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UNIVERSITY OF FLORIDA GAINESVILLE, 32611

COLLEGE OF ARTS AND SCIENCES
DEPARTMENT OF ZOOLOGY

February 20, 1976

MEMO TO: Wayne King

Richard Fitter Colin Phipps Sir Peter Scott Anthony Mence

FROM: Archie Carr

This is a reply to the request of one of you (King) for my opinion of a proposal to allow Mariculture, Ltd. a five-year exemption from a law that will prohibit the importation of *Chelonia mydas* and products derived from it into the United States. Although official IUCN and CCC reactions to this suggestion are not available, I see no reason why I should refrain from giving you my private views on the subject.

If I were prepared to accept the premise that farming a depleted species is beneficial for that species—or even that it does no harm except for the loss of eggs taken from the nesting beaches—I would not be averse to allowing the five—year extension. The loss of eggs would probably cause relatively little demographic change.

But to me that issue seems altogether irrelevant, because I am opposed to any international trade whatever in products derived from species with unsound survival positions. It seems to me that the moment the survival outlook of a species is officially recognized as weak (as in the IUCN Red Book) it is the obligation of conservationists to make every effort to discourage commerce in that species. By logic no farming enterprise should be endorsed until it had provided a Survival Impact Statement, a carefully worked out, quantitatively predictive analysis proving that its operations would neither (1) reduce natural populations, nor (2) increase demand for products derived from them. The burden of proof here does not rest on conservationists, but on the vested interests that propose the exploitation.

they would seem obliged either to foment legislation prohibiting trade in the species involved, or to mount depopularization campaigns to kill existing markets. Where products from a farmed, endangered animal could be confused in markets and customs houses with unendangered species, then trade in the whole complex of species involved should be discouraged. I realize that this is inconsistent with the stand of the IUCN Crocodile Group and can only conclude that those people have simply had to compromise.

If an enterprise selling an endangered or threatened species were able to produce all its own stock, and if there were well-enforced laws rigidly controlling the legal and illegal exploitation of that species throughout its range, the enterprise would be harmless. Moreover, if a farm could, without drawing on natural populations, develop an artificially selected animal, clearly different from and with market qualities superior to those of all relatives, and positively distinguishable as a product of the firm producing it, then there would be nothing for anybody to worry about. Otherwise, the only logical reason for any conservationist to tolerate the farming of wild species with unsound survival positions would be the need to compromise. I can see that where large conservation organizations or government agencies are faced with such dread issues, they will almost inevitably have to let politics, International good-will, people's jobs, or something of the sort influence their judgement, and to that extent relax their concern for the species in trouble.

As a private citizen and zoologist long concerned over the predicament of the green turtle I am not willing to endorse any culture project until I see a Survival Impact Statement, clearly proving that it does no harm. And I regret to say that I see little liklihood that such a document could be composed.

COLLEGE OF ARTS AND SCIENCES
DEPARTMENT OF ZOOLOGY

February 20, 1976

Mr. Jack W. Gehringer
Deputy Director
National Marine Fisheries Service
Washington, D.C. 20235

Dear Mr. Gehringer:

I am writing in regard to the public hearing to be held February 25 on the projected listing of the green turtle, loggerhead, and Pacific ridley as threatened species. I strongly recommend this course although "endangered" is clearly a more appropriate designation. That there should have to be any further discussion of this matter at this late date is incomprehensible, and a public hearing seems to me like plain wheel-spinning. Opposition to giving all sea turtles complete protection could be coming only from vested commercial interests, or from incompletely informed people who have heard of some populous remaining nesting colony somewhere and are not aware of the vast gaps that now exist in the natural breeding ranges.

All the genera of marine turtles have for decades been declining at increasing rates; all are, by any realistic definition of the term, endangered. Their predicaments range widely in character. Breeding assemblages of the Gulf ridley were down from 40,000 in the 1950's to a few hundred last year. The once enormous arribadas of the Pacific ridley are, despite the efforts of the Mexican government to protect them, being continuously reduced by massive poaching and smuggling of hides. World populations of the leatherback are small, and most nesting sites are depleted, vulnerable and, with a

Mr. Jack W. Gehringer February 20, 1976 Page 2

few exceptions being exploited for eggs. The hawksbill continues to suffer almost universal exploitation both on its diffuse nesting shores and on the accessible diving reefs. The green turtle has a few good sized populations left, but in most of its range it has been either dangerously reduced or wholly extirpated as a breeding visitant. In the Pacific, the loggerhead is dependent mainly on two or three Barrier Reef and Indian Ocean rookeries of moderate size. The hopes for saving the species in the Atlantic rest almost wholly on the coast of the Southeastern United States. The colonies based on Cape Romain, South Carolina, and Hutchinson's and Jupiter Islands, Florida, are the largest remaining in the world. In the approaches to these there is growing destruction of turtles by shrimp trawlers.

The sea turtles are, thus, no longer a far-flung, self-regenerating resource. They are not, in any real sense, a resource at all. For our government to drag its feet in the effort to save them, or to accede in action that leaves loopholes for further exploitation of any kind whatever would be anachronistic and shameful. I trust therefore that full protection for the green turtle, loggerhead, and Pacific ridley will be provided without further delay.

Sincerely yours,

Archie Carr

Graduate Research Professor and

Technical Director,

Caribbean Conservation Corporation

DEPARTMENT OF ZOOLOGY Z23 BARTRAM HALL 904-392-1107

23 March 1979

Mr. Robert W. Creamer Articles Editor SPORTS ILLUSTRATED Time & Life Building New York, New York 10020

Dear Mr. Creamer:

I just returned from a siege of sea turtle meetings and surveys in Costa Rica. I am sorry to say I still find it difficult to work out a rational account of the complicated events attending the impending extinction of Kemp's ridley. The present international, interagency campaign to save it is partly sound, but partly, in my opinion, wheelspinning. No positive results from the first season can be pointed to, except that protection of the feeble remnant of nesting turtles at Rancho Nuevo was improved. It was to get this protection that I acquiesced in the complex management program being undertaken. I have no faith in some of the things they're doing, but was willing to go along in order to get outside help for the Mexicans in protecting the nesting beach from predation and human exploitation.

So instead of being the neat, eye-catching story of an old lady trying to save a vanishing species, the ridley situation has become fantastically many-sided, with no good lead, and with the end wholly unpredictable. I am having a hell of a time trying to think how to put it into shape for SPORTS ILLUSTRATED without adding possibly unfair burdens to the job the National Marine Fisheries Service, Fish and Wildlife Service, National Parks Service, Texas Parks Service, Florida Audubon, and the Mexican Instituto Nacional de Pesca are trying to do.

If you are willing to stick with me through June, when the second nesting season at Rancho Nuevo will show what the present breeding population is, I may by then be able to see a way to tell the story properly. But it is really a very involved situation that will require extremely careful writing. I regret my continued stalling, but I'm very glad I didn't go ahead when I started out because the whole thing has changed vastly.

Best regards.

Sincerely yours,

Archie Care

Graduate Research Professor

AC: 1jw

To: Dr. Leo D. Brongersma Rijksmuseum van Natuurlijke Historie Raamsteeg 2 Leiden Netherlands

Regret unable attend Oviedo meeting. Desperately short of time this quarter. Two trips Costa Rica, one just finished, another early April, badly hindering complex field course am teaching. Throughout April my schedule so packed that losing another day would be serious. Anyway you and Peter know my views head starting and international trade, so my presence meeting not essential. If Cayman should undertake purely experimental head starting as public service no one would object. That idea is all I could contribute at meeting. Thank you for invitation, and my best regards.

DR. ARCHIE CARR
DEPARTMENT OF ZOOLOGY
UNIVERSITY OF FLORIDA
GAINESVILLE, FLORIDA 32601

Least as of lovered needer from free fretchers GRAN CHOTEL ARICA 11 A Jaril 1979 P. O. Boz 527 - Telifono 21-40-00 P. O. Box 527 - Celifono 21-40-00

Cable: Hotelrica - Telen 2131 transcent plant of the Break Break delight Moung thanks for your 3 and 4 April. Have our another bykrid miracon - planing the IOCARIBE conference and recommodering the Pariam beaden To my surprize Itead in the newsprape, that Mexico, Costa Rica and Femador are going to meet took to discuss management plans for their a thing I riggestes to Rene 18 mouses orgo; lent coming now, after Suares! leists have been to stirred, the proposed meeting makes me uneary. Meanwhile I'm going aleas will a proposal to have people on Nancite this season.
You proposed additions to the limite group seem good - providing you arrept the old list of members to add to, and not the abbreviated

list as of Toronto meeting time On that, Pretchard was not recorded, or you know, Deston MADO The arrangements for the both south of the South Party meeting the Head evolve without complicated. Hope Herey evolve without frontlesworth exploring I semply don't know hor agreering prople well react. Annes recent 7 ty Orlande Kempi Ressions yound like Alece in Wonderland SIRADOT WH Have to be off and first Surgeries The House hops; had comen now, often Suare, lend have to string, the proposed meeting makes me unicary. Meanwhele Van going about with a proposed to have people in Nanciste this reason to try lines Warry the old hist of manhers to and to, and not the abbrevialed



DEPARTMENT OF ZOOLOGY ZZ3 BARTRAM HALL 904-392-1107

13 April 1979

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

Dear George:

I enclose a copy of the Orlando <u>kempi</u> "agreement," typed from a Xeroxed copy of Leo:Brongersma's penscript original. As you will see, neither Anne as my representative, nor Perran Ross signed the paper at the meeting, and I have not signed here subsequently — for various reasons involving my sense of logic and my position vis-a-vis the SSC and CCC.

Needless to say, I am not opposed to anybody assembling and forever maintaining a breeding stock of kempi -- providing it can be built up and kept without bringing any sort of damage to the wild remnant of the species. However, I don't see why a corporation is necessary to mount such an undertaking, and I don't have the slightest confidence that such a stock would ever be of use in rehabilitating the species.

I sympathize with the urge to keep a pen of ridleys. As a matter of fact, two years ago, I told a member of the Orlando gathering about an aimless compulsion of my own to get some ridleys and keep them somewhere, more or less as the last passenger pigeon was kept in the St. Louis Zoo till she died of old age. That whimsy may have been the beginning of the present exercise.

My reasons for not putting my name on the present agreement are that I see no point in signing a document that would have legal power if any litigation affecting turtle farming should arise; or in my joining in a move that would inevitably spread the ethereal hope that the ridley could be restored from captive sources. If I had faith in the possibility of replacing the lost natural population of kempi with pen reared turtles I might possibly try to suppress other misgivings and sign the paper; but I simply don't have that faith. You know the weakness of the head-starting rationale as well as I. Restocking from captive stock is merely a self-sustaining excercise in head-starting.

I'll be interested in hearing your reaction to all this.

Sincerely yours,

Archie Carr

Graduate Research Professor

DEPARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

13 April 1979

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

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I'll be interested in hearing your reaction to all this.

Sincerely yours,

Archie Carr

Graduate Research Professor

STATEMENT OF INTENT

To whom it may concern:

Recognizing the vital importance of the current and ongoing efforts by the Departamento de Pesca, Mexico, to restore and perpetuate the only known breeding colony of the endangered Kemp's Ridley Turtle (Lepidochelys kempi [Garman]) and motivated by the desire to assist this laudable effort in every possible way, acknowledging the essential approval and cooperation of Mexico, we are agreed that it appears desirable at this time to establish a captive breeding colony of Kemp's Ridley Turtle to ensure preservation of this genetic entity, if efforts to preserve the species in the wild should fail. Also the establishment of this captive colony should in no way lessen the vigour of the efforts to preserve the species in the wild.

We are agreed that Cayman Turtle Farm Ltd. facilities with its existing scientific and technical personnel appear to offer the best prospects at this time, for the housing of this captive colony.

We are agreed that this colony should not be drawn from the Mexican adult turtles, but that this stock should be derived from existing aquarium specimens, accidentally caught individuals, and/or individuals from the 1978 hatch currently in the hands of the U.S. National Marine Fisheries Service.

We are agreed that the management of the captive colony should be guided by a non-profit corporation dedicated to the propagation of the species, which shall establish overall policies for the colony in accordance with technical advice by the scientific director of Cayman Turtle Farm Ltd.

This corporation shall be managed by a board of directors, which shall as a minimum include the Chief of the Nacional Sea Turtle Project of the Mexican Instituto Nacional de Pesca, Mexico, as an ex-officio member, as well as representatives of major non-governmental conservation organizations. It is considered important that the corporation shall have the endorsement of the bodies represented by the individual directors. The number of individual Ridleys kept by Cayman Turtle Farm Ltd. shall be mutually agreed upon by Cayman Turtle Farm Ltd. and the board of directors. This stock will be held in trust for the corporation only for propagation of the species. The sole intent of the signatories of this agreement, the proposed corporation, and its described activities is the safeguarding and augmentation of the species in its natural, wild state and no animals shall be disposed of for any other ultimate purposes.

We are agreed that the services provided for this purpose by Cayman Turtle Farm Ltd. shall not be utilized for promotional purposes, but that open channels of communication with all concerned scientists shall be maintained.

We are agreed that the costs of maintaining the initial captive stock for at least the first year of operation shall be arranged by Cayman Turtle Farm Ltd., and that subsequently, when the incremental costs of housing and maintaining those animals have been determined, discussions will be entered into for subsequent funding.

The actual investigations of the mechanics of this agreement shall be pursued by Prof. L. D. Brongersma, London, and Dr. P. C. H. Pritchard, Oviedo, Florida.

Orlando, Florida, U.S.A., April 7, 1979.

Signers:

Prof. L. D. Brongersma

Dr. P. C. H. Pritchard

Prof. L. Ehrhart

Prof. N. Mrosovsky

Dr. J. Mittag

Dr. R. Marquez Millan

Dr. G. H. Hughes

Ross Witham

Prof. J. R. Hendrickson

Dr. J. R. Wood

Herr Dr. Mittag (cannot read initial)

GRAN (HO

UNIVERSITY OF FLORIDA GAINESVILLE, 32611

P. O. Boz Cable: X San

DEPARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

16 April 1979

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

Dear George:

I penned the enclosed in San José last week, and then couldn't buy stamps because it was Semana Santa, etc.

Best regards.

Sincerely yours,

Archie Carr Graduate Research Professor

AC:1jw

EQUAL EMPLOYMENT OPPORTUNITY/APPIRMATIVE ACTION EMPLOYER

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DEPARTMENT OF ZOOLOGY ZZ3 BARTRAM HALL 904-392-1107

25 April 1979

Dr. Pierre Hunkeler World Wildlife Fund IUCN 1110 Morges Switzerland

Dear Dr. Hunkeler:

I have read the preliminary report on work on Mediterranean sea turtles done by Dr. Argano with WWF support. While Dr. Argano's actual contacts with turtles in the Mediterranean have been meagre, he has very wisely taken advantage of a careful systematic interview plan to piece out his understanding of the fauna. Interviews are not easy to use effectively, but Argano recognizes the pitfalls and his results provided considerable insight into a formerly very muddled situation. In any case I personally think I know more about the status of marine turtles in the Mediterranean than I did before. It seems to me that so far Dr. Argano has made good use of the support received.

Sincerely yours,

Archie Carr

Graduate Research Professor

cc: George Balazs Sir Peter Scott

AC: 1 iw

DEPARTMENT OF ZOOLOGY ZZ3 BARTRAM HALL 904-392-1107

May 8, 1979

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

Dear George:

Thanks for the additional briefing on prospects for the New Caledonia Workshop.

I was sorry to see Nicholas's reaction to your proposal to distribute survival ridley stock widely among existing aquarium facilities. I want to try to keep Nick happy and active, but in this case I'll have to say I think your scheme deserves at least equal Newsletter coverage to that given the Mittag scheme. I can't see any possible justification for discrimination. Can you?

Sincerely yours,

Archie Carr

Graduate Research Professor

AC/1jw

cc: Wayne King

DEPARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

17 May 1979

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

Dear George:

This is to tell you, belatedly as always, that we are in complete agreement as to the desirability of our producing some kind of sea turtle brochure telling of their nature and survival outlook. The Hawaii brochure is a good model.

Will you once again provide me with a full roster of the sea turtle group as you would like to see it re-formed? I am ready to submit a panel to Wayne and Peter Scott, but want to be completely sure that you and I are seeing eye-to-eye in the final version.

Zug seems to be badly irked by some sea turtle stimulus. I can't identify his trouble, but I don't intend to try.

Best regards.

Sincerely yours,

Archie Carr

Graduate Research Professor

AC/1jw

DEPARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

June 27, 1979

Dr. Jose L. Villa
Head, Department Marine Biology & Oceanography
Charles Darwin Research Station
Casilla 58-39
Guayaquil, Ecuador
S.A.

Estimado doctor:

I am pleased to hear that the plans for Biol. Mario Hurtado's visit to our Station at Tortuguero are still in effect. As I have said, we will be glad to reimburse him for any travel expenses in Costa Rica, and quarters and meals at the camp will be provided. We are convinced that providing field experience for people who are likely to move into programs of sea turtle research and conservation in their own countries is a useful function of our Tortuguero project. Because of limited space and logistic facilities we have not been able to do as much of this as we would have liked, but the five people who have come to the camp from other countries have all subsequently moved into responsible positions at home. Your belief that Biol. Hurtado will probably do the same is reassuring, and I'm confident that he will find his stay at the camp, despite the rough accomodations and hard work, to be useful later on.

I suggest that on reaching San Jose in August, Biol. Hurtado go to Tala Inn (Calle II, Av. 7 y 9, telephone 21-08-52). The proprietor of this is Alan Huper, who is a friend of ours and very helpful. Another important contact in San Jose is Sr. Guillermo Cruz B.: telephone: (home) 25-22-06, (office) 25-23-33. He can notify the Tortuguero turtle camp of Hurtado's arrival. Also, it is possible to telephone Alvin Bryan (tel. 011-506-71-81-44), a friend at whose house the only phone in the village of Tortuguero is located. Alvin can send word up to the Station, which is 2 miles away.

To travel to Tortuguero from San Jose, the best plan is to go by Puerto Limon, which can be reached by bus, train, or 45-minute commercial flights that leave twice daily. If a night is to be passed in Limon, a hotel reservation should be made by telephone from San Jose. The Miami Hotel or Hotel Caribe are conveniently located. From Limon to Tortuguero there are regular flights by small planes. A reservation for the itinerario flight should be booked in advance, from San Jose.

Let me repeat how pleased we are at the prospect of Biol. Hurtado's visit. If there are questions in your mind, please let me know.

Sincerely yours.

Archie Carr Graduate Research Professor



DEPARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

July 5, 1979

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

Dear George:

This is a belated reaction to your last letter concerning the urgent need to congeal a new turtle group. I appreciate the need, but there was doubt in my mind about a couple of names on your trial list. I am in favor of a bigger group than the Toronto gathering represented, and I accept the idea of using a shifting set of criteria in selecting people (i.e., one because he's a good turtle biologist, another because he represents a good turtle region, and so on). On the other hand we've got to keep out dead wood, professional wranglers, and vested commercial interests if we want to get anything done.

Would you consider Dr. John Parmenter, Instead of Kowarsky as an Australian representative? Perran thinks Parmenter is way ahead. Do you know what Limpus's opinion would be?

Perran says the position of Barwani in Oman politics is weakening, and that since his position was his chief recommendation we ought to drop him from consideration.

We are bound to hear some complaining about Carr graduate students being so prevalent; but that doesn't bother me so long as it doesn't impair the functioning of the group. Maybe the steering committee selection will placate critics. Incidentally, I want to follow Wayne King's suggestion that I appoint an assistant to help me keep day-to-day group affairs and communication going. Anne Meylan is my Research Assistant and, though well occupied with her own research, she could probably spare the time to provide the discipline necessary to keep me in creative touch with you and the rest of the turtle world. So please consider naming Anne to the unsalaried Group post of Agenda Officer, subject to the approval of Peter Scott and Wayne.

I can't give you data on weights of raw turtle skins but Anne just weighed a complete set of tanned Olive ridley skin pieces, and they seem to weigh 244 grams.

Ave shipments of ridley skins from Mexico to Japan row or tanned?

Mr. George Balazs July 5, 1979 Page 2

Did I answer your note asking If I am interested in satellite tracking? The answer is yes. I've been trying to work up such a spree since Nimbus B. I was actually aboard that one, but couldn't get the platform ready. So if I could help in any such work out there I would gladly participate if invited.

I hope we'll be talking this over before long.

Best regards.

Sincerely yours,

Archie Carr

Graduate Research Professor

AC/1jw

DEPARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

16 July 1979

Dr. J. A. Tosi Centro Cientifico Tropical Apartado 8-3870 San Jose, Costa Rica

Dear Joe:

Thank you for your letter with the dismal news of the proposal to move the seaward limits of Tortuguero National Park closer in toward shore. This move will make it next to impossible to prevent massive exploitation and poaching. It took us 17 years to persuade Nicaragua to stop exporting green turtles and it is distressing to learn that Costa Rica, for years a model of conservation conscience, has degraded the protection provided for the West Caribbean green turtle in its one remaining place of reproduction at Tortuguero.

The Tortuguero nesting colony will not withstand exploitation.

Before the three Nicaraguan packing plants were closed three years ago, extinction curves worked out by Karen Bjorndal from our Tortuguero data showed that the population would be exhausted within 35 years. Now that export trade in Nicaragua has been stopped, if Costa Rica continues to protect Tortuguero it may be possible to stabilize the population. This is by no means certain, because local demand is increasing rapidly.

One reason the Limon turtle fishermen are so anxious to come in close to shore off the nesting beach is that the turtles mate there. When the pairs are courting or copulating it is easy to harpoon both

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sexes without a chase. Another reason is that people can be put ashore at night to turn turtles at the nest, then buoy them with logs, and the next morning release them in the surf to be easily caught by canoes waiting offshore. So catching green turtles in the water off the nesting beach is not very different from turning them on shore. Reaction against killing turtles on the breeding ground has spread all over the world. If Costa Rica lets turtle boats operate close inshore it will be one of the only remaining countries in the world that allows such violation.

The number of Costa Ricans who derive economic benefit from commerce in turtles is very small. The statement, quoted in <u>La Republica</u>, that 5,000 "hogares" are involved is ridiculous. For Costa Rica to let this noisy minority impair its reputation for enlightened concern for the natural assets of the country is incomprehensible.

One factor in the attack by the Limonenses on the Park Boundary Law is that last year's nesting colony was exceptionally large. There is no possibility that the 1978 peak in nesting reflected a sudden increase in the population. It was no doubt partly due to the closing of the three Nicaraguan turtle-packing plants two years before. The Miskito Bank turtle hunters harvest both adult turtles and sub-adults within two or three years of maturity. Closing the packing plants must have increased the number of migrants to the Tortuguero breeding ground one to three years later. Moreover, much of the turtling for the Nicaraguan plants was done

by setting nets in the "mud-set" area, where Miskito Bank green turtles en route to Tortuguero pass in concentrations very near the coast, and where they can easily be intercepted by nets.

A more important cause of the big 1978 season, however, was probably just the drastic, unexplained fluctuations that the nesting aggregation undergoes. Tortuguero turtles never nest at any other locality, so a slump in nesting cannot be attributed to a change in breeding grounds. The fluctuation is probably somehow related to the diversity and shifts of migratory periods of the individual females. No female nests every year; intervals between nestings are 2, 3 or 4 years, with 3 years predominating. However, no female is locked into a single period length; she may change from a two-year interval to one of three years, and then back again. So we are now inclined to attribute at least some of the peculiar waxing and waning of the nesting population to coincident periodshifts that increase or decrease the expected number of arrivals in a given year. The West Caribbean green turtle populations based on Tortuguero did not suddenly grow larger last year; and for Costa Rica to emasculate its model turtle regulation because Limon fishermen saw a lot of turtles last season seems very shortsighted.

The turtles that come to Tortuguero to nest usually stay there for six weeks or more, nesting on the average three times, at 12-day intervals.

Anne Meylan's research has shown that during the internesting periods, they

Dr. J. A. Tosi 16 July 1979 Page 4

move back and forth along the coast, rarely going far in either direction or out to sea. Thus, throughout the season there is a concentration of female turtles in this "internesting" habitat, and these have only partly completed their season's reproduction. It is to get access to this habitat that the turtle fishermen want the offshore hunting limit cut down from 12 miles to three miles.

Prior to 1977 when the turtling was legal to within 3 miles from shore that limit was totally disregarded. Enforcement was impossible, and the boats regularly came in just beyond the breakers and often speared turtles that had just been tagged and released by workers of the Tortuguero green turtle program. One of our research projects, designed to investigate internesting ecology and departure courses, was repeatedly disrupted when the turtle boats seized the tracking buoys and hauled in our experimental turtles. This occurred regularly right in front of the research station, with several of us watching helplessly on the beach. Thus, the proposed reduction of the protected zone will be tantamount to giving the harpoon boats free access to the breeding colony. I know of no civilized country in the world that knowingly tolerates such abuse.

The political pressure from the vociferous vested minority in Limon ought to be weighed against the loss of prestige for Costa Rica around the world. Only two months ago Costa Rica was host to the Second Conference of the Parties to the Convencion Sobre el Commercio Internacional de

Dr. J. A. Tosi 16 July 1979 Page 5

Especies Amenazadas de Fauna y Flora Silvestre. Costa Rica concurred in listing the green turtle on Appendix I of this treaty, a designation that prohibits all international trade in the species. At the Cuarta Reunion Tecnica Sobre Animales Migratorias (Programa Regional de Desarrollo Cientifica y Tecnologico) of the OAS, a resolution was passed congratulating Costa Rica for its exemplary stewardship of the Tortuguero nesting ground of the green turtle.

This move to change the Park law was so surreptitious and unexpected that it has taken us by complete surprise. Billy Cruz, who has been away in London for several weeks will find it quite hard to cope with the reverse. Your interest is thus very welcome indeed. If you are willing to take an active part in opposing this backward move, the Caribbean Conservation Corporation will be most grateful and will provide any help it possibly can. Billy Cruz is in a position to help with local publicity for any counter moves you and ASCONA can generate. If you, in Costa Rica, think it will be helpful we can quickly set in motion through the IUCN an international campaign of protest, in the form of letters to President Carrazo from people in high places around the world.

Meanwhile, I am extremely glad you are on the side of the turtles.

Sincerely yours,

Technical Director

Caribbean Conservation Corporation

cc: ASCONA
Billy Cruz
Wayne King
Colin Phipps

DEPARTMENT OF ZOOLOGY 225 BARTRAM HALL 904-392-1107

August 20, 1979

Captain Jacques Cousteau Cousteau Society 777 3rd Avenue New York, N. Y. 10017

Dear Captain Cousteau:

We have heard that you may be on the verge of undertaking a film about marine turtles, and would like to bring to your attention what we feel to be one of the most critical problems in sea turtle conservation today. The hawksbill turtle (Eretmochelys imbricata) appears to be second only to the Gulf ridley (Lepidochelys kempi) as a candidate for imminent extinction. Although it has a circumtropical distribution, all known populations are believed to be declining. As a result of its tendency to nest diffusely throughout its range, hope to protect the reproductive members of the population is dim. Historically and at present the major drain on this species has not come from local subsistence - the meat is not even considered edible in some regions - but rather, from an irrepressible demand for tortoiseshell. The number of hawksbills killed in 1977 is estimated at between 100,000-140,000 (Report of Traffic IUCN/SSC). The main sources are Indonesia, Thailand and the Philippines, which provide over 60% of the world supply. Other major sources are India, Bangladesh, Panama, Cuba, Nicaragua, Kenya and Tanzania. Other exporting countries include all the Caribbean Islands, Fiji, Samoa, the Seychelles and the Maldives. In addition to the trade in shell, the market for stuffed juvenile turtles is estimated to be 24,000 turtles/yr.

The market is actually broader than the figures reveal. In nearly every coastal town in the Caribbean the profits to be made from tortoise-shell are known to the people. Consequently, tortoiseshell originating in countries that prohibit its sale is clandestinely funneled into open markets.

Importing countries often take comfort in the belief that the hawksbills from which the shell is taken would have been killed anyway for local consumption. The fact is that the demand for shell is generating its own market, and in so doing poses the most serious survival threat to the species today. The price of hawksbill shell in some areas so far exceeds that of the meat that many turtles are stripped of shell, amounting to maybe 4 or 5 pounds, and then discarded. In Bocas del Toro, Panama, shell sells for \$25-40/lb, while meat sells for 40¢/lb - if you can sell it. In remote areas, the cost of getting the meat to market is sometimes prohibitive. Although the traffic in shell brings some immediate income to people in need of it, it is at the same time depriving them of a resource on which they must depend, for many years to come, for protein.

The tortoiseshell is, as you may know, used primarily for decorative articles. In many places it has even become fashionable to display polished whole turtles in one's house. The market appears to have suffered only a slight setback from the introduction of synthetic tortoiseshell, although the two are nearly indistinguishable.

If you should decide to make a film on marine turtles, we urge you to take advantage of your access to millions of viewers, especially in Japan, to draw attention to this senseless exploitation of the world's hawksbill populations. If the tortoiseshell market in its present dimensions is allowed to continue, there seems to be no hope that the hawksbill will survive.

Sincerely,

Archie Carr Chairman

IUCN Marine Turtle Group

George Balazs

IUCN Marine Turtle Group

AC/GB:s

DEPARTMENT OF ZOOLOGY ZZ3 BARTRAM HALL 904-392-1107

August 28, 1979

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

Dear George:

I'm sorry the Cousteau letter was mistakenly mailed to him. If you approve what it proposes, will you please sign the xerox copy and send it on, together with my apologetic note? If you object, explain your objections to him.

Please also peruse the enclosed list of members of the reorganized turtle group. If you have suggestions for changes please communicate them to Wayne, who is going to Morges shortly, or to Peter Scott, or to both. I'm leaving for Costa Rica for a week or so. I now have no compunctions about the plethora of Carr students on the list; and I think it would be simpleminded to exclude them. Moreover, inasmuch as Anne Meylan will be taking care of most of the detail of the Gainesville pole of the chairmanship, I think her contribution will merit designation by a formal role-name. I propose Agenda Officer. This doesn't necessarily have to be a title in the sense of an official SSC designation, but merely a committee term coined to recognize Anne's otherwise unrewarded function in the chairmanship role-the reward being simply an additional term for future C.V.'s.

I don't know what the status of Nicholas' request for a co-chairmanship is; I don't think, however, that we need to wait on that decision to propose to him that he continue the newsletter and remain a member of the Group, possibly as a member of the steering committee.

I haven't heard anything from Noumea since our Honolulu meeting. Do you know whether other communications have gone out? Do you know, also, whether prepaid tickets will be sent to you and me, as consultants?

I heard from Wayne today that you may join Peter, David Ehrenfeld and me at Suarez's soiree in Oaxaca. I hope you do--it will be an apocalyptic encounter if both you and David are there.

Best regards.

Sincerely yours,

Archie Carr

Graduate Research Professor

AC:1jw enclosures

DEPARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

September 7, 1979

Dr. George Hughes Natal Parks, Game & Fish Preservation Board P.O. Box 662 Pietermaritzburg 3200 South Africa

Dear George:

Many thanks for your letter.

I have just turned over to Wayne King the recommendations that George and I are making for the composition of the new Turtle Group. Wayne will take them to Morges Monday, and I have no doubt that they will be approved.

Most assuredly you are listed as a full member. Your convictions about turtle farming don't alter your status in any way--at least they don't in my and Wayne's opinion. George may have relevant observations to make. If so you will hear from him directly.

I will say I don't envy you the prospect of involvement in an exercise which, because of the prevalent spreading opposition to world trade in endangered or vulnerable species, is bound to find itself repeatedly, and even in some cases perhaps undeservedly, a whipping boy. I've tried to reduce my own unshakable antipathy to its essence. It seems to be just that any such enterprise is bound to lust after international outlets, and at the same time is, in my judgment, bound to remain unable to satisfy potential demand. This situation generates intractable poaching, and smuggling. So I am sorry to see you get into such enterprises, because I have regard for you and don't think you will enjoy what you learn and experience. However, as a member of the Turtle Group you would be a treasure house of insight into the kinds of turtle problems that your farms will foment, and so will improve our judgment and understanding. I should add that your farmers will very likely plague you to wheedle the Group into endorsements of their undertakings. To unburden their minds of that rosy possibility should of course be high on your initial agenda.

Anne is in Tanzania visiting her husband, who is digging fossil tortoises with Mrs. Leakey. She was saddened by the idea of being on the Dark Continent and not being able to visit you; but even on a map you seemed a long way from Tanzania. Jeanne Mortimer is in Tanzania, too, on a completely separate excursion--a tour being lead by a friend of hers, a graduate student from Botany here. I doubt that she will get to Durban also.

Meanwhile, unless George is distressed over your venture, you are a full and highly respected member of the reformed Group.

Sincerely yours,

ACCITE CAFF

translation

Camara de Industrias de Costa Rica Apartado Postal 10.003 San Jose, Costa Rica August 23, 1979

Señor Lic. Rodrigo Carazo Odio Presidente de la Republica Casa Presidencial S. D.

Distinguido señor Presidente:

The Chamber of Industry of Costa Rica, by virtue of an accord in its executive committee, under the prerogatives provided by the political Constitution in its Article 140, very respectfully requests herein that you be so kind as to consider the possibility of denying your sanction for Bill No. 8267, which seeks to reform Article 8 of the Law Creating the Tortuguero National Park, No. 5680, 3 November 1975. Our petition is based on the principle of defense of our natural patrimony, which involves not only scientific values but also standards of national prestige which our position as a civilized country imposes.

Our organization has reached this decision, Mr. President, after being made aware of scientific facts attested to by world authorities in this field and furnished to us by the Caribbean Conservation Corporation. These leave no room for doubt that the authorization sought in this bill—namely that catching turtles be permitted within the zone of three miles out from the Tortuguero breeding ground—would in a very short while result in the extirpation of this species from Costa Rican waters. Realizing that these facts have been made known to you, and appreciating your extreme awareness of and concern for the protection of our natural resources, we have the hope that the petition we now make to you will be favorably received.

This optimism is reinforced by the fact that the benefit promised by the bill for a small number of fishermen in the zone of Limon is ephemeral and inconsequential and would be of very short duration and could in no way justify the danger to our heritage or the grave deterioration and impairment of the prestige of Costa Rica in international scientific circles as a civilized nation which treasures its biological resources. Also one cannot ignore the negative impact threatened for the tourist industry if it should be deprived of our natural aesthetic resources.

We sincerely believe it to be consonant with the policy of augmenting the exploitation of marine resources that your government proposes, to conceive a program which replaces and augments, on a stable basis of real benefit to Costa Rica, the aid proposed for this small group of Limon fishermen, who clearly merit the concern of the government and of their compatriots.

Thanking you in advance for your gracious attention to this petition, it is a pleasure to renew to the President of the Republic assurances of our highest consideration and respect,

Chamber of Industry of Costa Rica Francisco Terán Valls Secretary

DEPARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

September 12, 1979

Mr. Marinos Yeroulanos
Permanent Secretary
Ministry of Coordination
National Council for Physical
Planning and the Environment
Platia Syntagmatos
Athens
GREECE

Dear Mr. Yeroulanos:

Dr. Maarten Bijleveld has sent me a copy of your letter asking advice in developing a program of protection for sea turtles in Greek waters, together with his reply. All four of the moves that you yourself propose are relevant and necessary. The most fundamental of the four is the last listed--reconnaissance surveys and population estimates to reveal the species, developmental stages and presence or absence of breeding colonies in Greece. The information that such surveys would provide is essential grounding for any other moves to conserve the existing remnant of the marine turtle fauna of Greece. I strongly recommend a careful and systematic field study of this kind and hope that it can be undertaken in the near future.

Sincerely yours,

Archie Carr

Graduate Research Professor

Chairman, IUCN/SSC Marine Turtle Group

AC/1jw

cc: Maarten Bijleveld George Balazs F. Wayne King Peter Scott

DEPARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

September 12, 1979

From: Archie Carr

To: Colleagues

I am happy to report that President Rodrigo Carazo of Costa Rica has just vetoed the bill that would have so reduced the dimensions of Tortuguero National Park that the unique nesting colony of Chelonia there could not have been protected from exploitative abuse. In making this constructive reversal of a disastrous Congressional Act the President was responding to a wave of international letters and cables and to extraordinary widespread support mobilized in Costa Rica by ASCONA, Dr. Joe Tosi, of Centro Cientifico, and by Sr. Guillermo Cruz Bolaños representing the Caribbean Conservation Corporation. The attached letter to Dr. Tosi gives background for understanding the significance of this courageous decision that President Carazo has made.

DEPARTMENT OF ZOOLOGY ZZ3 BARTRAM HALL 904-392-1107

September 18, 1979

Biólogo Gabriel Quesada Apartado 8-3790 ASCONA San José COSTA RICA

Estimado Biólogo Quesada:

I want to congratulate you and the membership of ASCONA for your important role in bringing about a presidential veto of the unfortunate and irrational proposal to reduce the boundaries of Tortuguero National Park in order to facilitate poaching of the marine turtle colony that nests there. As a result of your work Costa Rica has, as so many times in the past, taken an enlightened course and shown her determination to resist the cynical destruction of her natural assets. People of like mind all over the world will be gratified by this turn of events, and Costa Ricans of times to come will be grateful for your part in bringing it about. Meanwhile, I offer you my own heartfelt felicitations, and the appreciation of the Marine Turtle Group, International Union for the Conservation of Nature, and of the Caribbean Conservation Corporation.

Sincerely yours,

alice Co

Archie Carr

Chairman, Marine Turtle Group/IUCN Technical Director, Caribbean

Conservation Corporation

AC/1jw

DEPARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

October 2, 1979

Sr. Antonio Suárez G. Pesquería industrial de Oaxaca, S.A. Etzatlan 28 (Col. Maza) Mexico 2, D.F.

Dear Antonio:

I want to thank you for making possible our recent visit there, and for the frank and open way in which you discussed your enterprise and showed us your plant. I went down to Oaxaca expecting to consort with the devil incarnate, but instead we were graciously entertained by an unbelievably attentive host. There were times when I suspected that you were purposefully entertaining us to the point of stupefaction just to soften us up; but I finally realized that you yourself probably live at that pace all the time.

Needless to repeat, I don't agree with some of your convictions, especially your faith in your ability to detect population decline in time to avert the dissolution of the morriva. In fact, I honestly doubt that there will be morrivas at Escobilla by the 1990's.

But I am sure everybody is grateful for the exciting and enlightening visit that you arranged for us--down at the coast, in Oaxaca City, and in your beautiful home in Mexico City. The chief regret I brought away was not having had a tape recorder when you related the mind-shattering story of the wedding ceremony and dance going blithely ahead in the ranchito while a just-murdered corpse reclined in the rain, an una postura muy extrana. I've got to hear that story again some day. Meanwhile, please thank Mrs. Suarez for our delightful last evening in Mexico, and tell your daughter I was very sorry not to have had the opportunity of meeting herand of begging her help in persuading you to ease up on the golfina.

With regards and gratitude,

Sincerely yours,

Graduate Research Professor

AC/IJW

Encounter at Escobilla

During the last week of September twelve people convened at Puerto Angel, Oaxaca, Mexico, where PIOSA (Pesquería Industrial de Oaxaca, S.A.), the company known for its massive harvesting of the golfina (olive ridley; Lepidochelys olivacea), has its slaughterhouse and packing plant, and a small laboratory building.

Puerto Angel is a half-hour jeep drive from Escobilla, the site of a huge nesting aggregation or arribada, known locally as morrina, of Lepidochelys, and a place made known to the world as the scene of intemperate exploitation by Tim Cahill in a sensational article in Outside Magazine.

The group assembled at the invitation of Sr. Antonio Suarez G., founder and owner of PIOSA. His motive was to establish communication with serious opponents of his exploitation of sea turtles, especially the golfina.

The group comprised the following: George Balazs, Archie Carr, Tim Clabaugh, Kim Cliffton, David Ehrenfeld, Richard Felger, Angie McGehee, Carlos Nagel, Peter Pritchard, Georgita Ruiz, Laura Tangley, and Jack Woody. All the participants paid their own travel expenses to Mexico City. From there on they were the guests of PIOSA, and all activities were arranged and attended by Sr. Suarez and his assistant Sr. Alfredo Martinez. The schedule was as follows:

- 25 Sept. '79 (1) Arrival of participants in Mexico City
 - Tues. P.M. (2) Showing of movie on industrialization of Mexican sea turtles
 - (3) Dinner in Mexico City
- 26 Sept. '79 (1) Travel to Oaxaca and Puerto Angel Wed.
 - (2) Visit to Escobilla Beach
 - (3) Visit to PIOSA laboratory
 - (4) Visit to PIOSA slaughterhouse
- 27 Sept. '79 (1) Boat trip along coastline off Escobilla, where Thurs. thousands of ridleys were strung out for 8 km in a longshore morrila
 - (2) Historical sketch by Sr. Suárez
 - (3) Arrival of editors of magazine DUMAC
 - (4) Night trip to Escobilla to watch for morring emergence, which failed to materialize; only six turtles nested
- 28 Sept. '79 (1) Return by some participants to research facility and Fri. slaughterhouse
 - (2) Departure DUMAC editors
 - (3) Meetings with Sr. Suarez

29 Sept. '79

(1) Return to Oaxaca

Sat.

(2) Return to Mexico City

- (3) Dinner at Suarez residence
- 30 Sept. '79 (1) Dispersal of participants Sun.

After many hours of meetings with and without Sr. Suárez in attendance, the participants expressed continuing doubt that the sea turtles of Mexico can withstand the current level of harvest. It was clear that Sr. Suárez believed otherwise, but it was hoped that this disagreement would not bar further discussion. A final meeting was held to see whether any principles could be agreed on. The points on which agreement seemed possible, together with Sr. Suárez's reaction to each, were as follows:

(1) A conference to instigate conservation of L. olivacea in an integrated way in the East Pacific was proposed. This would involve the principal countries with large ridley populations—Mexico, Costa Rica, and Ecuador.

Suarez: Agreed.

(2) The need to maintain an outside observer in future seasons at Puerto Angel and Escobilla was pointed out; and gratitude was expressed for the PIOSA money that supported Tim Clabaugh's work in that role during the past season. Future funding should be negotiated.

Suárez: Agreed.

(3) The need for careful study of migratory patterns of the East Pacific ridley, as grounding for conservation and management, was emphasized, and a substantial tagging program in Ecuador was recommended.

Suárez: Agreed

(4) Re beach patrols--in spite of the policy of total protection, enforcement by PESCA (Instituto Nacional de Pesca) had become lax and in some cases the marines assigned to the work had not been effective. It was hoped that Sr. Suárez would use his influence to improve the situation.

Suarez: I don't know what the status of protection is now--I'll explore it further. We are paying \$1000 per month for each group of marines--we want them to be effective. It is difficult to stop all illegal commerce--but, really, I feel that this is not heavy in Oaxaca.

(5) It was suggested that in the absence of a reliable population model, another technique to monitor population status—censusing nesting turtles annually—should be used. As a temporary rule—of—thumb, if the morrina of a given year is 20 per cent down, a moratorium should be declared; if it is ten per cent down, the harvest would be reduced by 50 per cent.

Suarez: Because of socio-economic and political factors such a process must come about gradually. I table the proposition, although I agree that any reduction would indeed by a cause for concern. Probably, if we should experience a clearly serious decline we would try to establish a moratorium, and to continue it until recovery.

(6) Sr. Suárez's support for a program of national beach reserves, with formal protection of beaches and the coastal zone behind them, was requested.

Suarez: It's an old idea, and nothing has been done about it. We should do it gradually, starting with the beaches only.

(7) It was pointed out that several joint, informal U.S.-Mexican sea turtle projects are afoot, and Suárez's support in formalizing and reinforcing these was asked.

Suarez: This is official business, at government level. It is my personal opinion, however, that if our relations here continue in a healthy way, such an advance is entirely possible.

Two features of our four days with Antonio Suarez were especially impressive. One was his unstinting hospitality. He is a man of vast energy. The round of inspection and sight-seeing that he had organized was so continuously unflagging that it seemed for a while that he was purposely wearing us down as adversaries. As it turned out, however, this could hardly have been the case, because the feverish schedule continued unabated after all the negotiations were over.

Another strong impression that we took away was that there was a curious lack of window-dressing. Some tidying had been done, especially at the laboratory, where, incidentally not much research seemed to be underway; and the slaughter session arranged was a mere demonstration of technique, with little of the shock power of the routine mass carnage. Otherwise, there was a surprising lack of effort to conceal the more unhappy aspects of an operation in which turtles are caught, landed, hauled, killed and dismembered by the tens of thousands.

The meetings at Puerto Angel were briefly attended by two members of the editorial staff of the Mexican magazine DUMAC, the bimonthly publication of Ducks

Unlimited, in which a translation of Tim Cahill's "The Shame of Escobilla" had just appeared. Antonio Suarez had invited the editors down from Monterrey on the grounds that, even though Ducks Unlimited is mainly concerned with game birds, its membership is made up of prosperous, leisured people who are strongly opposed to environmental loss in Mexico. An article on the Puerto Angel meetings will appear in the next issue of DUMAC. What its tone will be remains to be seen. Certainly DUMAC subscribes to the sustained-harvest concept, which constituted the main bone of contention between PIOSA and its conceptual adversaries at the meeting. However, the sincerity of Sr. Suarez's belief that DUMAC is the most substantial hope for conservation in Mexico cannot be doubted.

Besides the hours of group discussions, I had protracted private conversations with our host. During these I told him of my view that the controlling issue was not whether he may be returning significant numbers of hatchlings to the sea, in his oviducal salvage program; but rather that, since the 1960's, when the olive ridley became a theme for concern at meetings of the IUCN Marine Turtle Group, three and perhaps four arribadas of about the size of that at Escobilla had been destroyed. His reply to that was that it was just that kind of irresponsibility that he was preventing, by his disciplined exploitation and management. Then I told him that I personally opposed all international traffic in sea turtle products, and that the rapid spread of a brand new turtle leather industry since 1967 is an example of the ills that such traffic generates. Sr. Suarez replied that now it is precisely because of the growth of this profitable industry that he has exerted his influence in stopping the heedless destruction of the resource and in disciplining the fishery; and that if his two principles of operation: exploitación racional, and industrialización completa are adhered to, the fishery can be stabilized and perpetuated. Otherwise, he said, effective management of East Pacific ridleys would quickly disintegrate.

In a concluding statement at the last group session Sr. Suarez repeated a remark that he had made several times before. It was this: "I will not go down in the history of Oaxaca as a person who has contributed to the decline of sea turtles—this would be one of the worst inheritances that I could leave for my daughter."

Archie Com

DEPARTMENT OF ZODLOGY 223 BARTRAM HALL 904-392-1107

November 12, 1979

Mr. R. Jenkins
Wildlife Officer
Australian National Parks &
Wildlife Service
PO Box 636
Canberra City
A.C.T.2601
Australia

Dear Mr. Jenkins:

In reply to your inquiry concerning the proposed importation of turtle soup from farm-reared green turtles, I suggest that you request an opinion from Mr. Peter Sand, Director General, CITES, 1110 Morges, Switzerland. Actually the information you seek is available in the enclosed Federal Register excerpt prepared by the U.S. National Marine Fisheries Service, and Fish and Wildlife Service.

Your government faces a critical decision in this respect, and I hope it will be given the careful consideration it deserves.

Sincerely yours,

Archie Carr

Chairman, Marine Turtle Specialist Group

AC/1w Enclosure December 5, 1979

Mr. Ronald Chensam Instituto Nicaraguense de Reforma Agraria Bluefields, Nicaragua

Dear Mr. Chensam;

Thank you very much for your latter of November 8, with the thoughtful comments on the outlook of the green turtle in Nicaragua. Obviously we share that: Interest and concern here, because we have been studying the same turtles at their place of reproduction, Tortuguero, Costa Rica, for 22 years. We can see no indication of an increase in overall population numbers. As the enclosed sheet will show, the breeding migrants fluctuate strongly from year to year. If there has been any detectable trend over the past 50 years, it is a downward trend and our data can be used to show that prior to the ban on export hunting in Nicaragua three years ago the population was heading toward extinction within about 35 years.

It is possible that in the future a strictly controlled exploitation of Miskito Bank turtles may be practicable, but this would have to be regulated on a cooperative international agreement such as that realized at the San Jose Tripartite Conference of 1969. This produced an accord approved by Costa Rica, Nicaragua, and Panama, but never ratified by Nicaragua. I am hoping that these negotiations can be revived and put into effect.

Anything further that you can tell me about local belief in a Freeway in the Sky, or about the migratory routes followed by Nicaraguan turales would be gratefully received.

Thank you again for your letter.

Sincerely yours,

Archie Carr Graduate Research Professor

DEPARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

January 8, 1980

Sr. Jorge Peña
Jefe de Circulacion
Técnica Pesquera
Ediciones Mundo Marino,
S.A. Illinois 57,
Ap. Postal No. 19-283
Col. Nápoles
México 18, D.F.
MEXICO

Estimado Sr. Peña:

I enclose a small contribution for Técnica Pesquera. Through the years I have read your magazine with pleasure and profit, and have particularly admired the art work on your covers. However, a recent trend in editorial policy which seems to favor increased exploitation of Mexican sea turtles bothers me. Turtle exploiters need no encouragement from Técnica Pesquera. They are sufficiently motivated by the promise of profit. It seems to me that the obligation of a publication as influential as yours is to provide a balanced, realistic assessment of their actual and potential effect on a unique, vulnerable and vastly depleted resource.

Such contempt of the conservation ethic as the enclosed seems to me unworthy of *Técnica Pesquera*, and in the long run harmful to sound resource management in Mexico.

I sincerely hope that this article is not indicative of a fundamental change in the editorial policy of your excellent publication.

Sincerely yours,

Archie Carr

Graduate Research Professor

encl.

Por su aspecto antidiluviano, por su desamparo y parsimonia, por su vulnerabilidad como especie animal, la tortuga marina atrae mucho la atención de conservacionistas y almas caritativas, más preocupados por los animales que por las necesidades del hombre en la tierra. Pero las tortugas del Pacífico, especialmente la Lepidochelys olivacea o golfina, abundan quizá por millones de ejemplares y se espera que gracias a los trabajos de protección derivados del establecimiento de una pesquería racional, aumenten en pocos años sus poblaciones para seguridad de su especie, beneficio de los hombres, y tranquilidad de las buenas conciencias conservacionistas . . .

Tecnica Pesquera, May, 1978, p.28

Because of its antediluvian aspect and mild helplessness and its vulnerability as an animal species, the marine turtle attracts much attention from conservationists and bleeding hearts more concerned about animals than for the necessities of man on earth. But the turtles of the Pacific, especially Lepidochelys olivacea, the golfina, abound by perhaps the millions. It is expected that, thanks to the protective efforts of a rational fishery, they will increase their populations in a few years, thus insuring the security of the species, the benefit of man, and the spiritual tranquility of the plous conservationists.

Tecnica Pesquera May, 1978 p.28

DEFARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

January 23, 1981

Sir Peter Scott, Chairman Species Survival Commission, IUCN Wildfowl Trust Slimbridge Gloucester GL2 7BT England

Dear Peter:

As you may already know, there is good news to report regarding the U.S. project to reduce the incidental take of sea turtles in shrimp trawls. You may recall that as a part of my report to the SSC at our Cainesville meeting, Milton Kaufmann (organizational representative to the SSC from Monitor International), told of the technological breakthrough in trawl-net modification that has been schieved by the National Marine Fisheries Service. He reported that the net modification shows great promise, not only to eliminate the incidental take of sea turtles, but also to reduce the waste of other marine life through by-catch mortality. In U.S. waters this by-catch may go as high as 1 billion pounds annually. Since the time of the SSC meeting, intensive operational testing of the turtle excluder device has continued. Results of the testing suggest that net modification may virtually eliminate both the incidental take of sea turtles and a large percentage of the by-catch of other marine life.

I believe you will agree that it is important for the IUCN to assist in disseminating the new technology when the time to do so arrives. This would be consistent with several of the recommended actions in the "Action Plan for the Conservation of Sea Turtles," as follows: Sir Peter Scott January 23, 1981 Page 2

Action No. 119: "Encourage international and national fisheries commissions to promulgate regulations requiring the use of gear which precludes the capture of sea turtles and mandating the closure of areas and seasons as appropriate to protect these marine reptiles."

Action No. 120: "The U.S. National Marine Fisheries Service and U.S. shrimp industry should be commended and encouraged to accelerate their development of a shrimp trawl that precludes the capture of sea turtles, and UNEP and FAO should make this fishing technique available to world fishing fleets, and states should require the use of the excluder nets in areas or seasons necessary to provide adequate sea turtle protection in a specific area."

Action No. 121: "Encourage the U.S. National Marine Fisheries Service and the U.S. shrimp industry to expand research on trawling gear that precludes capture of sea turtles to include types of trawls other than just those presently being investigated. This will increase the acceptability of the new trawls by fleets using other types of gear."

I don't know whether the draft of an IUCN letter to the President of the United States that was proposed by Milton Kaufmann at the Gainesville meeting has been sent. In any case, however, I hope you will consider sending President Reagan a letter based on the enclosed draft as soon as Sir Peter Scott January 23, 1981 Page 3

possible. Milton Kaufmann joins me in this recommendation.

With best wishes,

Archie Carr, Chairman Marine Turtle Specialist Group

President Ronald Reagan The White House Washington, D.C.

Dear Mr. President:

The International Union for the Conservation of Nature and Natural Resources extends its congratulations on your election to the Presidency. We wish you and your Administration well, and look forward to continuing to work with your Agencies, which are valued members of the IUCN. Meanwhile we are deeply grateful for the support that the United States has provided ever since the IUCN was founded.

If I may address a specific problem of species survival, I would like to commend the U.S. for its current efforts and plans to reduce the mortality of endangered and threatened sea turtles that results from incidental take in the trawl nets of shrimp fishermen in the southeastern U.S. Recent technological advances in trawl-net design by your NOAA gear specialists give promise of eliminating deaths of sea turtles from this cause. It is hoped that where mortality has been high U.S. shrimp trawlers will be required to use the excluder modification by the time the brown shrimp season starts this spring. In 1980 over 2,000 sea turtles washed up dead on the southeastern U.S. cosst. Further, it is estimated by your NOAA scientists that 1 billion pounds of marine life may die each year in the shrimp trawl nets and are thrown back into the sea. Use of the excluder device by all U.S. shrimp boats would go far towards eliminating this unnecessary and wasteful damage to important marine ecosystems.

As the efficacy of the excluder gear is proved, by successful wide use, the IUCN would be pleased to work with the U.S. Government, UNEP and the FAO to insure the expeditious global technology transfer of this

President Ronald Reagan Page 2

significant U.S. development. Use of this gear modification by all the trawl fisheries of the world, where appropriate, would be an important step towards saving endangered and threatened species of turtles, as well as eliminating by-catch not used for food.

We also solicit the active support of the U.S. Government in implementing the "Sea Turtle Conservation Strategy," developed on principles enunciated at the World Conference on Sea Turtle Conservation, held at the State Department November 26-30, 1979, in Washington, D.C.

Sincerely yours,

DEPARTMENT OF ZOOLOGY 223 BARTRAM HALL 904-392-1107

February 11, 1981

Dr. Lucas Chin Curator, Sarawak Muzium 24232 Pejabat Muzium 24231 Penyelenggara MU/523/D/(39) Sarawak, Malaysia

Dear Dr. Chin:

We are all disturbed to hear of the decline, and the continued overexploitation, of the Sarawak egg beaches. Apparently, two problems badly need attention there: the drain imposed by the egg commerce; and the almost complete lack of information about factors affecting the turtles on their unknown feeding grounds. I hope that you will be able to get support, moral and fiscal, in a strong effort to solve these problems. Please let me know if there are ways in which we can help.

I enclose some information on the status of the turtle expeller that should be of interest.

Sincerely yours,

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Chairman, Marine Turtle Specialist

Group, IUCN

AC/1Jw

enc1.

cc: George Balazs

To: Marine Turtle Specialist Group Members

From: Archie Carr, Chairman

Re: Request for comments on draft sheet for IUCN Red Data Book account of Lepidochelye kempi.

The enclosed preliminary account was sent here by Dr. Brian Groombridge, of the Species Conservation Monitoring Unit, with a request for criticism and suggestions by members of the Marine Turtle Group. This is an important and difficult assignment that Brian has been given, and I hope you will examine the material carefully, and suggest any changes that you consider necessary or helpful. Your comments can be made directly on the text. Because there is an early deadline for publication of the volume we are hoping that your comments will reach our Gainesville office within 2-3 weeks of receipt for incorporation in the critique.

Brian will be sending the data sheets for the other species in the near future, and these will also go to you for review.