obtain what data may be available to the people on turtle nesting, distribution, and exploitation.

Attempts will be made to visit the atolls on which turtles nest. A high priority will be the attempt to visit Ujelang, an inhabited atoll in the Marshalls on which turtles are known to nest, but where populations are reported to be diminishing through excessive exploitation of meat and/or eggs. Turtles are reported still to be common on Jemo Island (10°08'N, 169° 32'E) where Fosberg (1969) found 22 fresh tracks in December 1951, and nesting also occurs on uninhabited Bikar Island (12° 15'N, 170° 05'E), where Fosberg saw 596 tracks on August 6, 1952. The turtles of the latter island apparently receive some degree of protection from a taboo among the Marshallese prohibiting bird and turtle exploitation.

Whether or not it will be possible to visit these turtle islands in the course of this preliminary investigation remains to be seen, since the distances between the individual islands are enormous. However, an effort will be made to charter local vessels so that important islands can be landed on and the turtles tagged and studied. If this proves impossible, an attempt will be made to charter a light aircraft to over-fly the islands by early morning light so that nests and tracks can be counted and photographed from the air, and the presence of small vessels or encampments of people involved in turtling noted.

The applicant can make available about five weeks at the end of January and through February 1976 for the proposed work. It is emphasized that definitive results, or anything more than a highly preliminary appraisal, cannot be expected

from such a brief expedition. However, it is hoped that it will be possible to establish sufficient information on nesting seasons, areas of intensive turtle exploitation, local contacts, and availability of local transportation to lay the groundwork for a thorough, extended survey at a later time.

It might be noted that the provisions of the United States Endangered Species Act specifically include the U.S. Pacific Trust Territory Islands in the provision for funding joint Federal-State conservation programs. The hawksbill turtle is already listed as an endangered species, while the more plentiful green turtle is currently listed as threatened, with endangered status proposed and currently being subject to public review and the drawing up of an environmental impact statement by the Department of Commerce. Instigation of the joint Federal-State endangered species conservation programs awaits an allocation of funds by Congress; but once funds are allocated and the green turtle placed on the endangered species list, it is to be hoped that a federally sponsored or subsidized turtle conservation program in the U.S. Pacific Islands Trust Territory may be instigated.

LITERATURE CITED

Balazs, G. 1975. Personal communication re. marine turtle survival situation in Hawaii.

Bustard, H.R. 1970 Turtles and an iguana in Fiji. Oryx Vol. 10 No. 5, Pp. 317-322.

Fosberg, F.R. 1969 Observations on the green turtle in the Marshall Islands. Atoll Research Bulletin No. 135: Pp. 9-12.

Harrisson, T.H. 1971 Easter Island: A last outpost. Oryx Vol. 11 No. 2-3, Pp. 111-115.

Hirth, H.F. 1971 Synopsis of biological data on the green turtle, Chelonia mydas (Linnaeus) 1758. FAO Fisheries Synopsis No. 85, pag. var.

Pritchard, P.C.H. 1971 Galapagos sea turtles - preliminary findings. Journal of Herpetology 5, 1-2: Pp. 1-9.

SCIENTIFIC AND PERSONAL REFERENCES

Dr. Archie F. Carr
Dept. of Zoology
University of Florida
Gainesville, Florida 32601

Dr. Hal Coolidge
c/o World Wildlife Fund
910 Seventeenth Street N.W.
Washington D.C.

PROPOSED BUDGET

Funding necessarily contains an element of guesswork in view of the uncertainties surrounding inter-island travel in Micronesia. Efforts will be made to economize at all stages so as to allow maximum island visitation within a limited budget.

Air fare: Round trip Orlando to Koror via California, Hawaii, Majoro, Ponape, and Truk:	$1,270
35 days field living, and hotel expenses: @$35*per diem:	$1,225
One month salary @ $15, 000 per annum:	$1,250
Tags and tagging equipment:	$ 100
Camping equipment:	$ 150
Photographic expenses:	$ 120
Inter-island boat and aircraft charter (estimated):	$1,500
Contingencies:	$ 500
Total sum requested:	$6,115

* Rate suggested by Dr. Coolidge.

SINCE NINETEEN-HUNDRED "THE VOICE OF CONSERVATION"

January 6, 1976

Dr. Tom Lovejoy
World Wildlife Fund
910 17th Street, NW
Washington, DC 20006

Dear Tom:

As a follow-up to our telephone conversation today, let me clarify my answer to your question regarding follow-up to the proposed Micronesia work in February.

My intention is to make the best appraisal of the survival outlook of the marine turtles on the Marshall Islands and others that is possible in the time available. This would include an investigation not only of biological aspects, but also of sociological and political considerations. I would regard it as a high priority to make personal contact with local officials in the islands who would be responsive to recommendations for turtle protection and/or management. This would be followed up in whatever way seemed most likely to produce results. It is hard to make a prejudgement of precisely what approach I will take until the facts of the situation are available, but I can say categorically that I would not propose to drop my interest or activity in this area upon my return to Florida - unless it appears that there are no grounds for real concern for the turtles' future. Moreover, I am conscious that I am asking WWF to put up quite a substantial initial investment in this area, and would make every effort not only to ensure that this investment translated into action as well as investigation, but also would endeavor to ensure that any subsequent longer-term studies that might prove necessary would be funded by other (preferably local or U. S. Government) sources. While I do not know exactly when Congress is liable to fund the cooperative federal/state endangered species programs, the Pacific Trust Territory Islands do specifically qualify for this type of funding, and I believe a well-designed turtle conservation program would stand a sporting chance of obtaining support.

Regarding the matter of salary, I regret that my fixed expenses are such that I could not offer to undertake the work without stipend. Florida

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Audubon is very strapped for funds at the moment, and I was specifically asked to get my salary covered separately if I will be out of the state for the month of February. If it is absolutely impossible for WWF to pay my February salary I will report this to our President, Hal Scott, and see what he decides; but we are under some pressure to get salary separately provided for for such periods of time as our conservation work does not relate directly to Florida. My follow-up work, which may involve protracted exchanges of correspondence with local officials and others, would, of course, be done without expense to WWF.

I hope this clarifies the questions. Please let me know if any further information is needed, and also let me know how long it will take for funding to reach me if the Board does act favorably upon my application. I will, of course, not enter into any commitments at this time, but I would like to make preliminary air fare bookings for around January 26.

Sincerely,

Peter C. H. Pritchard, Ph.D.
Vice President

PCP/sh

HAROLD JEFFERSON COOLIDGE
38 STANDLEY STREET
BEVERLY, MASSACHUSETTS 01915

Telephone 847-3511

Memo for Dr. George Balazs: Mar.5,1976

March 1, 1976

I believe you will be interested in this information about Pritchard's trip to the U.S.Trust Territory regardung turtle hesting places. Any data you could let me have to pass along to him would be very much appreciated. If you prefer to write to him direct, could you let me have a carbon for my files. Many thanks.

Col. Ed Bryan
Bishop Museum
Honolulu, Hawaii 95818

Also, any persons in TTPI who are interested in turtles.

E. H. Bryan, Jr.

Dear Ed:

My English friend, Peter Pritchard, who has worked on sea turtles for many years with Archie Carr will be making a month long visit to the district capitols in the U. S. Trust Territory to gather turtle information from officials and island inhabitants. I feel that you can give him much useful information, and I know that he would greatly welcome your supplying him outline maps or drawings from sources at your disposal of turtle nesting islands that you may know about in the Trust Territory. I would hope that he can develop a turtle program which could justify government or private funds for future turtle conservation efforts in the appropriate areas of the Trust Territory. I am asking Brenda Bishop in Honolulu and Lou Eldridge in Guam to handle mail and messages for Pritchard as the time is so short prior to his departure. However, if you wish to write him by return mail, your letter should be addressed to his Florida base, Florida Audubon Society, P. O. Drawer 7, Maitland, Florida, 32751.

With many thanks for your kind help in this matter. As ever,

Gratefully,

Hal

Harold J. Coolidge

HJC/as

P.S. Very distressed by news of Ken Emory's heart attack. Give him my sympathy. I do hope for a good recovery.

SINCE NINETEEN-HUNDRED "THE VOICE OF CONSERVATION"

Mr. George Balazs
Hawaii Institute of Marine Biology
P.O.Box 1346
Kaneohe
Hawaii 96744

January 26 1976

Dear George:

Many thanks for sending the copy of your Hawaii Audubon Society Journal. I am hoping to get up to Washington for the endangered sea turtle hearings on February 25th, and will me making a strong case for no further commercial importation of sea turtles of any species. We will be having a coordinating meeting in Savannah, Georgia, on Feb. 13.

Hal Coolidge recently asked me to see if I could find time to do a preliminary survey of sea turtles in the Marshall Islands, where according to his information the turtle populations were being seriously abused on certain of the outlying atolls. I decided to go ahead, and will hopefully be leaving for the Marshalls for a one month survey towards the later part of March. The purpose of this letter is twofold: i) to find out if you will be in Hawaii in late March; and ii) if you have any specific information on the distribution or nesting seasons of green (and other) sea turtles in the Marshalls.- I have not been able to discover much beyond Ray Fosberg's somewhat old observations on Jemo and Bikar. If you are going to be in Hawaii when I come through perhaps we might be able to get together. In any case, any information that you might have on turtles in the Marshalls would be appreciated as soon as possible so I can plan appropriately.

All best wishes,

Peter

Peter C.H.Pritchard
Vice President - Science and Research

P.S. I just got McCoy's paper on green turtles in the Caroline Islands.

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SINCE NINETEEN-HUNDRED "THE VOICE OF CONSERVATION"

March 9, 1976

Mr. George H. Balazs
Jr. Marine Biologist
University of Hawaii at Manoa
P. O. Box 1346
Coconut Island
Kaneohe, Hawaii 96744

Dear George:

Nice to get your letter. I am now planning to come through Honolulu on about March 22-24, so hope you will be around then. I do have a few other contacts at the University, but nevertheless would be very sorry to miss you.

I have Hendrickson's report and also McCoy's paper; Otherwise very little except generalities. But I do now have a lengthy list of people on each of the major islands whom I hope to contact.

You are possibly puzzled, and maybe understandably a little resentful, of my intrusion into your sphere of operations. I am doing the trip purely because Dr. Coolidge, who has known Micronesia very well for many years, felt there was a need for someone to draw together the various people who were working on turtles in Micronesia, summarize existing information and try and lay the foundation for an integrated turtle program in the territory (which will certainly not be carried out by me). He asked me to do this trip and I was able to get a month free to do it. So I am anticipating that my visit and report will facilitate your future operations in the islands and will draw attention to the many, many islands for which information is virtually lacking. I also hope to spend a little time in the Palau Islands to find what information is available on the hawksbill populations and the adequacy of present conservation work there; the Palau oilport is also an ominous development that may have to be fought from the outside since insiders, or at least those who work in some way for the government, have been told to keep their opinions to themselves.

I have a contact with the Army Chief of Staff, so there is a possibility of my doing some overflights from the Kwajalein Base over some of the more remote Marshall atolls.

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(305) 647-2615

Coolidge particularly mentioned Ujelang as an island where he felt that turtles were being excessively exploited; I may or may not be able to get to this island from Ponape.

By the way, I have your letter somewhere regarding the places where I tag turtles. Rather than look for it, I have done drawings on a separate sheet.

All best,

Peter C. H. Pritchard, Ph.D.
Vice President

rd

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Washington, D.C. 20235

MAR 23 1976

Please be advised that the Council on Environmental Quality has extended the period for commenting on the Draft Environmental Impact Statement assessing the impact of the National Marine Fisheries Service/Fish and Wildlife Service proposal to list the green sea turtle, loggerhead sea turtle, and Pacific ridley sea turtle as "threatened species" under the Endangered Species Act of 1973, from March 22 to April 5, 1976 (41 F.R. 11602, March 19, 1976). Comments on the February 25-26, 1976, hearing and the proposed listing and protective regulations will also be accepted by the National Marine Fisheries Service until April 5, 1976. Comments should be sent to the Director, National Marine Fisheries Service, Washington, D.C. 20235. This extension is not expected to prolong final action concerning the listing.

Harvey M. Hutchings
Harvey M. Hutchings
Acting Associate Director
for Resource Management

University of Toronto
DEPARTMENT OF ZOOLOGY

RAMSAY WRIGHT ZOOLOGICAL LABORATORIES
25 HARBORD STREET
TORONTO M5S 1A1, ONTARIO, CANADA

25/Feb/76.

Dear George,

I don't have anything of a leatherback in the sea....in fact I know of no good photograph anywhere of one in the sea..... I doubt even Pritchard has one...(though I'm a bit curious why you don't want to ask him...)...they are seen so seldom in the sea.

Enclosed are the best I can do just at the moment on the hatchlings.....I may have one or two more, if you let me know just what you are after.

I trimmed at the sides - not the top, the one of them reaching the jaw might look quite well -

So it goes on in Washington, I wonder what the outcome will be this time.

best wishes,

Nicholas Tosovsky

IN ORDER TO RESPOND AS PROMPTLY AS POSSIBLE, WE HAVE MADE MARGINAL NOTES ON THE ORIGINAL COPY OF THIS COMMUNICATION. DUPLICATES HAVE BEEN RETAINED FOR OUR FILES.

Sept. 6, 1976

RECEIVED

SEP 13 1976

DEXTER PRESS

Dear Mr. Castaldo —

I am eager to learn of the anticipated delivery date for my booklet on Hawaiian seabirds, turtles and seals. A brief note from your office to this effect would be greatly appreciated.

Sincerely,

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

September 13, 1976

The book should be ready for shipment around the end of this month, perhaps a bit before. I have seen a completed press sheet and I must say that I am impressed -- it's absolutely beautiful.

Mary

(Mrs.) Mary Lake
Secretary to Mr. Castaldo

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EXECUTIVE OFFICES

January 15, 1976

Mr. George H. Balazs
University of Hawaii at Manoa
Hawaii Institute of Marine Biology
P.O. Box 1346
Coconut Island
Kaneohe, Hawaii 96744

Dear Mr. Balazs:

Thank you so much for your letter of January 6 and explaining your plans about post cards and color booklets of Hawaii wildlife subjects. This is of great interest to Dexter Press and our representative on Hawaii, W W Distributors Ltd., Honolulu. I have discussed your letter with W W and someone from their organization will be in touch with you very soon. 536-1934

We do look forward to working with you. Perhaps, on my next trip to Hawaii I will have the pleasure of meeting you personally.

Very truly yours,

George Castaldo

George Castaldo
Vice President - Marketing
GC/ml

ROUTE 303 • WEST NYACK, NEW YORK 10994 • TELEPHONE: (914) 358-6400 • CABLE: DEXPRESS, WEST NYACK, NEW YORK • TWX: 710-575-2621

March 19, 1976
P.O. Box 1346
Kaneohe, Hawaii 96744

Mr. George Castaldo
Vice President- Marketing
Dexter Press
Route 303
West Nyack, New York 10994

Dear Mr. Castaldo:

You may recall that on January 6th I wrote to Dexter Press concerning my interests in preparing a color booklet on Hawaiian seabirds, turtles and seals. You responded on January 15th and placed me in contact with World Wide Distributors of Honolulu. Since that time a formal agreement has been reached with that company and I am now close to draft-form completion of the booklet.

The principal material for this booklet is of course 60 of my select 35mm color transparencies taken during field studies over the past three years in the Hawaiian Islands National Wildlife Refuge. While having confidence in the professional caliber of both Dexter Press and World Wide Distributors, I am nevertheless understandably concerned about the saftey and handling of my color slides during the production process. On a previous occassion, one of my slides was deeply scratched while in the care of the publishers of a nationally distributed conservation magazine. My purpose in writing to you now, before sending the slides, is to ask for your personal assistance in seeing that all due care is exercised while the slides are at your facility and for their safe return.

I fully anticpate that my involvement in this project will be mutually rewarding and I look forward to your early response.

Sincerely,

George H. Balazs
Jr. Marine Biologist
with the Hawaii Institute
of Marine Biology

cc
Mr. Vincent F. Sage, WW Distributors

society for the study of amphibians and reptiles

PUBLISHER OF
THE JOURNAL OF HERPETOLOGY • FACSIMILE REPRINTS IN HERPETOLOGY •
HERPETOLOGICAL REVIEW • THE CATALOGUE OF AMERICAN AMPHIBIANS
AND REPTILES • HERPETOLOGICAL CIRCULARS

2 February 1976

Milwaukee Public Museum
800 West Wells Street
Milwaukee, Wisconsin 53233
Max A. Nickerson

Dr. George H. Balazs
Hawaii Institute of Marine Biology
P.O. Box 1346 - Coconut Island
Kaneohe, Hawaii 96744

Dear Dr. Balazs,

Thank you for bringing your Elepaio article to our attention and additionally for offering to review Elepaio for herp. publications. Would you be willing to regularly scan other journals?

Sincerely,

Max A. Nickerson

Max A. Nickerson, PhD
Editor-Herp. Review

cjc

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THE ZOOLOGICAL PARK

Telephone: WEllington 3-1500
Cable Address: ZOOPARK NEW YORK

Bronx Park
Bronx, N.Y. 10460

18 February 1976

Janie Hansen
c/o Peace Corps
Box 880
Apia
Western Samoa

Dear Ms. Hansen:

I am forwarding your letter of 31 January 1976 to Dr. Archie Carr (Department of Zoology, University of Florida, Gainesville, Florida 32601), and George Balazs (University of Hawaii at Manoa, Hawaii Institute of Marine Biology, P.O. Box 1346, Coconut Island, Kaneohe, Hawaii 96744), for their consideration and reply. Dr. Carr is an expert on sea turtles of the world, and has a great deal of experience in the Australian area. George Balazs works on sea turtles in the Hawaiian Archipelago and has studied sea turtles also in other Pacific Island areas. I am sure that both of them would be more than happy to supply you with information on the Hawksbills of Samoa and would be more than delighted to receive further information on your turtle project. In the meantime I will answer a few of your questions.

Most, if not all of the Hawksbills probably stay in local waters for a good part of their life. Dr. Carr's studies in the Torres Straits suggests that at least in that area, the Hawksbills are fairly sedentary. Other species, notably the green sea turtle, migrate over long distances. Hawksbills, and all other sea turtles, return to their hatching beach to lay their eggs.

You state that you are having difficulty in getting the Western Samoan government to protect sea turtles there. Would some printed materials on the species be helpful?

Sincerely,

F. Wayne King

F. Wayne King
Director of Zoology and
Conservation

FWK:mm

Dr. F. Wayne King
Curator of Herpetology
Bronx Zoo, N.Y.
Zoological Park
Bronx Park, N.Y.

Dear Sir:

My husband and I are running a small Hawksbill turtle hatchery here in Western Samoa. We need information regarding the migratory patterns of the turtle and are hoping you might answer a few questions. Do the Hawksbill stay in local waters or are they migratory? If they migrate what is the main direction according to the season? And could you confirm that the Hawksbills return to their hatching beach to lay their eggs. Any help you could give us would be greatly appreciated. We are having a hard time convincing the government to keep the hatchery open because we can not prove they stay in Samoan waters.

Thank you,

Janie Hansen
Peace Corps
Box 880
Apia, Western Samoa

RECEIVED FEB 23 1976

DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
WASHINGTON, D.C. 20361

IN REPLY REFER TO

February 20, 1976

Honorable Spark Matsunaga
House of Representatives
Washington, D. C. 20515

Dear Mr. Matsunaga:

This is to acknowledge your inquiry of February 4, 1976, to the Chief of Legislative Affairs in behalf of Mr. George H. Balazs, who has written concerning the environmental impact of the Underwater Missile Range at Barking Sands, Kauai.

This matter is being looked into. You may expect a further communication within two weeks.

Sincerely,

Desdie Prince

DESDIE PRINCE
Deputy Director
Legislative and Information Division
By direction of Commander
Naval Air Systems Command

House of Representatives, U.S.

MEMORANDUM

February 23, 1976

The attached refers to a subject in which you are interested, and is, therefore, referred for your information.

Yours very truly

Spark M. Matsunaga

SEA LIFE PARK

March 1, 1976

Honorable Spark M. Matsunaga
House of Representatives
Congress of the United States
442 Cannon Building
Washington, D. C. 20515

Dear Congressman Matsunaga:

Thank you for your continued interest in the Green Sea turtle, the Pacific Ridley sea turtle and the Loggerhead sea turtle.

I have enclosed a copy of my letter to Mr. Robert W. Schoning, Director, National Marine Fisheries Service, giving my opinions on the EIS. Basically I think it is good providing the essential changes are made.

I have asked George Balazs of the Hawaii Institute of Marine Biology to send you a copy of his letter to National Marine Fisheries Service.

Thank you again for your continued interest.

Sincerely,
SEA LIFE, INCORPORATED

Edward W. Shallenberger

Edward W. Shallenberger, Ph.D.
Vice President & Director of Park Operations

EWS:w
Enclosure

SEA LIFE, INCORPORATED:
PARK: Makapuu Point • Waimanalo, Hawaii 96795 • Phone 259-7933 • Telex SLPSO 743-0124
SALES OFFICE: 2222 Kalakaua Avenue • Suite 1309 • Honolulu, Hawaii 96815 • Phone 923-1531

SEA LIFE PARK

March 1, 1976

Mr. Robert W. Schoning
Director
U. S. Department of Commerce
National Oceanic & Atmospheric Administration
National Marine Fisheries Service
Washington, D. C. 20235

Dear Mr. Schoning:

I have reviewed the draft Environmental Impact Statement concerning the listing of various species of sea turtles as threatened species.

I believe, as I believe most authorities on sea turtles also believe, that these certainly are threatened species and should be given protection under the law.

In concept, the draft impact statement appears to be generally accurate, however, there are several details that should be corrected in order for the EIS to be accurate. Balazs in his letter of 23 February 1976 to you has thoroughly detailed these errors.

I would like to direct my comments more towards the listed alternatives.

Alternatives to the Proposed Action:

1. No Action. The biological data shows clearly that these species are threatened and some action must be taken if they are to survive.
2. List One or More Species as "Endangered." The stocks of all three species of turtles appear to be declining rapidly, but do not appear to be in danger of extinction if their exploitation can be stopped.

Alternatives to Proposed Protective Regulations:

1. Take No Action to Change the Proposed Regulations. The regulations are necessary and for the most part well done, but some changes would greatly enhance them if the ultimate goals are to be met.
2. Allow No Taking, Importation or Exploitation Under Any Circumstances. Presumably the ultimate goal of the proposed legislation is to ensure the survival of the involved species. To allow no taking under any circumstances would prevent the scientific research and educational displays that would lead to increased survival rates and increased public awareness that would prevent exploitation and destruction of sea turtle habitat.

SEA LIFE, INCORPORATED:
PARK: Makapuu Point • Waimanalo, Hawaii 96795 • Phone 259-7933 • Telex SLPSO 743-0124
SALES OFFICE: 2222 Kalakaua Avenue • Suite 1309 • Honolulu, Hawaii 96815 • Phone 923-1531

3. Designate Specific Areas Within the Ranges of These Sea Turtles as Critical Habitat. With proper scientific data this should be done and even more stringent controls placed in these areas. However, except for a few exceptions, designation of these areas would be difficult. Certainly an effort should be made to locate these areas and do as much as is possible to protect them.

4. Incidental Catch. Incidental catch of sea turtles should not be allowed except by permit. It is necessary to develop non-destructive fishing methods as quickly as possible. To allow the universal incidental catch would remove the impetus for the development of proper techniques.

5. Accommodate Exceptions to Prohibitions by Regulation Rather Than by Permits. To allow exceptions by regulation would lessen the "red tape" considerably, but it would also destroy all necessary controls. Exceptions should be made by permit.

   Under a permit system, exceptions could be made for necessary scientific research, public display and/or education, mariculture and economic hardship if these are deemed necessary.

   The draft EIS points out how little the economic impact will be. Because of this, it would perhaps be wisest not to make any economic hardship exceptions.

   Exceptions for mariculture would be logical if mariculture was to a point where it is conceivable to breed and raise turtles in captivity without having to harvest them from the wild. The chances of being able to do this within the next decade appear to me to be negligible. Mariculture operations should not be allowed to exist if they must rely on wild stocks of sea turtles.

   Additionally, if mariculture is allowed to exist it will be extremely difficult to distinguish between captive raised turtles and illegally captured wild animals.

6. Prohibit Mariculture. This has been adequately covered in section 5.

7. Allow Subsistence Fishing in Areas of Traditional Sea Turtle Fisheries. This exception raises several practical problems: i.e., determination of when subsistence fishing is actually necessary, how much is necessary for subsistence and how much is for sport, and whether or not subsistence fishing would take place in "critical areas." If there are sufficient funds to adequately research and police subsistence fishing than there is no reason it should not be allowed provided it takes place in areas where existing stocks are plentiful and it does not take place in critical areas such as nesting beaches.

   In Hawaii it is illegal to take turtles except for home consumption and those

turtles taken must be greater than 36" long. While this has prevented the commercial use of turtles it has probably not affected the number or sizes of those taken by sport divers and fisherman. A very small percentage of those taken are reported and the size of many of those reported is not always accurate.

8. Allow for the Commercial or Other Public Display of Threatened Species of Sea Turtles. I have discussed the value of public display and education on many occasions and will only repeat here that one of the best ways of furthering the cause of the sea turtle is to increase the public awareness of its plight. The most efficient way to do that is to use oceanaria, zoos and aquaria. This should be handled by permit so that it can be properly controlled.

In summary, the listing of these species of sea turtles as threatened is certainly a much needed step to ensure the survival of these species. Just listing a species as threatened is not enough. It is also necessary to enforce the protective regulations, promote the necessary scientific research and educate the public.

Sincerely,
SEA LIFE, INCORPORATED

Edward W. Shallenberger

Edward W. Shallenberger, Ph.D
Vice President & Director of Park Operations

EWS:w

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

2-25-76

To : George Balazs

From: Rick Griffs

As promised here is some info on the turtle hearing held today in Washington .... you have until 3-22-76 to submit written testimony. Most testimony today was in favor of the threatened designation w/ the exception as you would expect from the vested interests, i.e. Mariculture ltd., the Shrimp Trawlers, etc.

All the best

TRANSMITTAL FORM CD-52A (10-67)
PRESCRIBED BY DAO 214-2

☆ U.S. GPO: 1975-685-081/1152 Region 6

R. Legg send copy of testimony TO D

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ROCKVILLE, MARYLAND 20852

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DEPARTMENT OF ZOOLOGY

RAMSAY WRIGHT ZOOLOGICAL LABORATORIES
25 HARBORD STREET
TORONTO M5S 1A1, ONTARIO, CANADA

Feb 19th 76.

Dear George,

Just a quick note to ask that you let me know as soon as the situation on field work in Hawaii begins to clarify....I assume you got my letter of Jan 12th. The problem is that it is getting very tight to fit everything in this year, and I wonder, if it is also going to be difficult for you to make arrangments, whether we should aim for another year. On the other hand there is a lot to do, and if it can be arranged this year , it would be good. In particular I think I was overly optimistic about being able to stay as late as 10 days from the end of July. This is most unlikely to be possible now. It might even be difficult to stay more than about 1 week into July this year , so in all I still favour the June time , if the bird problem on Trig is not too serious.

I wonder if you have found any hibernating turtles in your area...you can imagine that was pretty exciting for me as my other research area is hibernation (mammals), and now I find they are both linked.

I have applied to WWF Canada for funds for a newsletter. Hope they will be quicker in answering than Morges.

We certainly have lost a great innovator and original in Tom Harrisson. But I'm not sure that it will just be confusing to people , and ~~not~~ won't mean much to them anyway, to put anything about him on tags. How's the tatoeing business going ? In haste, sincerely,

Nicholas

THE ASSISTANT SECRETARY OF COMMERCE
Washington, D.C. 20230

Mr. George H. Balazs
University of Hawaii at Manoa
Hawaii Institute of Marine Biology
P. O. Box 1346, Coconut Island
Kaneohe, Hawaii 96744

Dear Mr. Balazs:

We are transmitting the enclosed draft environmental impact statement prepared for the Department of Commerce by the Director, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, for your review and comment.

As you may know, Federal guidelines implementing the National Environmental Policy Act require each Federal department to consider the views of appropriate Federal, State, and local agencies before implementing major actions which could significantly affect the human environment. These guidelines were published in the Federal Register (Vol. 39, No. 147) on August 1, 1973.

It appears that implementation of this proposal, which is presently under consideration in the Department of Commerce and the Department of the Interior, would constitute an action covered by the above-cited guidelines. For this reason, I would appreciate any comments you may wish to make on the enclosed statement. To permit expeditious consideration of the proposal, comments, if any, should be returned to the Office of Environmental Affairs no later than March 15, 1976.

If you have any questions about the enclosed statement, please feel free to contact either the official responsible for this program or me. The official responsible is Director Robert W. Schoning, and his telephone number is 202/634-7283. My telephone number is 202/967-4335.

Thank you for your cooperation in this matter.

Sincerely,

Sidney R. Galler

Sidney R. Galler
Deputy Assistant Secretary
for Environmental Affairs

Enclosure

headed by the *Deputy Assistant Secretary for International Economic Policy and Research* who shall report and be responsible to the Assistant Secretary for Domestic and International Business. The Deputy Assistant Secretary shall be assisted by a *Deputy Director*, who shall also perform the functions of the Deputy Assistant Secretary during the latter's absence.

.02 The Bureau of International Economic Policy and Research shall consist of the following principal organizational elements:

Office of International Trade Policy
Office of International Finance and Investment
Office of Competitive Assessment
Office of Economic Research
Office of Foreign Investment in the United States

SECTION 4. FUNCTIONS

The Bureau of International Economic Policy and Research shall:

a. Perform research, analysis, and development of programs and policies relating to international trade, finance, and investment;

b. Initiate and review research studies on developments affecting U.S. trade and commercial interests abroad;

c. Provide statistical information on and analyses of the foreign trade of the U.S. and of foreign countries;

d. Develop and coordinate the formulation of international trade, finance, investment and economic policy within DIBA and develop and implement the Department's position on such U.S. international policies.

e. Represent the Department in international trade and other negotiations and coordinate the Department's interagency policy role in such organizations as the National Security Council, the Council on International Economic Policy, the Office of the Special Trade Representative, and the National Advisory Council on International Monetary and Financial Policies;

f. Obtain, consolidate and analyze information on foreign investment in the United States;

g. Carry out DIBA's responsibilities for the conduct of a study on foreign direct investment; and

h. Assess the competitiveness of U.S. industry in foreign and domestic markets.

SECTION 5. EFFECT ON OTHER ORDERS

This order (in conjunction with DIBA Organization and Function Order 47-2) supersedes DIBA Organization and Function Order 47-1 of November 12, 1973, as amended.

Effective date: December 21, 1975.

DONALD E. JOHNSON,
Acting Assistant Secretary for Domestic and International Business.

[FR Doc.76-3657 Filed 2-5-76;8:45 am]

National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE

Public Meeting

Notice is hereby given of a meeting with State fish and wildlife directors from coastal and Great Lakes States on Tuesday and Wednesday, March 2 and 3, 1976. The meeting will commence at 8:30 a.m. on March 2 and 8:30 a.m. on March 3, in the Woodward Room of the National Wildlife Federation Building, 1412 16th Street NW., Washington, D.C.

The topics to be addressed at the meeting are related to implementation of possible extended U.S. fisheries jurisdiction and will include discussions of Federal grant-in-aid for fisheries programs providing financial assistance to States and other non-Federal interests.

The meeting will be open to the public throughout March 2 and 3. Seating space will be available for approximately 25 persons in addition to those participating in the meeting. The public will be admitted to the extent of seating available on a first come, first served basis. Questions from the public will be permitted during specific periods announced by the Chairman.

Additional information concerning this meeting may be obtained by contacting Mr. Robert W. Schoning, Director, National Marine Fisheries Service, Washington, D.C. 20235. The telephone number is 202-634-7333.

Issued at Washington, D.C., on February 3, 1976.

Dated: February 3, 1976.

JACK W. GEHRINGER,
Deputy Director,
National Marine Fisheries Service.

[FR Doc.76-3655 Filed 2-5-76;8:45 am]

ENDANGERED SPECIES ACT

Public Hearing on Sea Turtles

The informal public hearing on sea turtles (announced August 20, 1975, at 40 F.R. 35401, and rescheduled November 14, 1975, at 40 F.R. 53051) will commence at 10:00 a.m. on February 25, 1976, in the Penthouse Conference Room, Page Building No. 1, 2001 Wisconsin Avenue, NW., Washington, D.C. 20235.

This hearing is to obtain comments on: (1) the proposed listing of the green sea turtle (*Chelonia mydas*), the loggerhead sea turtle (*Caretta caretta*), and the Pacific ridley sea turtle (*Lepidochelys olivacea*) as "threatened" species under the Endangered Species Act of 1973, 16 USC 1531 *et seq.*; (2) the proposed regulations to protect these listed species; and (3) the draft environmental impact statement on the proposed listing and protective action.

The record will remain open until March 22, 1976, for the submission of written comments on the proposed listing and protective regulations and the draft environmental impact statement. This extends the public comment period previously announced to close on March 8, 1976 (40 F.R. 53051). Written comments may be submitted to the Director, National Marine Fisheries Service, 3300 Whitehaven Street, NW., Washington, D.C. 20235.

Dated: February 3, 1976.

JACK W. GEHRINGER,
Deputy Director,
National Marine Fisheries Service.

[FR Doc.76-3621 Filed 2-5-76;8:45 am]

MARINE MAMMALS

Notice of Modification of Permit

Notice is hereby given that, pursuant to the provisions of Sections 216.33 (d) and (e) of the Regulations Governing the Taking and Importing of Marine Mammals (39 F.R. 1851, January 15, 1974), the Scientific Research Permit issued to the Communication Sciences Laboratory, University of Florida, Gainesville, Florida 32601, on July 9, 1974, is modified in the following manner:

The period of validity of the Permit is extended from February 1, 1976, to February 1, 1978. Progress reports are due by March 1 of each year. A final report is due within 90 days of completion of the research, rather than by March 1, 1976.

This modification is effective on the date of publication of this notice in the FEDERAL REGISTER.

The Permit as modified is available for review in the Office of the Director, National Marine Fisheries Service, Department of Commerce, Washington, D.C. 20235, and in the Office of the Regional Director, National Marine Fisheries Service, Southeast Region, Duval Building, 9450 Gandy Boulevard, St. Petersburg, Florida 33702.

Dated: January 19, 1976.

ROBERT W. SCHONING,
Director,
National Marine Fisheries Service.

[FR Doc.76-3593 Filed 2-5-76;8:45 am]

NORTHWEST FISHERIES CENTER

Issuance of Endangered Species Permit

On October 24, 1975, notice was published in the FEDERAL REGISTER (40 F.R. 49812-49813) that an application had been filed with the National Marine Fisheries Service by the Northwest Fisheries Center, National Marine Fisheries Service, Seattle, Washington 98112, for a Scientific Purposes Permit to take and import specimen materials from dead specimens of eight endangered species of cetaceans (blue whale, (*Balaenoptera*

THE UNIVERSITY OF SUSSEX
ARTS BUILDING FALMER BRIGHTON BN1 9QN

THE MASS-OBSERVATION ARCHIVE

Director and Professor:
TOM HARRISSON, D.S.O., O.B.E.

Telephone:
Brighton 66755

George H. Balazs,
Hawii Institute of Marine Biology,
P.O. Box 1346,
Coconut Island,
Kaneohe,
Hawii,
96744

3.2.76

Dear Mr Balazs,

Thank you for your letter addressed to Tom Harrisson. Perhaps you may have heard by now the tragic news that both he and his wife were killed in an accident in Bangkok in the middle of last month.

I am so sorry to be conveying this news to you; it has been a great shock to everyone here at Sussex. I dare say it will take some time for the news to filter through to all Tom's many colleagues and contacts all over the world. I have informed I.U.C.N. in Switzerland. The funeral was held in Brussels last Monday and there is to be a memorial meeting for Tom in London later in March (to be announced in the Times). I understand that his affairs are being taken care of at his home in Brussels by his wife's two daughters.

If I can be of any assistance to you, please do not hesitate to write. I'm afraid, however, that I cannot help you with the queries in your letter.

Yours sincerely,

Dorothy Wainwright.

Dorothy Wainwright,
Secretary to the Archive.

Wayne King

UNIVERSITY OF MINNESOTA
TWIN CITIES

James Ford Bell Museum of Natural History
Minneapolis, Minnesota 55455
(612) 373-3194 (office)
(612) 373-3192 (secretary)

January 22, 1976

Mr. Anthony Mence
Executive Office for the
International Union of the
Conservation of Nature
IUCN
Morges, SWITZERLAND

Dear Mr. Mence:

Professor Archie Carr suggested that I write to you concerning a crisis with the populations of green sea turtles Chelonia mydas carrinegra in the Gulf of California.

We have discovered that a population of green sea turtles in the Gulf of California "hibernates"(!) and hence is physiologically unique. This adaptation, though, makes these animals extremely vulnerable to overkill since they are helpless as they lie about on the ocean bottom. The Mexican fishermen have discovered this and are plucking them off the sea floor with scuba equipment.

In a relatively short time the Mexican fishermen seem to have wiped out the populations near their base of operations, Kino Bay (Fig. 1 in the attached article). They now must travel ± 150 km to find turtles. You will appreciate that this is a very rapid rate of decimation.

The Mexican fishermen are now buying scuba equipment and this will greatly increase the efficiency of their hunting. With the methods used to date dives are short since carbon monoxide and gasoline fumes give them headaches after a few hours. There are over 12 weeks left this year in which the turtles are vulnerable and can be plucked off the ocean floor.

Rapid action is called for. Dr. Archie Carr suggested that I inform you that the situation justifies crisis action of the IUCN Survival Service Commission. He will send you a separate letter.

Our research in the area is ongoing and by requesting immediate action we are threatening our own projects, but we do feel strongly that this situation is desperate. In any event, we do feel that immediate action of some sort should be taken to save this unique population of the green sea turtle.

Sincerely,

Philip J. Regal

Philip J. Regal
Associate Professor
Department of Zoology
Department of Ecology &
Behavioral Biology

UNIVERSITY OF MINNESOTA
TWIN CITIES

James Ford Bell Museum of Natural History
Minneapolis, Minnesota 55455

January 22, 1976

Director of the National Marine Fish Service
National Oceanic and Atmospheric Administration
U. S. Department of Commerce
Washington D.C.

Dear Sir:

I wish to call a most urgent matter to your attention. Will you please make this letter and the attached copy of an article published in Science for January 23, 1976 (pp. 283-285) a part of the hearing record on the proposed listing of the green sea turtle as a threatened or endangered species.

We have discovered that some populations of Chelonia mydas "hibernate" on the sea bottom. In this helpless state these unique populations can be easily wiped out. Without protection modern technology will certainly allow their rapid extinction.

Indeed using diving equipment the Mexican fishermen have recently discovered these animals and are at the moment rapidly wiping them out. The center of operation is Kino Bay (Fig. 1) and in only a few months of hunting (combining seasons) known populations near Kino Bay have been wiped out and the fishermen now travel up to 150 km to gather up turtles. This is a disturbing rate of exploitation, to say the least.

It is even more disturbing when one realizes that the fishermen have been slowed down by their primitive diving equipment so that monoxide and gasoline fumes give them headaches and they must limit the time of their dives. Many fishermen will be purchasing scuba equipment this year and with this improved diving capacity there is little doubt that the turtles that remain will be wiped out rapidly.

Space did not permit us to make our case in full in the published article. Please, though, refer to the foot notes where we were able to include some supporting data in the "fine print". I might also mention that our research project is ongoing.

There are more than twelve weeks left in this year, during which the turtles are exceptionally vulnerable. Inestimable damage can be done in this time. I stress once again that immediate action is necessary. The decline even of less vulnerable populations of green turtles all over the world has been well documented by a number of scholars so I need not belabor the crisis nature of this situation further.

Please feel free to call upon me or Dr. Felger (602/885-7670) if we can supply you with any further information.

Sincerely,

Philip J Regal

Philip J. Regal
Associate Professor
Department of Zoology
Department of Ecology &
Behavioral Biology
(612) 373-3194 (office)
(612) 373-3192 (secretary)

PJR:ctg

Enclosure
cc: Biologo Rene Marcas
Wayne King
Archie Carr

GEORGE R. ARIYOSHI
GOVERNOR OF HAWAII

DIVISIONS:
CONVEYANCES
FISH AND GAME
FORESTRY
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FISH AND GAME
1179 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

January 29, 1976

Mr. George H. Balazs
P. O. Box 1346
Kaneohe, Hawaii

Dear Mr. Balazs:

On January 15, 1976 we received copies of your letter dated January 9, 1976 to Mr. Peter Rotsel, Director of Food and Beverage, Top of the I Restaurant, 1777 Ala Moana Boulevard, and Mr. Rotsel's letter to you dated January 2, 1976 concerning your inquiry by letter dated December 29, 1975 regarding the serving of canned turtle broth on New Year's Eve menu at the Top of the I.

We appreciate your concern regarding Mr. Rotsel's reference to the serving of turtle broth "made from the Leatherback Turtle" and "that the Leatherback is not an endangered species and is, in fact, fished commercially in certain areas of the world including, I believe, on a small scale in Hawaii."

Mr. Rotsel's letter prompted an investigation. It might interest you to know that "Leatherback Turtle" soup was not entered on the menu, nor was it in fact, served on New Year's Eve at the Top of the I. Statements in his letter were erroneous. Mr. Rotsel could clear this matter up for you.

Yours truly,

E K Burke

EUGENE K. BURKE, Chief
Fish & Wildlife Enforcement

EKB:rfm

cc: U.S.F.W.S., Matt Dillon
Hawaii Audubon Society
Mr. Rotsel

EDUCATION • RESEARCH • CONSERVATION

NEW YORK ZOOLOGICAL SOCIETY

THE ZOOLOGICAL PARK

Telephone: WEllington 3-1500
Cable Address: ZOOPARK NEW YORK

Bronx Park
Bronx, N.Y. 10460

28 January 1976

George Balazs
University of Hawaii at Manoa
Hawaii Institute of Marine Biology
P.O. Box 1346
Coconut Island
Kaneohe, Hawaii 96744

Dear George:

You may not have heard that Tom Harrisson and his wife were killed in a traffic accident in Thailand about two weeks ago.

Sincerely,

Wayne

Wayne King

/db

EDUCATION • RESEARCH • CONSERVATION

NEW YORK ZOOLOGICAL SOCIETY

THE ZOOLOGICAL PARK

Telephone: WEllington 3-1500
Cable Address: ZOOPARK NEW YORK

Bronx Park
Bronx, N.Y. 10460

27 January 1976

John Perry
Assistant Director for Conservation
National Zoological Park
Washington, D.C. 20009

Dear John:

I am enclosing copies of recent correspondence from Dr. Philip Regal concerning the decimation of the green sea turtles in the Gulf of California. As the individual charged with liaison between the North American NGO's and IUCN headquarters, I would appreciate it if you could urge a high level intercession from the acting director general of IUCN, its president, or a suitably high official in WWF with the Mexican authorities in order to save this unique sea turtle population from extinction. This is the only population of any sea turtle that is known to hibernate. It is therefore physiologically and behaviorally unique. The sub-species, Chelonia mydas carrinegra, was only described about fifteen years ago. It would be a shame if they became extinct in so short a period of time.

What is particularly distressing to me personally is that a good bit of the meat from this population is presently illegally entering the state of California. Although California has a ban on the sale of sea turtle meat, it does permit farm raised products from Mariculture Limited to be sold there. However, considerable quantities of green turtle meat are being smuggled across the border from Mexico. And while all this is happening, the Department of Commerce and Department of Interior twiddle their thumbs and refuse to act on my petition to list this critically endangered species on the U.S. Endangered Species List.

I cannot emphasize the urgency with which we need to act on protecting this population.

Sincerely,

FWK:mm

F. Wayne King
Director of Zoology and
Conservation

CC:

The Senate
The Eighth Legislature
of the
State of Hawaii

HONOLULU, HAWAII

January 26, 1976

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

Dear George:

Enclosed is a copy of my letter to President Matsuda. Let me know as soon as you hear anything, and we'll vice versa.

I'm asking Nancy Mower to call you to find out what we can do in connection with the loophole Regulation 11 evidently offers and will take whatever action you feel would be most effective.

All good wishes,

Jean

JEAN KING
Chairman
Committee on Ecology, Environment and Recreation

JK:lr

The Senate
The Eighth Legislature
of the
State of Hawaii

HONOLULU, HAWAII

January 26, 1976

Dr. Fujio Matsuda
University of Hawaii
Bachman Hall 207
Honolulu, Hawaii 96822

Dear Dr. Matsuda:

During the 1975 session the State Legislature appropriated $50,000 for a three-year study of the green sea turtle in the Hawaiian Archipelago.

As you know the green sea turtle in Hawaii is unique because it comprises the only remaining population of this animal in the United States, and the only one in existence which is under the jurisdiction of a single government at both feeding and breeding grounds.

Even for those who find no special appeal in this particular manifestation of the richness and variety of creatures who inhabit this earth with us, there is a compelling reason for taking immediate positive action to insure that it does not disappear from the waters of the world.

This sea animal, if properly managed, has the potential for providing a renewable source of protein to the people of our State, who have been traditionally dependent on the sea for food supplies.

However, the green sea turtle native to the Hawaiian Archipelago is rapidly declining due to the fact that the habitat has been disturbed and/or destroyed, and the animal has been exploited for meat and other products.

If we are to successfully utilize this valuable resource on a long term basis, sufficient biological

knowledge must be available to ensure wise management and conservation of the population.

If this management study does not begin soon, it might be too late to save this animal, which will prove to be a valuable resource to Hawaii.

May I urge you to act as expeditiously as possible to release these funds.

With all good wishes,

JEAN KING
Chairman
Committee on Ecology, Environment and Recreation

JK:lr

MEMO from LCDR P. L. HOOPER JR.

TO GEORGE H. BALAZS DATE 1/15/76 TIME

SUBJECT Dear George,

I apologize for the delay in replying to your memo, but I am not at Johnston Island anymore. I was transferred to here in Yap on 19 October.

I spoke to several people about the turtle parts in sharks before I left, assumed they would let you know.

I suggest you write Colonel Gilbert Martinez, Commander Johnston Atoll, APO San Francisco 96305, about this. I am sure that Gil would cooperate on this. He is also the one who would clear a visit for you. Hope this is of some help. Any information that you would like from here, let me know.

Larry Hooper

☐ REPLY ☐ INITIAL AND RETURN ☐ SEE ME

SLP 259-7933

EDUCATION • RESEARCH • CONSERVATION

NEW YORK ZOOLOGICAL SOCIETY

THE ZOOLOGICAL PARK

Telephone: WEllington 3-1500
Cable Address: ZOOPARK NEW YORK

Bronx Park
Bronx, N.Y. 10460

November 19, 1975

Mr. George H. Balazs
University of Hawaii at Manoa
Hawaii Institute of Marine Biology
P.O.Box 1346 - Coconut Island
Kaneohe, Hawaii 96744

Dear George:

I will, indeed, be at the 3 December public hearing in Washington which has been called to discuss the listing of the sea turtles. If you should come to Washington I'd be happy to see you there but I don't think it is necessary for you to come, in fact I think it probably would be a waste of time. From all indications the Department of Commerce is stalling in an effort to avoid listing the sea turtle. The Department of the Interior has officially opposed this hearing. They wrote a letter to Commerce back in July saying that they saw no need for a public hearing, that anything that a person could say verbally at the hearing could have been said in writing during the period of public comment following the proposed listing that was published in the Federal Register. Commerce ignored Interior's letter and unilaterally announced that they were going to produce an environmental impact statement. The story they are telling in Washington is that they called the hearing at the request of the Sea Life Park people in Hawaii. It seems that Sea Life Park is worried that they will not be able to obtain exhibit specimens if the turtle is listed.

I will be happy to relate what happened at the London meeting on Mariculture as soon as I get back from the Dusseldorf meeting on Mariculture that is supposed to be held next week. I can report that at the London meeting the Receiver for Mariculture appointed by First National City Bank reported that he had cut off all connections with Naylor and Fisher. He is trying to find a buyer for the corporation so that the bank can recover their investment. They presented a series of papers that confirmed all of the allegations that Mike Goodier made concerning the lies and misinformation turned out by the previous owners of Mariculture. However, they now claim that they are going to be honest and do good

things for the turtles, and have asked for the IUCN approval of the operation. IUCN, in spite of arguments advanced by Archie and me, decided to give them one year's grace in order to prove their good will. So now it's off to Dusseldorf where it is my understanding that a group of Germans are waiting to buy the company. More later.

Sincerely,

FWK:mm

F. Wayne King

University of Toronto
TORONTO, CANADA
M5S 1A1

DEPARTMENT OF PSYCHOLOGY

September 4, 1975

Dr. Archie Carr
Department of Zoology
University of Florida
Gainsville, Florida
32601, U.S.A.

Dear Archie:

You did well not to come on the alpha helix expedition, as refusal of permission to enter Sabah prevented much serious scientific work. I did however visit there, and in mainland Malaysia as a tourist, and came away more convinced that there is a need for communication between those concerned with marine turtles. I was disappointed therefore that Tony Mence has run into difficulties in financing a newsletter, though I'm sure he has tried his best.

The kinds of things this might contain would be, for example, a definite statement from George Hughes as to why he gave up plastic tags and switched to monel, followed by a similar one from the people at Trengganu as to why they gave up monel tags and switched to plastic! This whole issue needs airing. Then a letter would help avoid the absurd situation whereby the IUCN have produced a paper on leatherbacks (Pritchard) and the Trengganu authorities do not even know about it. Another example, there is likely to be a large wave of emigration from France to French Guiana, according to the press. It needs someone to get in touch with the authorities there and offer input, show interest, in how this might affect Organabo beach. It would be best for such a newsletter to go to a much wider group than the immediate turtle group, to Fisheries officers, private individuals, any one who had contact with sea turtles. You must have a good source of such people from your correspondence files. Possibly others do not think some channel of communication would be useful. Neither of the co-chairmen have come up with names and addresses of recipients for the letter, or any items.

If, however, a letter is considered valuable, then the question is how to go about it. Tony Mence's suggestion that IUCN do the printing and mailing is a very second best solution. Not only does it impose an additional stage in the whole process, but it makes no allowances for costs which occur before the letter gets to that stage. (Ideally of course some modest sum toward occassional travel would help the person running the letter, as it is then that one learns what the problems are and makes the useful contacts. Something like this from IUCN is clearly out). At the moment my grant is overspent, and I am in difficulties trying to avoid firing the people I have working in my group. Even if it were permitted, I don't have funds there.

An alternative is that I fund the newsletter myself as best I can as my own contribution towards conservation. If I did this I would not want to pay for the privelige of having lead weights tied round my wrists and ankles by IUCN.

Another possible idea worth exploring perhaps is whether CCC or N.Y. Zoological Society, or other source, would support a newsletter. I think we

have to ask what IUCN has really achieved as regards turtle conservation recently. A tardy set of principles on the mariculture, only when they were forced into it by a request for endorsement by Mariculture. In theory the IUCN can provide money and status. The former does not seem forthcoming at the moment. It is probably easier to get a $100,000 out of IUCN-WWF to buy a helicopter to lift elephants from one valley to the next than get a $1000 out of them for fostering communication on the widely distributed turtles.

They don't help much on the status issue either. For instance George Balasz still is not certain whether or not he is a member of the group. These kinds of things help strengthen one's hand on local issues, funding at the local level, or any action one might want to take. They cost IUCN nothing. And I am not sure for that matter whether I am secretary of this group or not. Again this could help if it came to approaching WWF Canada another mysterious organization, and in other actions. George and I are also frustrated on the pamphlet (called for in the principles). We have done some of the ground-work on this, and had thought a copy could go out with the newsletter. Local officials could then order it, or modify it for their own use, it would be something to start with. I had in mind to do this with the newsletter, as it would probably take a year to discover from IUCN that they had not after all got the funds. It is more than 2 years since I offered to do the newsletter!

The disadvantage of my other suggestions is that the newsletter then comes from a N. American organization. It would be better if it came from an international one and one with prestige like IUCN. But what is the value of prestige if it is not used. I'm not trying to take out my frustrations on you but more to ask, if the IUCN group is not really achieving anything, maybe we, or some of us, should try something else? I would really like your views on all this. As it is, I doubt if I am fulfilling any useful function and should bow out of this group.

I hope you had a good season at Tortuguero. One heartening thing I saw was piles of confiscated stuffed turtles in Hawaii; at least the endangered species act was being used. Stanley de Silva and I also managed to track a couple of hatchlings over 2 hrs. (not by swimming!) Our limted data suggest that there is a lot more to it than Frick's excellent start on the problem suggests, as indeed do her own data.

Very best wishes,

Nicholas Mrosovsky

NM:bh

Copies Wayne King
George Balasz
Tom Harrison.

UNION INTERNATIONALE POUR LA CONSERVATION DE LA NATURE ET DE SES RESSOURCES
INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES
1110 MORGES, SUISSE (SWITZERLAND) ☎ (021) 71 44 01 TELEGRAMMES: UNICORN MORGES

Dr. Nicholas Mrosovsky
Department of Zoology
University of Toronto
Toronto
Canada

16th July, 1975

Dear Nicholas,

I am sorry to see that it is now for nearly two months that I have been owing you a reply to your letter of 15 May 1975 about the turtle newsletter.

The main reason for the delay is that I have been living in hope that the coffers of World Wildlife Fund (on which we depend for our pocket money) might become a little more turgid under the stimulus of spring and summer. Perhaps as a result of global melancholia, they have remained in a state of most regrettable detumescence and it is evident that they are likely to remain so.

I have to explain this to you because any arrangement of the kind you have suggested whereby a grant is payable to the University to cover overheads of newsletter publication has to be regarded as a project competing for funding with all other conservation projects which have been received. I recently presented the newsletter grant proposal to the Joint Project Operations Group at the time I judged most favourable, but the response was clearly negative since there were many other projects much more conducive to parting the man in the street from his dollars.

I am afraid this means that any idea of funding the newsletter outside the IUCN Secretariat will have to be abandoned, including of course any question of a re-imbursement operation of the kind which you have already deemed unsuitable.

In action terms, what this means is that we are reduced to using the IUCN Secretariat as the issuing agent for any newsletter. This would imply that material for the newsletter would need to be sent here for putting on stencil, running off and circulation.

.../

Dr. Nicholas Mrosovsky 16th July, 1975

Do you think that a methodology could be worked out for dealing with the newsletter in this way?

With kind regards,

Yours sincerely,

Tony

A. J. Mence
Executive Officer
Survival Service Commission

AJM/MF/1

RA/SC

cc: ACarr
THarrisson

University of Toronto
TORONTO, CANADA
M5S 1A1

DEPARTMENT OF PSYCHOLOGY

October 24, 1975

G.H. Balazs
Hawaii Institute of Marine Biology
P.O. Box 1346
Kaneohe, Hawaii 96744
U.S.A.

Dear George:

I am not sure when this will reach you, as we have a mail strike here, maybe prolonged. But there is nothing urgent to reply to. IUCN is still fiddling around, and I have put off further work on a pamphlet till things are cleared up. There is enough material for a starter on a newsletter, but that is being held too. But I would like to know sometime from you if any further advance was made on the tag corrosion problem. I have copies of the correspondence you sent me up to 30th April 75. If Haas ever actually sent the incomel tags, or anything progressed after this, it would be nice to know. I will do a short bit on the tag information I have got from various people, boiling down the substance of the correspondence you sent me to something shorter, and suggesting anyone concerned gets into direct contact with you for further information.

Another thing it would interest me to have your views on this: it looks as if I will have limited time for field work next year, but what time there is might be in June, 2nd half, just the best time for your island populations. Suppose I could get myself to Oahu, would you

1. think if appropriate and like to do some cooperative work
2. be able to arrange the transport to French Frigate Shoals and get through any intervening red tape?
3. consider whether the following expt. would interfere with anything you are doing there.

Nest site preferences:

Very little is known about this. There is the general idea that lights put off nesting turtles, and that vegetation (see Bustard's book) may attract them. No tests have actually been done. A small island nesting beach that only has low vegetation offers an ideal opportunity to test these ideas, because introduction of cues cause large alterations relative to the natural cues present, which they do not do on a mainland beach with much vegetation already present. It is proposed therefore to drive about 6 poles into the ground on the crest of the island, and stretch between them black cloth, or some similar dark object (maybe something ~~the~~ to let the wind through better would be preferable). Ideally this strip of cloth would stretch the Birds length of about half the island, but less would be acceptable. The cloth would be removed on alternate nights, or on a random schedule. One would simply score the number of turtles nesting each night, and whether or not on the portion of the island close to the cloth. The answers would tell a) whether turtles tend to ~~sight there~~ site their nest near dark objects b) whether dark objects tend to attract turtles into a beach in the first place (i.e. whether more turtles nest on nights on which island has the prominent cue visible.) In the exact design of the experiment some thought should be given to problem of turtles not nesting on some night, having a greater urge to nest

on the next night.

With about 8 turtles coming up a night on average in June, in two weeks one could expect a total of 112. Say data on one night is lost for some reason, in round figures one might have a 100 nests. By chi squared it should still give have enough animals to see what is happening. (If same turtles nested twice, some different statistics could be used).

	No cloth	Cloth present	
Nests in half of beach by cloth			
Nests in half of beach away from cloth			
			Total c. 100

5,000 permits

I don't see how a few poles and a temporary stretch of cloth could have any untoward effects. The experiment should not interfere with other work though one might want to take the cloth down in the day.

There are one or two problems I can forsee:

1. If one wanted to have a pretty massive visual cue, something like half the length of the island, it would perhaps need more black cloth than weight allowances permit. One could calculate approx. weights. Maybe there are boats that go out that way also?

2. Stout poles, so that cloth can be a few feet high, and easily put up and down, could be a transport problem.

3. Would it frighten the seals, disturb the ecology of animals other than turtles?

4. Can coastguard be pinned down at all in advance to dates of flights, or approximate dates, there being only a limited amount of time I can be away for, say 2 weeks on the turtle, island itself.

presently - flights every Thursday

In addition, we could quite easily do the temperature measurements, and I could bring all necessary thermometers. Tagging and other work could go on, and I might like to take a close look at some of the tracks on animals returning to the sea.

Well, this is just an idea, maybe a pipe dream, but it did sound to be a place with some special potentials and also attractions. I know I can rely on you for frank reactions and to let me know if you think it a poor idea for whatever reason.

Best regards,

Nicholas

Nicholas Mrosovsky

NM:bh

MUZIUM BRUNEI
KOTA BATU,
BANDAR SERI BEGAWAN,
BRUNEI.

TALIPON: PENGARAH 2952 : PEJABAT 4545
SURAT KAMI:

TARIKH 8. XI. 75

Dear Guy

I went to 58 Belmont Road. It is just near where I was staying, in the "best" (i.e. richest) part of Singapore — which is very rich!

It is occupied by 2 or 3 European executives,* perhaps one Chinese also (probably not — unless, of course, as servant, amah or chauffeur, using as cover). It is certainly a "respectable" address, far from any business area, Chinese shophouse etc (it is a COMPLETELY residential suburb).

You provided no data basis upon which I could go further in the few hours I had in Singapore. I shall be back there after Xmas. But do not think you will get anywhere on that line. There should

(* The lighters are often split nowadays.)

MUZIUM BRUNEI
KOTA BATU,
BANDAR SERI BEGAWAN,
BRUNEI.

be the name of a firm, or a person. How can an address of that sort be an agent. Pity your info. was so weak.

I hope to be up at Sabah next week & see Stanley. We are preparing a paper on egg teasers in S.E. Asia, & the Pleistocene fauna perhaps relating thereto (very bit)...

After Xmas I go to Siam & Burma via Malaya (conservation lecture) & shall not be back in Europe until early Feb (meeting at Morges).

I don't think WWF can finance Hawaii trip from Europe end. The U.S. appeal (WWF (ranch)) in U.S. should surely do that.

Love TONY. Are you really so poor in the Institute?

Ever TONY

Defenders of Wildlife

2000 N STREET, N.W., SUITE 201 • WASHINGTON, D. C. 20036 • Telephone: 202 223-1993

Publishers of DEFENDERS OF WILDLIFE NEWS

July 17, 1975

Mr. George Balazs
Hawaii Institute of Marine Biology
Box 1346
Kaneohe, Hawaii 96744

Dear Mr. Balazs:

Confirming our phone conversation, we are happy you will join the Hawaii issue with a green turtle story.

You are acquainted with past issues of the magazine for hints on writing style. If you can add the personal touch, the first person field experience, it will no doubt makes things more interesting. Also, are the turtles nesting habitats sufficiently protected? 1800 words, more or less, with a supply of slides would be just fine. As I said on the phone, deadlines occur around July 31, but if you need more time, of course, we can comply. This article will be one of three other short features, the resting being the monk seal, the Hawaiian hoary bat and the nene.

Am including some questions that have me curious:

Where are the nesting beaches in Hawaii?
Where else than Hawaii do they nest?
Why is this turtle called "Green?"

Look forward to receiving your contribution.

Sincerely,

Delphine

Delphine Haley

2822 Boyer East
Houseboat 10
Seattle, Washington 98102 (206) 323-9486

11 January 1976

Dear George:

Thank you for sending me Peter Rotsel's 2 January 1976 letter and your 9 January reply.

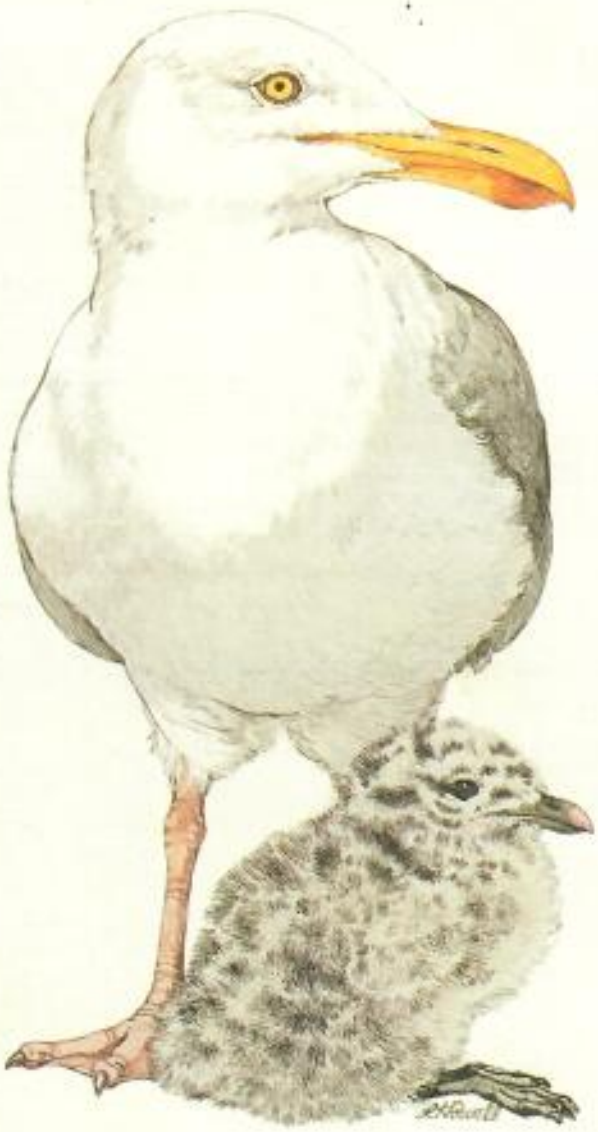
Since I have backlog of materials for the 'ELEPAIO, it'll take six to seven months before I can publish any article, unless it's an urgent message to the members, and since I lack the experience to judge the importance of letters, is it possible for you to keep the letters until you have the time to summarize your activities and send me a single article similar to the most current one on the Sea Turtle Conservation? In this way you'll have the background of the letters and will be able to publicize only those of most importance to the conservation cause and yet embarrass the least number of individuals. I hope this arrangement is agreeable with you.

Though I won't be able to use these letters until after May or June, do you still want me to publish them whenever space is available?

I have noticed an address change. Shall I continue sending the 'ELEPAIO to Box 8195?

MAHALO NUI LOA for your understanding and generous KOKUA.

Aloha,



Herring Gull

A childhood joy, the familiar Herring Gull is found on both the East and West coasts patrolling beaches, escorting fishing boats in and out of harbor, following the tides in hopes of its scavengers' reward. Commonly seen soaring high overland, the gull's loud, clear, bugle-like call is as familiar as the sound of the sea itself.

These sturdy, robust birds nest in large colonies, often numbering as many as 1,000 gulls, in nests composed of seaweed and collected litter. Both the male and female gull share domestic duties, with the male scavenging and feeding the young gull his digested food.

At six weeks of age the nestling will be on his own, perhaps to live for as long as 28 years. By his fourth autumn he will have acquired his adult plumage and reached his full growth of 22 to 26 inches.

NORTH AMERICAN BIRDS
ECOLOGY CARDS
100% RECYCLED PAPER

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TELEPHONE

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PERTH

The University of Western Australia

Department of Geology

YOUR REFERENCE.....

OUR REFERENCE.....
(IN REPLY PLEASE QUOTE)

Nedlands, W.A. 6009

15th January, 1976

Mr George Balazs,
Hawaii Institute of Marine Biology,
University of Hawaii,
Kaneohe,
HAWAII 96744.

Dear George,

Thank you so much for the advance copy of your "Biological conservation" paper and also for the heartrending article in "Elepaio". No, I haven't lost interest in our subject, not at all. But I must confess that the increasing amount of data (but not yet enough!) provided both from your paper and from several recent papers on the geology/geophysics of the Hawaii chain adds to my confusion. The two-way migration pattern, I feel, is the key facet of the problem.

Apart from the biological gaps you mention, there is also the question of precise genetic affinity between the Hawaiian subpopulation and other Pacific subpopulations. Would refined tools, e.g. electrophoretic comparisons, come close to proving the relationship between Hawaiian and eastern Pacific groups (*C. mydas agassizi*)? If this were so, it would have strong tectonic implications. What about the relationship of the Tuamoto (i.e. the chain east of Tahiti) turtles? Are there turtles about Easter Island? A point of all this is to try to guess at the origin of the Hawaii turtles -- if they came from the eastern Central Americas; if so, what is the genetic divergence between the Hawaiian turtles and those of the eastern Pacific?

The latest dope on the development of the Hawaiian chain confirms the idea of fairly steady growth from NW to SE. This does not mean, of course, that turtle havens, whether for breeding or pasture, were absolutely progressively displaced/lost from NW to SE. Frigate Shoals is an intriguing puzzle.

I need more time! Incidentally, I like the idea of a degree of fixation on the pasture grounds: I used it

to suggest a clue to the Surinam/Ascension subpopulations, which share pasture residence grounds but migrate in opposite directions to breed. I have urged Archie Carr to arrange for study of the genetic affinities between these two. I'll bet my bottom dollar they have marked differences.

Will keep in touch. Rest assured, I am puzzling actively!

Yours sincerely,

Patrick C.

(P. J. Coleman)
Reader in Geology

Friends of the Earth Limited, 9 Poland Street, London W1V 3DG. Tel: 01-434 1684.

note! bottom put here sent 12/28/76

Friends of the Earth

Yew Tree Cottage
Chaffcombe
Near Chard
Somerset.

January 7, 1976

Mr Balazs, Director
The Caribbean Conservation Corporation
P.O. Box 3048
Tallahassee
Florida 32303
USA.

Dear Mr Balazs,

Wayne King may have told you that we wrote to him last month outlining our proposals for a campaign to ban the import of marine turtle products into major consumer countries. He suggested that as most of the sea turtle products imported by these countries come from the Caribbean area we should ask you if you would consider helping to fund the campaign.

I do not know if Dr King has sent you a copy of my letter containing

our proposals, but in case he has not, I will briefly describe them:- FOE Ltd has been working for a ban on the import of the products derived from endangered species for five years. As a result of our efforts (and those of other conservation bodies) legislation has been introduced to control imports of certain animal products - mainly those of the spotted cats, tigers and baleen whales. There are, however, outstanding omissions in the Government's legislation which we hope to rectify. For example, there are no import restrictions on made up crocodile goods or turtle products (although raw crocodile skins and unworked tortoiseshell require import licences), raw or made up otter skins and vicuna cloth or garments.

Initially we plan to concentrate on controlling the trade in the products of sea turtles. We have been influenced to select turtles as our prime objective by Professor Tom Harrisson who has promised to furnish us with information and give us guidance. We would like to launch the campaign this spring in the UK and then encourage groups in northern Europe and the USA to follow suit.

The main purpose of the campaign would be to end the trade in <u>all</u> sea turtle products until such time that bona fide turtle farms exist and can prove they are able to supply a luxury international market without harming any wild populations - either directly or indirectly by encouraging illegal killing. We would campaign on two levels: 1) by raising the public's awareness of the issues and 2) by persuading the decision makers to take the necessary measures. In order to influence public opinion we would need to produce a campaign manual and a poster. Unfortunately FOE Ltd hasn't the money to produce either and we would be very grateful if you would consider funding such a campaign. I do not know how much a manual or poster would cost to produce but obviously much would depend on the quality

UNIVERSITY of TORONTO RAMSAY WRIGHT ZOOLOGICAL LABORATORIES
Department of Zoology 25 HARBORD STREET TORONTO M5S 1A1, ONTARIO, CANADA

January 12, 1976

Mr. George H. Balazs,
University of Hawaii at Manoa
Hawaii Institute of Marine Biology
P.O. Box 1346, Coconut Island,
Kaneohe, Hawaii 96744,
U.S.A.

Dear George,

Thanks for your two letters, which reached me about the same time. Your interpretation of the stalling in Washington was interesting. The latest information on tags will be useful too, if the newsletter gets off the ground. The latest position is that IUCN are going to reconstitute a new turtle group of some kind as far as I can tell from their memos, and they have told me that I will be secretary or something like that. This is good enough for me to go ahead and apply to WWF Canada for funds to run the letter. If I get funds, then the newsletter can start quite rapidly. I did not get much out of Carr, except a vague note encouraging me to persevere. He did not respond to my request to send names and addresses of people who should receive the letter. He must know of many people from his correspondence files. I have generated about 100 names myself, and if you have names and addresses of additional people who should get any newsletter if it comes out, they would be appreciated. So the overall position is that things edge forward. Neither Mence nor Tom have told me just what the latest Mariculture position is. I cannot lay hands on the Ponape leatherback release, but I have it somewhere. I will work through a pile of stuff I have on leatherbacks, and send you a copy soon I hope. It is good to hear the paper for Biol. Conserv. is on its way, that is nice stuff about the 2-way migration. I'm sure also that your growth data will be important. Since the changes are so small, I do have some doubts about accuracy when taken by different people, so that it was good that you yourself managed to catch 2 more tagged animals. If either of you can build up more of these data, or can extend the measurements over greater time spans, then the accuracy problem may become less important. On the sound experiment, I think it is known quite well what a green turtle can detect from Wever's work (? with Ridgeway, Proc. Nat. Acad. Sci. 1969, p 884). This is electrophysiological work, and of course that is not behaviour, so the experiment you propose may still have its value. If you want to check on frequency, you probably have to have sounds that are very pure, and I do not know whether a tape recorded sound will give that. Perhaps you should consult some one who knows sound. Tapes maybe ok for all I know. Tuning fork, or similar oscillator, if it is

Dillon
SEAORA
Mackook
Zeigler
McCoy

....2/

loud enough, might be another possibility. Presumably, whatever you used, you would try to play it at a standard distance from the ear, so that it was frequency rather than intensity that was varied. I think that responds to all your points, except on the possibility of a visit.

I can certainly wait till March before making definite plans. That sounds a good idea. Also I am somewhat flexible about time of visit, in that this could be moved later from the last 2 weeks in June, into July. However, I could not move it as far as the end of July. I would probably have to be back in Toronto at least 10 days before the end of July, at the latest, the exact date isn't definite yet. So we still have some room for manoevre.

I agree that false crawls could be counted. Also, yes, built in bio-altimeter is what its about. I think it is a matter of testing a specific hypothesis about such an altmimeter. After all, vegetation means that the land was high enough to escape the tides. And dark masses mean either high land, or vegetation. So if the laying turtle responds positively toward dark masses, it would in normal circumstances tend to take the animal to higher ground.

So that leaves the difficult question of how one could best run such an experiment in the circumstances. In some ways Trig sounds good, as you say the natural vegetation is even less, so that any introduced cue would make more of a difference. The disadvantage is the small numbers nesting, but if the effects were reasonably strong, 3-4 a night could be enough still. Do you think that:

a) we could get a reasonably large visual stimulus up on Trig in June? 3 ft high is minimal I would guess. How long an island is Trig? Could one get enough black material there to have something running the length of half this island?

b) have you had any thoughts on specifics, like could we get stakes there to attach the cloth to, and what kind of cloth would be best? High winds could be a problem, maybe netting, or several layers of netting? But netting is not so dark.

c) Am I right in assuming that Trig is close to East, and that some sort of boat is available? I would not mind staying there. If the experiment worked out, it might be useful even to have someone re-bury any eggs that were laid in a poor place on account of the stimulus.

d) do you know what the maximum elevation on the high part of Trig is? If one could get something on the low part that stretched up higher than the high part, that might be a guide for how high we need a stimulus.

As you can see, I somewhat favour the June time, for reasons of feasibility in my schedule. 3-4 per night in June on Trig is not much different from 4-5 in July on East. In any case it would still be possible to take temperature measurements on baskers, worthwhile in itself. Also I don't fully appreciate the exact nature of the problem with birds. Is it that the albatrosses might not see the cloth, or if they did, might be put off from nesting? collisions

Thanks for the slide. The tattoo method sounds well worth exploring. Are you keeping them in tanks initially to observe, or letting them go?

Keep in touch and best regards to you and Linda,

Yours,

Nicholas Mrosovsky.

NM/cl

.TION · RESEARCH · CONSERVATION

NEW YORK ZOOLOGICAL SOCIETY

THE ZOOLOGICAL PARK

Telephone: WEllington 3-1500
Cable Address: ZOOPARK NEW YORK

Bronx Park
Bronx, N.Y. 10460

8 December 1975

Angela King
Yew Tree Cottage
Chaffcombe
Nr. Chard
Somerset

Dear Miss King:

I am more than a little confused by your Department of the Environment's interim proposal to implement the Washington Convention. Their intention to control the imports of the raw or salted skins of crocodiles, lizards and snakes includes the leather made from those species. Of course, I do not have a copy of the regulations they intend to promulgate but I would think that "leather" would include any products made from the leather. In the U.S. we could probably take an importer of leather products to court for violation of such a regulation, unless the regulation specifically stated that leather did not include finished products.

I am delighted to hear that you are planning a spring campaign to end the importation and/or sale of sea turtle products. Tom Harrisson is an old friend of mine and an excellent turtle conservationist. Normally, I would encourage you to submit a proposal for funding for your campaign to the New York Zoological Society, however, in this instance I think there might be two better sources available. I would suggest that you submit a proposal to the Fauna Preservation Society (c/o Zoological Society of London, Regent's Park, London NW1 4RY) or the Caribbean Conservation Corporation (P.O. Box 3048, Tallahassee, Florida 32303). The Fauna Preservation Society, of course, you are familiar with. The Caribbean Conservation Corporation is the group which backs

Archie Carr's research and conservation work on the sea turtle in the Caribbean. In as much as most of the sea turtle products that reach the U.S. and Europe come from the Caribbean area, I suspect that the CCC would be willing to consider underwriting your efforts.

Sincerely,

F. Wayne King
Zoology and Conservation Director

/db
cc: G. Balazs
J. Burton

MONITOR, INC.
Suite 931
1346 Conn. Ave., N.W.
Washington, D.C. 20036

President:
Milton M. Kaufmann

(202) 223-1397

Mr. Lynn A. Greenwalt
Director, (FWS/LE)
U.S. Fish and Wildlife Service
P.O. Box 19183
Washington, D.C. 20036

6 December 1976

Dear Lynn:

With reference to PRT 9-25-C (Federal Register, 4 November 1976), the implantation of Spaghetti tags into the flesh of marine mammals is a recognized hazard to their health and well being. Even in fish this method of tagging has been the cause of infections that proved fatal.

Dr. Keith Farrell, a respected member of the faculty of the Veterinary Medicine College at the University of Washington, emphasizes the danger of any tag that involves breaking the skin of the animal. When a tag that moves continues to irritate the wound caused by its implantation, the possibility of infection is further heightened.

For these reasons, the following Monitor organizations oppose the approval of the permit amendment requested by Howard W. Campbell to Spaghetti-tag West Indian manatees, and recommend that a noninvasive method of identifying the animals be substituted:

International Primate Protection League
Humane Society of the United States
Society for Animal Protective Legislation
Defenders of Wildlife
Fund for Animals
Audubon Naturalist Society of the Central Atlantic States
Committee for the Preservation of the Tule Elk
Friends of the Earth

Sincerely,

Milton M. Kaufmann (ALP)

Milton M. Kaufmann
President, Monitor, Inc.

INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES

Report to the Chairman of the Survival Service Commission by the ad hoc Task Force convened to investigate the commercial exploitation of sea turtles.

1. The Task Force was convened in accordance with Decision 42/23 of the 42nd Meeting of the Survival Service Commission,

2. The Terms of Reference of the Task Force as drawn up by the 43rd Meeting of the Survival Service Commission are attached as Annex 1.

3. The Meeting required by these Terms was held at the University Inn, Miami, Florida, USA, on 23 and 24 November 1974. Those in attendance were:-

a) By invitation:

Dr. George R. Hughes
The Natal Parks Board
P. O. Box 662
Pietermaritzburg, 3200
South Africa.

Mr. George S. de Silva
~~Forest Department~~ The Sabah National Parks Trustees
Sandakan P.O. Box 768
State of Sabah
East Malaysia

Dr. Nicholas Mrosovsky
Department of Zoology ← Ramsay Wright Zoo. Lab.
University of Toronto 25 Harbord St.
Toronto M5S 1A1 Ontario
Canada

~~Professor~~ Dr. David Ehrenfeld
Department of Horticulture and Forestry
Cook College, Rutgers University
P. O. Box 231
New Brunswick, New Jersey 08903
USA

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

Dr. Peter C. Pritchard
Florida Audubon Society
P. O. Drawer 7
Maitland
Florida 32751
USA

Dr. Harold Hirth
Department of Biology
University of Utah
Salt Lake City
Utah 84112
USA

Dr. L. D. Brongersma
Rijksmuseum van Natuurlijke Historie
Raamsteeg 2
Leiden
Netherlands

Dr. F. Wayne King (IUCN/SSC Alert Group)
New York Zoological Society 185th St. and Southern Blvd.
Bronx, New York 10460
USA

Professor A. Carr (IUCN/SSC Meeting Co-Chairman)
Department of Zoology
University of Florida
Gainesville, Florida 32601
USA

Professor T. Harrisson (IUCN/SSC Alert Group Meeting Co-Chairman)
c/o Vice-Chancellor
University of Sussex
Falmer BN1 9QQ
Sussex
U.K.

b) IUCN:

Dr. G. Carleton Ray (IUCN Consultant) (for part of the time)
Department of Pathobiology
The Johns Hopkins University
615 North Wolfe Street
Baltimore, Maryland 21205
USA

Mr. A. J. Mence (Executive Officer, Survival Service Commission, Secretary to Meeting)
International Union for Conservation of Nature and Natural Resources
28 Les Uttins
1110 Morges
Switzerland

c) Observers (part of the time):

Mr. Ross Witham
Florida Department of Natural Resources
Marine Research Laboratory
P. O. Box 941
Jensen Beach, Florida 33457
USA

Miss Karen Bjorndal
Department of Zoology
University of Florida
Gainesville, Florida 32601
USA

4. The Meeting considered the subject of commercial exploitation of sea turtles and, in accordance with the requirements of the Terms of Reference, agreed on a Statement of Principles and Recommendations, attached as Annex II.

5. The following participants then proceeded to Grand Cayman Island:

Professor Carr,
Professor Harrisson,
Dr. King,
Dr. Pritchard,
Dr. Hirth,
Mr. de Silva,
Dr. Brongersma,
Dr. Hughes,
Mr. Balazs,
Mr. Mence

6. Meetings were held there on 25 and 26 November with the following Directors, Advisors and Staff of Mariculture Ltd.

Directors: Mr. Anthony Fisher
Dr. J. Johnson
Dr. S. Ayres
Mr. Marlin Simon
Mr. M. Goodier

Scientific Advisors:

Sir Alan Parkes; F.R.S.
Professor E. Amoroso; F.R.S.

Staff: Mr. Roy Major
Dr. Jim Wood

7. Having already considered aspects of the operations of Mariculture Ltd. in relation to the Principles previously established, members of the Task Force were given the opportunity to question the representatives of Mariculture Ltd. on all matters upon which elucidation, explanation, account or elaboration was thought necessary.

8. Owing to circumstances beyond their control, Professor Carr and Drs. Wayne King and P. Pritchard had to return before full consideration could be given to the implications of this dialogue. They indicated however that the main issues had been covered to their satisfaction and that they were agreeable to accepting the findings of the remaining members.

9. The panel of the Task Force which then considered the extent of the Company's compliance with the Principles consisted of Professor Harrisson; Drs. Hughes and Hirth; and Messrs. de Silva and Balazs. Dr. Brongersma, who had travelled independently to Grand Cayman, was co-opted to this panel.

10. The panel agreed on the following conclusions:

    a) that Mariculture Ltd. has made claims and statements which are misleading and demonstrably incorrect;

    b) that this has resulted in unjustifiably favourable impressions in some quarters regarding its operations to date; and in some others in grave suspicion about its integrity;

    c) that reconciliation of the conservation ethic with business efficiency in the company's policy therefore remains to be demonstrated;

    d) that no long-term operational planning projection has been made;

    e) that the viability of its turtle culture operation has yet to be proved; as indeed has that of turtle farming in general.

    For these reasons alone the panel is unable to regard the operations of Mariculture Ltd. as making a positive contribution to the conservation of the Green turtle.

11. This notwithstanding, the panel noted:

    a) that Mariculture Ltd. has recognised the harm done by its misleading publicity and has agreed to withdraw remaining inaccurate publications and to ensure that all future publications are scientifically accurate.

    b) that the company has developed plant and installations on a considerable scale.

c) that research programmes, one being of outstanding scientific merit, are in varying stages of development, and that facilities are also made available by the company to private research workers;

d) that the Directors of Mariculture Ltd. have stated categorically that they wish to maintain frank and open dialogue with IUCN concerning all aspects of the company's operations in order to ensure compliance with conservation requirements.

12. The panel expressed concern:

a) that Mariculture's present practice of taking "doomed" eggs might become an established part of the operation, thus perpetuating ranching rather than farming and also encouraging an extension of the definition, and by implication the range of occurrence, of so-called "doomed" eggs;

b) that Mariculture's known interest in establishing operations in other parts of the world (e.g. Astove Island) has implications which cannot be assessed in the lack of any long term operational planning projection, and which carry inherent dangers of accelerated gene movement between oceans;

c) that the requirement for profitability can easily result in a disregard of inconvenient conservation considerations; particularly in regard to promotion of markets;

d) that the present culture operations depend on a nutritional regime at a higher trophic level than that naturally applicable.

13. The panel therefore recommends:-

a) that the present operations of Mariculture Ltd. can not be regarded as being in the conservation interests of the Green turtle;

b) that recognition be given to the efforts made by Mariculture Ltd. in developing turtle culture techniques and for its expression of intent to ensure that such development conforms to conservation principles;

c) That Mariculture Ltd. be informed of these principles, and of IUCN's readiness to review the company's operations when convinced that they are, and are likely to continue to be, in conformation with those principles;

d) that Mariculture Ltd. be informed of IUCN's pleasure at the company's assurance of frankness concerning all aspects of its operations, and of IUCN's expectations of receiving practical demonstrations of this assurance by being kept posted about future plans; recognising that new activities or significant extensions of present ones initiated without previous notice will be regarded as a breach of such assurance and therefore as grounds to doubt the company's integrity of purpose.

INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES

SURVIVAL SERVICE COMMISSION

An ad hoc meeting to discuss the commercial exploitation of marine turtles; to be held in Miami, Florida, 21-23 November 1974

TERMS OF REFERENCE

1. Following a decision of the Survival Service Commission and after consultation with the Co-Chairmen of the SSC Marine Turtle Specialist Group, this meeting has been convened, and persons invited, by the Secretariat of the International Union for Conservation of Nature and Natural Resources (IUCN).

2. The meeting is asked impartially to review the commercial exploitation of marine turtles with especial reference to the state and implications of turtle farming and, if possible, to reduce the result of such review to a statement of principles.

3. The resulting statement will be in the form of a recommendation to the Survival Service Commission, which will review it and will, if considerations of new policy implications may be involved, so recommend to the Executive Board of IUCN for decision.

4. It is proposed that after this meeting a small panel should visit Grand Cayman in order to examine and discuss the operations of Mariculture Ltd. in the light of the statement of conservation principles referred to in paragraph 2 above, and to report to the Survival Service Commission on its findings. This panel is to consist of the two Co-Chairmen of the SSC Marine Turtle Specialist Group (or their nominees), three other persons selected by the ad hoc meeting, along with the Executive Officer of the Survival Service Commission.

Morges, 28th October, 1974

PRINCIPLES AND RECOMMENDATIONS

Because the majority of the distinct populations of Chelonia (green turtles) are extinct, threatened or rapidly declining, the entire group should be considered endangered.

The reasons for the extinction and decline of populations include particularly exploitation for meat, hides, eggs and other products (including souvenirs), massive killing of turtles in the trawl nets of fishing fleets as well as increasing habitat destruction and disturbance.

The situation has become even more critical with the expansion of international commercial trade in sea turtles and their products.

As regards trawling, the task force recommends that urgent attention be given to encourage the use of nets designed to minimise undesirable catches of turtles and that research into this question be given funding priority.

As regards souvenirs, the task force recommends that the taking and preparing of turtles and turtle products for the primary purpose of souvenirs be strongly discouraged.

As regards primary exploitation (meat, hides, eggs), the task force recommends that, where it can be demonstrated that local turtle populations can tolerate exploitation, and the desire or necessity is present, it should be done only by peoples traditionally dependent on them, with methods ensuring minimal waste and for local utilisation. The task force condemns the diversion of wild sea turtle resources from traditional use by local people, or the expansion of that use, to satisfy or extend the demands of international commerce.

The task force emphasises at this point the distinction between turtle farming and turtle ranching; a turtle farm implies that the unit is completely independent of wild stocks; a turtle ranch is a unit dependent on wild populations for eggs or turtles with the animals kept in varying degrees of captivity. (H. Hirth; FAO Fisheries Synopsis No. 85; "Synopsis of Biological Data on the Green Turtle" December 1971.)

Further, in recognition of the deteriorating energy and food resources of the world, the task force advocates that wherever possible any turtle culture be maintained at the lowest applicable trophic level.

The task force is opposed to farming objectives which lead to the expansion of existing markets resulting possibly in an increased exploitation of wild turtles. However, it would be consistent with the foregoing principles for the task force to endorse turtle farming whose products will replace wild turtle products in existing traditional markets. The acceptability of any farm should be demonstrated

by suitably designed and independently evaluated tests and data. Moreover, the task force can endorse those ranching endeavours satisfying the above conditions and which can be shown not to harm wild turtle populations.

The task force encourages the provision of funds for the preparation of informative pamphlets to promote the application of the foregoing principles and recommends to IUCN that immediate measures be taken to ensure the early implementation of such action as is necessary to conserve the marine turtle resource in accordance with these principles.

Nearly all the considerations stated for Chelonia may be applied with force to populations of the six other species of marine turtles.

Extract from report dated 13 December 1974
by Dr. Carleton Ray, IUCN Consultant.

"I visited Mariculture on the last Saturday we were there and was struck with the overcrowded conditions of their tans and with the stink that emanated therefrom. I got a film can and snuck out a water sample and turned it over to our Environmental Health Laboratory here a couple of days afterwards. The lab tells me that this delay would not effect the analysis they made unless possibly to decrease the bacterial counts which they actually got, barring a nutrient source in the sample.

The analysis follows:

Total coliform - confirmed	2.2×10^3 coli/100 ml.
Fecal coliform	20 fecal coli/100 ml.
Presumptive *Salmonella*	+
Pseudomonas aeruginosa	-
Staphyloccus aureus	-

To give a context for these figures, I will mention the Maryland State standards for various types of water. First, the drinking water is 1 total coliform per 100 ml. For oysters and bathing water, the count must not exceed 70 per 100 ml. The effluent from sewage treatment plants must not exceed 200 per 100 ml. Note, the total coliform of the sample I brought back is over 10 times that permitted for sewage treatment effluent in this state!

The fecal coliform, indicative for warm-blooded animals, is low because the green turtle is not warm-blooded. *Salmonella*, the devil which triggered the action to stop the selling of baby turtles in pet stores, was massive and its presence only is confirmed; this is a qualitative test, not a quantative. The other two rather dangerous organisms tested for were not present.

I don't know enough about this subject to say whether or not the FDA would permit meat from turtles to enter this country from Mariculture's tanks. I took the sample from the large tank holding yearling turtles, not animals that were to be butchered. All I can say is, the tanks in which they hold their animals are considerably filthier than the tanks in which we hold animals at the New York Aquarium and we would not have thought of eating fish or turtles from our Aquarium tanks at any time.

I have no doubt that this is not the first analysis of their water that has ever been run. Does it agree with other results you may have heard of? Do you know whether or not Mariculture meets our FDA standards or whether sufficient tests have been made to determine the purity of their product? *Salmonella* is almost impossible to eliminate. It is present in chickens, turtles, and just about everything else, so I am not suggesting for a moment that their meat is unfit for human consumption, but I think that serious questions at least are raised."