

THIRD WORKING MEETING OF THE IUCN/SSC CROCODILE SPECIALIST
GROUP, CONVENED 5-12 APRIL 1976 AT MANINGRIDA, AUSTRALIA

A Summary Report by the Group Chairman to the Survival Service
Commission Meeting, 11-12 May 1976, Morges, Switzerland.

The Third Working Meeting of the IUCN/SSC Crocodile Specialist Group was hosted by the Crocodile Research Station operated by the University of Sydney and the Government of the Northern Territory, and was attended by 20 Group members and observers from Australia, Colombia, England, India, Papua New Guinea, South Africa, Switzerland, and the United States of America. In addition, a member of the editorial staff of National Geographic Magazine was present to gather information for an upcoming special issue on crocodilians, their ecology, conservation, and impact on human culture.

Status of Wild Populations. The first two days of the meeting were devoted to reviewing the latest information on the status of crocodiles (i.e. - all crocodilians) in the wild.

The Group noted with grave concern the continued decline in most African, Latin American, and Asian populations of crocodiles, as a result of continued hide-hunting, sale of crocodile souvenirs and trinkets, and "vermin" eradication

efforts. However, the Group is happy to report the "Recovered" status of the American alligator (Alligator mississippiensis) as a result of efforts involving several Group members. Members Chabreck, Joanen, and King led the early fight to protect the American alligator with a series of protective state and federal laws, including the U.S. Endangered Species Act. Member Campbell drafted much of the U.S. federal regulations which regulate the hunting, capture, and interstate commerce in the species today. Member Joanen is head of the federal Recovery Team (i.e. - the U.S. Fish and Wildlife Service's equivalent of a "Specialist Group") charged with directing the conservation of this species.

The Group was also pleased to note the development of a management plan for Papua New Guinea's two species of crocodile (the New Guinea crocodile, Crocodylus novaeguineae, and the estuarine crocodile, C. porosus) under the direction of Member Downes. This plan should insure the survival of these species in that nation. Unfortunately, no such management scheme exists in neighboring Irian Jaya where the same two species are declining.

On the side of negative developments, the Group learned that the President of Colombia had authorized the issuance of licenses for hunting 290,000 caimans in that country during 1976. The Crocodile Specialist Group doubts that there are that many adult caimans remaining in the wild in Colombia.

~~This unrealistically high quota, which is reminiscent of~~

International Whaling Commission quotas, is sure to stimulate killing of animals smaller than legal size and the smuggling of hides from neighboring nations.

The Group was extremely concerned over the low numbers of estuarine crocodiles remaining in Australia. University of Sydney crocodile researchers have censused the entire Northern Territories coast and rivers and found a total of approximately 3,000 estuarine crocodiles. Extrapolation of these data suggest that fewer than 5,000 estuarine crocodiles remain in the wilds of Australia. The population was destroyed by hide hunting in years past. A high proportion of juveniles in the population reflects the low numbers of commercially valuable adults that survived. The Group expressed their concern over the future of the Australian crocodiles in a letter to the Australian Council of Nature Conservation Commissioners, and congratulated the federal government on its banning the export of hides.

The Group singled out the critically endangered gharial of Bangladesh, India, Nepal, and Pakistan, and the Orinoco crocodile of Colombia and Venezuela for special attention during the coming months.

Surveys conducted by Romulus Whitaker (Madras Snake Park Trust, Guindy Deer Park, Madras 600 002 India) and his staff in India and Nepal from 1974 to 1976 indicate the gharial (Gavialis gangeticus) probably numbers fewer than 500 adults in the wild in these countries. The largest populations

exist in the Chitawan National Park, Nepal, and a 40 km stretch of the Narayani River extending from Chitawan to the Nepal/India border; and in the Satkosia Gorge Sanctuary on the Mahanadi River in India. The primary cause of the decline of this species has been hide hunting, but today's pressures include drownings of adults entangled in fishing nets, incidental killing of adults by illegal dynamite fishing, and robbing of nests for eggs.

A 1975 survey conducted by Group Member Medem covering 252,530 km² of Colombian tributaries of the Orinoco revealed a total of only 280 specimens of the Orinoco crocodile (Crocodylus intermedius) extant in the area. Even if 50% of the reptiles were missed in the survey, the Orinoco crocodile is one of the most endangered species of crocodile.

Farms. A day was spent discussing commercial crocodile farms. Crocodiles and sea turtles seem to generate more interest in commercial farms than any other species of endangered vertebrate, possibly because the market for products from these reptiles is enormous and there are no other species which can readily be substituted. This is different from the situation with endangered fur animals, such as the spotted cats. In most developed nations spotted cat furs account for less than 5% of total fur sales, so elimination of these species from the market place does not threaten the fur industry. Another reason might be that the reproductive potential of reptiles which lay clutches of 50 or more eggs suggests to the layman that a few breeding pairs will yield

many hides. In any event, each year inquiries about farming techniques are referred to the Crocodile Specialist Group by the IUCN Secretariat, by WWF, by various United Nations agencies, and by individual Group Members. The Group has devoted considerable time to answering these requests, pointing out the difficulties involved in farming crocodiles and the lack of data on many aspects of such ventures. In most instances the inquirer never acknowledges receipt of the Group's answer, and few have actually entered into farming projects. In an attempt to reduce the amount of time the Group devotes to these inquiries, it drafted a standard response which will be routinely sent to all initial inquiries for information on farming. If this stimulates a request for further information, the Group will then devote some time to a detailed and individualized reply.

There have been several unsuccessful attempts by reptile leather tanneries in Europe to construct and operate commercial hide farms in Africa and South America. A few have planned to use exotic (non-native) species of crocodiles in these ventures. Such plans ignore the potential for introduction of an exotic reptile predator into aquatic habitats where it could cause major imbalance in existing ecosystems.

In addition to the Specialist Group receiving inquiries about farming crocodiles, UNDP and FAO also receive requests from governments for assistance in developing farming programs, marketing plans, or schemes for exploiting wild populations.

They have responded to several of these requests by underwriting the expense of "experts" to advise the governments. Unfortunately, with the exception of Dr. Robert Bustard, who is presently working in India on an FAO sponsored crocodile conservation/farming program, these advisers are not expert in the field. The European reptile leather industry has complained to the Crocodile Specialist Group that one U.N. "expert" advising the government of the Sudan on tanning and marketing of hides has no knowledge of reptile leather tanning or of crocodile management. Similarly, the Group knows of one U.N. "expert" who is responsible for devising and administering a harvest/research scheme that caused the near extermination of the already endangered crocodile populations in Botswana.

What may well be the largest crocodile rearing program in the world, and one which was developed by Group Member Downes, is getting underway in Papua New Guinea (PNG). This program is part of a comprehensive conservation/exploitation scheme under which adult crocodiles are protected in the wild to insure the survival of a healthy breeding population, and eggs and young are collected from the wild and raised in captivity to supply the hide market. Eventually, there may be hundreds of individuals, villages, and companies involved in rearing crocodiles in Papua New Guinea. To date the development costs have been borne by the government of PNG, but they are seeking UNDP funding for further implementation and expansion of the program. In this one instance, UNDP contacted the Crocodile Specialist Group chairman for

assistance in evaluating the total program. The chairman was able to locate a herpetologist who visited the area and also interviewed PNG officials before submitting a detailed, and favorable, review of the program to UNDP. In addition, at the invitation of the PNG government, the Specialist Group sent Members Medem and Pooley to conduct an independent evaluation of the crocodile conservation/exploitation scheme immediately prior to the Working Meeting in Australia. Their findings were discussed at the Meeting (see attached report). It is hoped that the PNG program might serve as a pilot scheme for crocodile conservation in many developing countries. It is further hoped that UNDP and FAO will continue to consult with the Group on crocodile conservation matters.

Crocodile farming interests have claimed that hides from captive stocks will replace wild hides in the international hide market, thereby relieving pressure on the wild populations. They have even expressed the belief that a steady source of hides from farms, constant in number, size, or quality, would make them preferable to wild hides. On the other hand, conservationists have expressed fears that the sale of hides from the few extant crocodile farms might stimulate, but fail to satisfy, the international market. This might result in renewed exploitation of the dwindling wild populations in an effort to meet the increased demands of the market. In an effort to determine which of these beliefs might be nearer the truth, the Specialist Group reviewed the

impact that commercial farming of wild species has had on conservation of those species. No example could be found where farming clearly had either a beneficial or harmful effect on the wild populations. The example which the Group found came closest to being beneficial was the farming of ostriches for their plumes. However, the replacement of wild ostrich plumes with farmed plumes was possible because most European and North American "consumer" nations closed their markets to wild plumes. It is doubtful that ostrich conservation would have benefited from farming efforts without the wild plume prohibitions. Since the Convention on International Trade in Endangered Species of Wild Fauna and Flora contains prohibitions on trade in some endangered crocodilians, captive-reared hides might eventually replace wild hides if the ratifying nations cooperate and the technical problems of captive management are overcome.

Research and the Biological Basis of Crocodile Conservation.

Several days were spent reviewing the latest data on crocodile ecology and behavior. Particular attention was focused on the impact of crocodiles on their environment -- in Africa, where crocodiles have been exterminated the amount of fish caught for human consumption has decreased; in North America, the alligator increases marsh productivity by digging deep den holes that retain water and serve as refuges for other aquatic species during periods of drought; in Latin America, caimans speed up the recycling of energy by consuming large numbers of rough fish and defecating the nutrients into the

water, which in turn supports a wider variety of fish, invertebrates, and plants, and where the caimans have been removed there has been a decrease in productivity and a reported increase in schistomiasis and liver fluke infestation. These effects must be called to the attention of nations bent on exploiting or exterminating their wild crocodile populations.

During the last three years, research has revealed that crocodiles possess a complex series of social signals and a surprisingly elaborate pattern of parental care of eggs and hatchlings. These findings have been reported in scientific journals and more are in press at the present time. Some of this behavior was the subject of a Time-Life Wild, Wild World of Animals television show in the United States during 1975. The show was filmed largely at Member Pooley's crocodile research station in the St. Lucia Game Refuge in Natal.

New research techniques and equipment from the United States, Africa, and Australia were discussed and demonstrated. Of particular interest was the method of examining the stomach contents of living crocodiles which was developed by the University of Sydney's crocodile research team under the guidance of Member Messel. Its development eliminates the need to kill crocodiles in order to document what they are eating. Also of note was the solar-battery radio-telemetry units developed by University of Sydney. The unit fastens to the skull of the crocodile without the aid of surgical clamps

or sutures and recharges its batteries every time the crocodile basks in the sun.

Discussions revealed gaps in our knowledge of crocodile biology and yielded new cooperative programs to fill some of those gaps.

Trade and marketing. The Group continued its efforts to monitor the trends in hide marketing. The number of crocodile hides marketed internationally each year is estimated to be 2,000,000. A majority of these hides are produced in Latin America. Africa is the second largest producer of hides. France, Germany, and Italy are the largest consumers of hides. England, Japan and the United States also consume large numbers. New laws and regulations enacted to protect and conserve the wild crocodile populations were reviewed.

Considerable time was spent debating the placement of particular crocodiles on Appendices I and II of the Convention on International Trade in Endangered Species. Part of this discussion was prompted by the receipt of a letter from the German Reptile Leather Association in which the Group was asked to recommend the removal of some Appendix I species to Appendix II and vice versa. In return for these changes, the industry had offered to impose a voluntary ban on the use of certain size classes of hides. They also offered to contribute funds for crocodile conservation and farming research through the Frankfurt Zoological Society. The Group drafted a reply to the industry letter in which we

indicated we could not support many of their recommendations (see below and attached letter).

The Group debated the problems associated with restocking areas depleted of their wild crocodilians, and concluded that this will be impossible in many instances without public education programs and/or an economic incentive to tolerate the animals' presence. Also examined was the disposal of confiscated hides -- should they be destroyed or sold to produce revenue for conservation. The majority of the Members were of the opinion that confiscated hides should be destroyed. If hides are sold, they re-enter the trade and supply the very same buyers who were buying them as illegal hides. The only way to avoid this is to destroy the hides. A few Members reported that their governments had no legal basis for destroying hides and so were prevented from doing so, but they were allowing the hides to deteriorate through improper storage.

ACTION PROGRAMME

Rather than promulgate a program so large that it would be impossible to implement, the Group decided to concentrate on a few important and realizable goals. Primary among these were efforts to save the gharial and Orinoco crocodiles from extinction.

Gharial. The Crocodile Specialist Group requests that IUCN/WWF make representation to His Royal Highness Gyanendra, Kathmandu, Nepal, to protect the gharial population in Chitawan National Park and in the Narayani River. Since these populations are the largest remaining populations of the gharial, Nepal should be asked to accept the ULTIMATE RESPONSIBILITY for assuring its survival.

Under the guidance of FAO adviser, Robert Bustard, the government of India has established the Satkosia Gorge Sanctuary for the species. In addition, captive propagation programs are being developed under Dr. Bustard and under Romulus Whitaker of the Madras Snake Park Trust. Also, India should be encouraged to set aside a portion of the Narayani River contiguous with the gharial habitat in Nepal as a reserve.

The Crocodile Specialist Group will attempt to find an ecologist to study the gharials in the Chitawan and Narayani populations. This "scientific presence" should further insure the conservation of the species in Nepal.

Orinoco crocodile. The Crocodile Specialist requests that a letter be sent from IUCN/WWF to the President of Colombia seeking more effective protection of the Orinoco crocodile in that nation, including the establishment of suitable sanctuaries. Protection will never be effective unless adequate support (vehicles, boats, gasoline, etc.) is given to the wildlife officials responsible for enforcement. A U.S. Peace Corps worker will assist Member Medem's study of the species in Colombia this year and maintain a "scientific

presence" there.

Similarly, a letter should be sent to the President of Venezuela seeking the establishment of a sanctuary for the species in that nation, and the acceptance of ULTIMATE RESPONSIBILITY for the species' survival. The Group is prepared to offer technical assistance to Venezuela if it is needed.

The Group further requests that IUCN/SSC congratulate Dr. Pedro Trebbau, Director of the Jardin Zoologico "El Pinar" (Cota 905, El Pinar, El Paraiso, Caracas, D.E. Venezuela) for his initiation of a breeding program for the Orinoco crocodile in that institution, and encourage him not to disperse the breeding group and its offspring by giving specimens to visiting zoo directors during the upcoming IUDZG meeting in Caracas. Almost certainly some of the European zoo directors will request specimens. Dr. Ernst Lang, as IUDZG representative on the IUCN/SSC Zoo Liaison Group, might be prevailed upon to make the same requests of IUDZG and Dr. Trebbau.

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Colombian caiman. The Group requests that IUCN send a letter to the President of Colombia calling for a reexamination of his decree to permit the killing of 290,000 caiman.

Ultimate Responsibility. The Group hopes governments can be prevailed upon to accept ULTIMATE RESPONSIBILITY for the following species:

- Chinese alligator (Alligator sinensis) -- China
- Apaporis River caiman (Caiman crocodilus apaporiensis) -- Colombia
- Orinoco crocodile (Crocodylus intermedius) -- Venezuela
- Philippine crocodile (Crocodylus novaeguineae mindorensis) -- Philippines
- Cuban crocodile (Crocodylus rhombifer) -- Cuba
- Gharial (Gavialis gangeticus) -- Nepal
- False gavial (Tomistoma schlegeli) -- Malaysia or Indonesia

New Sanctuaries. It is the intention of the Group to encourage the establishment of a number of urgently needed sanctuaries for particular species or populations.

- 1) Narayani River in Nepal or India (as mentioned above) for gharial.
- 2) Orinoco River sanctuaries in Colombia and Venezuela (as mentioned above) for Orinoco crocodile.
- 3) Lago Catemaco, Mexico, for the Morelet's crocodile (Crocodylus moreleti) population there. This population exists in a growing tourist vacation area, where it could form the center

of a natural wildlife attraction.

- 4) Lago Enriquillo, Dominican Republic, for what may be the largest single remaining American crocodile (Crocodylus acutus) population. The crocodiles in this hyper-mineralized lake haul out on the shore to bask in scenes reminiscent of past eras. It is possible to photograph 40-50 crocodiles in a single exposure. The area could become a major wildlife attraction for tourists. The major threat to the continued existence of this population also is reminiscent of past eras, they are killed and rendered for their oil.
- 5) Black River Morass, Jamaica, for the American crocodile. This is the habitat of the largest remaining population in Jamaica, and it is scheduled to be drained for development of rice terraces.

In addition, the Group hopes to encourage all crocodile producing nations to establish new sanctuaries for these reptiles or to include the species in protection, provided by existing parks and reserves.

Washington Convention. Because of its Recovered status, the Crocodile Specialist Group suggests that the American alligator (Alligator mississippiensis) be transferred from

Appendix I to Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora. If it is appropriate, the IUCN in its role of Convention Secretariat should suggest this to the November meeting of ratifying nations.

New Specialist Group Members. The Group noted with regret that Member Max Downes was no longer directly involved with crocodile conservation but instead was producing wildlife bibliographies. The Group voted to make up for this loss with the addition of John Lever, present head of the crocodile conservation program in Papua New Guinea, to the Group.

Romulus Whitaker, founder-director of the Madras Snake Park Trust, India was also approved for membership on the Group, as was Dr. Federico Achaval of Uruguay.

Of course, official addition of these three new members, Lever, Whitaker, and Achaval, awaits the approval of the Chairman of the SSC.

Venue and Date of Next Working Meeting. The Group tentatively selected India as the site of its 1978 meeting, pending final arrangements by its Indian Members. The Group decided that each member should raise the travel funds he needs to attend the meeting.

Crocodile Conservation and the U.N. Agencies. The Crocodile Specialist Group (as noted above) is concerned that United Nations agencies needlessly and unwisely encourage

crocodile exploitation as a means of gaining foreign exchange, and is disturbed by their habit of supplying non-expert advisers on crocodile exploitation projects. These practices are resulting in the needless squandering of a valuable resource. Of the estimated 2,000,000 crocodile hides that are traded internationally each year, one-half are unusable due to rot. If the quality of field preservation could be improved, it might be possible to reduce the number of wild crocodiles killed without reducing the number of usable hides the international reptile leather industry consumes.

The Crocodile Specialist Group has learned that FAO has prepared a confidential report on the reptile leather industry, which it is using as a basis for many of its crocodile projects. The Crocodile Specialist Group has been denied access to this report, although one Member was permitted to look it over superficially, but not allowed to even copy down the correct citation.

The Crocodile Specialist Group urges the IUCN/SSC to make strong representation to FAO to obtain a copy of the reptile leather industry report for review by the Group. We also suggest IUCN seek discussions with FAO and UNDP to end their hiring of non-expert advisers on crocodile projects. The Crocodile Specialist Group is willing to assist the U.N. in locating knowledgeable individuals as was done in the case

of the Papua New Guinea program. We are frequently told that the U.N. recognizes the scientific expertise of the IUCN on matters involving conservation. Apparently that recognition does not extend to matters involving crocodiles. We also wish to remind the SSC that on the occasion of its General Assembly the IUCN routinely praises FAO, WHO, UNDP, and UNEP for their cooperation. If that cooperation does not exist, we should reevaluate this General Assembly procedure.

Crocodile Ecologists. To increase the number of crocodile biologists available for conservation work, each Group member will attempt to attract one student to the field each year.

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Acting on the opportunity of having Crocodile Specialist Group Member Medem visit Germany on his return to Colombia from Australia, Members Honegger and King rescheduled their work and trips, and the three of them met with the German Reptile Leather Industry in Frankfurt on 3 May 1976. The three Members made it known that they were not empowered to speak for the IUCN, the SSC, or the Crocodile Specialist Group. They did set forth the Group's response to the earlier letter from the German Industry, and did present the Group's view of a number of problems resulting from overexploitation of wild crocodile populations. They also

stated they would convey the Industry's ideas and opinions to the Group and to the SSC. A few of the subjects which were covered were:

- 1) Industry acceptance of an upper size limit on hides in order to protect the wild breeding populations. The concept of an upper size limit is acceptable, but the actual limit is being discussed further.
- 2) Reducing the overall number of hides harvested below the present 2,000,000 per year, if needed. [Incidentally, the industry confirms the Group's estimate that 2,000,000 hides are traded internationally each year.] The industry is willing to accept such a measure only if forced to do so by law or the loss of the resource.
- 3) Industry data on the status of wild populations. The German reptile leather industry insisted that it had better data on the status of wild crocodile populations than did the Crocodile Specialist Group. Discussions during the meeting revealed that industry "data" pertained primarily to one population, the population in the Sudan, and even that was based on casual observations during repeated visits by a representative of the industry.

4) The functioning of the Washington Convention.

The German industry insists that France and Italy will not ratify the Convention, which means that these two countries will reap all the skins from the species on Appendix I. This will give them an unfair trade advantage over the German industry. [Since the meeting Italy has acceded to the Convention.] In addition, the industry representative expressed the belief that eliminating commerce in Appendix I species will result in increased trade in the Appendix II species, which will rapidly make them candidates for Appendix I.

5) The Reptile Leather Industry's concern over the non-expert advisers employed by FAO on crocodile exploitation and tanning projects -- this concern closely parallels that of the Specialist Group as set forth above.

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SUGGESTED ELEMENTS IN "ORINOCO CROCODILE" LETTER TO:

Dr. Alfonso Lopez Michelsen
Presidente de la Republica de Colombia
El Palacio
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Colombia

- 1) A statement on the very low numbers of Orinoco crocodiles (Crocodylus intermedius) in relation to area of Colombian Orinoco habitat. Medem survey in 1975 revealed only 280 specimens living in 252,530 km² of Orinoco tributaries in Colombia.
- 2) The need to strictly and vigorously enforce the existing total ban on the hunting of the species and on the sale of its hides.
- 3) The need to establish sanctuaries for the species where it can be effectively protected from further hunting. Any sanctuary being established today probably will not contain Orinoco crocodiles, so it will be necessary to stock it with specimens from areas where the species is not adequately protected or from captive breeding groups.
- 4) The need to establish a breeding station for restocking depleted areas and/or new sanctuaries. Such a station could be located in the Llanos Orientales.

- 5) The urgent need for sufficient wildlife wardens with support services to adequately protect the species in Colombia, especially in any newly created sanctuary.
- 6) The offer of technical assistance from the Crocodile Specialist Group for siting sanctuaries, training wardens, or developing management programs.
- 7) Thank Colombia (or the National University) for the tireless and highly expert efforts of Prof. Federico Medem (Estacion de Biologie Roberto Franco, Apartado aereo 2261, Villavicencio, Meta, Colombia) in behalf of crocodilian conservation in Colombia and throughout Latin America. [This is important for Fred has been granted time away from his university duties to do the crocodile work.]

SUGGESTED ELEMENTS OF "ORINOCO CROCODILE" LETTER TO:

Presidente Carlos Andreas Perez
Palacio Miraflores
Caracas
Venezuela

- 1) A statement on the very low numbers of Orinoco crocodiles (Crocodylus intermedius) in relation to the area of Orinoco drainage habitat in Venezuela. Surveys by Edgardo Mondolfi and Carlos Rivero during the mid-1960's, and by Federico Medem (Estacion de Biologie Roberto Franco, Apartado aereo 2261, Villavicencio, Meta, Colombia) in 1972 revealed that the Orinoco crocodile is so rare, so thinly scattered, after 45 years of intensive legal and illegal hunting that it is essentially extinct in the Orinoco proper, in its tributaries, the Apure, Portuguesa, Arauca, Cunaviche, Capanaparo, Cinaruco, Meta, rivers and in the Amacuro delta. Only isolated individuals can be found there today. No healthy populations remain. Surveys undertaken in 1976 by Dr. James Dixon (Department of Wildlife Science, Texas A & M University, College Station, Texas 77843) confirm these observations.

- 2) Although the species is totally protected by Venezuelan law, killings are still occurring, both for hides and for "predator control." Encourage the Venezuelan authorities to strictly and vigorously enforce the ban on hunting and sale of hides of this species.
- 3) The need to establish sanctuaries for the species where it can be effectively protected from further hunting. Since the species is so thinly scattered it may be necessary to stock any sanctuary with specimens collected from areas that cannot be adequately protected or from captive breeding groups.
- 4) The need to establish an official breeding station for restocking depleted areas and/or new sanctuaries. It might be preferable to lend support to the Orinoco crocodile breeding program of the Jardin Zoologico "El Pinar" (Cota 905, El Pinar, El Paraiso, Caracas) under the direction of Dr. Pedro Trebbau, rather than establish an entirely new station.
- 5) Offer technical assistance from the Crocodile Specialist Group for siting sanctuaries, training wardens, or developing management programs.

SUGGESTED ELEMENTS OF "GHARIAL" LETTER TO:

H.R.H. Gyanendra
Kathmandu
Nepal

WITH COPY TO:

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P.O. Box 107
Kathmandu, Nepal

- 1) Mention extreme low numbers of the gharial (Gavialis gangeticus) through its range in India, Bangladesh, Pakistan, and Nepal. Point out the relative abundance of the species in the rivers of the Royal Chitawan National Park (estimated at 14 specimens) and in the Narayani river between the Park and the Nepal/India border (estimated at 50-60 specimens).
- 2) Encourage total protection for the species in these populations -- and active (vigorous) protection.
- 3) Recommend the establishment of a gharial sanctuary in that portion of the Narayani river extending from Chitawan Park and Nepal/India border -- possible ~~extension of Royal Chitawan National Park boundaries~~ to encompass this area.

- 4) Offer technical assistance of the Crocodile Specialist Group for surveying the populations and establishing biological requirements of the species, training of Nepalese wardens or students in crocodile ecology, and development of management program.
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[Note. It is the hope of the Crocodile Specialist Group to find funding for a study in the Chitawan/Narayani region in Nepal this year, in order to establish what the SSC terms "scientific presence."]

Press Statement by

The Crocodile Specialist Group of the International Union for
the Conservation of Nature (IUCN) Survival Service Commission.

The Crocodile Specialist Group of IUCN consisting of 12 members drawn from countries in North and South America, Africa, Europe, Asia and Australasia met at the University of Sydney's and Department of the Northern Territory's Crocodile Research Headquarters at Maningrida, Arnhem Land, Northern Australia from 5th to 12th April 1976.

The group considered and deliberated over the regional and national crocodile conservation status reports from African, Asian, Australasian, Middle American, North and South American nations. Research reports and recent results on the biological basis of crocodile conservation were also considered at length. The report along with action recommendations is being forwarded to the group's parent body - IUCN - in Switzerland.

The group viewed with utmost concern the virtual extinction of a number of the world's crocodilian species and is recommending to its parent body urgent and special action in an attempt to restore these populations. Human population pressures, the destruction and loss of habitat, the continued activity of poachers and certain unscrupulous national and international reptile skin dealers, the lack of policing of parks and sanctuaries and failure to enforce so-called protective ~~game or conservation laws have continued to deplete the~~ populations of one of the world's oldest, least known and most misunderstood creature. In the case of certain species of crocodile there are only 50 to 100 of the reptiles known to remain and these are usually spread over the boundaries of 2 or more countries. In other cases such as that of Crocodylus portus (the saltwater crocodile in Australia) there are only

a few thousand remaining, spread over a vast area where the chance of breeding and hence survival may be low. In many cases these species were numbered in millions only 20 or 30 years previously. On the other hand the group was pleased that strong and continued conservation measures over the period of the last 20 years in parts of the southern United States has lead to the excellent recovery of the American alligator population. This species because of overhunting and loss of habitat had been in serious danger, but has now recovered to some $\frac{3}{4}$ of a million in number and trial cropping for the skin industry (under very stringent controls) has begun.

A number of other national and local governments have in recent years implemented conservation measures and commended research programs which if pursued with vigor may insure not only the survival of the species, but in due course again allow cropping of the crocodile resource. In the latter instance the cropping would require the most stringent regional, national and international control. The Convention on International Trade in Endangered Species of Wild Fauna and Flora now being ratified by many nations of the world will help insure this to a degree.

The Crocodile Specialist Group wishes to congratulate the Australian Commonwealth government for its continued total ban on the export and import of crocodile skins and products, and for its support of the University of Sydney's and Department of Northern Territory's crocodile research program. This program is of critical importance for the survival and recovery of the very seriously depleted saltwater crocodile population in Australia.

After excursions into the field, the group continues to view with concern the seriously depleted crocodile population in Australia (from millions to only a few thousand) and wishes

to stress that the recovery of the population will require a further 15 to 20 years before controlled cropping could even be considered. However, it is recognised that removal of nuisance crocodiles by wildlife officers might be necessary in local areas for public safety.

The group further wishes to congratulate the West Australian and Queensland governments for their conservation legislation providing total protection for the crocodilians. It hopes that this legislation will be enforced with vigor, and encourages these governments to support research on methods of restoring and managing the species within their jurisdictions. In due course, as the result of the large Australian crocodile research program become available the basic information necessary for the establishment of secure crocodile sanctuaries in Australian and elsewhere will be available.

The group wishes to draw attention of the Australian people to the possible important role which the crocodile could play in the control of the noxious cane toad. In South America it is well known that crocodilians eat these amphibians. Australia appears to be faced with a serious cane toad problem and may wish to examine the possible interaction of the cane toad and its crocodilians.

The Crocodile Specialist Group wishes to thank the Maningrida Council, the Aboriginal people of Arnhem Land and the Australian government for their hospitality and support.

* * * * *

[This statement was released to the Australian press through the Information Officer in Darwin at the conclusion of the meeting.]



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

1110 MORGES, SUISSE (SWITZERLAND)

☎ (021) 7144 01

TELEGRAMMES: UNICORN MORGES

In your reply, please refer to:
En répondant, veuillez rappeler:

12 April 1976

The Secretary
Council of Nature Conservation Ministers
P.O. Box 1937
Canberra City, A.C.T. 2601
AUSTRALIA

Dear Sir:

On behalf of the IUCN Crocodile Specialist Group
I would be grateful if you would convey the following
message to the Council of Nature Conservation Ministers.

The Third Working Meeting of crocodile specialists,
organized by the Survival Service Commission of the
International Union for the Conservation of Nature and
Natural Resources, was held at Maningrida in the Northern
Territory of Australia during April 1976. Previous
meetings of the Crocodile Specialist Group have been held
in southern Africa in 1973 and North America in 1971.

As you will be aware, most crocodilian species
throughout the world have been severely depleted in numbers
and several brought to the brink of extinction. Obviously
a variety of national and international programmes are
needed if this major and ancient group of animals is to be
conserved. It was for such reasons that the IUCN appointed
the Crocodile Specialist Group.

In the Australian context, the group was pleased to
note that appropriate protection has been given to both
Crocodylus porosus and Crocodylus johnsoni and congratulates
the Western Australian, Queensland, and Australian Governments
for the actions taken. The Group also believes that, as yet,
little is known of the ecology and status of crocodiles in
tropical Australia although it would appear that C. porosus
in particular has been greatly reduced in numbers compared with
populations of twenty-five years ago.

The Crocodile Specialist Group would encourage Australia to vigorously pursue research, management and habitat reservation programmes for both crocodile species in order to ensure their long-term conservation, and would strongly urge that no further harvesting of these animals be allowed until detailed assessments of population status and management strategies have been obtained. The Group would expect this to take many years judging from experience gained with the American alligator.

We wish to thank the Government of the Northern Territory and the University of Sydney and the staff of the Crocodile Research Station at Maningrida for the courtesy they extended to the Group in hosting its meeting, and welcome this opportunity of offering our recommendations to the Council of Nature Conservation Ministers.

Sincerely,



F. Wayne King
Chairman, IUCN/SSC Crocodile
Specialist Group

/db

NEW YORK ZOOLOGICAL SOCIETY

THE ZOOLOGICAL PARK

Telephone: WELlington 3-1500

Cable Address: ZOO PARK NEW YORK

Bronx Park

Bronx, N. Y. 1046

10 April 1976

(mailed 1 June 1976)

Dr. Heinz Wermuth
Staatliches Museum Fuer
Naturk.
Arsenalplatz 3.7140
Ludwigsburg
GERMANY

Dear Dr. Wermuth:

This is written in response to your kind letter of 23 February 1976 to Mr. Rene Boregger, in which you indicate a willingness on the part of the German Reptile Leather Industry to become more supportive of crocodile conservation in return for a change in the listing of some species of crocodilians on the Appendices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (= Washington Convention). We welcome this dialogue, and hope it leads to an effective and mutually satisfactory conservation program for crocodiles. We can support some of the proposals contained in your letter, but others are troublesome.

Specifically, we cannot accept that "biological aspects" were not considered in drafting the present Appendices of the Washington Convention as suggested on page 2, paragraph 2) of your letter. For the most part the Appendices are based on the biological status of the crocodilian species in the wild. We suggest you consult the IUCN Red Data Book on Amphibians and Reptiles, and the recommendations of the Crocodile Specialist Group of IUCN for confirmation. However, we do admit that in a few instances (e.g. - *Alligator mississippiensis*) other considerations might have over-ridden the biological status. In the case of the American alligator, it occurs in no other country but the United States, and it was placed on Appendix I at the request of the U.S. delegation.

No one, least of all legitimate leather dealers, can argue against the right of nations to protect their wildlife in any capacity that they wish even to the extreme of preventing all trade. You obviously recognize this right in your discussion of Crocodylus johnsoni on page 4 of your letter.

However, we do recognize that Alligator mississippiensis is not now endangered and believe that it will be moved from Appendix I to Appendix II at the request of the U.S. delegation to the first meeting of the ratifying nations. This meeting is presently scheduled for November 1976 in Bern, Switzerland.

Reference is made, on page 2 of your letter, to "facts, known to the industry regarding crocodiles living in the wild" without revealing what the facts might be. While we freely admit that the Crocodile Specialist Group does not have access to all the information we might like, we are unable to concede that the industry has knowledge we lack when we have not had the opportunity to examine the evidence, or even to confirm its existence. Perhaps you could arrange for the industry data to be made available to us.

The reptile leather industry might have information on the numbers of hides being shipped out of various countries, but that alone proves nothing about the status of the wild populations, since they may be being overexploited or the hides might be smuggled from neighboring nations.

Evidence available to us on the status of wild populations of Caiman latirostris, Caiman crocodilus yacare, and Melanosuchus niger demand total protection for these species. They are extinct over much of their former ranges, and are severely depleted over the remainder. The only places they occur in healthy numbers is in a few sanctuaries and national parks. Our evidence is not just the number of hides that were shipped in the past and are being shipped now, but more importantly involves scientific studies and surveys by trained zoologists and government wildlife officers in the field. We cannot support continued trade in these species.

All available evidence indicates that Crocodylus siamensis is nearly extinct in the wild. Some specimens are bred in captivity and we have no objection to industry use of farmed C. siamensis, but we cannot, in good conscience, condone a continued utilization of wild hides of this species.

We question the logic which admits the African species are near extinction in many areas yet asks permission to trade in skins from the few remaining viable populations as is done on page 3 of your letter. Without very careful regulation such trade might well endanger the populations in these last refugia of the species. What assurances can the industry suggest which might prevent the loss of these populations, and

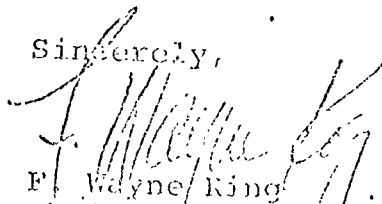
what data does the industry have on numbers of specimens in the healthy populations? These data and any industry assurances must be mutually agreed upon before we would be willing to accept transfer of the African species from Appendix I to Appendix II.

Your suggestion that placement of a total embargo on the medium size hides of various species is "of essential importance to the propagation and conservation of (the) species," is puzzling in the extreme. It implies that harvesting of the larger size specimens, the breeding adults, is in the interest of propagation and conservation. Clearly removing the breeding individuals is not desirable, except that doing so would supply large hides to the industry. Only by protecting the breeders can a future supply of offspring be assured. For example, the belly width limits for Crocodylus novaeguineae might be set at 25 cm to 51 cm. Smaller and larger hides would be prohibited. We would be happy to supply assistance on setting such size limits. Any such size limits might have to be adjusted when more information is available on size of sexually mature wild specimens.

We welcome the industry offer to provide funds for conservation and research on crocodilians through the Frankfurt Zoological Society. That generous offer indicates a recognition of the need to invest some of the earnings of the industry in programs which will assure the future of the resource upon which it depends.

We hope you will present our views to the members of the International Reptile Leather Association and invite their response. We sincerely hope this dialogue leads to a program which assures the continued existence of the crocodilians and to the development of an effective management program for both wild and captive populations which will supply hides to the industry.

Sincerely,



F. Wayne King
Chairman, IUCN/SSC Crocodile
Specialist Group

/db

cc: Crocodile Specialist Group
T. Mence



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

1110 MORGES, SUISSE (SWITZERLAND)

☎ (021) 7144 01

TELEGRAMMES: UNICORN MORGES

In your reply, please refer to: DP/cl/1
En répondant, veuillez rappeler.

To The Director of
Instituto de Desarrollo de los
Recursos Naturales Renovables
INDERENA
Apartado Aéreo 13458
BOGOTA D.E.
Colombia

Morges, 13 May 1976

Dear Sir,

We have just learned from the Official Gazette of Colombia dated February 24th 1976 that, on the basis of a proposal from INDERENA, a Presidential Decree has been issued (Decree No.014, 1976, February 3rd) which authorises the hunting of a total of 290'000 specimens of caimans (Caiman crocodilus, including Caiman crocodilus fuscus) in 1976. Only individuals above 150 cm may however be hunted.

As you probably know, the three sub-species of Caiman crocodilus occurring in Colombia (Caiman crocodilus crocodilus, Caiman crocodilus fuscus and Caiman crocodilus apaporiensis) are listed in the "endangered" category in the IUCN Red Data Book Volume 3, Amphibia and Reptilia. Most populations are considered to be declining because of overexploitation by hunters for hides, for the curio/souvenir market or for the pet trade.

Furthermore, Caiman crocodilus apaporiensis is listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, which entered into force on July 1st 1975 and the two other sub-species are listed in Appendix II of this Convention.

We are therefore very surprised that INDERENA proposed such a high quota for 1976 and that this quota has been approved. We would be very grateful if you could let us know if INDERENA has recent new information

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INDERENA

which shows that a yearly quota of 290'000 specimens measuring longer than 150 cm can be established and sustained in Colombia without affecting the survival of the species.

Yours sincerely

Duncan Poore

D. Poore
Acting Director General

C.: Sir Peter Scott, Chairman, IUCN Survival Service Commission
Dr. F. Wayne King, Chairman, IUCN Crocodile Specialist Group
Mr. René Honegger, Compiler, IUCN Red Data Book vol.3
Mr. J. Berney, Executive Secretary, Convention on International
Trade in Endangered Species of Wild Fauna and Flora

