

3 of 3 20

1981-1983 INCOMING  
LETTERS OF G.H. BALAZS

Denis Mylonas  
35 ch. du Banc-Béni  
1213 Petit-Lancy/GE  
Switzerland

Dr. George H. Balazs  
Hawaii Institute of  
Marine Biologie  
P.O. Box 1346  
Coconut Island  
Kaneohe/Hawaii 96744

October 5, 1982

Dear Dr. Balazs,

Mr. Scott of the IUC suggested that I write to you on the following matter :

I am interested in sea turtle conservation and more particularly in the topic of possible disturbances to sea turtles by tourist developments near laying beaches.

Mr. Scott indicated that you are an expert in this issue and that you could provide me with the answers to questions relating to this matter, namely :

Are there any standards regarding limitations of construction, or other developments, near laying beaches ?

Is there a minimum distance to be observed between such constructions/developments and the laying point on the beach ?

Are there any standards regarding light or noise limitations in such areas or restrictions regarding boat traffic in the sea close to laying beaches ?

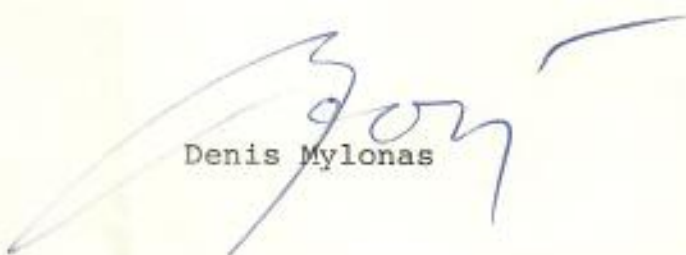
If such standards or restrictions or limitations exist do they relate to certain periods in time (specific months/days) and how are these established ?

Furthermore do they depend on the importance of the sea turtle population visiting the beach or on the existence of other beaches in the neighborhood which could be used by the turtles as "substitution beaches" ?

I have looked into various reports but have not found any specific information regarding the above questions. Your kind attention to my request and your guidance, together with any publications relating to these issues will be highly appreciated.

With many thanks in advance and best regards.

Yours sincerely,



Denis Mylonas

# STINASU

STICHTING NATUURBEHOUD SURINAME  
FOUNDATION FOR NATURE PRESERVATION IN SURINAME  
P.O.B. 436 PARAMARIBO TEL. 75845 / 71856

Paramaribo, September 13, 1982.

To:

Mr. George 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:

The publication you requested is an extremely popularized version of Joop's "Sea Turtles Nesting in Surinam", and it is meant for the general public. In addition it is written in Dutch so I believe there is no need to send you one because I assume you already have Joop's book.

Thanks for the Philippines turtle stamp.

Best Regards,



H.A. Reichart.



# TRAFFIC (U.S.A.)

1601 Connecticut Avenue N.W., Washington, D.C. 20009  
Cable: PANDAFUND  
Telex: 64505 Telephone: (202) 797-7901



WORLD WILDLIFE FUND-U.S.

Sept. 13

Dear George,

I have been bogged down with everything under the sun and have yet to do any investigation on "tortoiseshell" coming out of the Cayman Islands. I'm enclosing some addresses of people who may actually shed some light on the topic and you may want to contact them directly.

- 1) Portfolio of Agriculture and Natural Resources  
Government Administration Building  
Grand Cayman  
Cayman Islands, BWI

(Management Authority in Cayman Islands and should have data on permits granted for export of CTF + other tortoiseshell).

(over)

2) T. Kakidachi

Chairman

Nippon Taimai Kyokai

(Japan Hawksbill Tortoise Association)

c/o Kakidachi Kogeihin Co, Ltd.

No. 3-23, Hama-machi

Nakasaka, Japan

Let me know if you  
get any responses.

Best,

Dried



PEJABAT TAMAN NEGARA BAHAGIAN PANTAI TIMUR

REGIONAL OFFICE, EAST COAST NATIONAL PARKS

BOX 768, SANDAKAN, SABAH, MALAYSIA. TEL: 42188  
CABLES "NATAPARK" SANDAKAN.

Your Ref :

Our Ref : EGNPRO/55/1/138

3rd September, 1982

Mr. Robert Scott,  
Executive Officer,  
Species Survival Commission,  
International Union for Conservation  
of Nature and Natural Resources,  
Avenue du Mont-Blanc,  
1196 Gland,  
Switzerland.

Dear Bob,

World National Parks Congress - Bali

..... Roberto P. Garcia of the Task Force Panel on the Philippines  
has now contacted me regarding the Sabah/Philippine Turtle Sanctuary.  
A copy of his letter is enclosed for your information.

It is not known whether Garcia would be at Bali - if he is there,  
we could discuss this matter. At this stage, I do not wish to suggest  
anything as it has been noticed that Filipino enthusiasm tends to wane  
after a conference and a masterly silence is maintained thereafter. I  
have had no news from Helma de Celis for some time and wonder whether  
she is still attached to the Task Force.

I am looking forward to meeting you at Bali and with your assist-  
ance attempt to get a definite commitment from the Philippines.

With all good wishes,

Yours sincerely,

  
G. S. de Silva

c.c. Professor Archie Carr  
c.c. Dr. Wayne King  
c.c. Mr. George Balans



Republic of the Philippines  
Ministry of Natural Resources  
OFFICE OF THE MINISTER

108

July 27, 1982

George S. de Silva  
Chief, Game Warden  
Forest Department  
Sandakan, Sabah  
Malaysia

Dear Mr. de Silva:

The Task Force Pawikan, the marine turtle conservation arm of the Philippines, would like to coordinate with your group regarding the conservation strategy at the Turtle Islands. In the last World Conference on Marine Turtle held in 1979, one of the proposed action projects is the establishment of an International Sanctuary in the Turtle Islands, to be sponsored jointly by Malaysia and the Philippines. This worthwhile proposal has long been shelved and for this matter, it is urgent that your group and the Task Force meet at a convenient time and place and discuss its feasibility. Likewise, other important matters such as law enforcement and management schemes in the conservation of marine turtles will be taken - up.

The Task Force can be contacted at its base in Taganak Island, Turtle Islands through the Mayor of the place or at its main office with the following address:

Task Force Pawikan  
Ministry of Natural Resources  
Visayas Avenue, Diliman, Quezon City  
Philippines

Very truly yours,

ROBERTO P. GARCIA  
Chief, Research Division  
Task Force Pawikan



Canberra, 9 June 1982

George,

Firstly an apology for the long delay in replying to your previous notes; I have no substantive cause at which to point the finger of blame, so I must simply put it down to ordinary, everyday frustrations and problems of keeping up with work and family affairs. Mind you, I make no claim to being a conscientious letter writer - far from it.

Now, to turtles, which I hope are busy fornicating and multiplying in waters around the world. Your poster showing turtles of the <sup>7</sup> ~~seas~~ was well received and now decorates otherwise drab walls in my work area.

You asked me about any approach to the Stamp Advisory Committee on turtle stamps. I checked my files but, to my horror and shame, could find no record of having written to them. This I have now rectified, addressing them briefly on the subject, enquiring whether they have ever received any "nominations" for turtles in the past and suggesting <sup>a turtle stamp</sup> they would fall logically into the regular Australian animals definitive series, three more of which are to be released on June 16. The three new stamps will feature reptiles (15c snake-necked tortoise, 40c gecko, 90c crocodile).... but alas no turtle.

Actually, I would be very surprised if there had not been a previous nomination of turtles as suitable candidates for stamps. Australia is, of course, signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora. The Customs (Endangered Species) Regulations are virtually stopping export of turtles from Australia, with the Hawksbill listed as being threatened with extinction and others listed as potentially endangered. So it would be fairly logical to assume that the Stamp Advisory Committee was in tune with

BY AIR MAIL PAR AVION  
AEROGRAMME



AUSTRALIA 33c

TO Dr George Balazs  
University of Hawaii at Manoa,  
Hawaii Institute of Marine Biology  
P.O. Box 1346, Coconut Island,  
Kaneohe, Hawaii 96744  
COUNTRY OF DESTINATION USA

SENDER'S NAME AND ADDRESS

P. Davis,  
1/ Export Inspection Service,  
~~8, Spence Lane~~  
Department of Primary Industry,  
Canberra,  
A.C.T. Postcode 2600

FOLD SIDE FLAPS FIRST

FOLD SIDE FLAPS FIRST

Nothing is enclosed in this form must bear the approval of the Postmaster General

Trust your turtle stamp collection is expanding. Two recent additions to my holdings are the Cayman Islands (5c, 7c, 12c, 20c) showing green + hawksbill turtle, terrapin and turtle farm. Also Samoa (24s, \$1) showing turtle hatchery and hawksbill turtle and featuring the World Wildlife Fund logo.

Best wishes in your work, full marks for perseverance with stubborn Australian correspondents.

Regards  
Peter Davis

**YNTEMA**

BOX 305  
FREDERIKSTED, ST. CROIX  
U. S. VIRGIN ISLANDS  
00840

*sent 9-14-82*

EXPORT-IMPORT

CABLE ADDRESS  
"YNTEMA-ST. CROIX"

1 Sept. 1982

G. H. Balazs  
P. O. Box 1346  
Kaneohe, Hawaii 96744

Sir:

Please send me 50 postcards (25 green turtle, 25 hawksbill),  
as indicated in the recent Turtle Newsletter.

My check, in the amount of U.S. \$100.00 is enclosed to cover  
the cost of cards and air postage.

Sincerely,

*John A. Yntema*  
John A. Yntema

encl.

30 Aug 1982

Dear George:

Thanks very much for the Philippine turtle stamp, I really appreciate your remembering me. I thought your letter to Nancy Hammond was excellent - I couldn't agree more. Your way of handling the problem would avoid a lot of future hassles. I hope she takes your advice.

According to Fred Berry, Peter Hitchard seconded our "nomination" as co-editors. I have tried w/no success to reach Fred. I leave Fri for 10 days in the Bahamas - will try to reach him before then.

I've enclosed a copy of a note I sent to Missovsky last week. Thought you might like to see it because you've expressed concern in the past about turning turtles + that the "powers that be" might not allow it. So I thought someone should respond to Hitchard's note.

about "turnover" - I avoid using the term because the correct use is counter-intuitive, so it is often misused. Turnover time = average time for feed in digestive compartment. Therefore, a lower passage rate yields a higher turnover time. But "turnover" is often misused or used loosely to mean the same as passage rate. Fenchel's paper leaves a lot to be desired.

Hope all is well w/ my co-editor. This time next week I'll be with Sam + Jim + my turtles - happy as a clam!

Best regards  
Karen

REGIONAL OFFICE, EAST COAST NATIONAL PARKS  
~~TURTLE ISLANDS NATIONAL PARK~~  
BOX 768, SANDAKAN, SABAH, MALAYSIA.  
CABLES "NATAPARK", SANDAKAN. TEL 2188

Your Ref:-

Our Ref: ECHPRO/52/1/138

Date: 13th August, 1982

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



Dear George,

Many thanks for both your letters and the 8 posters which you very kindly sent me. They are very useful and if it is at all possible could you please send me two more.

The delay in replying your letters was due to the fact that I was away from the State for some time and have just returned.

For the Bali conference, I was asked to present a paper entitled "Protected areas and turtle eggs in East Malaysia." As some sort of partial funding would be made available, I will be at Bali and hope to meet you there and discuss many matters pertaining to turtles etc.

Hope all is well with you, Linda and George Jr.

With all good wishes,

Yours sincerely,

*G. S. de Silva*  
G. S. de Silva



Mr. George Balazs,  
University of Hawaii at Manoa,

Hawaii Institute of Marine Biology,

P. O. Box 1346,

Coconut Island, Kanoche,

Hawaii 96744

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Sender's name and address: **Turtle Islands National Parks**

P. O. Box No: 768 Sandakan,

Sabah, East Malaysia



AN AIR LETTER SHOULD NOT CONTAIN ANY  
ENCLOSURE: IF IT DOES IT WILL BE SURCHARGED  
OR SENT BY ORDINARY MAIL.

← First fold here →

↑ To open out here



Colin J. Limpus

Home: P.O. Box 189  
Aitkenvale  
Townsville, 4814  
Australia  
Telephone 73-2674

Business: National Parks and Wildlife Service  
Pallarenda  
Townsville, 4810  
Australia  
Telephone 74-1411

11th August, 1982.

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

Dear George,

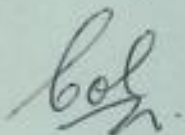
Thanks for the letter on tags from National Band and Tag Co. As far as I am concerned their prices are unrealistic for Inconel tags. In retrospect there are many things I would change if given the chance - like turn to a better tag than the Monel many years ago. However this is now water under the bridge and for me I haven't been able to obtain Inconel 625 tags since my first attempts in 1978. As you know I gave up trying on Inconel last year and am now trialing titanium. There are several hundred titanium tags now on free ranging turtles out here. I'll have my first chance to look at them again in October/November after 8-9 months. We have encountered some problems in the first attempt in producing a self-piercing tag that didn't need a prepunched hole. Our next batch will be of thicker and less flexible titanium. If you haven't checked you will find that titanium and Inconel 625 perform almost identically in the standard corrosion tests.

My local manufacturer is prepared to experiment with the titanium tags (provided I use whole sheets of metal ie. about 1200 tags per order). These tags cost me \$1 per tag. When I've finished trialing them and am satisfied that they are as good as I think they are I will let you all know. I hope this satisfies your curiosity on my titanium tag ideas.

Nev mentioned your concern over my results from the "courtship to Nesting" study. We have large courtship aggregations 20-50 miles from rookeries. In some cases that is the distance to the nearest land of any sort. Hence large movements between courtship and nesting have to occur for many of our turtles. Also when we are monitoring one of the "female refuges" in association with the courtship study at Heron, most of the females which move in to the refuge just prior to nesting are females which have not been recorded courting on Heron. However all carry extensive recent courtship damage indicating a large number of females have courted elsewhere prior to moving in onto Heron Reef in preparation for nesting. We regularly catch out of this refuge area when we want females (known to be Heron nesters for that season) at different times before oviposition. There is no evidence that this catching and other manipulation we do alter their choice of nesting beach or timing of nesting. I guess what I am saying is that I can see no reason to accept disturbance through catching as a primary cause for a female moving from a courtship area to nesting beach other than the most adjacent one.

When there are large numbers of turtles using large numbers of sites for each phase of their life cycle as we have over here the task of monitoring became much greater than for monitoring a single nesting beach. Bob Bustard fell into the trap of treating Heron Island as equivalent to Ascension Island or Tortuguero when in fact something like the Capricorn Bunker Group of islands and reefs is the probable equivalent. Heron Island is only equivalent to a segment of Archie's Tortuguero beach or one of the Ascension Island beaches in my interpretation of the degree of interchange between adjacent islands between and within breeding seasons. Similarly for dispersal from courtship to nesting.

I await your reply to these issues.



C.J. LIMPUS.

CJL:DH



23 Sept. 82

George -

I have enclosed a copy of a letter from Ken Dodd's from Robert Gilmore regarding Johnston Atoll. ~~At~~ I just learned from Ed Moll that the International Turtle & Tortoise Society has gone defunct - but its library, at least, has been taken over by Chelonian ~~Society~~ <sup>Documentation</sup> Center - CDC. They issue ~~a~~ a CDC Newsletter quarterly - but I have no idea of its format. A perch of an info. page is enclosed. Mrosowski called to tell me he is going to "squeeze" my notes into the next MTN, because it is a "rebuttal" to the last newsletter. I don't believe the fact that we stopped turning in 1977 has been published anywhere. We did it to lighten the load on our tagging team. It became unnecessary to measure every turtle on the beach, so now we only tag the northern 2.5 miles turtles (& note nest location) & then measure a sample of the turned turtles on the south. The caliber of village assistants is improving - maybe we will switch to all night tagging in the future - I don't know. I do feel that the less you disturb a study animal, the better.

I don't know what we should do about the CEE rawshills. I'm afraid the damage is already done. I don't know how the CEE comes up w/ its projects, but frankly, I hate to see the US conservation dollars for sea turtles being

wasted on crap like this & the "Hunts" map  
etc. - the U.S. public will only give so much  
for sea turtles! but I don't know what we can/  
Quarterly report for the period 1 July 1982 - 30 September  
should do. Any ideas? Berry has been counsel-  
ing the Jamaica people, particularly Katrick  
Fairburn, who from my brief acquaintance  
at the Wash. Conf. seemed well-meaning, but  
now misled by Fred.

I think your point about head-starting  
success is a good one in your comments on  
the Recovery Plan. You should circulate that  
now, because when the 1<sup>st</sup> tagged, head-  
started turtle nests, we'll have such a  
chorus of "savior, savior!" That any com-  
ment from you then will sound like "sour  
grapes" or whatever.

Dr. Carr still hasn't returned from Alaska, so  
I haven't asked him about maculosa & lacryma-  
ta. Do you want to ask Peter or should I  
pursue it from here? From the text, it sound  
like we can rule out the hawksbill (caret).  
About the longevity record - I'm afraid I can't  
help. All I can offer is that there was a  
paper by Flowers many yrs ago that  
recorded many such captive records.  
I can't now remember when or where  
published, I'll try to find out more.  
That's interesting about the algae in the gut.  
It's possible I guess that the acid "preserved"  
rather than digesting it. Mont found that, when  
she was looking at guts in Nicaragua, many turtles

that had been on their backs for awhile had empty stomachs, but ~~almost~~ many had fresh-appearing boluses in their esophaguses. In the case of your turtles the spear may have damaged nerves necessary for moving food along the gut, <sup>or for secreting digestive enzymes</sup> in the sea grass-feeding turtles I've looked at, the blades are chopped into "mouth-width" lengths, but don't change much in appearance until they reach the large intestine. But I've never seen the gut of an algae-feeding turtle.

About the editing: I very much agree that we should use the Hopkins-Pritchard letter concerning general statements. I spoke w/ Fred yesterday. He called to talk money & I told him we had agreed to edit, not rewrite. Of course he just ignores anything he doesn't want to hear. I couldn't believe his & Peter's "comments" on the ms - "rewrite" "expand" "add refs" etc. etc. I asked Berry for a list of which authors wrote what chapters & told him we would return them for expansion. I am also unhappy about Peter's lead role in this review. I hadn't noticed before that he is listed as first author, while all the rest are alphabetized. But I didn't know what I could say to Fred about that. Peter is apparently going to supply more photos for the book - when he sends them to me, I think I can arrange for a free-lance illustrator here. I also told Fred I can't present the book in Miami in Jan. because I'll

be in Hawaii - he said "No problem."  
Then Larry Green called & asked me to send in  
an "edited" preliminary draft of the Manual  
by 30 Sept & invoice \$1100 in payment so he  
could use 1982 funds. So I scratched in a  
lot of picky initial changes & sent it off. I  
didn't have time to do more because I'm  
going to Wash on 26 Sept for 2 days for the  
book review (final!) at Smithsonian & Mar  
& I are getting married on 30 October 82. Larry  
said anything would be fine, just so he could  
say he had a "product" in hand & could release the  
money. So I'll get \$1100 here which we can use for  
phone calls, typing, illustrating. They want an  
estimate ASAP on how much more we'll need.  
That is impossible to tell until we know if  
we're talking about 4 or 30 figures to re-do  
etc. Any thoughts? I'll deposit the check in  
the WATS acct here & can write checks to you  
for any of your expenses (phone, typing, etc.).

We need to get a letter out soon requesting  
comments by end of October - what do you think  
of that date? also we need to distribute manuals  
to people who may not have received them (Keith  
Ehrenfeld, Stancyk, etc). I got 6 extra copies from  
Larry that we can use to scratch up or distri-  
bute. Any thoughts on how you want this done, or  
additional people you would like to have review  
it?

all the best to you, Linda & Christian. (Mont is  
back & doing well!

Faren



UNION INTERNATIONALE POUR LA CONSERVATION DE LA NATURE ET DE SES RESSOURCES  
INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES

Avenue du Mont-Blanc  
1196 Gland - Suisse/Switzerland

Télex/Telex: 22618 iucn ch  
Tél./Tel. (022) 84 71 81

Télégrammes/Telegrams:  
iucnaturs, Gland

Référence/Reference:

SSC/RFS/sn

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

23 August 1982

Dear George,

As you know, I have not been replying to each of the several things you have been thoughtful enough to send or copy to us in recent months. These range from very nice turtle postcards through project comments, to the exchanges on RDB category interpretations and the interesting copy of the Conway article. Each was very much appreciated and was both useful and timely here.

\* Now I want to use this letter, by copying it to several others as noted, to solicit ideas and/or contributions for what might be called a mini-symposium or the like, at the Kuala Lumpur SSC meeting - to follow up in some orderly fashion all the thoughts that are emerging on RDB categories, degrees of endangerment etc. With a little effort this might also result in a modest but timely and significant SSC/IUCN publication. Both Gren Lucas and Wayne King favor the idea and have already been thinking of contributions they would like to make to such a topic. Peter van Bree has also offered to discuss the definition of "endangered", based on a paper he is preparing for the Netherlands CITES authority. Sidney Holt has been offering his own interpretations as well. You and Archie Carr have already expressed a lot of ideas in connection with the turtle issues. I'm sure the folks at the Conservation Monitoring Centre have given it a lot of thought. There no doubt are others who might want to contribute as well, including the CITES Secretariat. The general problem has already been discussed in the SSC Steering Committee.

The questions - to you and those getting copies - would seem to be:

1. Is such an organized discussion at Kuala Lumpur a good idea?
- ND* 2. Should we plan it so that it could be quickly published by IUCN? Presumably this would mean that invited papers would state the various aspects of the case(s), with salient features of ensuing discussion summarized for the publication.
3. With or without publication, are there traps or pitfalls to be avoided, or key questions that should be emphasized?

Dr. George H. Balazs  
Kaneohe, Hawaii 96744, USA

- 2 -

4. I suppose the classic thesis-antithesis-synthesis could give us an organizing pattern. Do you have more down to earth agenda ideas?
5. If we have invited papers, or scheduled speakers, who would you suggest, and on what topics?
6. Any other related thoughts?

Im sure the subject, however it defines itself, will end up being discussed at Kuala Lumpur regardless. Perhaps we can make it more effective.

Thanks again, George, for your communications. I'll be interested to see what responses result from this letter.

Yours sincerely,



Robert F. Scott  
Executive Officer  
Species Survival Commission

(typed and signed in his absence)

cc: Sir Peter Scott  
G. Lucas  
F.W. King  
S. Holt  
R.S.R. Fitter  
Mhd Khan  
P. van Bree  
N. Duplaix  
R. Mittermeier  
A. Carr  
T. Mence  
C. Huxley  
E. Lapointe, CITES  
H. Syngé  
P. Sand/L.M. Talbot  
A. Schiøtz

21 Sept '82

Dear George,

Enjoyed talking to you the other day. Hope my memo about upcoming meetings was o.k. I had AC, you + Wayne King telling me everything not to say.

I forgot to thank you for the slide and for the nice Philippine turtle stamp. We are getting a fine collection of turtle stamps! My Juandad Naturalist article is in David Mack's hands right now. We haven't decided on what slides to use. Wayne loaned me some good ones, too.

Enclosed is my letter to Gilmore. You forget to circle what paragraph I should focus on, so I just did my best. I didn't mention the need for baseline studies because I think Karen covered that, and it would look strange for me to hit that point, too, I think. In response to your question, no - I don't know of any refs. on the effect of bright lights on sleeping or feeding areas. That's a tough one!

I'm not sure what's what with the Druen Jaya proposal. I found a copy of a letter from Pat Chable reminding AC to respond, but a major ransacking of his office + the files failed to find the proposal itself. I really don't think it came, but

will have to pry around in AC's briefcase upon his return to be sure. The proposal sounded fairly reasonable, I thought -- at least the objectives. The budget is astronomical, as always. No one seems to be able to work in Indonesia without a small fortune. Why such extravagance? When I exhaust all possibilities, I'll write Chable that, for one reason or another, we didn't get a chance to review it. Maybe there's still time.

The Fort. team is due back any day, whereupon I'll send you flipper-width data. Hope they did it right. Dr. Carr finally recanted and said the measurement in adults was in fact perpendicular to the flipper axis, as you said.

We never saw Derek's migration paper. That's a loss if it doesn't get out!

Karen reviewed the recovery plan for our office. Did she send you her comments? I wasn't very impressed by the little of it that I read. Out-of-date, superficial -- I thought.

My pipeline issue is raging. Met last week with Environmental Advisory Committee.



in Panama. Found that the situation is even worse than I expected. There is no <sup>spill</sup> contingency plan as yet -- and no data to put ~~it~~ in it anyway. ~~The~~ The oil companies got rooked, I think, and sunk \$900,000. into a ~~flag~~ fly-by-night <sup>acc. impact.</sup> firm in Panama that hasn't come up with the goods. I gave my synopsis of the situation to the Exxon man by phone yesterday. <sup>am</sup> Waiting for response to suggestion that they postpone operations until they get their act together. Doubt they will give it much thought. Meanwhile, we have a pretty good committee that is willing to have an input ~~on~~ on contingency plans when they become available. Petroterminal promised access to these documents.

Well, much to do tonight. Hope this ties up some of the loose ends. Will be sending you some Bhaskar (poor Bhaskar) reports that he had us request from WWF/India.

Hasta la proxima,

Best regards,

Anne

P.S. Enjoyed the article on the Guaymi. I have been in touch w/ a Jesuit priest who was involved in that battle. He's concerned about the <sup>now</sup> pipeline,



**Sea Turtle  
Rescue  
Fund**

26 August 1982

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

Dear George:

Thank you for your letter of 18 August and your compliments on our comments on the recovery plan. I am afraid that the plan has a long way to go before it will become an active plan.

I have just sent out copies of Debbie Crouse's final report. You should be receiving a copy quite soon. Also, I have found out that your request for the inexpensive STCB was confused with a similar request from Jack Woody of Fish and Wildlife, who was taking the books to the Rancho Nuevo project. I have been assured that your 40 books will be in the mail by tomorrow, which means you should receive them by the first week of September at the latest.

Although we have suffered some rather dramatic budget cuts ourselves, the patch idea is still alive. Indeed, we are contemplating a rather large scale stranding network effort for whales, seals and sea turtles, of which the patch would be part.

Finally, I understand from Ken Dodd that the idea of a Pacific recovery team is making the rounds in Interior, although Region 1 apparently recommended against it, as might have been expected. That idea is by no means dead yet either.

I hope your travel to Samoa goes well. I would be interested in learning whether or not there is much tourist trade in turtle products.

Sincerely,

Michael Weber  
Sea Turtle Rescue Fund Director

9/23/82

Dear George,

Thanks for all the news — good and bad. I'm still waiting for Colombia to decide upon the appropriate dates for my visit. They are to provide a plane and pilot. It's been one delay after another. I'll miss the peak of the nesting for loggerheads and now must plan on another trip in June '83.

At last, the "manuals" have arrived in Miami from Costa Rica. Customs hold-ups over "no commercial value" declaration. They didn't believe us. Then on to Panama City via UPS. I'll send you copies ASAP. I'm glad you decided to edit a new revised edition with Karen. I am having additional color plates printed up here in Panama City with end-of-the-year money.

Short response to your questions follows:

- That's a pretty grim picture you all got of the Nicaraguan-Miskito situation. Undoubtedly some/all of it is factual, but its tone speaks hyperbole. Anti-revolutionary forces are still active along the Honduran border and the northernmost settlements of Miskitos are right in the middle of it. There is no love lost between the coastal creole-indian population and the interior dwelling Spaniards. It's been this way for over a hundred years. I would not be surprised if the Miskitos would resist

any effort to move them from their ancestral homes, with some indians temporarily joining forces with the anti-Sandinistas. Wouldn't you? Also, the new revolutionary government is trying to strengthen its borders, including the eastern shore where miles upon miles of sea bottom remain vulnerable to encroachment by other Caribbean interests. Colombia still claims much of that deep shelf property off the Misquito Cays as their own, dating back before U.S. involvement in the Panamanian affair. Anyway, I don't believe the situation is quite as bad as the article would have you believe, especially if you consider the source and the paper and their mutual anti-communist feelings. Carr hasn't mentioned problems with the southern settlements near Pearl Lagoon and sanctuary status for the offshore cays is still a goal of Nicaraguan officials. Just recently, a conservation officer with the new government has been named to be the National Representative to WATS. His name is Reynaldo Arostegui of the Parks and Wildlife Service of IRENA. Also, Nicos did spend the summer at Tortuguero, learning the turtle tagging trade and survey methods.

Need to - 350-1111  
Telephone 350-1111

- Tom Kisting (or Nancy Thompson) are your SEFC, Miami Lab contacts for tag info. Galveston lab is temporarily in limbo. Jim McVey left NMFS for a job with AID in Indonesia for 2 years (aquaculture-fish/prawn). Thane Wibbels left NMFS for grad school at Texas A & M. He will be studying under David Owens.

Ed Klimia, Galveston Lab Director, says everything is under control. Ridley duties will be transferred to someone else. Declined my <sup>offer of</sup> assistance (with A. Carr) to evaluate tag returns and report on findings to-date. Papers in progress by McVey - don't know when they'll get published with Jim gone.

(Needless to say I do not have any recent info on tag returns.)

- Yemeri turtle paper left something to be desired. As you observed, we do not know the sex and size class of the captured greens. Introductory

statement mentioned some of turtles captured had eggs. I guess we can assume at least one was an adult ♀. Like you, I am very curious about their size — were they primarily subadults, like the loggerhead we encountered in SE U.S.

- One more writing session to incorporate all corrections and review comments from outside teams. Therefore, you do have time to send your comments on the SE Region Recovery Plan before October 1, 1982. We meet in Charleston SC with other team members on Oct. 4. Sally Hopkins is our hostess. I'll give your comments to the group if you want to send them here. Otherwise, send them to Sally and she'll make xerox copies for us.

- Conference  
Strategy  
?
- Appreciate any ideas you might have regarding CEE statement on Jamaica hawkshills. Because they solicited me for a donation, I'll respond with a letter instead of money, explaining the fallacy in their thinking (as best I can). They mean well, but we don't need to encourage culture — it's already well

implanted in the minds of hundreds of entrepreneurs. Also, it appears to be a highly visible conservation effort to many government types, who may transfer effort/funds from more arduous protection measures for nesting and foraging populations under their jurisdiction.

The more letters from "friends" the better. What do you think? I believe Anne and Karen are responding in kind. Wouldn't be surprised if Peter took a different tack from his stand on head starting (as stated in Amer. Zoologist article, 20(3): 616. Scenario 4: Head-starting). I'm sure others in NMFS (Fred, Ed Klima, etc) see nothing wrong in the CEE letter and probably will support it if asked to do so.

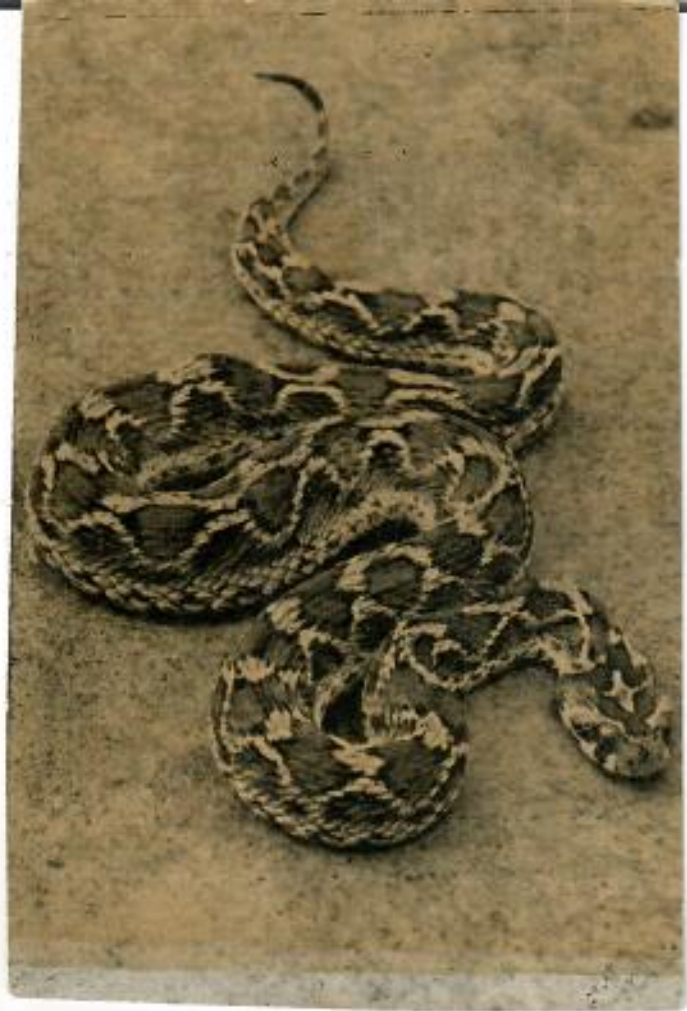
- Re turtle meeting. Have not had opportunity to discuss this with Carr et al. Suggest we leave date open until after WATS in July 1983. Many of us have foreign travel planned for Spring '83 to complete final field surveys before symposium. Also, if sponsorship for WATS by TOCARIBE fails

from lack of funding, etc., and WATS needs to be re-organized into a "Caribbean Sea Turtle Workshop," or something, it would seem like a good idea to bring in the turtle group at this time. We have considered a contingency plan if our sponsorship and inter government National Rep support falters...however, no mention was made of the turtle group at that time. I'll run this by Carr first chance I get.

Adios, George. My Colombian trip was postponed again. Presidential election left administrators in limbo for 4 weeks. No decisions could be made re counter-part collaboration!

P.S. Enclosed extra copies of Carr's interim report for you to distribute around Hawaii. Let me know if you want more. I have preprint of your leatherback stuff.





Saw-scaled Viper - One of the  
Big Four dangerous Snakes of  
India.

Size: 30 c. m.

Dear Dr. Balazs,

Since I was away on  
maternity leave and Satish  
is away on Suheli since May  
5th- an uninhabited island  
in Lakshadweep your letter  
was left unanswered. However,  
I shall give him your letter  
on his return by end september.  
Since there was no way of  
communication-he posted a  
letter in a bottle which got  
washed to Sri Lanka and got  
posted to me by a fisherman.  
Copy right Madras Snake Park.

*Bhaskar*  
(Mrs Brenda Bhaskar)

**AIR**

Madras-600022.  
Guindy  
Sri  
as  
got



Dr. George Balazs  
National Marine Fisheries  
Service  
Honolulu Laboratory  
P.O. Box 3830  
Honolulu, Hawaii 96812

HAWAII

Dear George -

10 August 82

Thank you once again for your correspondence. I'm afraid I'm quite behind in my replies.

I got back from Aldabra at the end of July, and until recently have been quite unsettled. Partly I think I was suffering from "culture shock", after 5 months on one island with 22 people and 2 months on another with 10, it was quite a change to get back to Mahe. Another bigger problem was that I needed to find a new place to live on Mahe. I was living <sup>ON</sup> St. Anne Island, located 3 miles from Mahe, in a house with 4 Park Rangers. After the attempted coup in November they had imposed a 6:00 PM to 6:00 AM sea curfew. Obviously, this <sup>was</sup> a nuisance, since it meant I either had to be home by 6:00 PM each evening or not go home at all. Even the Rangers couldn't take it any more - they all moved off 2 months ago. So, this left me alone in a big house, with no electricity, ~~and no water~~ <sup>at least</sup> from 6:00 PM to 6:00 AM every day. <sup>It was like HOUSE ARREST</sup> What a drag! But I got a new place finally on the coast of northern Mahe. It is a little cottage and it is beautiful by anyone's standards. (Even my parents would love it.) It even has hot water - very rare in Seychelles. So I am all settled in now. In some ways I really don't want to visit the States just now, but I must or I can't go until after the hawkbill season - OCT - FEB.

Thank you for the lovely sea turtle poster - "Sea Turtles of the World." Is there a chance that I could get about a half-dozen more of them? There are several people here who are very impressed by it. One of these is Maxmin, the Manager of Cosmoledo. He is one of my dearest friends here in Seychelles, but is also one of the very best turtle hunters in the country. He thinks the poster is beautiful - he wants one for his home in

Make ad one for Cosmolade where he does most of his turtle hunting.

Thank you also for keeping up the correspondence regarding the Ascension Island sea turtle stamp issue. ~~By the~~ By the way I got a letter from the Ascension Island Historical Society asking my permission to let them ~~also~~ publish a little booklet in my name based on my doctoral dissertation. They want to sell it on the island to make money for the Historical Society. I told them 'yes', but that I would like to proof-read it first.

Regarding the article you send me on the Reunion turtle farm, <sup>for</sup> which you asked me to comment -- Obviously there are lots of mistakes regarding the general biology of sea turtles. These I'm sure you can pick out yourself. Regarding the turtle farm specifically -- a) the "2 kilos of food to produce one kilo of turtle meat" may be more or less accurate. That is what Le Brun told me 2 kilos of dry food produce 1 kilo of wet turtle. b) I don't think Guy Lebrun is a "Dr", nor is a "Marine biologist" c) I would really like to get some good data on just how many hatchlings on Europa do emerge in the day and how many of these really are eaten by Frigate. I am a bit skeptical personally. But never having visited there I don't know any more than you do. Any data gathered by Joel Kopp on the matter is highly suspect. Bernard Bonet is, I believe, quite a sound biologist, although primarily a physiologist. What does Servan say about it? I haven't ~~seen~~ his paper here. d) Guy Lebrun is not strong enough to hold "two adult turtles" at waist level, as the caption under the photo on page 15 suggests.

e) I got the impression that although Mauritius ~~is~~ is "interested" in having its own turtle ranching operation it is waiting to see what happens to the Reunion ranch. Recently I got a letter from a friend of mine in Mauritius, in which he expressed great delight over the fact that Mauritius is near to getting possession of Tromelin. Apparently they have long felt that Tromelin is rightfully theirs. Do you <sup>know</sup> anything about this?

Thank you for the Aldabra brochure. Very attractive, isn't it. Thank you also for the copy of "An early report of the flora + fauna of the Aldabra Group." This has lots of information of interest to me besides just that on the turtles.

I enjoyed the article from the St. Petersburg Times on the Cayman Turtle Farm. I wish that Dr. Carr's statements hadn't been used to make him sound like an ultra-purist over the prospect of mixing turtle populations just because he is studying them. I think more emphasis should have been put on the problem of just screwing up the species. This is a danger to the survival of the whole species of in the Caribbean if you create a new poorly adapted species.

Your article on the Squid Drifted problem is very depressing.

My friend in Mauritius sent me <sup>the</sup> a postcard of the green turtle hatchery that you found so exciting. I am writing to him to send me a bunch of them.

Thank you much for sending the article from SCIENCE on Temperature-Dependent Sex Determinants. Has anyone figured out what "NATURAL SEX RATIOS" are? This is very important for me out here. They have a law saying that only male green turtles can be killed, but how many males there are ~~are~~ is difficult to estimate.

16 August 82

Sigh!!... Here we are again in the midst of another ~~coup~~ coup. You've probably heard about it by now. We are under 24-hour total curfew and part of the army has taken over the major parts of Maki -- airport, radio station. Yesterday the first day of the take-over, I was on my way to the radio station of all places! I go there about twice a year, and was on my way to get interviewed for a newspaper article on my work. That was where they took over 200 hostages! Actually I never got that far cause I was stopped in front of my house while waiting for a bus. Yesterday I was a bit worried cause these creeps were threatening to blow-up the petrol station, the powerhouse & the radio station, + kill the hostages. So, I filled up a lot of containers with water (in case the H<sub>2</sub>O supply was cut), and cooked up a lot of food like beans + rice (in case the power was cut), and packed a bag in case I needed to escape up into the hills (I live right on the road). Right now I can hear distant gunfire, but this part of Maki is really quite quite quiet as it is away from the important places. The credibility of the rebels is questionable. They kept saying "if you don't give us an answer in 15 minutes we will blow up the power-station". But then they didn't. I think the Gov't is just going to wait them out. However, there is supposed to be a band of Tanzania soldiers firing on them at the moment. That bodes poorly for the poor merchants in town.

Anyway --

I really enjoyed your article "Radio Telemetry of Hawaiian Green Turtles" -- I would love to go back to Ascension and use some more sophisticated equipment and of the longer term tracks.

George, can you supply me with information on the following topics -- i.e. do you (have yourself), or do you <sup>KNOW</sup> of other work which would answer my questions on the following (sorry if I am sounding illiterate!)

1. Sex ratios -- I need to get some up to date information on the number of males vs females. This would come from a combination of data gathered ~~from~~ on sex ratios in natural nests, ~~and~~ <sup>FROM</sup> on counts made at the nesting grounds on adults, and from a comparison of tag return intervals in both males and females. Here in Seychelles it is illegal to kill adult female green turtles (although people do it all the time) but during 7 months of the year it is open season on males. Lots are taken. There is no well defined nesting season for greens here. Very odd.

2. Is there new information available on age to maturity in green turtles? As you know, this is a very important bit of information if one is to try to manage the population. During the complete ban on killing green turtles here in Seychelles in the '70's "no increase was observed in the nesting populations". Of course, there are two good reasons for this a) No attempt was made to monitor the population b) During the period of the ban the people went right on killing turtles as before. However, if I had hard data that suggested that one must wait so-and-so many years before you could <sup>EVEN</sup> expect to see protected hatchlings return to nest, it would make matters easier. When I tell people that recent research suggests green turtles take 30 or more years to reach maturity they are incredulous and do not want to believe it. I don't have numbers to back me up so I find myself at a bit of a loss. Do you have a manuscript on this. I am embarrassed to say I can't

remember if you published that sort of info in the  
Proceeding + I don't have a copy of your papers here with  
me.

I think I will leave Senegales on the 5 of September  
for a visit of about 1 → 1½ months in the States. I hope  
the curfew ends soon. This is a drag. I suppose this will  
cut into Tourism once again so I shouldn't have much trouble  
getting a seat in the airplane to go home.

Sorry to hear B. Groomsbridge is being a creep.

Best regards —  
Eann

P.S. Note stamp on envelope for R3.50  
It is of the Ship Civa Tula  
I've lived on that ship for over 3 months!



G. Balazs



UNION INTERNATIONALE POUR LA CONSERVATION DE LA NATURE ET DE SES RESSOURCES  
INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES

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Télégrammes/Telegrams:  
iucnature, Gland

Référence/Reference:

Sa/3/4-1  
SSC/RFS/pc

Professor Archie Carr  
Dept of Zoology  
University of Florida  
223 Bartram Hall  
Gainesville  
Florida 32611  
USA

30 August 1982

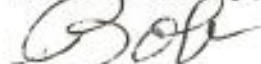
Dear Archie,

I have a note from George Balazs referring to my 11 August letter to you about the Bali turtle meeting. This, together with further conversations about the Bali Parks Congress, leads me to offer the following clarification about attendance.

Anyone concerned with marine turtles who is able to be in Bali on his or her own arrangements at the time of the 12 October turtle meeting will be welcome to attend that and any ensuing turtle meetings. If space were to become a problem in the Congress meeting rooms, arrangements elsewhere could be made. This will probably not be necessary, however.

If anyone wishes to attend the Congress itself, an invitation and registration fee would be required, as I indicated.

Yours sincerely,

  
Robert F. Scott  
Executive Officer  
Species Survival Commission

cc: distribution list encl.

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because cocci lives

**Coban.**  
FOR THE COCCI

Dear George -

Hope this letter is okay.  
I sent it off the day after  
I received your letter -  
sorry I was slower to  
get the copy to you. I  
assume you've received  
your copy of Fred's memo  
by now. I'm going to  
wait until he will have  
had a chance to receive  
1 okay from everyone.  
Then I'll arrange to send  
out a formal request  
for comments on the Manual  
& set a definite deadline.  
Most people have still not  
received the Manual - all

find out when everyone will have their copy, so we can set a reasonable deadline date. I thought we could ask them to send all comments to me; I could incorporate all I agree with - then send the revised copy to you w/ the comments I didn't include to see if you agree with all. If Fred wants major chapter rewrites - I think we should consider sending the chapter back to the original author. I didn't volunteer to rewrite the thing! If possible, I would like to assign authors to each of the chapters, rather than numbering 1-10 at the beginning. What do you think? That way people w/ questions know to whom they should write etc. I don't know how the chapters were

because cocci lives

**Coban.**  
COBAN COBAN

written, though, so it may not be feasible. Alan & I are going to Inagua Sept 3 for 10 days. I'm really looking forward to it. Also, I finally got my courage up to take the big step - Alan & I are going to get married, probably in October.

I hope all is well with you, Linda & Christian.

Best regards,

Karen



# TRAFFIC (U.S.A.)

WORLD WILDLIFE FUND-U.S.

1601 Connecticut Avenue NW  
Washington, DC 20009

(202) 797-7901

Aug 17th

Dear George,

I've been working with Mike Bean and WMFS regarding CTF petition. I haven't found anyone in the government who supports CTF products again coming into U.S.; however, as we all know, scientific recommendations can be overturned by higher-ups. Let's keep our fingers crossed.

One problem I foresee coming up in the future is the ranching operations by Suriname and Reunion. If they are approved by the parties, does this put extra pressure on the U.S. to open the doors to CTF products?

I have enclosed our comments to the CITES agenda at the next meeting of the parties in Botswana, April 1983. As you will notice, we would like to see an agenda item added on "Implementation of the Convention with respect to sea turtles." The trade figures are just incredible and it's time for the Convention to address

(over)

this issue. A letter from you and  
Archie Carr (just sent him a letter)  
supporting a discussion of the sea  
turtle product trade at the next  
meeting would probably lend support.  
I'd address a letter to the CITES  
Secretariat and a cc: to Mike  
Goldsmith at the UK Scientific Authority  
who is head of the Technical Expert  
Committee.

Keep in touch.

Best,

David

Boqor, 2 August 1982

Dear Mr Goerge Balazs,

I am very glad received your report 'synopsis', letter and the map a sea Turtles of the world. Thank you very much for your kindness.

I think my research in Bali I. as simple as your research in Hawaii I. Because my research is only practice for finishing touch my study at Fisheries faculty, Boqor Agriculture University.

I try to write about my research. My research about Morphology and Anatomy of the green turtle which catch around "Bali" waters. I choose this place (Bali) because in this place the green turtle can be found in large number.

The material & methods, please <sup>see</sup> figure <sub>the</sub>.  
(All turtles are weighed and measured.)

The result, I write in table. And I make data as:

- relationship between carapace length and body weight
- relationship between carapace length and carapace width
- " - " - plastron length and plastron width
- " - " - carapace length and plastron length.
- " " carapace length and digestive tract length
- " " carapace length and shell depth



So I am very happy if you give me some opinion or correction, how to prepare data.

I am sorry if my letter not correct. I still learn to write a letter in English. My English is not better, but I try to practice. I think where there a will there's a way

But I suppose you are not doubt about your letter if you write me next. Because I understand to read English book, so I use the dictionary if I don't know the sentence (statement)

I send to you my photograph. I hope every thing was satisfactory.

Best regards,

Sincerely,

Fransine Manginsela

Fransine B. Manginsela  
Bogor Baru B II/3-4  
Bogor  
Indonesia.

Data Primer

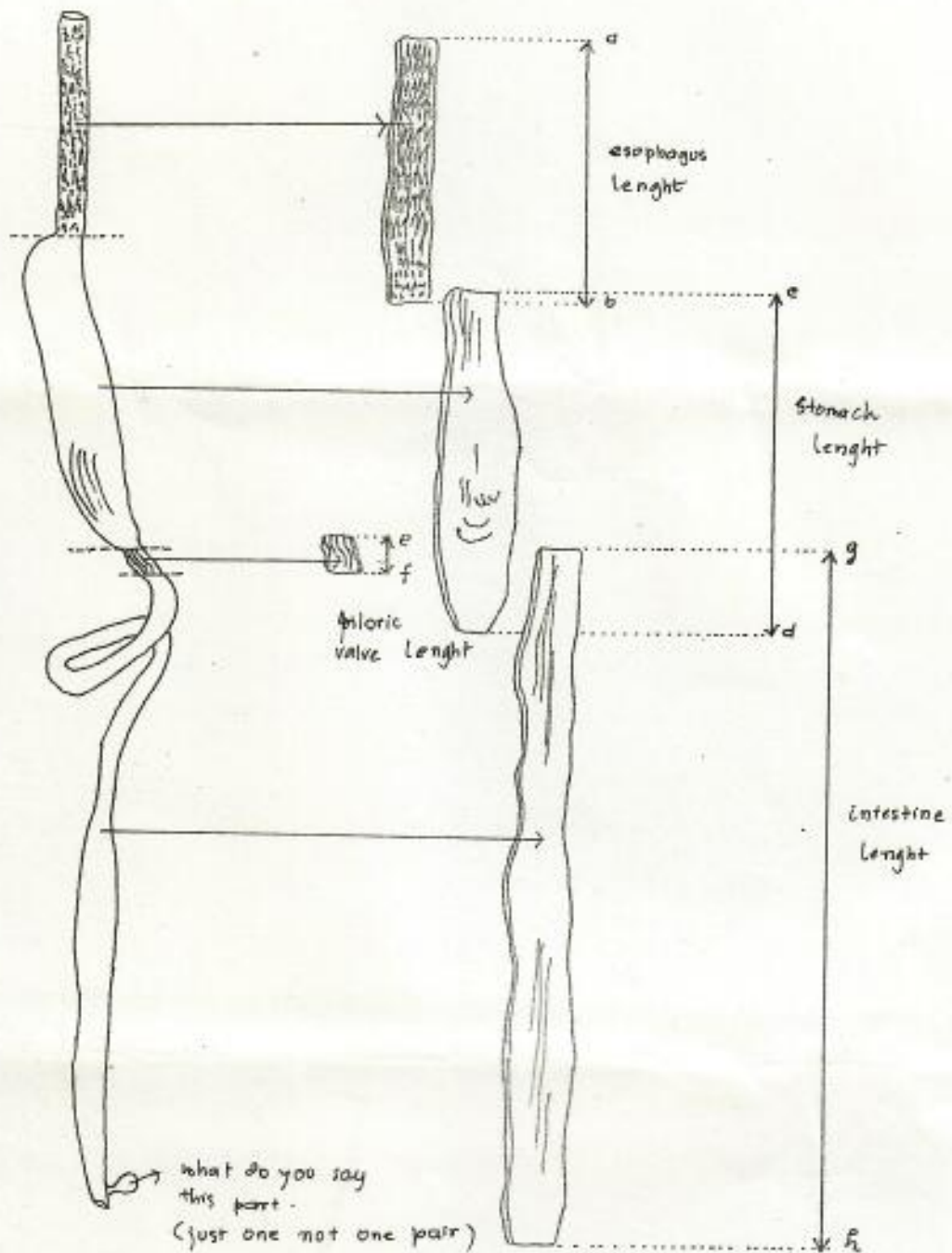
Tabel 2. Ukuran-ukuran panjang dan berat individu dan alat pencernaan penyu daging (Chelonia mydas L )

No.	Tanggal (Pengamatan)	Jam	Tempat	Lokasi Penangkpn.	Lamanya diplhr.	Karapas (cm)		$\sum N_3$	$\sum M_n$	$\sum C_A$	$\sum X$
						panjang	lebar				
22	21-3-82	20.04	Br.Pgok	Selat Bali	1 hari	41.20	33.70	3	11	4	5
23				dan S.Indo. (Grajakan)		39.10	33.55	3	11	4	5
24	20-3-82	19.15				48.90	44.60	3	11	4	5
25	21-3-82	20.04				59.70	53.30	3	11	4	5
26						45.70	39.60	3	12	4	5
27						47.60	39.60	3	11	4	5
28						48.80	41.10	3	11	4	5
29						45.40	40.10	3	11	4	6
30						67.15	56.10	3	11	4	5
31						40.90	34.40	3	11	4	5

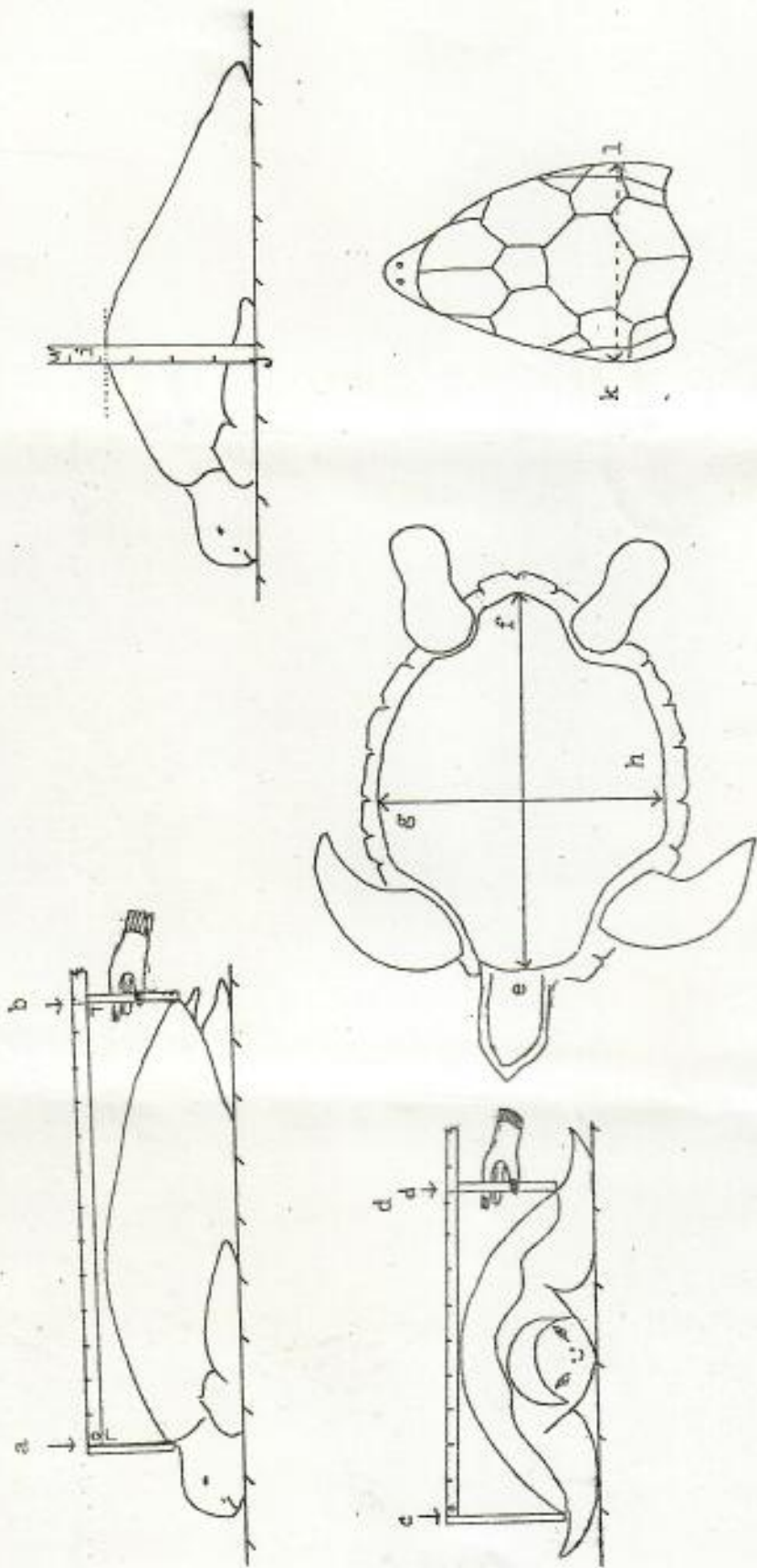








Gambar 3.2. Cara mengukur saluran pencernaan menurut bagian-bagiannya.  
 a-b = panjang kerongkongan  
 c-d = panjang lambung  
 e-f = panjang saluran pilorus  
 g-h = panjang usus



Gambar 3.1. Cara pengukuran panjang dan lebar di lapangan  
 a-b = panjang karapas    g-h = lebar plastron  
 c-d = lebar karapas    i-j = tinggi badan  
 e-f = panjang plastron    k-l = lebar kepala

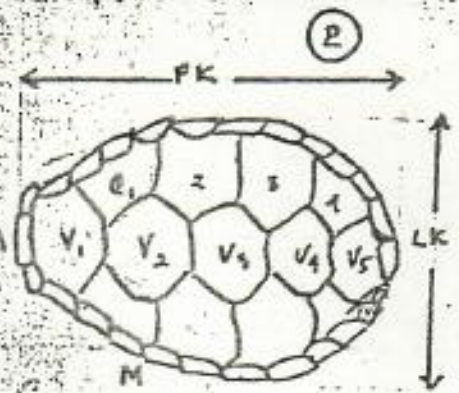
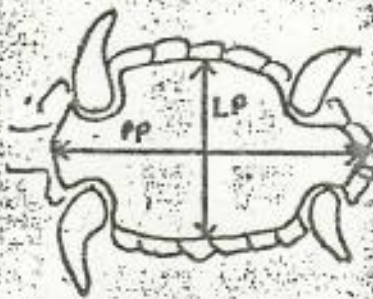
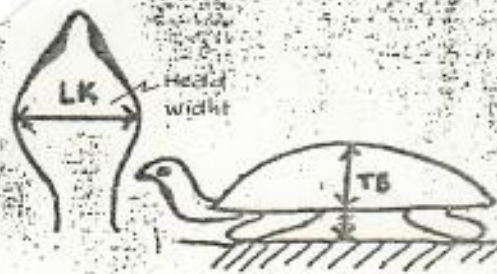
Data Primer

Tabel 2. Ukuran-ukuran panjang dan berat individu dan alat pencernaan penyus daging (*Chelonia mydas* L.)

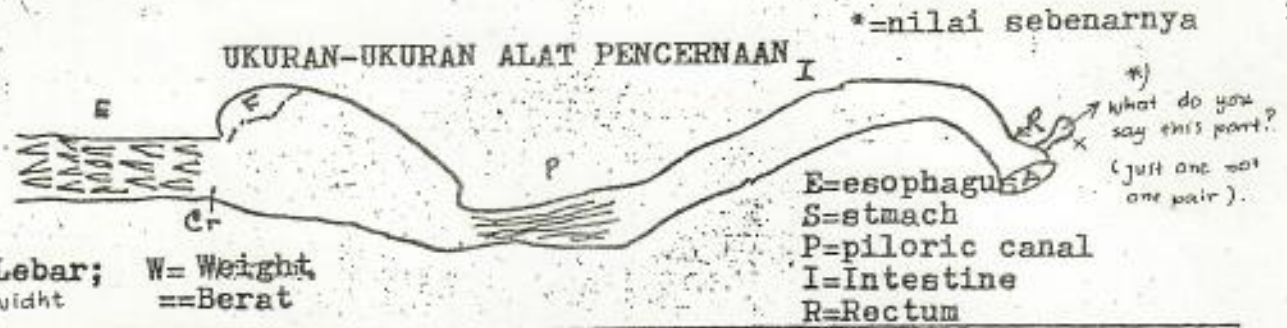
No.	Date	Time	Location	Lokasi Penangkpn.	Lamanya diplr.	Carapace Karapas (cm)		Nuchal $\sum N_3$	Marginal $\sum M_{11}$	Plastron $\sum C_{-1}$	Vertebral $\sum V_5$
	Tanggal (Pengamatan)	Jam	Tempat			panjang	lebar				
	DATE	TIME	LOCATION	CATCH LOCATION		Lebar	width				
1	13-3-82	19.30	Br. P'gok	Kep. Sunda	1-30 hari	59.50	46.95	3	11	4	5
2	*2	-"-	-"-	Kecil	*"-	42.05	35.10	3	11	4	5
3						41.65	36.15	3	11	4	5
4						38.40	35.35	3	11	4	5
5						43.20	35.85	3	11	4	5
6						55.10	46.80	3	11	4	5
7						52.90	45.00	3	11	4	5
8						58.20	47.10	3	11	4	5
9						56.90	48.20	3	11	4	5
10						54.40	43.80	3	11	4	5
11						41.90	37.60	3	11	4	5
12						59.40	45.55	3	11	4	5
13	-"-	-"-	*"-	*"-	-"-	93.95	72.80	3	11	4	5
14	20-3-82	19.15	66"-	Selat Bali	1 hari	49.35	38.10	3	11	4	5
15				dan S. Indo (Grajakan)	tangkap: 12 Temp: 20/1	54.50	45.70	3	11	4	5
16						58.50	52.70	3	11	4	5
17						47.20	40.90	3	11	4	5
18						45.00	39.90	3	11	4	5
19						41.80	35.20	3	11	4	5
20						42.70	36.70	3	11	4	5
21						52.80	45.70	3	11	4	5



( Sambungan Tabel 2 ) 0



No	Lebar (cm) Kepala LK	Tinggi (cm) badan TB	Plastron (cm)		Berat tubuh (kg) body weight	Warna tubuh (c/h)	Rectum x <sup>3</sup> ?		
			PP Panjang	LP Lebar			P (cm)	L (cm)	W (gr)
1	9.90	19.40	48.80	40.90	25.75	ch	-	-	-
2	7.10	14.00	34.50	28.95	8.40	ch	4.00	2.00	5
3	6.50	13.30	35.15	29.05	8.35	ch	5.00	2.80	8
4	6.95	11.90	33.80	29.80	8.60	ch	5.25	3.00	15
5	7.60	12.60	35.60	30.05	9.95	ch	3.60	1.00	10
6	7.60	14.50	47.05	40.55	22.50	ch	5.80	3.00	10
7	8.00	11.90	43.50	37.00	13.10	ch	7.00	3.40	15
8	9.10	15.20	48.20	42.50	22.45	ch	10.00	3.80	15
9	8.40	15.50	48.55	41.10	24.45	ch	6.10	2.00	9
10	8.90	13.10	45.30	37.50	17.45	ch	5.00	2.00	10
11	7.30	12.70	34.00	31.15	7.40	ch	3.95	2.00	10
12	9.60	19.20	59.40	45.55	23.90	ch	6.60	3.00	20
13	13.20	23.20	74.95	67.85	102.05	ch	7.50	3.00	50
14	6.90	13.55	41.05	33.25	13.40	ch	5.50	1.00	5
15	7.90	17.05	47.90	41.20	22.55	ch	5.60	2.00	10
16	9.50	18.80	51.40	46.20	31.80	ch	5.00	2.00	15
17	8.20	15.30	41.20	35.30	15.80	ch	4.50	1.80	10
18	7.90	13.90	39.20	33.10	14.70	ch	3.70	1.80	10
19	7.60	11.90	36.60	31.30	10.00	ch	4.50	1.30	5
20	7.00	11.10	36.00	31.80	19.20	ch	4.00	1.00	5
21	9.00	15.10	44.00	39.10	20.00	ch	4.50	1.80	8



No	esophagus			stomach			piloric canal			intestine		
	H (cm)	L (cm)	W (gr)	P (cm)	L (cm)	W (gr)	P (cm)	L (cm)	W (gr)	P (cm)	L (cm)	W (gr)
1	26.00	6.90	190	39.00	6.50	270	3.40	4.00	10	599.50	5.00	1000
2	17.90	4.80*	80	22.00	2.60	70	3.20	3.00	1	245.00	2.30	260
3	20.50	5.50*	95	24.50	3.60	75	1.90	2.70	2.5	329.80	2.10	340
4	23.00	4.60*	80	26.90	3.80	75	2.10	2.60	2.5	318.00	2.40	245
5	19.00	5.50*	90	20.00	3.50	75	1.90	2.20	2.5	320.80	2.40	320
6	20.00	6.00	115	32.50	4.00	155	3.50	3.50	11	522.00	3.50	870
7	22.80	6.10	155	24.00	5.00	110	3.20	3.50	10	508.00	3.20	800
8	24.30	8.90	250	31.20	5.20	240	4.50	4.50	9	530.90	4.50	1000
9	26.60	8.00*	210	38.00	4.30	180	3.20	3.70	9	613.10	3.00	900
10	28.00	5.20*	200	31.10	4.10	195	4.20	3.20	5	465.50	4.00	760
11	20.40	5.50*	75	18.05	2.45	50	2.00	2.00	1	287.20	2.00	170
12	20.50	5.50	115	38.20	4.00	220	3.60	4.00	10.5	569.90	3.00	1180
13	66.00	9.00*	1125	53.40	10.00	1050	4.40	4.50	20.00	1300.0	4.50	4120
14	22.50	6.30	155	32.50	5.30	152	3.70	4.80	5	607.10	3.00	840
15	23.60	6.20	165	31.90	5.00	195	4.60	3.80	10	690.00	3.70	1320
16	25.20	6.90	210	43.50	5.20	330	4.30	4.00	15	804.00	4.00	1580
17	24.00	7.80	165	33.50	5.90	150	3.40	3.10	10	613.80	3.50	970
18	21.90	8.00	120	31.10	5.80	145	2.80	3.60	5	477.20	3.00	650
19	22.60	6.50	130	27.10	4.00	135	3.20	3.20	10	558.20	3.00	640
20	23.20	7.20	130	26.00	5.20	125	2.60	3.30	10	382.00	3.00	530
21	29.50	6.20	165	37.00	5.50	210	4.20	4.20	11	704.00	4.00	1220





IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE

POST OFFICE BOX 1306  
ALBUQUERQUE, NEW MEXICO 87103

19 AUG 1982

Prof. Felix A. Garcia  
Jefe de Tortuga Marina  
Direccion Nacional de Recursos  
Naturales Renovables  
Apdo. 5390 - Panama 5, Paraiso  
Republica de Panama

Estimado Prof. Garcia:

Your letter of May 25 to Mr. Curt Freese of our Washington Office of International Affairs has been referred to me for reply. Please accept our apologies for the delay in responding to you; I assure you it will not happen again.

The reason I am responding to your letter is that I am rather closely involved in the administration of a number of sea turtle projects in the United States, Mexico, and Costa Rica. These projects involve management, research, and providing direct and indirect assistance to both Costa Rica and Mexico in their efforts to manage their sea turtle resources on both the east and west coasts of the respective countries.

To begin with, I was both surprised and pleased to learn of your efforts with Lepidochelys olivacea, the same species we are presently cooperatively conducting research with at two sites on Costa Rica's west coast. This is a joint effort supported by the Costa Rican Government (National Parks), the University of Costa Rica, the World Wildlife Fund-U.S., and my office of the U.S. Fish and Wildlife Service. None of us have enough resources to do the work alone, so we have managed to jointly pool our resources to reach the needed level of support to get the job done. This combined approach is what you seem to require, also. Whether this is possible in the case of Panama, I can't say, but it is certainly worth pursuing further, and we will try to assist you.

Obviously, if support is to come from outside of Panama, then the appropriate Panamanian Government agency will have to give their endorsement for such an effort before a foreign organization or an agency such as mine could seriously entertain a cooperative international assistance project. Without support and approval of the host government, it cannot be considered.

Before going further in relation to the possibilities of actual assistance to your programs, I'd like to comment on your suggestion of "headstarting" hatchlings by holding and monitoring them in captivity for at least 2 years. In all honesty, I would not recommend that you institute such a measure, for to do it correctly

and maintain significant numbers of turtles in a healthy condition with high survival, is difficult and very expensive. The benefits of such a costly effort have never been proven. It is being attempted in some countries, including one of our U.S. projects, but ours is strictly experimental and utilizes less than 1,800 hatchlings for approximately 1 year. Our captive survival is excellent--over 90 percent--but the cost is prohibitively high for so few turtles. The species involved is L. kempi, a highly endangered species, and our efforts are purely experimental to try and determine if we can establish a second nesting colony and reduce early hatchling mortality.

I've enclosed some short articles from the "Marine Sea Turtle Newsletter," which talks to this question and may be of some help to you. Headstarting does not have general support from most of the professional turtle biologists due to the many unanswered questions as to how it may alter normal behavior, as well as the often high mortality, and, believe me, there often can be very high losses. To raise a few turtles is one thing, but to try it with thousands, I could not encourage such an effort until we learn much more and prove or disprove the value of such efforts and until costs can be made more reasonable.

Since I know so little about your program, I am most hesitant to say anything other than to suggest we jointly explore opportunities which could help in your program efforts. When you get right down to addressing the basic biological and management questions regarding L. olivacea on the Pacific coast, it becomes obvious that probably the most basic need is for the countries of Central America and Mexico to pool their resources and expertise, try to ignore political boundaries, and work together to maintain and manage this important renewable resource which is shared by all but which could be overexploited by one. The Costa Rica project has tagged thousands of ridleys during the past 2 years and this current season, also, in an effort to determine the movements, seasonal and annual, of this large population which nests to the north of Panama. I am enclosing copies of these project reports for the past 2 years; they may be of help to you in formulating future plans. You may wish to make contact with either Dr. Robinson at the University of Costa Rica, or Steve Cornelius. Dr. Robinson and Cornelius are working together, one at Playa Ostional and one at Playa Nancite, and they would be very interested in what you are doing and what you know of sea turtles in Panama. Without a doubt, the population in Costa Rica and Panama must intermingle, for we have received tag returns from Ecuador and Panama.

Are you or have you tagged any of your nesting females? If so, when and how many? If you are so inclined, I could offer to assist you in obtaining tags and tagging pliers. The tags would be incised with both a number and a Panamanian return address. A tagging project, along with your current efforts, would greatly increase the opportunity for the countries of Central America and Mexico to gain a better understanding of the movements and interactions of the various ridley populations along the Pacific coast. We know that Ecuador has carried on some relatively heavy commercial harvests of ridleys in past years, although there is no nesting population in that country. Where

do these turtles come from? Are they part of the population you are trying to protect or the same population Mexico is harvesting in Oaxaca, or a mix of all these and other ridleys that spend part of the year in Ecuadorian waters? Are there significant interchanges between nesting playas in Costa Rica and Panama by the turtles, or just an incidental occurrence of little biological and management importance?

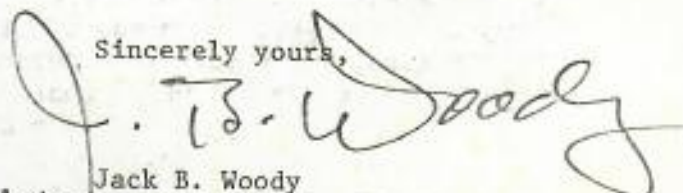
There are many questions that need to be answered about the Pacific ridley, and it appears that no one country alone can manage the species without affecting other countries. The sea turtle resources of the Pacific coast are much like a migratory bird resource that spends the year in a number of countries and must be managed accordingly to assure a continuing supply for everyone.

At any rate, we are most interested in the sea turtle efforts of Panama and will try and assist you as we can. Please let me know if you would be interested in starting a tagging effort and we will try and help you with obtaining the equipment needed. Please don't hesitate to contact Dr. Robinson or Steve Cornelius in Costa Rica if you believe they may be able to assist or provide you information.

Project funding sources may be available from private organizations, but it will require that you provide a project proposal of what it is you wish to do and how it will benefit the resource through your management or scientific studies.

I look forward to your reply.

Sincerely yours,



Acting Jack B. Woody  
Assistant Regional Director  
Federal Assistance & Fisheries

Enclosures

bcc: (w/o enclosures)  
Steve Cornelius/Doug Robinson  
Georgita Ruiz  
Nancy Hammond  
George Balazs ✓  
Curt Freese  
Archie Carr  
J. Hendrickson  
SE (RO)



1) HK  
2) HEN  
Balazs  
mailed 8/1/87

GOVERNMENT OF THE VIRGIN ISLANDS OF THE UNITED STATES

Department of Conservation and Cultural Affairs  
Division of Fish and Wildlife

BOX 1878, FREDERIKSTED  
ST. CROIX, U.S. VIRGIN ISLANDS 00840

6 August

Dear Sir,

I would appreciate a copy of the October '80 NOAA/NMFS Technical Memorandum: SYNOPSIS OF BIOLOGICAL DATA ON THE GREEN TURTLE IN THE HAWAIIAN ISLANDS by George H. Balazs. (NOAA-TM-NMFS-SWFC-7). Thank you. I am

Sincerely,  
Karen Eckert

NATL MARINE FISHERIES  
SERVICE

AUG 11 10 27 AM '87

HONOLULU LABORATORY

University of Toronto

DEPARTMENT OF ZOOLOGY

RAMSAY WRIGHT ZOOLOGICAL LABORATORIES  
25 HARBORD ST.  
TORONTO 5, ONTARIO, CANADA

August 11, 1982

Mr. G.H. Balazs  
Hawaii Institute of Marine Biology  
P.O. Box 1346  
Kaneohe, Hawaii 96794  
U.S.A.

Dear George,

I have thought further about your proposal for a list of turtle stamps, and have consulted one or two people also, but am still not prepared to take the list. There are various reasons. Our funds are not limitless, and at  $3\frac{1}{2}$  pages I do not think it justified. We do sometimes print reports on new issues of stamps, but that takes only a little space. Also I want to keep the MTN with more emphasis on biology and direct conservation actions, and as topical as I can. We could have articles on a lot of past things related to turtles. Why not one on Bernini's turtle fountain? or turtles in art? I am faced with making decisions about what to include and I hope that at least you will be grateful for the immediate replies given to you and Gomez on this matter.

I'm sure you could find somewhere else for your list, maybe something like the Tortgua gazette. Of course I would reconsider it when I saw the list, and try to be open-minded, but I do not want to encourage you at all. I would be happy to list it in the recent papers section, and interested people can follow up. That is one of the functions of the MTN, to tell people what is going on, who to contact, what literature is available. We cannot publish full accounts of everything.

With best wishes,

Yours sincerely,

  
Nicholas Mrosovsky

NM/jr





INTERNATIONAL TURTLE & TORTOISE FOUNDATION  
Publishers of Chelonologica

I.T.T.F.  
P.O. Box 125  
8700 AC Bolsward  
The Netherlands

reference:

date:

Phone: 05157-2795

Dear Member:

In the first issue of the REVIEW (1981) we have asked for financial support and we announced that we would contact local and international institutions in order to get the so badly needed financial back-up.

Since that time all our efforts to get this support were unsuccessful what means that it is impossible to continue any longer publishing periodicals and other publications.

Not only the finances as mentioned did us decide to stop all activities, but, also the number of members, right this moment 125, made this decision necessary. Furthermore, ITTF got very little support from other societies and institutions. Nearly 500 of them we have written to of which only 5% responded. The same counts for the more than 150 authors we have written to. Besides these arguments also the number of manuscripts which were received by us for publication was very limited and not even enough to produce two or three issues of CHELONOLOGICA. Therefore, ITTF has stopped all activities and will produce no longer any publications.

Because there is no money left for refunding to you, we have decided that those who have paid 1981 dues and who do not have back-issues of CHELONOLOGICA to send them the available four issues. Those who do already have all issues of CHELONOLOGICA we have to disappoint.

We regret that this is the only way to give some compensation for the inconvenience you have had. Back-issues and other publications will be available as long as stock lasts.

Finally we would like to thank you for having joined ITTF and all ITTF Staff-members for the work they have done.

The ITTF Board of Directors.

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- All published

**Reprints from Chelonologica:** at \$ 1.40 each (Numbers 4 and 5 never issued)

- Number 1 (1980) - Christel Pfeiffer, Foods for Tortoises. 9pp  
 Number 2 (1980) - Ernest Williams, A Key and Description of the Living Species of the Genus *Podocnemis*. 12pp, figs.  
 Number 3 (1980) - John H. du Pon, *Chelydra serpentina* of de Gewone Bijtschildpad. 8pp, figs.  
 Number 6 (1980) - Peter C.H. Pritchard, Record Size Turtles from Florida and South Amerika, 11pp, figs.  
 Number 7 (1980) - Jelle Hofstra, Mijn Franjeschildpad of Matamata, *Chelys fimbriata*. 7pp, figs.

**Reprints:**

- Reprint of the Turtle Hobbyist in four parts. Part 1. 1976, Vol. 1, nrs. 1-7. 54pp, figs. All published. \$ 5.00.

**Bibliotheca Testudinata:**

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These prints were drawn by R. du Pon, after G.L.C. Günther, 1877

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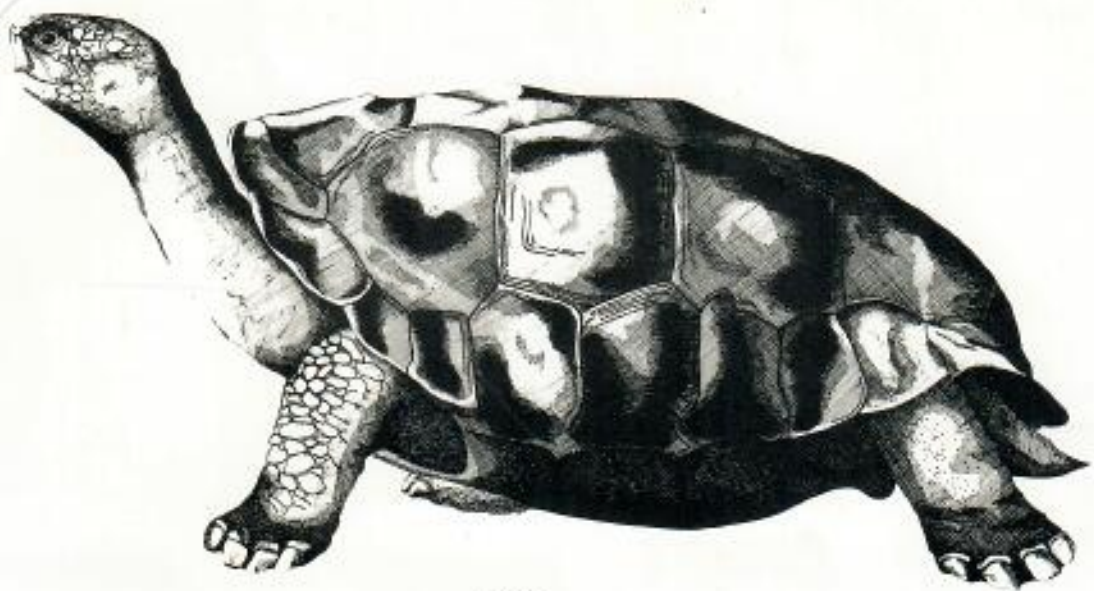
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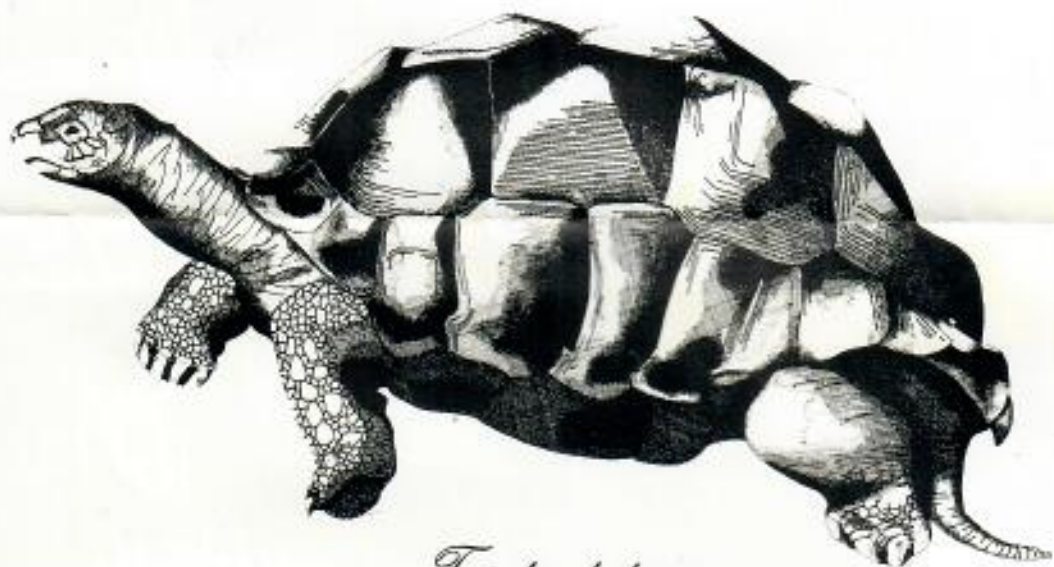
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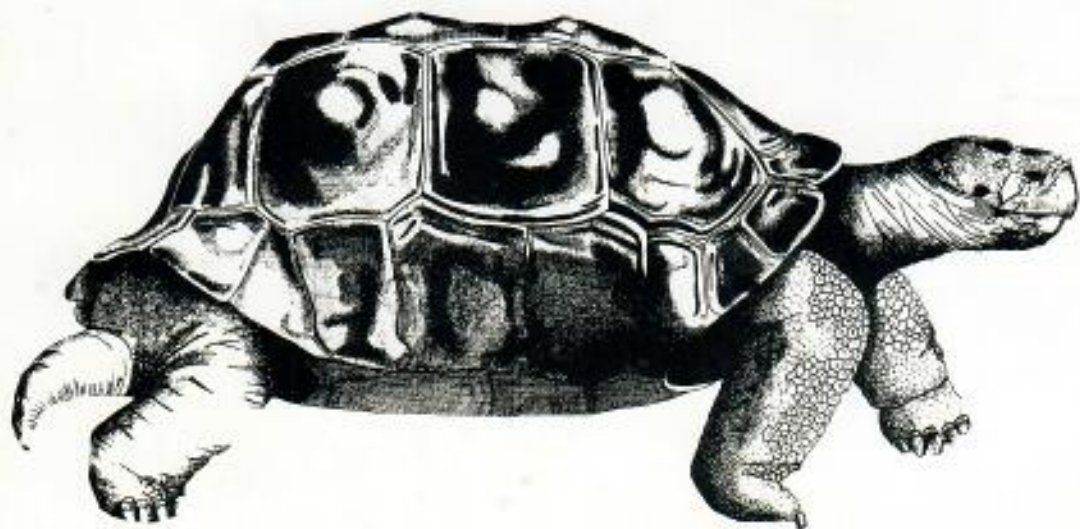
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*Testudo ephippium*



*Testudo elephantina*

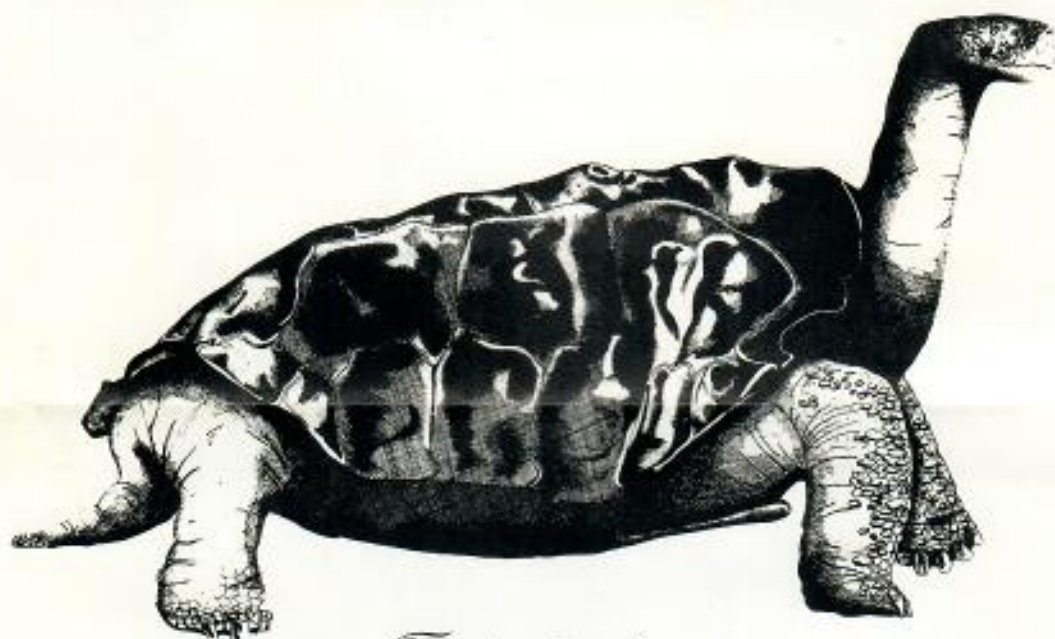


*Testudo microphyes*

## TORTOISE PRINTS

Five different Tortoise Prints by R. du Pon are available for sale. These portraits are drawings after the book; Gigantic Land-Tortoises (Living and Extinct) by Albert C.L.G. Günther, 1877. Five different prints of Aldabra and Galapagos tortoises are printed on sturdy paper. Stock measuring 22.2 by 34.5 cm. The prints are suitable for framing. This edition is strictly limited to 100 numbered and signed copies of each print. These portraits are also available as a complete set of five postcards, stock measuring 10.5 by 14.5 cm, and is also limited to 100 sets. On this and the following page we have printed all five prints. Please use the orderform enclosed with this issue of Chelonologica.

FIFTY PERCENT OF THE PROCEEDS FROM THIS SALE WILL BENEFIT ONE OF THE ACTIONS OF THE DUTCH DEPARTMENT OF THE WORLD WILD LIFE FUND, FOR THE CONSERVATION OF SEA TURTLES.



*Testudo abingdonii*



*Testudo daudini*

cc - R. Scott

bc - Dr. G.H. Balaze

Mrs Aban Marker Kabraji  
Principal Investigator  
Marine Turtle Conservation  
Project  
Sind Wildlife Management Board  
PO Box No. 3722  
Karachi  
PAKISTAN

Gland, 13 August 1982

Re: Project 1451 - Pakistan, Sind Wildlife Turtle Conservation Programme

Dear Mrs. Kabraji,

We have received a number of very constructive comments on the technical questions raised in annual reports for 1981. As the names of the IUCN reviewers should be kept confidential I will quote relevant sections from correspondence without mentioning the source;

- (1) "The extended incubation times mentioned on page 3 of the report are certainly abnormal. Incubation time in sea turtle eggs is directly related to incubation temperature. A lot of work has been done on this subject lately in relation to adverse impacts of sex determination unknowingly resulting from "conservation" hatchery projects. The enclosed article that recently appeared in Science will bring you up to date on this subject."
- (2) "The repeated use of a beach area for hatchery work should not cause contamination (from "rotting" eggs) under normal circumstances. Of course, the site selected should be nearly identical to the natural beach and have good drainage (percolation) of rain water down through the sand. This will serve to continually cleanse the substrate. Also, the unhatched remains of nests should be taken out and discarded elsewhere on a regular basis. The flooding problem mentioned in the report makes me wonder if the site selected is indeed adequate."
- (3) The hatching (survival?) rate of 31% (56,726 hatchlings from 183,250 eggs) is exceedingly low. I am unable to understand the "seasonal variation" explanation given for this. Does this pattern follow the natural, undisturbed nests?

- (4) "A delay of up to 12 hours between egg laying and reburying is probably excessive. If at all possible, the transfer should be accomplished within a few hours. Care should be taken to not excessively rotate the eggs."
- (5) "The reason stated for moving the eggs in the first place is to circumvent natural predation. How extensive is this natural predation? Approximately what per cent of the eggs and hatchlings would be preyed upon under natural conditions? Possibly it would be better to leave the nests where they are laid. As stressed in the enclosed Science article, we shouldn't be moving eggs around if there is not a very clear and proven need to do so."

Furthermore it has been suggested that we should urge the Governor of Sind to shift the planned housing colony away from the nesting beaches. Do you feel that WWF/IUCN should help by writing a letter of intervention?

We have not been able to find a suitable scale to weigh the turtles (re Sue Howlett's letter of 3 August to Miss Firdous). The weighing of adult nesting turtles is, apparently, stressful and potentially harmful and I wonder if we could drop this item of equipment.

Could we perhaps receive your financial report as requested in my letter of 8 June 1982? (Please note that the period of the report should be 1981 and not 1982).

Last year (at your suggestion) we asked the editor of the SSC Turtle Newsletter to publish an invitation for sea turtle experts to visit your project to exchange information. Did you receive any such visits?

We look forward to receiving your reply.

Kind regards,

Yours sincerely,

Anton K.C. Fernhout  
WWF/IUCN Project Manager  
ASIA, PACIFIC and OCEANIA

George-

request - Johnston Atoll 25 July 82  
letter

Thanks for sending a reprint of your FFS tracking paper. I enjoyed reading it & look forward to the next paper detailing behavior. The male site-fidelity is an interesting point. Between you & Limpus we should soon have a pretty good understanding of movements off nesting beaches.

I have enclosed a <sup>Good comments!</sup> copy of my comments on the recovery plan, not much to say really. I think by the time they had all argued the points back & forth, nothing very controversial could emerge. Seems to me to be pretty straight-forward. They didn't give us much time. In the cover letter dated 7 July that came w/ the book, they said they needed comments back by 26 July. As you've noticed, I'm sure, we just don't work on that kind of schedule here!

Conservation Manuals from NMFS got delayed in printing. Larry Ogren spoke w/ Costa Rica (where they're being printed) on Friday 23 July, & they had just received the first one from the printer. Not bound yet. They should now be out soon.

Your cover picture on "Pacific" is great, George. Will you be switching from NMFS to pro-lance photography? Alan is going to give a paper on his pesticide grant to the National Apiculture meetings. I will send you our itinerary, & ask for hotel suggestions, when it's formalized.

Please, again, apologize to ~~Les~~ Linda for me for calling so early the other morning. How are you so lucky to avoid Daylight Savings? Best regards,  
Wes





# POST CARD



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## KOALA.

### Australian Native Bear.

The koala is one of the best loved of all Australian animals, but although it is often referred to as a bear it is, in fact, distantly related to the Possum family. The name koala is an aboriginal word which means 'no drink', and it was given to this animal because it very seldom drinks water, but gets moisture from the dew and sap in its eucalyptus leaf diet. It eats a great deal and spends practically all its time in the treetops. The newly-born baby koala measures less than 25 millimetres in length and remains in the mother's pouch for six months before emerging to ride on her back for a further eight weeks. Found only in the eucalyptus forests of eastern Australia, the koala is carefully protected and preserved.  
Photograph by Gary Lewis.

W591





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"Meng Meng" the female orang utan with baby born during captivity at the Singapore Zoological Gardens. The orang utan is a fast disappearing species in South East Asia.

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31st May, 1982.

George H. Balazs,  
DBA Hawaiian Wildlife Photography,  
992-A Awaawaanoa Place,  
HONOLULU. HAWAII 96825.

Dear Sir,

Thank you for your aerogramme dated 20th May regarding souvenir postcards.

We do produce postcards and our prices for new and repeat orders and the various quantities are as follows:-

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Qty 10,000 Each View	6.6 cents ea	6.5 cents ea

Please note that the quantity actually printed could vary by up to 10% more or less than that ordered.

However, as your enquiry would involve an export market, there would be a fairly substantial discount on these prices, probably in the order of 20% - 25%.

To produce postcards we work from 120mm transparencies using ektachrome film. This is mostly taken through a pink filter to sharpen up the image. Would you please advise if you can supply this type of transparency or if you can get a professional photographer to supply this type of photography, or would your quantities warrant one of our photographers coming to your area to take the necessary photographs.

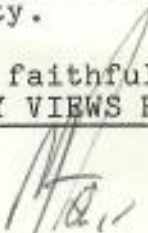
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31st May, 1982.

-2-  
Hawaiian Wildlife Photography.

We enclose some samples of our cards for you to judge the quality.

Yours faithfully,  
MURRAY VIEWS PTY. LTD.

  
P.J. Fair,  
SALES MANAGER.

PFJ:LJ

Enc.

1 Aug 1982

Dear George -

Fred Berry just called me & asked whether I would be interested in editing the Conservation Manual for a 2<sup>nd</sup> edition - to be much improved. A few months ago Fred, Larry Ogren, Archie, Annie & I had a meeting at which we all agreed you should be asked to perform this task. Fred tells me that at that time you weren't sure. I started to tell him that I didn't feel I had the time to do a good job, but then he said that his 2 alternatives after you & me are Mosovsky & Peter Bacon. The latter has, unfortunately, been restationed in the Caribbean - Jamaica this time. I really felt that we should avoid this fate. Therefore, I quickly back-peddled & said that the 2 of us could probably handle it. He wants the revised addition by mid-Jan for ~~approval~~ approval at a Steering Committee meeting. <sup>This would give us quite a bit of time.</sup> What do you think? Dr Carr's new Secretary is very good & can use the department's word processor for any & all revisions. Revising is always easier than assembling the whole thing

from scratch. Fred hopes there will be  
\$2-3000 from FHO to cover costs. If not, we  
can invoice WATS from here for secretaries,  
pross, etc. I know we both have better  
ways to spend our time. Copies are in the  
mail to us now. I told Fred I'd take  
a look at it & contact you & get back with  
him. What do you think? If you feel  
you would like to handle it yourself,  
please, by all means, be my guest. I talked  
Fred out of approaching Nicholas until  
after he hears a "no" from us. I did it  
nicely, of course. If we do it, I want us  
to be free of Peter Bacon so we should  
let Fred know before he settles w/Peter.  
I'll be in Canada from 8-11 August. If you  
agree to you doing it alone or w/me, let  
Fred know & let me know. Sorry for  
abrupt letter but I'm off to two  
more Biomass Meetings - pity my fate!

We could divide the work any way  
you see fit & perhaps farm out specified  
sections - best ways for aerial surveys,  
for example. The Recovery Plan may have  
some info for us along these lines.

Best regards  
Karen

August 6, 1982

Dear George,

Thanks for the impetus  
on the Humane Hints for  
turtles.

We had supplied them  
with one, but not along  
the lines you're thinking.  
We will now do it!

Alex





Hawaiian Humane Society  
2700 Waiialae Avenue  
Honolulu, Hawaii 96826



Mr. George Balazs  
UMFS  
P.O. Box 3830  
Honolulu, Hi.  
96812

Copy to A.C.



1801 CONNECTICUT AVENUE, N.W.  
WASHINGTON, D.C. 20009  
CABLE: PANDAFUND TELEX: 64505  
TELEPHONE: (202) 387-0800

July 30, 1982

Dr. George Balazs  
Hawaii Institute of Marine  
Sciences  
Kaneohe, Hawaii 96744

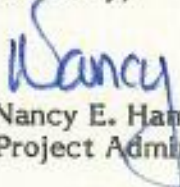
Dear George:

I have just received the enclosed letter from Steve Cornelius which I hope will be of interest to you.

At the bottom of page 2, Steve asks for an opinion on the proposed controlled harvest of sea turtle eggs at Ostional. Before replying to Steve on this point, I would like to have your guidance. While I am willing to be persuaded otherwise, my immediate reaction is that WWF probably should not promote harvest of sea turtle eggs in Costa Rica. Even if a controlled harvest were biologically defensible, it seems from Steve's letter that such a position would put us at odds with conservationists in Costa Rica and perhaps set a precedent we don't want to set.

I would appreciate having your thoughts on this.

Sincerely,

  
Nancy E. Hammond  
Project Administrator

cc: Letter

NEH/fkr

19 July 1982

Ms. Nancy Hammond  
Project Administrator  
World Wildlife Fund-U.S.  
1601 Connecticut Ave., N.W.  
Washington, D.C. 20009  
E.E.U.U.

Dear Nancy:

I felt it worthwhile to take a little time and let you know that I arrived in Costa Rica as planned on the 6th and most remarkably all my baggage was on the same plane! This is the first time I haven't had to wait a week or more for my gear to catch up with me. Dr. Robinson had a university vehicle waiting for me which was to prove the first of several indications that the university administration is realizing the stability and importance of the project. Other signs include the sea turtle biology and conservation course approved for this semester which has at present 18 students enrolled, an offer from the computation center to install a remote terminal for our use, and full professorship status for Dr. Robinson in part granted for his turtle activities.

During the last 6 months the new computer at the university has come on line and in May was opened for faculty use. This already has made a very real difference in our ability to enter, manipulate and retrieve data. DCR has hired an office assistant who very competently attends to such matters as reward payments, archiving distant return information, and preparing field data for input. His salary is paid for by the project through the university account we established last year. We have a new field assistant at Ostional who is a recent graduate of UCR in wildlife (B.S.). I've met him and am quite sure of his interest and capacity to perform the work and survive the rigors of living at that beach. In fact, all the students (2) and assistants (2) involved in the project at present are top notch.

Last week I made a short preliminary trip to Nancite to catch a small arribada (2-4 thousand). Arribadas occurred in December, February, March-April, and May during my absence. All were relatively small but nothing to be worried about since they occurred during the dry season. The park guards again made a reasonable effort over the past 7 months to record track counts, and arribada and hatchling emergences. The Nancite field station, funded by a grant by the Caribbean Conservation Corporation, has finally been started. Building materials were landed by boat several months ago but actual construction has been slowed by rains. I have no idea of when it might be completed and frankly expect to live out of my tent most of the season.

Also last week I had an opportunity to visit Ostional, the first time since 1971. I came away with a greater appreciation for the difficulties in working at that study site, especially the problem of access. Although we (DCR and 3 students) were able to drive directly to the beach because of a 2 week dry spell, a 1/2 day rain would easily make the last 10 km cart trail impassible by vehicle. The UCR truck which brought us in had to leave the same day so when we departed 2 days later and by a different route, it required walking

7 km on a mud path across 3 rivers (low water at this time of the year but often raging torrents in the height of the rainy season) to the small town of Nosara. To reach the bus from there to Nicoya in time meant leaving Ostional at 3:30 in the morning. By the time we had bounced along in an ancient school bus to Nicoya, waited 6 hours for the last bus to San Jose which arrived in the capitol at 10:30 p.m., 19 hours had elapsed since we left the beach. Although Nancite is also very isolated, it can normally be reached in 7-8 hours from San Jose with cooperation of the park for use of horses. It seems astounding to me that DCR has been as successful as he has in getting students into Ostional on short notice of arribadas. Even more amazing is that the same ones often agree to go back again! The problem of access would be alleviated considerably if a small airstrip near the town were cleared and repaired.

While in Ostional we had a formal meeting with the community (a proximately 50 residents attended) and discussed a variety of topics including the reasons for the university presence at the beach and the research effort, status of the turtle population and the community's most recent attempt to organize a cooperative to permit a legal controlled harvest of turtle eggs. This is nothing new as the idea has been around for over a decade. The main hurdle for them remains the simple fact that at least 3 existing laws would have to be amended to exempt Ostional from the prohibition on turtle egg collection. This continues to be very unlikely for political reasons. We are somewhat caught in the middle of the controversy because of our suspicion that the justification for permitting the harvest may be biologically sound. Production at Nancite, a totally protected beach, is very low with an estimated hatch rate of 5% maximum (last year I estimated it at less than 1%). This is due to a combination of factors, all of which were outlined in our last report, but which principally involves nest destruction by the turtles themselves, disruption of incubation by fungus and bacteria, and to some degree predation by large animals. We strongly suspect that the same situation is occurring at Ostional. Unfortunately, because of long-standing hostility and misconceptions on the part of the community toward the <sup>role of the</sup> university workers, we have never been able to gather the data necessary to determine whether this is so or not. The most positive result of our meeting with the community was that the tension and distrust which last year culminated in an attack upon our field assistant has been lessened considerably. For the first time it appears possible that we may be able to start gathering some data similar to that taken routinely at Nancite (such as systematic quadrat counts of nesting turtles and capture of hatchlings for production estimation purposes) without interference from the <sup>local</sup> egg collectors. It remains to be seen how outsiders who converge on the beach during arribadas will affect this attempt. I should add that even if production data show that hatching success is equally low as that at Nancite and that the egg collecting is having little adverse impact, acceptance of the cooperative idea would not necessarily be forthcoming. Costa Rican conservationists would have a difficult time accepting it as I suspect would those <sup>however</sup> from the international community. The history of Ostional has repeatedly shown that the placement of large numbers of armed guards at the beach has only temporarily halted the gathering of eggs while causing deep resentment and ill-will in the community and in one unfortunate case, even loss of life. I have overly simplified this complex situation but hope I have brought into focus some of the difficulties we face. Any comment from you on the above would be very welcome, i.e. how WWF might view a program of controlled harvest of eggs.

We learned of one other problem in Ostional which might be turned to our advantage. The project has been renting a house in the community for 3 years for use by the assistant permanently stationed there and visiting students. At present it sleeps 8, has a spacious kitchen and running water. Shower, latrine and clothes washing facilities are apart from the house. It sits on a large lot near the nesting beach (although well outside the 200 m limit prohibiting private ownership of land). The owner has indicated that she wishes to sell the property, which if purchased by someone who either wished to live in it themselves or who did not care to continue renting it to the university, would leave us without a shelter. There do not appear to be any other available dwellings for rent in the community. The present asking price is apparently \$50,000 or about \$800 at the current exchange rate. What we propose is to reallocate funds from our operating budget to purchase the house and lot through the university. The legal owner would be the University of Costa Rica which would have several advantages such as use of carpenters for improvements and maintenance. Such an arrangement would also permit us to leave equipment at the house for brief periods unattended. We have not contacted university officials on this matter pending a) a firm asking price from the owner and b) approval from you and WWF on such a reallocation of the funds. I should add that we feel that we can do this without too seriously affecting our ability to meet operating costs because of the chaotic exchange rate. One year ago the \$ bought 24 colones. At present it buys \$63. In other words our dollars are being stretched 3X as far. A quick answer on this request will be appreciated.

As I mentioned in my last letter to you before leaving Missouri, we would like to submit a proposal to WWF to cover the equipment costs for our two graduate students' field work. This would begin early next year. Could you send Dr. Robinson the proposal forms at the following address:  
 Dr. D.C. Robinson  
 Escuela de Biología  
 Universidad de Costa Rica  
 Ciudad Universitaria, Costa Rica

You will be kept informed of events here periodically over the next 5 months. I neglected to note the due date on the progress report but believe I recall it being in mid-September. If this is incorrect, please advise. Also will the review board be meeting at the same times this year as last to consider grant proposals?

With best regards,

*Steve*

Steve Cornelius  
 Parque Nacional Santa Rosa  
 Apartado 169  
 Liberia, Cte.

I've enclosed some information for your files including a preliminary listing of chronological events at Ostional & Nariá during the past 12 years plus a series of newspaper articles which have appeared over the past 2 months concerning turtles in C.R. Perhaps Curt Freese could briefly translate them for you.

CHRONOLOGY OF IMPORTANT EVENTS AT PLAYAS OSTIONAL AND NANCITE

- Fall 1969 D.C. Robinson is notified of olive ridley arribadas at Playa Ostional by Peace Corps Volunteer (PCV) J. Hyslop.
- Fall 1970 J.D. Richard and D.A. Hughes locate large fleets of turtles congregated off Ostional and Nancite during a survey of Pacific coast.
- Spring 1971 Santa Rosa National Park established with Nancite included within its borders.
- Fall 1971 D.A. Hughes initiates tagging study at Nancite with funding from National Geographic Society.
- Fall 1971 Robinson initiates tagging study at Ostional under auspices of University of Costa Rica (UCR) with funding and personnel support from Peace Corps.
- November 1971 Robinson begins effort to obtain land for field station at Ostional.
- April 1972 Rights to small parcel of land obtained by Robinson from resident of Ostional.
- August 1972 S.E. Cornelius constructs small field station at Nancite with personal funds and continues tagging study.
- August 1972 Robinson continues study at Ostional with UCR and PCV.
- September 1972 Hyslop publishes "Muchas Tortugas", International Wildlife.
- November 1972 Robinson constructs field station at Ostional with funds from UCR.
- 1972 Richard and Hughes publish "Some observations of sea turtle nesting activity in Costa Rica", Marine Biology 16:297-309.
- July 1973 Robinson, McDuffie, Cornelius present. "Reproductive activity of the Pacific Ridley sea turtle", 53rd meeting of Am. Soc. Ichth. and Herp. in San Jose.
- September 1973 Hughes publishes "Arribada", Audubon 75.
- Aug-Nov. 1973 Hughes and Cornelius continue study at Nancite.
- October 1973 P. Zahl publishes "One strange night on a turtle beach", National Geographic 147.
- 1973-1974 Robinson with help from PCV, UCR students and students from the Associated Colleges of the Midwest program continues studies at Ostional

- 1974 Hughes and Richard publish "The nesting of the Pacific Ridley sea turtle at Playa Nancite", Marine Biology 24:97-107.
- 1974-1976 Reduced UCR presence at Ostional.
- 1974-1979 No scientific presence at Nancite.
- September 1976 Hughes publishes "Ridley arribada", Sea Frontiers 22:2.
- 1977-1978 Robinson reinitiates tagging program at Ostional with funds from UCR.
- March 1977 Coastal Zone Law (4558) changed placing responsibility for shoreline protection in the hands of C.R. Tourist Institute.
- June 1978 Obligatory Community Work (TCU) program for UCR students expanded to include several projects in Ostional to offer the residents an alternative cash crop to the turtle egg commerce.
- Spring 1979 Talks begun between UCR and Ministry of Agricultura (MAG) concerning construction, operation and maintenance of a new field station at Ostional.
- November 1979 Caribbean Conservation Corporation offers to fund construction of a new field station at Nancite.
- May 1980 Formal contract drawn up between UCR and General Direction of Fisheries and Wildlife of MAG to develop a program of sea turtle investigation at Ostional.
- Fall 1980 C.R. National Parks Foundation receives donation of \$300,000 for construction of new field station at Nancite.
- July 1980 Cornelius and Robinson begin present studies at Ostional and Nancite on ridley abundance, distribution and movements under contract granted by U.S. Fish and Wildlife Service.
- Fall 1980 Old field station abandoned and house rented in Ostional for field personnel.
- November 1980 UCR refuses to sign contract with MAG for Ostional field station until legal ownership of property is clarified. Eventually determined that property lies within 200 m of shore eliminating possibility of university ownership.
- November 1980 R. Acuña completes thesis on reproductive aspects of olive ridleys at Ostional.
- Spring 1981 Fisheries and Wildlife are reorganized into separate departments within MAG which confuses issue as to which is responsible for sea turtles.
- July 1981 Colegio de Biologos (an organization of professional biologists) receives a donation of \$3600 from Animal Protection Institute for sea turtle protection in C.R.

July	1981	Cornelius and Robinson receive a second grant to continue studies at Ostional and Nancite.
Fall	1981	MAG postpones involvement in cooperative program with UCR because of confusion over jurisdiction within the Ministry over whether Fisheries or Wildlife is the responsible agency.
November	1981	F. Crastz completes thesis on embryonic development of olive ridleys at Ostional and Nancite.
November	1981	Town of Ostional proposes a project to permit formation of a cooperative to exploit turtle eggs at Ostional. Colegio de Biologos, C.R. Association for the Conservation of Nature (ASCONA) and MAG oppose project because it would violate existing laws.
Fall	1981	Anonymous article in <u>Mainstream</u> , "A test of survival for the Pacific Ridley" dealing with Ostional.
January	1982	Presidential decree 13200-A signed declaring Ostional a "protected area" with the Department of Fisheries as the responsible agency.
February	1982	Construction begins on new Nancite field station.
Spring	1982	Proposed change in wildlife law would place responsibility for all refuges in the hands of the Wildlife Department.
June	1982	New decree proposed that would change definition of Ostional from "protected area" to "refuge". Responsible agency not specified.
July	1982	Cornelius and Robinson begin third year of study with extension of funding from USFWS and new grant from World Wildlife Fund.



UNIVERSIDAD DE COSTA RICA

Ciudad Universitaria Rodrigo Facio

Costa Rica, América Central

19 July 1982

Mr. Jack Woody  
Endangered Species Office  
U.S. Fish and Wildlife Service  
P.O. Box 1306  
Albuquerque, NM 87103

RD  
DRD  
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OFFICE OF THE  
REGISTRAR

JUL 29 1982

Dear Jack,

Arrived with all my gear on the 6th. Doug had a University vehicle waiting which was the first of several positive signs I was to see over the next couple days that the university administration was realizing the stability and importance of the project. Others included the sea turtle biology and conservation course approved for this semester, with 18 students signed up; an offer from the computation center of a remote terminal for the project; and full professorship for DCR in part granted for his turtle activities.

During the last 6 months the new computer has come on line and in May was opened for faculty use. This has already made a very real difference in our ability to retrieve and enter data. DCR has hired an office assistant who very competently attends to such matters as reward payments, archiving distance return information, and preparing field data for input to the computer. His salary is paid for by the project through the university account we established last year. We have a new person at Ostional who is a graduate of UCR in wildlife (B.S.). I've met him and am quite sure of his interest and capacity to perform the work and survive the rigors of living at that beach. In fact, all the students (2) and assistants (2) Doug has gathered together since the first of the year are top notch.

Last week I made a short trip to Nancite by land to catch a small arribada (2-4 thousand). The guards again made a reasonable effort over the past 7 months to record track counts, arribada dates and hatchling emergences. They also did some tagging of leatherbacks at Naranjo. Arribadas occurred in December, February, March-April, and May. All were relatively small but nothing to be worried about.

Materials for the field station at Nancite were brought in by boat over a 3 month period beginning in February. There were a couple mishaps. The last boat capsized in the breakers and all contents lost. Parks has apparently willing to pick up the replacement costs (\$20,000). They have already spent about \$450,000. The grant, because it was given to them by CCC in colóns at a time when the exchange rate was 15 to 1, amounted to only \$300,000. Possibly of greater concern as far as missing materials are the 6 concrete columns that were buried in the beach by high winds and a 10 day storm in mid-May. The guards have probed and dug for them, thus far unsuccessfully. I am satisfied with the site itself, which is approximately 250 m from the center of the beach. Nevertheless, a board walk of some sort will eventually be necessary to aid in reaching the beach, since about 150 m of the trail will be covered by the estuary by mid September. The structure will be prefab concrete with much screening and asbestos roofing. It is much larger than I anticipated being in the form of a "T" with 20'X 20' stem connecting to a 60'X18' top. Because the rain will undoubtedly slow work, I have no idea when it will be finished. I frankly expect to spend most of the season in my tent.

UNIVERSIDAD DE COSTA RICA

Ciudad Universitaria Rodrigo Facio

Costa Rica, América Central

After leaving Nancite and arranging for a boat and operator for my entrance this week to the beach, I met Doug and 3 students and traveled with them to Ostional. This was the first time back to Ostional for me since 1971 and I came away with a greater appreciation for the difficulties inherent in working this study area. Access is often more difficult than to Nancite, although we were able to drive to the beach because of a 2 week dry spell. A 1/2 day rain would make the last 10 km unpassable in a vehicle. The UCR truck which brought us in left the same day so when we departed 2 days later and by a different route, it required walking 7 km on a mud path across 3 rivers (low water at this time of the year but raging torrents later on in the height of the wet season) starting at 3:30 in the morning in order to catch the bus at Nosara. The 4 hour roller-coaster ride to Nicoya on an ancient school bus with no suspension, a dead battery, and leaky radiator was undoubtedly the most uncomfortable I've ever taken in C.R. We had to wait 6 hours in Nicoya for the next bus with space to get back to San Jose. We reached S.J. at 10:15 pm, 19 hours after leaving Ostional. In comparison, with proper advance warning to the park in Santa Rosa for a ride in from the highway and horses ready, it is possible to reach Nancite in 7-8 hours from San Jose. It seems astounding to me that Doug has been as successful as he has in getting students into Ostional on short notice of arribadas. Even more amazing is that the same ones would agree to go back a second time!

While in Ostional we had a meeting with the community concerning turtles, the universities activities and their most recent attempt to organize a cooperative to permit a legal controlled harvest of turtle eggs. The main hurdle for them remains the simple fact that at least 3 laws would have to be amended to exempt Ostional from the prohibition on turtle egg collection. This seems very unlikely at the moment. The most positive result of the meeting was an indication of a gradual acceptance that the tagging project is not in fact harming the turtles, that university presence at the beach will be continuing and that the hostility shown in the past was counter-productive to their efforts at forming a cooperative. What this appears to suggest is that for the first time we may be able to start gathering some data similar to that taken routinely at Nancite (such as systematic quadrat counts of turtles on the beach and capture of hatchlings for production estimation purposes) without interference from the local community. It remains to be seen how outsiders who converge on the beach during arribadas will affect this attempt.

Returns of tags from other locales continues with 85 presently registered, of which 36 have come from outside Costa Rican waters. Turtles continue to be harvested in Ecuador, in spite of the ban, but are off-loaded in Colombia for storage and/shipment to Japan and Italy. This information in considerable detail was offered by an Ecuadorean fisherman who returned a tag. Another interesting recovery occurred at Escobilla. The first time for this.

The currency situation is as chaotic as last year, actually more so. The dollar now buys \$60-65, compared to 24 at this time a year ago. Prices are quickly adjusting however and thus partially discounting the increased value of the \$. A good example was the cost of my room at Playas del Coco last week. Last year it was \$50, approximately \$2 at that time. This year the same exact room took me for \$375 or \$6.25 at the current exchange rate! I frankly don't see how those living strictly on colones are making it.

UNIVERSIDAD DE COSTA RICA  
Ciudad Universitaria Rodrigo Facio  
Costa Rica, América Central

I leave next Thursday (22 July) in a Park Service truck to Playas del Coco and the following day on boat to Nancite. The day I go in is always the most critical of the season so hope for calm waters and a boatman who can count to seven.

Hope things have turned around for the better at Rancho Nuevo.

Best regards,

Steve

Also included is a preliminary listing of events as they have occurred at Ostional + Nancite during the past 12 years., also a series of newspaper articles from the last 10 months.

1974	Hughes and Richard publish "The nesting of the Pacific Ridley sea turtle at Playa Nancite", Marine Biology 24:97-107.
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November	1981	Town of Ostional proposes a project to permit formation of a cooperative to exploit turtle eggs at Ostional. Colegio de Biologos, C.R. Association for the Conservation of Nature (ASCONA) and MAG oppose project because it would violate existing laws.
Fall	1981	Anonymous article in <u>Mainstream</u> , "A test of survival for the Pacific Ridley" dealing with Ostional.
January	1982	Presidential decree 15200-A signed, declaring Ostional a "protected area" with the Department of Fisheries as the responsible agency.
February	1982	Construction begins on new Nancite field station.
Spring	1982	Proposed change in wildlife law would place responsibility for all refuges in the hands of the Wildlife Department.
June	1982	New decree proposed that would change definition of Ostional from "protected area" to "refuge". Responsible agency not specified.
July	1982	Cornelius and Robinson begin third year of study with extension of funding from USFWS and new grant from World Wildlife Fund.

Chinnor Hill, Oxford OX9 4BS August 5 1982

Dear George,

Sorry not to have replied to your letter of June 30. The problem of the 'numerous but endangered' species is to be discussed at the next SSC meeting - Kuala Lumpur October 4. Are you going to be there?

Later: I have just looked at the latest list of participants and see you are not there, which is sad. Who will speak for marine turtles? Gren Lucas has been told your and Archie's views about down-grading turtles and promises 'to put it right'.

Yours

*M. J. J. J.*

PS Many thanks for the latest material you sent - I am very glad to have it.

PPS I am not sure how far you have taken your protests on turtles, but I think it might be a good thing for you - + Archie too - to write direct to Gren Lucas - The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB.

By air mail  
Par avion

Aerogramme



Be properly  
addressed  
POSTCODE IT

Dr George H Balazs  
Hawaii Institute of Marine Biology  
PO Box 1346  
Kaneohe, Hawaii 96744  
USA

Royal Mail

Sender's name and address

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Postcode

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An aerogramme should not contain any enclosure

K5

To open slit here

To open slit here

*Faint, illegible handwriting, possibly bleed-through from the reverse side of the envelope.*





**Sea Turtle  
Rescue  
Fund**

August 9, 1982

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

Dear George:

Thanks for your letter of July 28. I have enclosed a copy of comments I submitted to the SE Recovery Team regarding their technical draft. As you can see, I have formally suggested that they call for the establishment of a team for the East Pacific. I have also stressed this in conversations with a number of the team members.

We continue to pursue the idea of a patch. Actually, we have expanded the idea to include posters and brochures. I don't know whether we shall be able to fund all of it this year, but at least we can get a start.

Keep in touch!

Sincerely,

Michael Weber  
Sea Turtle Rescue Fund Director

8/6/82

Dear George,

I glad to hear you have another IPA with  
MMFS. Soft money is tough to live off of.  
Thanks for all the goodies and info. Re 5-yr  
status reviews — I get the vibes that  
our Washington office is not going to initiate  
anything unless someone else will. Ergo,  
no review is scheduled this year to my  
knowledge.

Talked with Jack Woody regarding incomel  
tags and possible joint sponsorship (funding)  
of the first production batch. He is willing  
to kick it some bucks and will see what  
other agencies/institutions can contribute.  
We are willing (SEFC) to participate of course,  
having suggested to do so in the past, and  
having blessing of program mgrs. Will  
send you any info as this develops over the  
coming year.

Please show John Burchard problem with  
trawlers in Arabian waters. Confidentiality  
is too strong a word to use regarding this  
information. Courtesy to authors if they decided

to re-write is mainly what I had in mind (and <sup>an</sup> off-the-record clearance from them). But I just talked with John Watson today and he said the re-write it as suggestions dictated for Biol Conserv and the editor responded that he received MS. So it should come out fairly soon. We are swamping that journal! With sea turtles! Karen B. and Anne Meylan had two Loggerhead papers approved for publication by Duffy this past week.

I was just over at Gainesville but working on WATS. We did mention the meeting proposed for the SSC group and problems with travel funds. Never heard anything from on where or when (Carr and associates are very busy as usual what with contracts, conservation and college = CCC).

Do you personally think SSC group turtles before after 1973?

Fred Berry & I discussed editorial needs "manual on Conservation." I recommended that you or/and Karen be asked to take on this task if you could or would. Hope you say yes. I will send you a few copies —

copy of my letter to Berry

Bob Hankford in San Jose said he put 600 on a plane today and it should get them next week.

We did not finish editing the Recovery Plan. Sally Hopkins agreed to another session in September ca. 20<sup>th</sup>. Send your comments if you want to me and Sally. I will see that they are put in. We

really tore into the draft last week — you won't recognize it. Karen supplied some <sup>good comments</sup> too. Sometimes there is not

enough time to review stuff — we understand if you don't have time. If

you've got a problem, though we want to hear about it, your input is always good. <sup>no time</sup> shot deadline

Got to go now. Looks like I'll be working in Colombia next week. They (INDERENA, govt. Fish-Wildlife folks) will provide me with a pilot and plane and INVEMAR Kaufman's old institution in Santa Marta will provide a counterpart biologist. At last, grassroots taking hold! Keep in touch George Best over Larry

8/9/82  
Panama City  
Florida

George —

I digested all the very interesting correspondence re status review for the green. You do good work — No question about it. Don't get exasperated over your "fellow" civil servants. They don't always have the luxury of having one-track-minds like you and me. They do need your thorough up-dates from time to time, and should appreciate your efforts to be timely, etc. However, they might not have the <sup>bad</sup> exposure we had to good solid conservationists like A. Carr, and certainly have other species to consider besides turtles, including fishermen.

Your arguments are solid, however, and Clyde Jones' response should put the question of status review for greens at rest for another year. Your responses to these

these questions will be held in separate file for my reading only. Thank you.

Latest on TED (now called Trawling Efficiency Device) (1) most testing in situ hydrodynamics of net rather rough — scaled-down tests <sup>are</sup> scheduled for <sup>this fall.</sup> flume studies in England. Data will point out better spread at reduced vessel speed (rpms), (2) molded plastic model with fiberglass rods being designed by plastic's firm in east that specializes in fishing equipment (baskets, trays, traps, etc.) should be much lighter and tougher, too.

I always thought the steel frame was too heavy and cumbersome. Hope cost of plastic model not too high. Prototypes (4 <sup>plastic</sup> models) will be tested at sea, here in Panama City, in October '82. Will send you pictures.

(over)

Just heard from Anne Meylan that it  
is a big year at Tortuguero — a convergence  
of several remigration interval groups,  
apparently as was predicted. Carr is  
at Tortuguero until mid-August ca 13<sup>th</sup>.  
Also, Anne was invited by oil consortium  
in Panama (Sohio, Arco and Exxon)  
to meet with them <sup>in</sup> September re mitigating  
measures to be taken in Laguna de  
Chiriqui, site of their oil pipeline  
terminal. This was a direct result of  
her one-lady campaign last month.  
She should be congratulated for her

\* effort!

Finally, Jack Woody, Fred Berry and  
Larry Ogden are in agreement that the  
Fed (and other interested agencies/institutions)  
should fund the Inconel-625 tag production  
for the first "printing." Just how successful  
we will be in putting together the \$50K+  
package during <sup>the</sup> FY 83 depression remains  
to be determined!

Best ever  
James

*George*  
*Fishing efficiency of TED; latest est. of turtle exclusion is 97% w/ 7% increase in shrimp catch over standard trawl.*

① LIB  
② FILE

U. S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Southeast Fisheries Center  
P. O. Drawer 1207  
Pascagoula, MS 39567-0112

RECEIVED

AUG 5 1982

NATIONAL MARINE FISHERIES SERVICE  
Panama City Laboratory  
Panama City, Florida

FRV JEANIE Cruise No. JE-04-82(1)  
3/29-4/14/82

INTRODUCTION

The chartered vessel, Jeanie completed cruise JE-04-82(1) on April 14, 1982 in Ft. Myers, Florida. The objectives of the cruise were to:

1. Evaluate the top opening TED on pink shrimp grounds off the west coast of Florida.
2. Evaluate a commercially produced TED.
3. Test the effectiveness of the top opening TED design for reducing loggerhead sponge bycatch.

METHODS

Comparative tows were made between a standard rigged 65' Mongoose trawl on one side of the vessel and a 65' Mongoose with a top opening TED installed on the opposite side. Comparative tows were also made between a 65' Mongoose rigged with a commercial model TED with 3" bar spacing and a 65' Mongoose rigged with the NMFS design TED with a 6" bar spacing. The trawls were spread with 9' x 40" otter doors employing 50 fathom bridles and were rigged with standard loop chain and 1/4" tickler chains set 36" shorter than the footrope. Testing was conducted on pink shrimp grounds in 5-10 fathoms of water off Ft. Myers, Florida. The catches from each net were weighed and bycatch samples taken. Data were collected on shrimp catch rates, finfish catch rates, and catch rates for loggerhead sponge.

RESULTS

1. Comparative results between NMFS TED with 6" bar spacing and standard rigged trawl.

Shrimp Catch Rates (N=12)

	<u>TED</u>	<u>Standard</u>
Total Catch	223 lbs.	246 lbs.
Mean Catch	6.1 lbs/hr.	6.8 lbs/hr.

Finfish Catch Rates (N=12)

	<u>TED</u>	<u>Standard</u>
Total Catch	1,547 lbs.	2,018 lbs.
Mean Catch	43 lbs/hr.	56 lbs/hr.



### Loggerhead Sponge Catch Rates (N=12)

	<u>TED</u>	<u>Standard</u>
Total Catch	50 lbs.	1362 lbs.
Mean Catch	5 lbs/tow	186 lbs/tow

2. Comparative results between NMFS TED with 6" bar spacing and commercial model TED with 3" bar spacing.

### Shrimp Catch Rates (N=18)

	<u>NMFS TED</u>	<u>Comm. TED</u>
Total Catch	190 lbs.	132 lbs.
Mean Catch	5.25 lbs/hr	3.60 lbs/hr.

### Bycatch Rates

The commercial model TED with 3" bar spacing became clogged with sponge on 13 of the 18 tows making valid comparisons of the bycatch rates impossible. The 3" spacing cannot be effectively employed on these shrimp grounds due to clogging of the device by sponge.

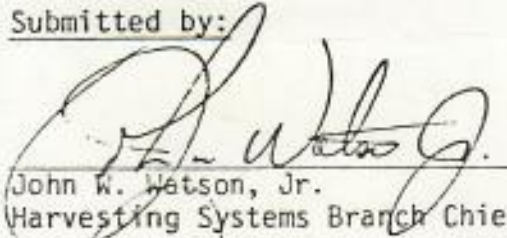
### GENERAL COMMENTS

The top opening TED with 6" bars was effectively employed on the pink shrimp grounds off of Ft. Myers, Florida. The major bycatch species on these grounds is the loggerhead sponge which was effectively eliminated by the TED. Shrimp catch rates were comparable for the sample size taken. The commercial model TED with 3" bar spacing was not effective due to clogging of the device. Another problem encountered with the commercial TED was increased bottom trash catch due to the heavier weight of the commercial TED. As a result of this testing the commercial manufacturer of the TED has modified the design to allow flexibility in the bar spacing and a decrease in the weight of the device. These modifications should allow optimum performance of the commercial TED for the different fishing conditions encountered on the southeastern U.S. shrimp grounds.

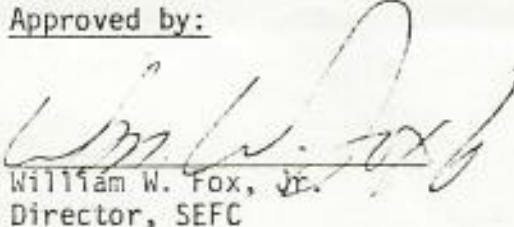
### Cruise Participants

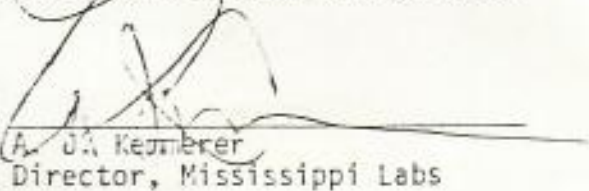
N. Serra, FMES, Pascagoula, MS  
J. Mitchell, Fishery Observer, Pascagoula, MS

Submitted by:

  
John W. Watson, Jr.  
Harvesting Systems Branch Chief

Approved by:

  
William W. Fox, Jr.  
Director, SEFC

  
A. J. Kernerer  
Director, Mississippi Labs

*ec les compliments de*  
*With the compliments of*



L'UNION INTERNATIONALE POUR LA CONSERVATION DE  
LA NATURE ET DE SES RESSOURCES

THE INTERNATIONAL UNION FOR CONSERVATION OF  
NATURE AND NATURAL RESOURCES

1196 GLAND  
Suisse/Switzerland



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Tél./Tel. (022) 64 71 81

Télégrammes/Telegrams:  
iucnature, Gland

Référence/Reference:

Sa/3/1C

12 August 1982

Dear

As you may know, all of IUCN's Commissions and Specialist Groups are automatically dissolved after each IUCN General Assembly, thus providing a periodic opportunity for reorganizing as circumstances may dictate.

Since the 15th Session of the IUCN General Assembly at Christchurch, New Zealand, in October 1981, the SSC Steering Committee and I have been deciding on new patterns for reconstitution of the SSC network.

Over a period of time we have gradually established separate Specialist Groups for the principal taxa of reptiles and amphibians as follows:

Tortoise Group	Dr. Ian R. Swingland
Freshwater Chelonian Group	Dr. Edward O. Moll
Marine Turtle Group	Prof. Archie Carr
" " "	Dr. George H. Balazs, Deputy Chairman
Crocodile Group	Dr. F. Wayne King
Snake Group	Dr. Romulus Whitaker
Lizard Group	pending

With this coverage in separate groups, we have therefore decided not to reconstitute the Reptile & Amphibian Group again.

However, to provide an integrating and coordinating overview of reptile and amphibian activities, Mr. René Honegger has agreed to serve as Commission Vice Chairman for Reptile and Amphibian Matters.

I very much hope that each of the members of the former Reptile & Amphibian Group will remain interested and active in SSC affairs, and I extend my warm appreciation for your services in the past.

Yours sincerely,

Gren Lucas  
Chairman  
Species Survival Commission

Encl.

SSC REPTILE & AMPHIBIAN ORGANIZATION

Tortoise Group

Chairman:

Dr. Ian R. Swingland  
School of Continuing Education  
and Biological Laboratory  
Rutherford College  
University of Kent  
Canterbury, Kent  
UK

Freshwater Chelonian Group

Chairman:

Dr. Edward O. Moll  
Department of Zoology  
Eastern Illinois University  
Charleston, Illinois 61920  
USA

Marine Turtle Group

Chairman:

Prof. Archie Carr  
Graduate Research Professor  
Dept of Zoology  
University of Florida  
Gainesville, Florida 32601  
USA

Deputy Chairman:

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

Crocodile Group

Chairman:

Dr. F. Wayne King  
Director  
Florida State Museum  
University of Florida  
Gainesville, Florida 32611  
USA

Snake Group

Chairman:

Dr. Romulus Whitaker  
c/o Madras Snake Park Trust  
Guindy Deer Park  
Madras-22  
India

Lizard Group

pending

SSC Vice Chairman for  
Reptile and Amphibian  
Matters

Mr. René E. Honegger  
Curator of Herpetology  
Zoo Zurich  
Zurichbergstrasse 221  
8044 Zurich  
Switzerland

Sent to:

Mr. Arden H. Brame, Pasadena, California, USA  
Dr. Donald G. Broadley, Umtali, Rhodesia, Zimbabwe  
Dr. S. Bruno, Pescasseroli, Aquila, Italy  
Dr. Bruce Bury, Fort Collins, CO, USA  
Dr. Harold Cogger, Australia  
Mr. J.C. Daniel, Bombay, India  
Dr. Federico Medam, Colombia  
Dr. Marco Freiberg, Argentina  
Dr. F. Wayne King, Florida, USA  
Mr. J. McNeely, Gland, Switzerland  
Prof. Dr. A. Bannikov, Moscow, USSR  
Prof. Ch. Blanc, Montpellier, France  
Mr. John Burton, ffPS, London  
Dr. Stephen Busak  
Dr. Gordon Gregg, Sydney, Australia  
Dr. Russ. Mittermeier, NY

For information to:

Mr. René E. Honegger  
Mr. Gren Lucas  
Dr. B. Groombridge, SCMU, Cambridge  
Dr. I. R. Swingland  
Dr. Edward O. Moll  
Prof. A. Carr  
Dr. G. Balazs  
Dr. R. Whitaker

G. Bebas

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Telegrams/Telegram:  
IUCNATU, Gland

Reference/Referencia:

Sa/3/4-1  
SSC/RFS/pc

Professor Archie Carr  
Dept of Zoology  
University of Florida  
223 Bartram Hall  
Gainesville  
Florida 32611  
USA

11 August 1982

Dear Archie,

The rather piecemeal correspondence about an October Marine Turtle meeting and discussions here with Jeff McNeely of CNPPA about the Bali meeting, prompt me to produce the following review of events and some straw-man ideas.

The original suggestion was that turtle workers should take advantage of their attendance at the Bali World Parks Congress in October to get together and compare notes - especially with respect to the mutual interests of those working in Indonesia, Malaysia and the Philippines, and with the added benefits of contributions by whatever international experts were also present. (Not everyone is aware that official attendance at the conference is by invitation only and involves payment of a registration fee).

At our request, Jeff agreed to set aside and announce the evening of Tuesday 12 October for an ad hoc marine turtle meeting in conjunction with the Bali Conference. He also expressed the hope that the meeting would contribute something useful to the conference as well as to turtle people. (The date is not absolutely firm and could of course be the victim of minor last minute schedule changes but this seems unlikely).

A very tentative agenda might identify gaps and help focus on a possible orientation, as well as be useful in preparation for the meeting. Therefore I suggest the following topics for discussion:

1. Report from the SSC Marine Turtle Specialist Group
2. Reports of work in progress in the region:  
Indonesia / Malaysia / Philippines / Elsewhere
3. Opportunities for regional coordination
4. Significant new developments in research and management world-wide

Prof. Archie Carr  
Gainesville, Florida 32611, USA

11.8.1982  
- 2 -

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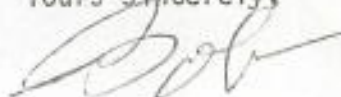
5. Material on turtle management in protected areas to be included in conference publication on Management of Marine and Coastal Protected Areas.  
(Possible assignment of a working group to review material and meet again later in the Conference)
6. Preparation of a conference resolution, if appropriate, on the role of protected areas in marine turtle conservation
7. Other Matters
8. Schedule of any additional working group assignments or further meetings
9. Adjourn

Naturally, the group that meets will arrange their agenda as they see fit, but the above may help focus thinking.

The distribution list attached to this letter reflects my impression of those who are likely to be present or otherwise especially interested in the turtle meeting.

I hope to see you there.

Yours sincerely,



Robert F. Scott  
Executive Officer  
Species Survival Commission

Encl.

DISTRIBUTION LIST:

---

G. Lucas	
W. King	
G. Balazs	
J. McNeely	
H. Eidsvik	
B. Groombridge/SCMU	
R. Salm	Bogor, Indonesia
G.S. de Silva	Sabah
K.T. Siow	Malaysia
N. Sumertha Kuitja	)
S. Akhmad	) Bogor
I. Suwelo	Jakarta
J.B. Alvarez	Philippines
N. de Celis	Philippines
Mond Khan	Kuala Lumpur, Malaysia



FROM: Chandra Sekhar Kar  
Gahisomatha Marine Turtle Research  
and Conservation Centre

Post: Salabhaya - 754225

Via: Rajonagar, Dist: Cuttack  
(Orissa) INDIA

Dated 21st July 1982

To,

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

Dear Dr. Balazs,

I thank you very much for your letter of 23rd April, 1982 along with some of your much valuable publications. I also thank you for including my name in your permanent mailing list for all your future publications. I don't have the access to Dr. Bustard's reprint library as the same was at his residence at U.K. and moreover Dr. Bustard is no longer in India. Kindly provide me two of your recent publications viz;

- ① Balazs, G.H. (1980) - A review of basic biological data on the green turtle on the North Western Hawaiian Islands. pp: 42-54. In Proc. Symposium on Status of Resource Investigations on the Northwestern Hawaiian Islands.
- ② ~~Chandra Sekhar Kar~~ G.H. Balazs (1982) - Sea Turtles and their traditional usage in Tokelau. Report for WWF (USA) & office of Tokelau Affairs. pp: 1-54.

+ telemetry

Thanking you for your favour.

With Best regards.

Yours faithfully  
Chandra Sekhar Kar

sent  
8/19/82

हवाई पत्र  
Aerogramme



90



DR W.H. BALAZS  
Hawaii Institute of Marine Biology  
P.O. Box 1346  
Kaneohe, Hawaii, 96744  
U.S.A.

दूसरा मोड़ SECOND FOLD

भेजने वाले का नाम और पता:-  
Sender's Name and Address:- Chandra Sekhar Kar  
Rahisomatha Marine Turtle Research  
& Conservation Centre  
P.O. Satabhaya - 754225  
Via: Rajnagar  
Dist: Cuttack (Orissa)  
INDIA

इस पत्र के अन्दर कुछ न रखिये  
No Enclosures Allowed

पहला मोड़ FIRST FOLD



Cofin J. Limpus

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Telephone 73-2674

Business: National Parks and Wildlife Service  
Pallarenda  
Townsville. 4810  
Australia  
Telephone 74-1411

Aug 82

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

Dear George,

Thanks for all your many notes and reprints. Thanks too for spending some time with Nev McLachlan and his wife. I trust too that your own work goes well and that your family is OK.

You mentioned a possible Costa Rica venue for the Turtle Group meeting. I'll believe it when I see it. I'm surprised someone hasn't notified me that there is no intention to pursue an Australian venue.

I've sent to you some copies of papers I have in press. I hope they are of use to you. When you read them you will see that apart from establishing data bases on Queensland turtle populations they are attempting to correct some of the misconceptions created by H.R.B. Speaking of H.R.B., I don't have a copy of Bustard 1981 which you asked for - sorry. He doesn't send me reprints as a matter of course.

Re lights and turtle feeding grounds. I've seen no indication of a local effect of lights and general nocturnal tourist activity on the underwater behaviour of the greens and loggerheads of my study area near Heron. The turtles can be seen foraging at night in areas where tourist activity in the water and on the adjacent <sup>beach</sup> is fairly common by day. One of our regular catch sites is about 400 m offshore from the most illuminated area of Heron Island. It is rich in 40-70 cm CCL *C. mydas*. I'm more concerned with the effect of people on the basking in these areas. Prior to settlement mass basking was apparently a common event at Heron. Today even isolated "basking" is rare and then only at night. Pleasure divers regularly catching the turtles to ride them underwater doesn't appear to drive them away. It just seems to educate the turtles to avoid divers at close quarters. High density outboard motors will have an associated higher incidence of propeller strikes. I hope these rushed thoughts are of use to you.

Re John Burchard: I'll be at my Crocodile field work until 4th September. If he visits Townsville before then suggest that he contacts Gail and she can organise for him to meet my assistants and together they can help him if he has problems he wants to discuss.

Re R.D.B. (Groombridge): I sent a hurried note in response to Archie's letter. I was not happy with a lot of what was in the *C. mydas* and *Caretta* drafts. However most of my concern was really with the implied ideas rather than the explicitly stated ones e.g. I feel it gives the impression that green turtles were so abundant and widely dispersed that although some areas had reduced populations the conservation lobby may be "crying wolf". Have I misread the drafts.

On a matter arising from the above drafts and other papers: I'm amazed that so many people have access to the proceedings of the Washington Conference while so many of us don't have. The information is so out of date now that I wonder if it will be worth using when it is published. With the new rookeries and so on that we have found in the last two seasons I know I'd like to rewrite my contribution. (Gee, I must sound like a bitchy critter at times).

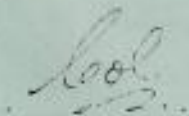
I've just been notified of acceptance for another 1 year grant to monitor the Raine Island rookery again in 1982-1983. I'll be able to employ an assistant to spend several weeks in the area. That plus tags are my main costs for the project. The funds will come from the Raine Island Corporation and they will also fund another small project to examine the distribution of sea turtle harvests in Torres Strait - a major feeding ground for Raine Island greens. Helene Marsh of James Cook University has been given that grant.

At present I've got my fingers crossed for a grant to run what I hope will be the last of my intensive work at Heron Island. I'll know in September how I've gone with that one. It looks promising. This grant has also been the grant supporting my sex determination studies in the last year. I need the funds to complete the work started. I can't remember what I've told you to date on this - we ran pivotal temperature studies on 4 species this year *Caretta*, *C. mydas*, *C. depressa* and *Dermochelys*. *Caretta* was run for eggs from two rookeries with very different sand temperature regimes. For the first 3 species we also tested for critical stage for sex determination. That was all lab work. At Mon Repos and Heron Island we have also measured at weekly intervals the sex ratio of *Caretta* and *C. mydas* through the season. This is our 3rd season of doing this in conjunction with extensive beach sand temperature recording. There are some really dramatic differences coming out of this between species, between rookeries and between years. I hope we are submitting our first substantial papers on this work early next year.

If you come over my way in October I'll take you to Heron Island for one of my turtle Rodeos. It must be about time for us to sit down for another turtle chat. How about it?

Well I must close. Please keep me informed about the proposed turtle meeting as Archie hasn't replied to any of my letters from earlier this year.

Regards,



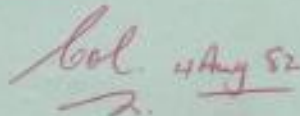
C.J. LIMPUS.

CJL:DH

George,

Re your letter from Soames:

It is probably a fair assessment of the situation.

  
2. 4 Aug 82