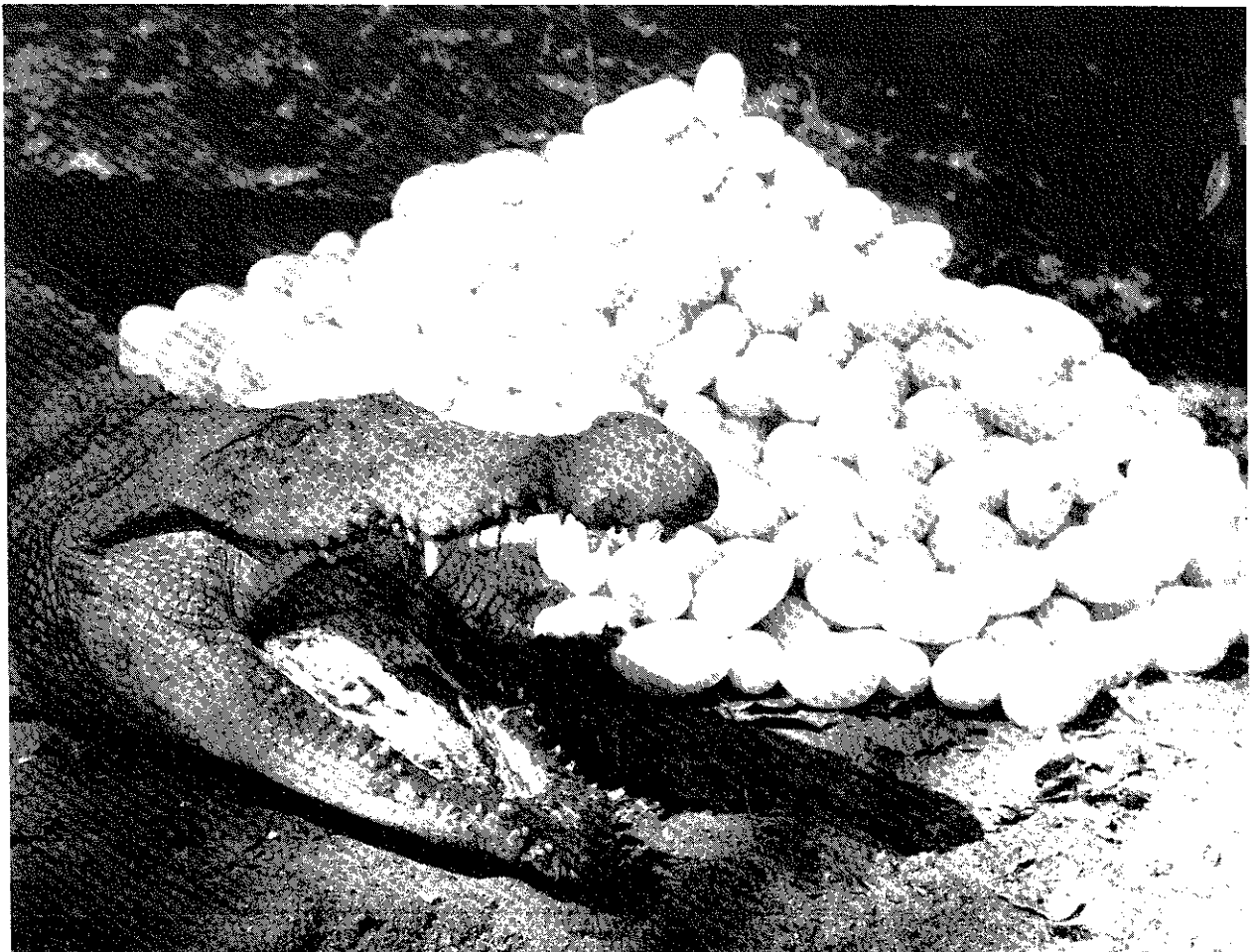


CROCODILE SPECIALIST GROUP

NEWSLETTER

VOLUME 10 No. 4 ■ OCTOBER 1991 - DECEMBER 1991



IUCN World Conservation Union ■ Species Survival Commission

CROCODILE SPECIALIST GROUP

NEWSLETTER

VOLUME 10 Number 4
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IUCN--The World Conservation Union
Species Survival Commission

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COVER PHOTO: Female Mugger,
Crocodylus palustris, Madras Crocodile Bank,
India, with eggs representing her lifetime
reproductive output. R. Whitaker photo.

PATRONS

The following Patrons of the CSG have contributed more than U.S. \$500.00 during the past 12 months. The funds donated have been deposited with University of Florida Foundation, Inc., and are used to support the CSG program:

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EDITORIAL

SUBSCRIPTIONS TO THE NEWSLETTER. The Newsletter is currently distributed without charge to between 750 and 850 people, four times a year. The cost per issue is approximately \$1,400 for production and \$1,100 for mailing and requires approximately 100 hours of effort to edit. Some cost savings have been realized by controlling the number of pages and illustrations and utilizing bulk mail, but there remains a cost of approximately \$10,000 per year to the CSG budget. In these times of increasing costs and tight budgets the option of charging a subscription to recover part of this cost must be considered.

A disadvantage of subscriptions is the physical and logistic difficulty of recording and tracking subscriptions. Some subscribers honestly cannot afford to pay in hard currency. The Newsletter depends on the material sent in by subscribers for news and information and we do not want to dry up this source of information.

The Steering Committee considered all these factors and proposed that subscriptions could be for a calendar year renewed each January 1. Some subscribers can receive the Newsletter without charge, while others, who have the means to do so may voluntarily pay for subscriptions and subsidize the others. Many subscribers are commercial operators, croc farmers, academics, government employees. Such subscribers receive a valuable benefit from the Newsletter and will be asked to pay a subscription. Others are students, or residents of developing countries without hard currency resources and will continue to receive the Newsletter without charge.

The Steering Committee approved a new policy of inviting subscribers to pay US \$40 each calendar year for the Newsletter. Subscribers unable to pay this cost will continue to receive the Newsletter without charge. However all Newsletter recipients are urged to voluntarily pay this subscription if they can. A subscription renewal form for this purpose is enclosed. Comments and responses to this new policy are invited. - J. P. Ross, *Executive Officer*.

STEERING COMMITTEE

CROCODILE SPECIALIST GROUP STEERING
COMMITTEE, MINUTES, 9-11 NOVEMBER 1991,
SANTA MARTA, COLOMBIA

Present: H. Messel (Chairman), W. King, D. David, G. Hemley, J. Hutton, D. Jelden, T. Joanen, P. Ross, A. Seijas, B. Vernon, J. Villalba-Macias, G. Webb, T. Yamanaka. CITES Observer: O. Menghi. Observers: D. Ashley, J. Cox, K. Rice, T. Hines, M. Hoogmoed, Y. Raharjo, S. Atmosoedirdjo, T. Saleh, M. Stambulie, J. Thorbjarnarson, E. Pachon, E. Velasco, R. Raymer, F. Garcia, T. Hakansson, G.A. Borges, M. Continho.

The meeting opened at 9.00 am 9 November and the chairman thanked the Colombian hosts of the First Regional Meeting of the CSG for the opportunity to hold a Steering Committee meeting in Santa Marta. Much of the meeting was devoted to the proposals for the CITES meeting in Kyoto.

Sustainable Use Symposium, Kyoto. The Chairman informed the Group of a symposium on sustainable use in Kyoto on 7 March during the CITES meeting. Sponsorship was being sought from IUCN and the Japanese Environmental Agency and, Leather Industries Association (JLIA). The meeting would present the sustainable use concept and call upon the Japanese government to adopt a policy of sustainable use of all resources.

Universal Tagging System for the Identification of Crocodilian Skins in International Trade. This proposal, sponsored by USA, Germany and Australia, was developed by the CITES Animals Committee following a resolution adopted by the CSG in May 1990. A recommendation in the proposal to ban trade with non-Parties or Parties holding a reservation for crocodilians was considered difficult to enforce. The need for improved tag design and improved monitoring was discussed.

The CSG supports the proposal and proposed guidelines for improving tag design, use and recording:

Whole skins, flanks and tails will require tags. Any skin parts smaller than a flank will be packed in units measured by weight into transparent primary containers. Each container will be tagged and accompanied by a document from the CITES Management Authority of the exporting country verifying the nature of the container contents and the number of pieces contained.

Each whole skin will carry an individual tag and it is strongly recommended that each flank and tail carry an individual tag. However, flanks and tails equivalent to the skin of one animal may be combined and exported bearing a single tag attached to all three pieces.

Tag design. Each tag must bear the IOS 2-letter country code, a unique, serialized identification number, the species code, and the year of production. This information should appear on both sides of the tag in both alpha-numeric form and as a computer bar-code. Tags must be self locking and non-reusable. In addition both the tag and the information it bears must be heat and chemically resistant to the normal conditions of skin storage and tanning. The tag should be of a design that can pass, without inconvenience, through the normal tanning process and to this end should have no loops or projections.

It is strongly recommended that the CITES Secretariat investigate a new tag design with these criteria. Self-locking sliding container seals which are commercially available appear to be a starting point for this investigation.

Use, monitoring and records. It is recommended that the CITES Secretariat:

a) Purchase and distribute tags, recovering the cost from the CITES Management Authority from each exporting country.

b) Add a handling/administrative levy of US \$ 0.02 per tag, to be received annually.

c) Produce and distribute a standard computer program for the recording of tag information.

d) Collect and compile information on the import and export of skins with tags, on an annual basis from the CITES Management Authorities of the countries of origin and import.

e) Present this information at each Conference of the Parties bringing attention to inconsistencies and irregularities.

A Review of Procedures and Criteria for the Transfer of Crocodilians from Appendix I to Appendix II. The proposal, sponsored by Germany, elaborates requirements for down listing of crocodilian populations and encourages ranching schemes as a preferred management and conservation tool.

Before discussion could proceed members of the Steering Committee complained that they had not received advance copies of this, or any other proposals. It was agreed that for future meetings, proponents of particular issues would be responsible for circulating advance copies to all Steering Committee members. The Executive Officer is responsible for circulating agendas and advance copies of general materials.

Discussion of the German proposal was deferred and continued on the following day. The proposal has had considerable prior review and discussion by CSG and CSG supports the proposal, with the deletion of the words "or having achieved" from the first paragraph of the operative section with the understanding that the revised procedures would not be retroactive.

Latin American proposals concerning caiman trade. The Observer from CITES informed the CSG about two proposals presented by Paraguay and supported by other Latin American Parties, addressing trade in illegal caiman skins through Italy and Singapore. The CSG decided to support these resolutions in principal and provide supporting statements and letters to CITES and the Commission of the European Community (EC) on this issue. Drafts were developed for discussion later in the meeting (see below).

Illegal trade through Aruba and Dutch Antilles. Dr. O. Menghi informed the group about recent cases of massive smuggling of illegal caiman skins through Aruba. These islands are partially independent and considered non Parties of CITES. The following letters were drafted,

reviewed and approved on 11 November, calling on CITES, the EC and the Dutch Government to take action to prevent this illegal trade.

Mr. Claus Stuffmann
Commission of the European Community,
Brussels, Belgium

Dear Mr. Stuffmann:

At the First Regional Meeting of the IUCN/SSC Crocodile Specialist Group (CSG) held in Santa Marta, Colombia on 11 November 1991, the CSG Steering Committee discussed in depth the severe problems with the international trade in caiman skins from South and Central America to the European Community (EC).

Severe doubts were expressed by all the members of the Committee present, whether the application and enforcement of EC-CITES regulations in Italy are adequate to prevent the considerable amount of illegal trade that continues to occur between Latin America and the EC through Italy. Deep concern was expressed by the Steering Committee that the inadequate enforcement of CITES in Italy undermines the considerable efforts of Latin American countries to protect and manage their caiman resources in recent years.

The following cases serve to illustrate in greater detail the profound and serious nature of this problem:

In 1989 a shipment of *Caiman crocodilus crocodilus* skins destined for Italy was seized in Belgium. These skins originated from Bolivia and accompanied by an export document No. 366 were shipped from Argentina. The export document described the shipment as comprising 500 'belly skins', 500 'tails', and 1,000 'pieces' but upon inspection were found to actually contain 460 large skins, 1,466 small skins and 3,922 sides. Following this confiscation Italy has taken no action to investigate this case.

In 1990 a shipment of 2,581 skins of *Caiman crocodilus crocodilus* was stopped by enforcement officials in Northern Italy. This shipment was accompanied by false Paraguayan documents. Further investigation revealed that 3 other shipments consisting of about 9000 *Caiman* skins and 240 *Eunectes notaeus* (anaconda), with similar false documents, had been already cleared by Italian customs in 1990.

In 1991 Italian officials issued a re-export

certificate covering 10,000 sides of *Caiman c. crocodilus* for shipment to Switzerland. The original export documents from the country of origin indicated that this shipment had entered Italy improperly documented as 'legs' of Caiman.

May I kindly ask you, Mr. Stuffmann, to do all you can, on behalf of the EC Commission, to encourage an immediate clarification of the above mentioned cases. Action to prevent similar cases in the future will benefit the conservation and sustainable use programs for *Caiman* in Latin America.

The Crocodile Specialist Group is well aware of the exemplary legal steps the EC has taken to encourage potentially effective regulations to implement CITES in the EC. The CSG also acknowledges the financial contributions the Commission has made towards the CITES Secretariat's *Caiman* projects in Latin America. All these steps are undermined by the failure of Italy to properly implement and enforce CITES for the import of *Caiman* skins.

To assist the Latin American countries in their efforts to manage their caiman resources and to resolve the existing unbearable situation, may I call on you to use the full influence of the EC Commission to urge Italy to enforce CITES by introducing strong national legislation and stop illegal entry of *Caiman* skins into the Community through their country.

Yours sincerely,
Professor Harry Messel, Chairman, CSG

The Minister of Landbouw,
Natuurbeheer,
The Netherlands

Your Excellency:

On behalf of the Crocodile Specialist Group (CSG) of the World Conservation Union (IUCN), I am addressing you concerning the issue of illegal trade in *Caiman crocodilus* ('brilkaaiman') skins from the island of Aruba.

During our CSG Steering Committee meeting in Santa Marta, Colombia, on 9 and 10 November 1991, we learned through the CITES Secretariat, that in Aruban free-port warehouses in 1990 alone, 200,000 - 300,000 caiman skins were illegally obtained from Colombia, had been stockpiled, and eventually shipped from Aruba to

Singapore and Italy.

It is our understanding that though the Netherlands are a Party to CITES, Aruba, although forming part of the Kingdom of the Netherlands, because of legal complications due to its 'status aparte', CITES regulations do not apply in the island of Aruba. We also understand that since 1 November 1991, a recent decree (Landsbesluit) has entered into force, regulating trade in CITES Appendix I Species, being based on 'Landsverordening in- en uitvoer, AB 1989 No. GT 102'. We applaud this as being a step forward in the protection of endangered species.

South American countries, which are attempting to regulate and manage their caiman resources, are not aware of the exact legal connection between Aruba and the Netherlands and hold the Netherlands responsible for the continuing trade in illegal caiman skins (and other specimens listed by CITES) from Aruba, and from the Dutch Antilles. As a consequence, during the Kyoto meeting of the Parties, in March 1992, a resolution will be proposed by a number of South American countries strongly denouncing the Netherlands role in this illegal trade.

We ask you to use your influence to ensure that the present trade in illegal caiman skins from Aruba and the Dutch Antilles is stopped as soon as possible. We ask you also to try and convince the Governments of both Aruba and of the Netherlands Antilles, to join CITES at short notice, if possible before the Kyoto Conference, and thus have all CITES regulations apply to these islands. Joining of CITES by Aruba and the Netherlands Antilles would close a major loophole in the trajectory of illegal trade in caiman skins between South America and the rest of the World. The present situation is undesirable and detrimental to legal trade in caiman skins and the development of sustainable management programs for the conservation of these animals.

Yours sincerely,
Professor Harry Messel, Chairman, CSG

Dr. Claus Stuffmann
Commission of the European Community

Dear Dr. Stuffmann:
The Netherlands Antilles islands of Curacao,

and Bonaire, and the island of Aruba, have long acted as points from which wildlife exported illegally from countries of natal origin in Central and South America can be shipped to international buyers.

In the 1960's & 1970's, shipments of illegal reptile hides, including hundreds of thousands of caimans, were shipped from these islands -- particularly Aruba -- to buyers in North America and Europe. During the 1980's illegal shipments continued through Aruba and the Netherlands Antilles though in a lesser quantity because many were routed through Central and South America. In the late 1980's the trade began shifting back to these islands. In 1988, an illegal shipment of approximately 10,000 live hatchling *Caiman crocodilus fuscus* shipped from Curacao was denied entry into the Netherlands. That shipment was returned to Venezuela for release back into the wild, but finally ended up in a breeding program on a caiman farm.

In the 1990's, Aruba has again become a major shipping point for illegal hides. In 1990, 200,000 - 300,000 skins of *Caiman crocodilus*, and thousands of skins of *Felis pardalis* and *Felis wiedii*, and even pelts of the extremely endangered *Pteronura brasiliensis*, were transshipped through Aruba.

In September 1991, a containerized shipment of nearly 250,000 illegal *Caiman crocodilus* hides left Aruba on a Nedlloyd ship bound for Singapore. Earlier shipments of illegal caiman hides shipped to Singapore were manufactured into leather products in that island nation or were rerouted to Italy, Taiwan, and Japan. Detailed documentation of this illegal trade is available in the files of the CITES Secretariat and the TRAFFIC network.

At the present time, only Venezuela, Colombia, Guyana and Nicaragua have legal harvests of *Caiman crocodilus*. Hides of this species originating from any other country are not legal and are in violation of CITES. While the quantity varies from year to year depending on the quota set for that year, the sum total of caiman hides exported from all four of these legal sources at the present time is approximately 200,000. The quantity of hides of this species shipped through Aruba in 1990-1991 may have been twice the legal combined quota, and the single shipment that left Aruba in September 1991 almost equalled the total legal quota. None of the hides shipped through Aruba and the Netherlands Antilles were accompanied by legal

export permits from the countries of origin.

Although they are part of the Kingdom of the Netherlands, Aruba and the Netherlands Antilles are independent governments responsible for regulating their own trade. The situation is further complicated by the islands being freeports. For this reason, regulation of the trade is non-existent, though Aruba from 1 November 1991 has started to control trade in CITES Appendix II species.

The CSG asks the European Community to take immediate steps to rectify the situation in Aruba and the Netherlands Antilles by urging action from the Kingdom of the Netherlands and by denying entry into the EC of all crocodilian hides shipped from Aruba and the Netherlands Antilles.

Yours sincerely,
Professor Harry Messel, Chairman, CSG

Registration of Farms for Captive Breeding, *C. acutus*, Honduras. Clal Continental Crocodile Farm of San Pedro Sula, Honduras, has applied to register the first captive breeding facility for *Crocodylus acutus*. The farm holds 600-700 adult breeding stock that were taken from the wild, against the recommendation of the CSG. Subsequent surveys indicate the number of wild adults is severely depleted. While it was thought valuable to encourage ranching in Honduras, great concern was expressed that the farm could not be registered under current circumstances. A working group was convened, including representatives of the farm management, and the following resolution issued:

Honduras Farm Registration

The Steering Committee of the Crocodile Specialist Group (CSG) of the IUCN/SSC met in Santa Marta, Colombia on 10 and 11 November 1991. Honduras proposal to CITES to have Clal-Continental Crocodile Farm, San Pedro Sula, registered as a captive breeding farm for an Appendix I species (*Crocodylus acutus*), was discussed at length.

It was resolved that the CSG could not support the proposal because the number of adults removed from the wild to establish the Clal-Continental Crocodile Farm captive breeding facility for

Crocodylus acutus had, by careful surveys been determined to have been detrimental to the wild population, in contravention of the requirements of CITES -Resolution Conf. 7.10.

This resolution states that "the first specimens used to start and maintain the first registered commercial captive breeding operation should have been obtained without detriment to the wild population".

The prime objective of the CSG is the conservation of wild crocodilians and their habitats, and exploitation of crocodiles can only be accepted if it is sustainable and if it contributes to this goal. The conservation benefits of commercial exploitation must far outweigh any conservation costs. In this case there has been a demonstrated conservation cost but little, if any, benefit.

The Crocodile Specialist Group therefore RECOMMENDS that:

- 1) The present proposal to CITES be withdrawn by the proponents.
- 2) All harvesting of wild crocodiles in Honduras cease immediately.
- 3) A management program be prepared which unequivocally establishes the means through which conservation benefits of commercial utilization of *Crocodylus acutus* in Honduras will be demonstrated, that outweigh the conservation costs.
- 4) The management program plan be refined on the basis of discussions with the CSG; and
- 5) A new proposal for farm registration incorporating the new management program, be prepared for submission to the next Conference of the Parties in 1994/95.

Registration of Farms for Captive Breeding, *Alligator sinensis*, China. This proposal presents some valuable information on the status of captive bred alligators in China, but has almost no information on the wild population. The proposal is unclear about why farm registration is needed or what international trade is contemplated. The strong interest of German dealers in live Chinese alligator for the European pet trade was noted.

Support of the proposal should be postponed

until a fact finding mission to China is completed. The Chairman agreed to discuss this mission with Chinese authorities and initiate the field visit to be completed prior to the CITES meeting in Kyoto. A recommendation would be developed for Kyoto based on the information obtained.

The meeting broke for lunch at 12.00 and reconvened at 1.30 pm.

Maintenance of Indonesian populations *Crocodylus porosus* on Appendix II with a Ranching Scheme. The apologies of the Indonesian Director General of Forestry and the President of the Indonesia Crocodile Farmers Association were received and their delegates Mr. Saleh, Mr. Atmosoedirdjo and Mr. Raharjo were recognized. Grahame Webb summarized the results of his review, with Hank Jenkins, of the Indonesian situation in May and the recommendations of their report, around which the present proposal is based. Prof. Messel expressed his serious concern that the proposal would receive stringent review and criticism at Kyoto and the CSG's credibility was in jeopardy if our recommendation was not consistent with the facts and the conservation needs of the situation.

Recent improvements in management, enforcement of regulations and reductions in illegal trade were noted. The data base on which management was based was scrutinized and criticized but the extreme logistic difficulties of the country were recognized. The great difference between Irian Jaya and the rest of the country was noted.

A fundamental problem was the long history of commitments by Indonesia to improve crocodile management that had not been fulfilled. There was widespread support for the notion that CSG endorsement would have to be conditional upon concrete progress and on continued scrutiny. The establishment of a Task Force for crocodile management comprising an independent authority with representation from the Management Authority and other government agencies was proposed as the key to successful crocodile management in Indonesia. Failure to achieve Appendix II status at Kyoto would defer legal trade until another proposal could be considered at the next CITES meeting. The consequences for the present foundation of management and legal trade would be uncertain.

Approval of the current proposal would encourage the continuation of improved crocodile management in Indonesia, but would also give another chance for commitments to be unfulfilled. After extensive discussion the chairman called on a small group to draft a resolution and recommendation. This draft was discussed and amended at the Steering Committee meeting on 11 of November and finally approved as follows:

RESOLUTION ON THE INDONESIAN PROPOSAL

REAFFIRMING that the prime objective of the Crocodile Specialist Group is the conservation of wild crocodiles and that the exploitation of crocodiles in Indonesia is only acceptable if it is sustainable and if it contributes to the conservation of wild crocodiles and their habitats in Indonesia; and

RECOGNIZING that the Government of Indonesia was given CITES quotas for 6 years as an interim management tool to allow the development of a management program to ensure sustainable utilization; and

RECOGNIZING further that such a management program has been designed but must be implemented prior to the 8th Conference of the Parties of CITES in Kyoto, Japan in March 1992.

HAVING ASSESSED the review of crocodile conservation and management in Indonesia conducted by Dr. G. Webb and Dr. R. Jenkins and taken note of the recommendations made therein; and

HAVING NOTED the findings of the FAO/PHPA crocodile project in Indonesia.

BEING AWARE that Indonesia is comprised of many diverse islands with complex geographic and cultural characteristics that impose unique complexity on crocodile management.

THE CROCODILE SPECIALIST GROUP OF IUCN/SSC:

1) CONGRATULATES the Government of Indonesia on the initiatives already taken, particularly the new legislation, the review of

crocodile management undertaken, the increased enforcement of regulations, and the Government's stated commitment to establishing a Crocodile Management Task Force; and

CONGRATULATES the Crocodile Farmers Association of Indonesia for their commitment to improve management and for their financial support of the review undertaken; and

ACCEPTS that the management program proposed to CITES may be sustainable but its potential for being so cannot be assessed until the administrative and reporting procedures recommended in the Webb and Jenkins report have been implemented; and

2) URGES that the steps already taken by the Government of Indonesia to curtail illegal trade be continued.

3) URGES the Government of Indonesia to immediately establish the proposed Task Force and implement the other appropriate recommendations of the Webb and Jenkins report.

4) CALLS UPON the Government of Indonesia to ENSURE that prior to the 8th Conference of the CITES Parties in Kyoto, Japan, in March 1992, that the following actions are completed and can be documented:

4.1 A complete inventory of all live crocodiles, skins and tags on farms and in tanneries is conducted.

4.2 Procedures are in place for the regular reporting of all internal transactions in crocodiles and crocodile skins.

4.3 Procedures are in place for the regular reporting of all import and export trade in crocodiles and crocodilian skins.

4.4 Reports to CITES for 1989 and 1990 required under Conf. 7.14 are completed and submitted

4.5 A schedule is determined for the implementation of the Indonesian crocodile management program following the Kyoto meeting.

5) CONFIRMS that the CSG could only support the acceptance of the Indonesian crocodile management program proposed IF the recommendations 2, 3, and 4.1 - 4.5, above are implemented, and encourages Indonesia to adopt similar programs for other wildlife that is subject to exploitation.

Swiss proposal to return populations of Nile crocodile to Appendix I following the expiration of time limits under Conf. 7.14. Elements of this proposal pertaining to Kenya, Tanzania, Madagascar, Sudan, and Indonesia are rendered moot due to submission of alternative proposals for these countries.

The remaining elements concerning Nile crocodile populations in Congo and Cameroon, and populations of *cataphractus* and *Osteoleamus* in Congo, are simple procedural resolutions and the CSG agreed to support them.

South African proposal to move its Nile crocodile population to Appendix II under Conf. 2.23. The original South African proposal appeared to be a ranching proposal based on Conf. 3.15. While the CSG reviewers had some reservations about the data presented it was considered a generally acceptable proposal. However, the definitive version presented to CITES requests Appendix II status under Conf. 2.23. The supporting data are unchanged. The CSG considers that acceptance of a proposal under Conf. 2.23 to be unjustified by the data presented and further to be a use of the Convention that would lead to unacceptable disruption of the emerging structure of crocodilian management and conservation under Conf. 3.15 and 5.21. Such an Appendix change would also be inconsistent with the revised procedures for listing ranches and farms that the CSG supports (German proposal above).

The CSG cannot support this proposal but would support Appendix II listing for South African crocodile populations under a properly documented proposal under Conf. 3.15.

Kenya proposal to retain Kenya population of Nile crocodile on Appendix II under Conf. 3.15. The proposal describes a program of management and trade in skins produced from eggs and hatchlings collected from the wild. Available data indicate reduction in crocodile populations in Kenya but conservation will be

enhanced with the incentive of commercial use. Some discussion ensued on the adequacy of monitoring techniques proposed. The consensus of the meeting was that proposed monitoring activities based on nest data collected during egg collection by commercial operators was acceptable and appropriate, although it would be improved by an element of independent verification by the management authority.

The CSG agreed to support the proposal.

Ethiopian proposal to retain Nile crocodile populations on Appendix II. The proposal is based on the continuation of present ranching activities that, to date, have proceeded under quota. The proposal is generally adequate but proposes export of hatchlings, apparently due to poor success at raising larger animals for skin. It was agreed that this has no effect on the crocodile population but reduces the economic gains from the project. Annual reports under CITES 7.14 were overdue for 1989 and 1990, but considering the political turmoil in the country, it was agreed to recommend that overdue reports be submitted as soon as possible. Grahame Webb questioned whether the flexible response to this and other African proposals was consistent with the very stringent treatment given the Indonesian proposal. It was pointed out in response by Jon Hutton that there was a history of effective management and trade regulation in east Africa and documented recovery of populations in several countries.

The CSG agreed to support the proposal with the additional recommendation for the prompt submission of reports.

Madagascar proposal to retain Nile crocodiles on Appendix II. This proposal was considered to be only marginally acceptable by most CSG reviewers. Serious concerns were raised about the adequacy of surveys, the effectiveness of present farms and continuing internal trade in wild caught crocodiles. Management and enforcement capacity in Madagascar was not adequately described. A letter reviewing the Madagascar situation from Olivier Behra was translated and read.

The CSG agreed that while the proposal was supportable in principal, that the present proposal was inadequate. Support of the CSG would be withheld while the following letter requesting response on a number of issues was forwarded via CITES Secretariat to Madagascar.

The Secretary General
CITES Secretariat

RE: Additional information requested on the proposal to downlist the Nile crocodile population of Madagascar to Appendix II under Resolution Conf. 3.15 on ranching.

Dear Sir:

The Crocodile Specialist Group, in its recent review of the proposal submitted by Madagascar for consideration by the 8th Conference of the Parties, identified a number of issues which require clarification. Please would you direct the following comments and questions to the Management Authority of Madagascar on our behalf?

1) The survey data presented are inadequate to provide a baseline against which future population trends can be assessed. This is essential for a successful management program. What method of monitoring does Madagascar intend to use and what baseline data are being collected?

2) It is of particular concern that the hunting of crocodiles and local trade in their products does not appear to have decreased. What measures are envisaged to control this in the future? What additional resources will be devoted to law enforcement?

3) The domestic trade in skins from the wild harvest of crocodiles is not sufficiently addressed. Nationals are only allowed to export a restricted number, but what restrictions are placed on tourists?

4) If a ranching scheme is adopted the proposal contains no practical assurance that skins from the wild harvest will not be mixed with skins produced on ranches. What additional steps will be taken to prevent this?

5) Madagascar has not yet submitted an annual report for 1989, which contravenes Resolution Conf. 7.14. When will these be submitted and what steps are being taken to ensure that the reporting requirements of Conf. 6.22 can be met if a ranching proposal is accepted?

Thank you for your continuing close

cooperation on crocodilian related CITES issues.

Yours sincerely,
Professor Harry Messel, Chairman, CSG

Tanzanian proposal to retain Nile crocodile populations on Appendix II. The large size of remaining crocodile populations in Tanzania and the continued development of effective sustained use provide a firm base for continued development of this program. Some discussion was held on the adequacy and precision of past surveys and the status of crocodile populations outside protected areas. Proposed levels of egg harvest are high but probably sustainable. A serious problem was the proposal for a quota of 1,900 skins from wild harvest. This seemed excessive to any need for problem crocodile disposal and was considered unjustified. Any wild harvest quota must be supported by Berne criteria.

The CSG agreed to support the proposal for Appendix II status on the basis of farming but to oppose the request for a quota for wild harvest until it can be supported under Berne criteria.

Zimbabwe and Ugandan proposal to list the Uganda population of the Nile crocodile on Appendix II with an export quota under Conf. 7.14. This proposal is submitted by Zimbabwe on behalf of Uganda, a new party to CITES. Apparently the pressure from crocodile farmers was the impetus for Uganda joining CITES. The proposal represents the first step in sustainable use of crocodiles in Uganda and will allow development of ranches there while a quota operates for the next two years. While initial stock will be collected from Murchison Falls National Park, the amounts proposed appear sustainable by the population.

The CSG agreed to support the proposal.

Sudan proposal for a special quota to dispose of a stockpile. The current stockpile of crocodile skins was the result of an incongruity in Sudanese law that allowed legal hunting of crocodiles after the last CITES quota expired. Had Sudan requested a quota for 1990 that this stockpile could have been legally traded. However, while sympathizing with Sudan's situation, the CSG was extremely reluctant to provide any support or continued precedent for special quotas as they

were thought to encourage irregular trade and discourage effective management.

The CSG will oppose this proposal.

The meeting recessed at 7.15 pm to reconvene at 8.45 am next morning, 10 November.

Special proposals from Zimbabwe on operation of CITES. Dr. Jon Hutton, Vice Chairman for Africa, briefed the group on five proposals submitted by Zimbabwe to address a perceived change in the application of CITES away from the original intention of the Parties. The core issue of these proposals is whether NGO participation has diverted CITES from its role in international trade regulation to a more general conservation regulation role. CITES is unique in the degree of participation and the influence of NGO's. The five proposals call for: 1) A recognition that trade can be beneficial for species conservation, 2) a reconsideration of the meaning of the term 'primarily for commercial use' as it applies to endangered species use, 3) a review and revision of the criteria used to list species on CITES appendices, 4) Requirement for special consideration of the position of range states in listing species, and 5) a re-emphasis on the responsibility of domestic enforcement as the major trade control mechanism. Positive aspects of these proposals are the recognition of sustainable use as a conservation activity that provides local economic benefit that serve as an incentive to conservation and can be used to fund management activities. In discussion it was recognized that these resolutions would generally support, or not impede the current structure of crocodilian trade regulation, but were likely to be very contentious and receive sharp opposition from some NGO's.

The proposals were not reviewed in detail. The CSG determined not to take any action on these proposals except to report them as information in the NEWSLETTER.

This concluded the CSG's discussion of CITES proposals. The Chairman noted that this is the first time the CSG has discussed proposals well before the CITES meeting and developed positions based on broad review, discussion and consensus. It was agreed that the results of these deliberations would be summarized by the executive officer and disseminated through the following channels:

- Publication in the CSG NEWSLETTER.
- Sent to the SSC Trade Specialist Group for use in their preparation of the IUCN guidelines for the Parties.
- Sent to the Chairman of the CITES Animals Committee.
- Sent directly to the Secretary General of CITES.
- Delivered by CSG representatives at Kyoto.

Thailand Trade Prohibition. Following the commitment made at the last Steering Committee meeting in Tokyo, the CSG again reviewed the situation with regard to trade in farmed crocodile skins from Thailand. Letters have been received from CSG member Mr. Utai Youngprapakorn asking the CSG to assist in removing the trade ban. The report by Grahame Webb and Hank Jenkins, previously distributed to Committee members, was reviewed. The situation of *Crocodylus siamensis* in Thailand may be unique, with essentially no animals surviving in the wild but with an extensive cottage industry of captive breeding holding thousands of crocodiles, some of which are F₄ captive bred.

Since the last review of this issue in June, new legislation to implement CITES had been introduced into the Thai Parliament. The driving force behind improving the situation was the Thai Crocodile Farmers Association. The marking of all captive crocodiles in Thailand with microchip transponders to assist tracking was underway. Prof. Messel congratulated Thai authorities on their progress to date but reiterated the CSG position stated in Tokyo; the CSG will support removing trade bans only after concrete implementation of crocodile management procedures is demonstrated.

Discussion covered the need to assess the remaining wild population and possibly initiate restocking actions, and the capacity and time frame of the Thai Government for management action. It was noted that despite the CITES Standing Committee recommendation for a ban on wildlife trade from Thailand, several countries, including Japan and Australia, had not instituted a ban and some exports of crocodile skins had occurred. It was further noted that independent of any CSG action, the earliest a lifting of the ban could be considered was the next meeting of the CITES Standing Committee in January 1992. Reports were also received of recent exports of illegal caiman skins from Paraguay to Thailand. A resolution stating the

CSG position was prepared, discussed and approved on 11 November:

RESOLUTION, THAILAND TRADE PROHIBITION.

REAFFIRMING that the prime objective of the Crocodile Specialist Group is the conservation of wild crocodiles and that the exploitation of crocodiles in Thailand is only acceptable if it is sustainable and if it contributes to the conservation of wild crocodiles and their habitats in Thailand.

RECOGNIZING that Thailand's ability to fulfill its obligations under CITES are severely constrained by lack of legislation enabling Thailand to implement CITES and that the CITES Standing Committee has recommended that the Parties ban all wildlife trade from Thailand.

HAVING ASSESSED the review of crocodile conservation and management by Dr. G. Webb and Dr. R. Jenkins and taken note of its recommendations.

BEING AWARE that only one of the crocodile breeding farms in Thailand is registered with CITES and export of skins from this farm is adversely affected by the recommended CITES ban.

THE CROCODILE SPECIALIST GROUP OF IUCN/SSC:

COMMENDS the Government of Thailand for action they have taken to draft new wildlife legislation and URGES the Government to expedite rapid passage of this legislation and its prompt implementation.

COMMENDS the Crocodile Management Association of Thailand for funding the review of management and for developing management initiatives such as the implantation of transponders in captive crocodiles to assist the Royal Forestry department in control and regulation of the industry.

DRAWS ATTENTION to Thailand's position as the only country in the world where the decline of wild crocodiles is so

severe that three species may be extinct in the wild.

URGES the Government of Thailand and the Crocodile Management Association of Thailand to develop a strategy to assess the status of any surviving wild crocodile populations and a program to re-establish wild populations:

OFFERS the resources of the CSG to assist with the development of a program to re-establish wild crocodiles as part of Thailand's natural wild fauna,

CONFIRMS the CSG's support for the CITES registration of Thailand's major crocodile breeding farms, and

CONFIRMS the CSG's support for the recommended ban on the export of skins from Thailand until the new legislation is passed and management procedures for tagging crocodiles and crocodile skins, and reporting, are implemented.

Philippine Crocodile Farming Institute. A letter was received by the Chairman from Charles A. Ross concerning the activities of the Philippine Crocodile Farming Institute (CFI) in Palawan, Philippines. It was alleged that the farm was contributing to the decline of *C. mindorensis* by collecting stock and had made little progress in captive breeding. This concern was made known to the sponsors of CFI in the Japanese Leather Association (JLIA) and their representative visited the Philippines to review the situation. The report of Dr. Ross was thought to be due to an unfortunate breakdown in communications with CFI staff. In view of the highly endangered status of the Philippine crocodile it was thought appropriate that the CSG intervene as a disinterested party in this matter. The Chairman proposed that a small workshop be convened of CSG personnel, CFI staff and Mr. Ross to meet in the Philippines and make productive recommendations to CFI. This workshop is scheduled for February 1992.

Zambia. Following the CSG's report of irregular activities on some crocodile farms in Zambia to CITES (Minutes and NEWSLETTER 10(2) June 1991) the CITES Secretariat received a report prepared by the crocodile farmers in Zambia and

submitted via their Government. This reported that, subsequent to the allegations, the farm in question had ceased operation and a change in government and in the management authority ensured that no further irregularities were expected.

Repatriation of Nile Crocodiles from Spain. Dr. O. Menghi reported that 190 adult Nile crocs were exported from Zambia to Spain, with legal permits, but that the Spanish management authority had subsequently withdrawn approval and seized the animals because they were being poorly maintained. The Spanish authorities had proposed to CITES that the animals be returned to Zambia and an opinion from the CSG was requested by CITES. It was suggested that euthanasia or commercial use of the animals might be cost effective but that if the Spanish authorities were prepared to pay for repatriation, they should be congratulated and encouraged to proceed.

Export of Live Alligators. Dennis David briefed the meeting on an initiative in the US to ban the export of live alligators. The purpose of this action was to support US regulations controlling trade in *Alligator* and make it more difficult to establish sources outside US control where alligators were produced.

Critics of the proposal suggested it was motivated by a desire to maintain a closed monopoly of alligator production in the US. This issue was aired in an open and productive fashion. Proponents of the measure reiterated their interest in effective trade control to ensure legal trade. Skeptics continued to ascribe a protectionist motive to the measure. After discussion the Chairman intervened to state that the CSG had an adequate policy statement on exotic species. While the CSG should applaud any actions that enhance crocodilian conservation the CSG should not be involved in pure trade issues on behalf of any nation or group. Individual countries were free to adopt regulations more stringent than CITES requirements, but again this did not require CSG endorsement. The Chairman then called on Dennis David to prepare a letter centered around the existing CSG resolution on exotic species. The following letter was developed and approved on 11 November:

Mr. Manuel Lujan, Jr.

Secretary of the Interior
Washington DC, USA

Mr. Secretary:

The IUCN Species Survival Commission's Crocodile Specialist Group adopted the enclosed resolution regarding the introduction of exotic species of crocodilians at our 27 November 1990 Steering Committee meeting in Perth, Australia.

It has come to our attention that the US does not have national legislation restricting the international export of live alligators outside of their native range; few states have legislation restricting such export. We are extremely concerned over the potential establishment of alligator farms outside U.S jurisdiction serving as a conduit for illegal trade in illegal alligator hides taken in the southeastern states. Possibly more important are the ecological consequences that could result from the escape of exotic crocodilians commercially farmed outside their natural range. We support the southeastern states in their efforts to seek national legislation to restrict the export of live alligators for commercial purposes.

We appreciate your attention to this matter of critical concern.

Sincerely
Professor Harry Messel, Chairman, CSG

US enforcement of CITES. Professor Wayne King informed the meeting that several shipments of crocodile products with documents indicating legal status and origin had been seized because the products were alleged to contain leather of prohibited species. In some cases these seizures were based on erroneous identification but in others it was apparent that the products contained leather from more than one species of crocodilian, some of which are prohibited entry into the US. It appears that some European manufacturers are mixing skins of different species in one product and this is not adequately indicated in the accompanying documents. This situation provides a loophole for the laundering of illegal skins as part of products made from otherwise legal skins. In discussion, the need for improved

communication between US, EC and CITES authorities on this issue was recognized. Dr. King was asked to monitor the situation and keep the Steering Committee informed.

Caiman farming in Colombia. A draft resolution prepared by the Association of Colombian Wildlife Farmers was presented to the CSG for discussion. The resolution calls on the Colombian Government to encourage ranching schemes in preference to closed cycle farming and to limit the acquisition of new stock for farms to captive bred adults, phasing out wild stock capture. It was noted that capture of species other than *Caiman crocodilus* for farm stock is currently restricted to 10 individuals per farm. It was recommended that the resolution also include a call on the Colombian Government to undertake surveys and monitoring of wild crocodilians. The resolution is in general agreement with the preferred policy of CSG for the development of sustainable use of crocodilians, however, the group felt insufficiently informed of current activities in Colombia and deferred any action on this resolution until after the Regional Meeting.

South American Regional Report. Dr. Obdulio Menghi and Dr. Juan Villalba-Macias presented a summary report on the South American scene. Programs producing legal caiman skins were now operational in Venezuela, Colombia, Guyana and Nicaragua. These programs represent an active CITES program to implement Article 4 of the convention calling for the nondetrimental use of Appendix II species. A primary phase of this program was the clarification of the taxonomic status of *Caiman yacare* in Bolivia, Paraguay and Brazil which is ongoing. In Paraguay the program is developing a secondary phase of investigation of the population status. Mr. Jorge Picón was seconded from the US Fish and Wildlife Service to develop a similar secondary phase in Bolivia. In Honduras a survey of crocodilians was completed and recommendations made to limit exploitation to a quota of 12,000 per year. In Venezuela the monitoring project was in place under the direction of Dr. Jose Ayarzagüena. In Guyana CITES was working with the management authority to implement the recommendations of a prior survey. A quota of 12,500 skins /year (half of the original recommendation of 25,000) had been negotiated. Surveys were in various

phases of development in Nicaragua, Panama, Cuba and Colombia. In Nicaragua the survey is planned to begin in early 1992. Panama has recently approved an agreement with CITES to initiate a survey, and proposals are in preparation for surveys in Cuba. In Colombia logistic difficulties made a whole country survey difficult but discussions were taking place with the head of the Management Authority who had indicated a willingness to begin surveys where feasible. Additional projects are underway in the Pantanal of Brazil investigating populations and breeding of *yacare* and a national crocodilian survey was underway in Argentina. Requests and interest had been received by CITES Secretariat for the development of crocodilian sustainable use projects in Peru, Ecuador, Costa Rica and Belize, and from Mexico, which recently joined CITES.

Professors Messel and King congratulated CITES and acknowledged the special personal effort that Dr. Menghi has extended in the region. It was noted that as recently as 6 or 7 years ago such widespread crocodilian conservation activity was inconceivable and this development is directly due to sustainable use schemes. However, the continuing widespread illegal trade in caiman skins was recognized as the primary remaining problem in world crocodilian trade.

The Caiman Trade. A wide ranging discussion ensued upon aspects of the illegal trade in *Caiman* skins. This is a problem for both producing countries in Latin America and the importing countries in Europe, the US and Asia. Implementation of CITES needs equal effort at both ends. The producing countries have made significant efforts attempting to curtail illegal exports and develop legal sources of skins but continuing inability of the importing countries to adequately control trade remains a major problem. Particular countries such as France and Japan had made significant improvements in enforcement but major problems remained in Singapore, because of their reservation on *Caiman*, and in Italy where enforcement is very poor. A new development is the re-activation of Aruba as a major trans-shipment port for illegal skins. Recent reports document an estimated 600,000 skins passing through Aruba to Taiwan, Singapore and Italy and a current shipment of 250,000 skins was known to be in transit.

Several countries were taking unilateral

action to address this problem. Bans on the import of caiman skins had been announced by the EC and proposed by Louisiana and Florida to the US Federal Government. There is a danger that these unilateral actions will suppress legal as well as illegal trade and inhibit the development of sustainable use on which so much crocodilian conservation is based. In the EC there will be effectively no internal border restrictions after 1993 so that a single lax country opens the whole EC to illegal products. In the US, despite vigorous enforcement efforts, a continuing large volume of caiman from illegal sources is mixed with, and indistinguishable from, legal material.

Extensive discussion followed on the effectiveness of trade bans in controlling the illegal caiman trade. The key issue is that illegal skins are unfair competition for legal skins because the cost of production is low, therefore illegal trade undermines legal sustainable use management and threatens the legal trade. Concerns were expressed that just when Latin American countries were improving enforcement and developing legal trade, trade bans in Europe and the US would undercut these efforts. The issue with caiman is perceived to be a question of legality, not one of conservation needs. The species is widespread and remains abundant despite many years of heavy exploitation. However, the essence of CITES is the agreement of consuming countries not to import products from illegal sources. It was finally agreed that the CSG should not support the closure of trade in *Caiman* skins but should act to identify problem countries, both producers and importers, and apply pressure to improve their activities. A group was delegated to draft a resolution for discussion the next day (see below).

CSG Finances. The balance of funds at the end of the second quarter was \$14,370.26. Income for the third quarter was \$20,278.31 and expenses \$15,215.92, leaving a balance of \$19,432.65 at 4 October. Queries about several expense items were answered. Expenses and income for the year to date were reviewed and seen to be approximately in line with budget projections. Income for the first three quarters was \$50,107.96 and expenses were \$43,662.51. Anticipated expenses for the fourth quarter are about \$16,900, leaving a year end balance of about \$3,000 plus whatever additional donations

are received in the period. A combination of continued support from our patrons, the acquisition of several new patrons, and careful cost control have kept our expenses in line with income for the year.

A draft budget for 1992 was presented and discussed for planning purposes. Revenues for next year were conservatively estimated at \$62,000. Expenses for next year were estimated at \$87,388, which included substantial expenditures for the publication of Proceedings of the Colombia regional meeting (\$6,000) and the Zimbabwe Meeting (\$12,000). A deficit could be expected unless costs could be reduced and new donors attracted.

Discussion followed on various ways that the planning budget could be balanced. It was decided that publication of Proceedings would be removed from the operating budget and only supported if separate funds, either from a special donor, or generated from meeting registrations, were available to support them. It was stated by several commercial operators that the potential for additional support from farming and trade interests was considerable and should be developed. A draft of a certificate of recognition for patrons was presented and approved for use.

Newsletter. Production of the Newsletter costs about \$5,600 a year and mail costs an additional \$4,500. Ways to recoup the cost of this expense were discussed. The possibility of charging a subscription for the Newsletter was examined. It was felt that many recipients of the Newsletter, particularly commercial operators, could easily afford to pay a subscription, but that another group of recipients, students, researchers without adequate funds, and some third world recipients, could not. It was recognized that the continuation of free distribution of the Newsletter was a valuable conservation action of the CSG. The computerization of the mailing list has simplified the logistic effort needed to track subscriptions. After discussion it was agreed that subscribers to the Newsletter could be invited, on a voluntary basis, to contribute \$40.00 per year toward the costs of production and distribution. The Executive Officer was instructed to announce this policy in the next Newsletter, making sure that non-paying subscribers were clearly reassured that their subscriptions would continue.

Additional potential revenues from the sale of publications were identified. The Spanish

Language Farming Manual, the Farming Manual and Directory, and the Projected Model Management Plan could all generate some income for the CSG.

Registration Fees for CSG Meetings. The fee for the Colombia Meeting was \$250 and contained charges for additional services. The Colombian organizing committee was congratulated on its efforts, but concern was expressed at the inflated costs. No announcement of the registration fee was made prior to the meeting. Continuing high fees would discourage participation in CSG meetings. The chairman then stated that henceforth it would be CSG policy that registration fees for meetings would be announced to participants in advance and that registration would not normally exceed \$100 for a meeting. Additional charges for other services, publications, banquets etc., should be charged on a separate basis. Two donors then agreed to subsidize the registration fees in Santa Marta for a number of deserving participants who would otherwise be unable to attend.

11th Working Meeting of the CSG in Zimbabwe. Progress in the organization of the Zimbabwe meeting was presented. The logistic arrangements are well advanced and a package of hotel and tour reservation information had been mailed to the approximately 250 advance registrations to date. It was agreed that the registration for the Zimbabwe meeting would be \$100 US and an additional \$25 increment would allow registered participants to receive the Proceedings. A preliminary schedule of events and a call for papers was distributed with the last Newsletter in October. Special speakers for keynote addresses had been invited. Workshops on survey techniques and on mobilizing commercial influences to solve particular conservation problems were proposed. Convenors to organize these workshops are needed.

Publications. THE CROCODILE ACTION PLAN is complete and in the hands of SSC for production and publication. It should be available by March 1992. The possibility of periodically updating the Action Plan was discussed. The Spanish Language Farming Manual, CRIANZA DE COCODRILOS, compiled by Professor King, was complete and copies were being distributed at the Regional meeting. Additional copies will be

available from CSG for \$15 US. The INTRODUCTION TO THE FARMING OF CROCODILIANS, edited by Jon Hutton and Grahame Webb, was in final draft form and ready for production. Minor additions to cover recent developments in caiman farming were recommended. Grahame announced that interest had already been received in having this valuable resource translated into other languages for use throughout Asia. The DIRECTORY OF CROCODILE FARMS compiled by Richard Luxmoore is approaching completion and will be printed by IUCN. The Chairman noted that funds for the compilation and printing of the directory had been obtained with the express intention of publishing the DIRECTORY and Hutton and Webb's INTRODUCTION... as one volume. The executive officer was asked to contact both groups to ensure that this was clearly understood and occurred. It was agreed that any CSG publications should be translated into other languages whenever a donor to support this activity could be found. The MODEL MANAGEMENT PLAN edited by Dennis David has been produced in outline draft and preliminary sections drafted. Dennis presented a proposal for supporting funds to complete this work that will be funded by Mr. Zack Casey of Group Z, Louisiana, Mr. Alex Trachter of Techno-Caiman, Brazil, and WWF-US. A final draft will be presented for review at Zimbabwe. Dr. Obdulio Menghi announced the wholehearted endorsement of CITES for these valuable contributions of the CSG to sustained management of crocodilians.

Certification of Qualified Crocodilian Surveyors.

Dr. King presented a proposal for the CSG to certify individuals meeting minimum qualifications to conduct quantitative surveys of crocodilian populations. It was thought that this would be valuable worldwide to ensure that competent personnel conducted surveys on which important decisions such as national harvest levels and CITES quotas are determined. It was noted that the quality of surveys conducted worldwide was quite variable and occasionally unqualified personnel had produced unacceptable population estimates. The need for quantified, repeatable surveys with measured variance estimates for the successful management of crocodilians was stressed. The possibility of producing a manual of techniques was entertained but it was determined that

techniques are constantly being updated and are readily available in the literature. A list of certified individuals would be useful to CITES, FAO and other agencies when they were seeking personnel to conduct surveys.

CSG Membership. The membership invitation process for the Trienium is complete and the CSG has 310 members from 60 countries. Additional members can be added by Vice Chairmen at the discretion of the Chairman. Lists of members and addresses are available for the Vice Chairmen and the full list of members will be published in the SSC directory early next year. All members will receive a copy. Concern was expressed by several Vice Chairmen that members had been added to the CSG from their areas without their knowledge. The Executive Officer undertook to copy Vice Chairmen on all membership invitations that concerned them and apologized for the oversight in not doing so previously.

Southeast Asian Workshop. Grahame Webb and Professor Messel drew the attention of the Group to political and diplomatic initiatives in SE Asia that were leading to increased stability and openness in the region. A window of opportunity was opening for the CSG to become involved in the region where there are numerous conservation priorities for crocs. A proposal was presented for a workshop on sustainable utilization of crocodilians, hosted by Australia, as a first step in regional coordination. The proposal was endorsed and discussion on the best venue and alternate hosts held. Grahame Webb undertook to keep the Group informed.

SSC Brochure. Prof. Messel presented the new SSC brochure developed by George Rabb's office for information and fundraising and stated the need for a supplementary folder on the CSG.

The meeting closed at 6.40 pm (having worked through lunch) to reconvene at 10.00 am the following morning, 11 November.

In the final session of this extended Steering Committee meeting the final drafts of the various resolutions and letters reported above were presented, discussed, amended as necessary, and approved. The Chairman began by clarifying for the Group that, following SSC procedure, the Steering Committee's input was advisory to the Chairman who reserved the right to accept or

reject it. He further noted that his input to SSC and to CITES was of a similar advisory nature and the CSG's positions might not be the ones eventually adopted by other entities. In response to a question he further clarified that the resolutions as drafted and approved by the Steering Committee would go forward unaltered as the Steering Committee's recommendations.

Most of the resolutions and letters were accepted with minor amendments and approved as presented above. Exceptions, relevant discussion and new material is summarized here.

Illegal Caiman Trade. Objection was voiced by the Vice Chairman for South America, supported by the CITES observer, that the discussion and proposal concerning banning caiman imports into the US was prejudicial to the development of legal trade in South America. Extensive discussion followed on the nature of the enforcement difficulties experienced by the US and appropriate responses. It was noted that if the US was unable to enforce CITES regulations pertaining to the import of caiman then one response might be to embargo alligator exports from the US, as was being proposed for Singapore and Italy. The draft resolution was presented as a compromise that avoided support for a total ban but focussed action on particular problem countries. Following changes in the wording the prior objections were withdrawn and the resolution approved.

RESOLUTION ON *CAIMAN* TRADE

RECOGNIZING that great strides have been made in managing crocodilian populations worldwide on a sustainable basis; and

RECOGNIZING that the economic benefits of the crocodilian trade and management contribute to the preservation and management of wetland habitats worldwide; and

RECOGNIZING that many crocodilians are an important and valuable renewable resource that generate millions of dollars to producer countries; and

RECOGNIZING also that large scale illegal traffic in certain crocodilians skins continues in certain countries; and

AWARE that illegal trade in *Caiman* skins undercuts sustainable use management programs and provides little or no economic benefit to producer countries; and

NOTING that the illegal trade in crocodilian skins is compounded by Singapore's maintenance of a CITES reservation on *Caiman crocodilus*; and

CONCERNED that the failure of Italy to properly implement and enforce CITES, further compounds the problems relating to illegal trade in Caimans; and

NOTING the responsibility of the Commission of the European Community to ensure effective implementation and enforcement of CITES in all EC member states; and

ACKNOWLEDGING that certain CITES Parties have imposed a trade ban with Thailand recommended by the CITES Standing Committee, as a result of Thailand's failure to implement CITES trade controls, including that country's failure to control illegal trade in *Caiman*.

The Crocodile Specialist Group of IUCN/SSC RECOMMENDS that:

1) IF a program of universal skin tagging for crocodilians is NOT accepted at the Eighth Conference of the Parties of CITES in Kyoto, Japan, March 1992; and

2) IF Singapore does NOT withdraw its CITES reservation on *Caiman crocodilus* by the Eighth Conference of the Parties and cooperate with a CITES inventory of all stocks of crocodilian skins held in Singapore at the time of withdrawal; and

3) IF Italy does NOT commence effectively to implement CITES to the satisfaction of the CITES Standing Committee by the Eighth Conference of the Parties,

THEN all countries that receive *Caiman*

crocodilus products introduce a moratorium on the importation of such products exported from, or manufactured in, Singapore or Italy or both, as appropriate.

It was proposed that improved communication between US management authorities and the EC would clarify this issue and a letter was drafted for Mr. Curtis (Buff) Bohlen, Assistant Secretary of State, US for forwarding to the Commissioner of the Environment of the EC, as follows:

Mr. E.U. Curtis Bohlen
Assistant Sec. State
Washington, DC, USA

Dear Buff:

At its recent meeting in Santa Marta, Colombia, the Steering Committee of the IUCN/SSC Crocodile Specialist Group (CSG) reviewed a number of serious crocodilian trade issues, including the continuing and widespread illegal trade of caiman skins to Singapore and to the European Community via Italy. As a result the CSG adopted the attached resolution recommending an import moratorium on all caiman products if Italy and Singapore do not demonstrably improve their CITES implementation before the Eighth Meeting of the Conference of the Parties to CITES. This resolution was supported by the Latin American representative on the CSG Steering Committee and by Obdulio Menghi of the CITES Secretariat.

The Steering Committee has drafted the attached letter which we urge you to send to the Environment Commissioner of the European Community, Mr. Carlo Ripa di Meana. As the United States is a major consumer of Italian-made caiman products, importing some \$25 million per year, we believe it is critical for the United States to bring this serious problem to the attention of the highest levels of the EC Commission. We believe this is the only way to achieve lasting improvements in the abysmal CITES implementation in Italy. We would greatly appreciate your

assistance.

Sincerely,
Professor Harry Messel, Chairman CSG.

Mr. Carlo Ripa di Meana
Commissioner of Environment
European Community

Dear Mr. di Meana:

As a major consumer of wildlife products manufactured in and re-exported from the European Community, the United States is extremely concerned about the poor implementation of the Convention on International Trade in Endangered Species (CITES) in the EC. Our concern stems from the lack of uniform application of the Convention in EC member states, in spite of the requirements of EC regulation 3601 adopted in 1984. As documented by the CITES Secretariat, illegal trade in certain EC member states, especially Italy and Spain, has been allowed to flourish because of the failure of those countries to enact legislation to implement CITES and impose penalties on violators. The lack of an adequate legal framework for CITES implementation in Italy and Spain raises serious questions about the legal origin of certain wildlife goods shipped from those countries, thus creating serious enforcement impediments for our own wildlife trade control system in the United States.

Concern over Italy's failure to properly implement CITES has reached significant levels. In a recent report to the CITES Standing Committee, the CITES Secretariat documents numerous instances of illegal wildlife trade in Italy over the last two years. The CITES Secretariat explains that all attempts to resolve these problems on a bilateral basis with Italy have failed. The Standing Committee is now reviewing the report and is expected to make recommendations within a few weeks.

Further evidence of Italy's failure to properly implement CITES is found in the enclosed letter to Mr. Claus Stuffmann

from Professor Harry Messel, on behalf of the IUCN/SSC Crocodile Specialist Group, which provides specific examples of illegal trade in caiman crocodile skins from Latin America to the European Community via Italy. At its recent regional meeting in Santa Marta, Colombia, the Crocodile Specialist Group recommended that all nations consuming Italian-made caiman products ban such imports if Italy fails to demonstrably improve its CITES implementation by the time of the Eighth Meeting of the Conference of the Parties to CITES in March 1992 in Kyoto, Japan.

As an indication of further concern over the European Community's failure to adequately implement CITES, Paraguay, on behalf of several Latin American states, has submitted a resolution to the upcoming CITES meeting in March 1992 which recommends major improvements in EC CITES implementation before any additional CITES Parties approve the so-called 'Gaborone amendment' which would allow the EC to accede to CITES as a regional trade block. As you may know, only 27 of the requisite 54 CITES member states have approved this amendment. Much of the concern of Latin American CITES nations relates to the wildlife trade control problems in Italy.

I urge you, Mr. di Meana, to carefully review the serious wildlife trade problems in the European Community, particularly those of Italy. Because many CITES member nations have yet to approve the Gaborone amendment, it is of the utmost importance for the EC Commission to demonstrate its commitment to ensuring strict and uniform CITES application in all EC member states. This would also extend to ensuring that the two EC member states not yet party to CITES, Greece and Ireland, rapidly accede to the Convention as well.

I would be most grateful if you could inform me before the Eighth Meeting of the Conference to CITES in March 1992 of EC efforts to strengthen CITES controls in the Community, and particularly in Italy.

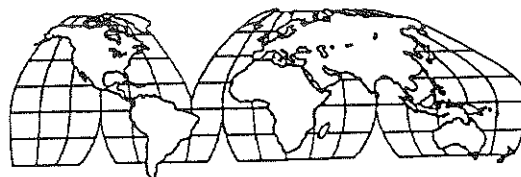
Sincerely,
E.U. Curtis Bohlen
Assistant Secretary of State

2nd World Congress of Herpetology. Dr. Marinus Hoogmoed, Secretary General of the World Congress of Herpetology, extended an invitation to the CSG on behalf of Dr. Michael Tyler, Congress Director and the Executive Committee, to attend the World Congress in Adelaide, Australia, 28 December 1993 - 6 January 1994. He further invited the CSG to coordinate a symposium at the Congress on crocodilian management. Professor Messel accepted on behalf of the group, thanking Dr. Hoogmoed, and delegated Grahame Webb to coordinate the Symposium in conjunction with the Vice chairman for Science of the CSG.

Next Steering Committee Meetings. The next Steering Committee Meeting of the CSG was scheduled by the Chairman for Saturday 29 February 1992 in Kyoto prior to the CITES Meeting. A Steering Committee meeting will also be held 1 and 2 August 1992 in Victoria Falls, Zimbabwe, immediately preceding the 11th Working Meeting.

There being no further business the Steering Committee meeting closed at 12.41 pm. J.P. Ross *rapporteur*.

AREA REPORTS



AFRICA

South Africa:

CROCODILE CREEK RE-OPENS. Peter Watson's Crocodile Creek Farm in Maidstone, South Africa, is once again open to the public and for production. On 3 October 1991 the new section of the N2 Freeway north of Durban was opened and coincidentally, or perhaps in celebration, 'Houdini' a 2.8m Nile crocodile laid 56 eggs in an enclosure adjacent to the new highway.

The farm closed after blasting for the highway construction was associated with the deaths of crocs in the farm. The farm stock was relocated to seven farms; Riverbend, Crocworld, Assagay and C.R.U.W in Natal, Croco & Sanga in Transvaal and Manyane in Bobhuthatswana. The Watsons would like to express their grateful thanks to the crocodile farmers of Natal and Transvaal for their assistance and encouragement during this most difficult year. -- Peter Watson, *Crocodile Creek*, P.O. Box 178, Maidstone, 4380, South Africa.

BALLISTICS TESTS. For many years I caught problem crocs in Zululand and in my mad enthusiasm, wading out into lakes at night, I was always confident and re-assured by the small 'stun gun' ('bang stick') I carried of the type developed to kill sharks. Mine was loaded with a 16 bore shotgun cartridge guaranteed to instantly kill any large attacking crocodile. I was recently commissioned to evaluate a similar weapon developed for the protection of divers and others who might come into contact with crocodiles.

The weapon tested fired 12 bore shotgun or standard R1(UN 762mm) cartridge. These and my 16 bore were tested on three crocodile carcasses of 2.01, 2.14 and 3.5 m length from commercial farms. The carcasses were placed in a tank in 45-60 cm water and a series of detonations applied to determine the effects and penetration on different parts of the body. The carcasses were then X-rayed to evaluate the effects.

The 16 bore caused minimal tissue damage on the softer body parts and barely penetrated if fired against the nuchal shield or large osteoderms. So much for my false confidence over the years. The 12 bore was more effective and caused considerable tissue damage, except when fired into the side of the neck where penetration was not enough to cause serious damage. The R 1 cartridge was effective in 90% of tests but again failed to penetrate the dense muscle at the side of the neck sufficiently to damage the vertebrae. Having seen large crocodiles in combat, seize and screw out the entire forelimb of a rival, without deterring the injured animal from continuing the fight, I would not state with complete confidence that this type of weapon is infallible in discouraging a really large crocodile from an attack. -- A. C. 'Tony' Pooley. *adapted from N.C.F.A. Newsletter 5*,

November 1991.

NILE CROCODILE FARMERS ASSOCIATION. While things still look depressed in the market place the South African Framers have been advocating the downlisting of their *C. niloticus* population from Appendix I to Appendix II of CITES. A proposal has been submitted to the CITES secretariat and we would like to encourage member countries to support us in our application. With 36 crocodile farms and an excellent wildlife management system, the population of crocodiles in South Africa is definitely not endangered. Both the farmers and wildlife authorities have investigated the stability of the crocodile population and agree that the South African population should be on Appendix II.

With the depressed skin market and ever increasing costs, farmers are going to have to have a serious look at the financial viability of their concerns and ensure that costs are kept to a minimum and high standards maintained. Price and quality are the keys to survival in the long term. The breeding season has got off to a good start with most farms reporting early laying and substantial numbers of eggs.

Finally, we would like to encourage any interested persons who are attending the CSG 11th working meeting in Zimbabwe in August 1992, to visit South African Farms after the Zimbabwe meeting. NCFA will be organizing a tour of facilities and full details can be obtained from me at the address below. -- Howard Kelly, *President, Nile Crocodile Farmers Association*, P.O. Box 245, Ramsgate, 4285, South Africa.

ASIA

China:

ALLIGATOR PROTECTION DISTRICT. The Anhui Nature Protection District of Chinese Alligator (ANPDCA) was established in 1982. It includes the five counties of Xuancheng, Nanling, Jingxian, Langxi and Guangde. In July of 1986 the ANPDCA became a county class refuge and its office was established at the Anhui Research Center of Chinese Alligator reproduction. The officer of ANPDCA is Engineer Zhao Yaozong. Up to the end of 1990 the numbers of Chinese Alligators is estimated to have increased about 40% within the ANPDCA. Currently there are

thirteen protection centers where alligators of all ages can be readily seen. Notable among these are centers at Changle, Yantan, Hongxing, Zhancun and Zhongqiao. -- Zhang Zhengdong, *Anhui Research Center of Chinese Alligator Reproduction, Xuancheng, Anhui, Peoples Republic of China.*

CROCODILE PARK IN SOUTHERN CHINA. A new crocodile park has been built at the Farmers Holiday Resort located at scenic Baiteng Lake, Zhuhai, Guangdong Province, a coastal city in southern China. The project is headed by Mr. He Jun Rong, assistant general manager of the Baiteng Lake United Development Company with the joint efforts of Mr. Chen Qiyu, director of the Baiteng Lake Institute of Game, Fisheries and Agriculture and Professor Xu Gongai. In the last two years the Institute has made significant advances in the field of crocodile reproduction, winter survival and disease control. Three *Crocodylus porosus* were obtained indirectly from Thailand and these produced four young in 1990. In November of 1990, 70 immature Chinese alligators were brought from Xuan Chen, Anhui Province and these are growing well.

The Baiteng Lake Crocodile Park is planning a reproduction center for wild animals, particularly crocodiles from all over the world. In 1991 CSG member Prof. Huang Zhujian and Prof. Tan Yanxiang of Academia Sinica were invited to Baiteng Lake to advise on the reproductive ecology and husbandry of crocodiles. The support and assistance of zoologists and administrative departments at home and overseas is invited. -- Prof. Huang Zhujian, *Inst. of Zoology, Academia Sinica*, & Prof. Li Zongfang, *Beijing Normal University, Beijing, Peoples Republic of China.*

Indonesia:

SUMATRA SURVEYS. In its present Sumatra Wetlands Project the Asian Wetland Bureau has collected information on the distribution of *C. porosus* and *T. schlegeli*. The results of these surveys will be published in reports. A need for further surveys was identified for the *C. porosus* population in South Sumatra Province, which appears to have been overexploited. A proposal for such a survey is in preparation. -- Dr. Mariel Silvius, *National Coordinator, Asian Wetland*

Bureau, P.O. Box 254/B00, Bogor, 16001, Indonesia.

Nepal:

EGG MARKET IN INDIA? In a recent summary of his work entitled 'Studies on crocodiles in Nepal, particularly in the Karnali and Babai river', submitted to Deputy Vice Chairman, Professor Lala A.K. Singh, Dr. Tej Kumar Shrestha comments that,

'Crocodile eggs are eaten by poor tribals of Nepal. They also see the viability of eggs for a fairly good price in Indian market (Rs. 350 per egg)'.

In correspondence to the NEWSLETTER (27 November 1991) Professor Singh responds that,

'Regarding the information that the crocodile eggs have a fairly good price in the Indian market (Rs. 350 per egg) I have my doubts. Nevertheless I would appreciate to be quoted about my doubts and in the meantime I am trying to verify the accuracy of the information'.

The full substance of Dr. Shrestha's research report will be presented in a future NEWSLETTER with the resolution of this issue. *From materials submitted by L.A.K. Singh, Deputy Vice Chairman for Western Asia, Project Tiger, Similipal Tiger Reserve, Khairi-Jashipur, Orissa, India 757091, & Dr. Tej Kumar Shrestha, Tribhuvan University, Kirtipur Campus, Kathmandu, Nepal.*

AUSTRALIA/OCEANIA

Australia:

ANGER AT CROCODILE HARVEST. A State Government decision to allow 50 saltwater crocodiles to be taken from Cambridge Gulf in Western Australia's far north, has angered managers of the nearby Wyndham Crocodile Farm. The government has agreed to a one-off harvest of 20 adults and 30 juveniles. Wyndham Farm manager Nigel Palmer said removing 50 crocodiles from the Gulf would have a disastrous effect on the wild population, which he estimated at less than 200. He said that tourists came to Wyndham to see crocodiles and he feared

contractors would take the crocodiles from the most popular spot for tourists to see wild crocodiles. Broome Crocodile Park Manager, Mark Johnson said there were enough crocodiles to service all three farms. The harvest would allow the Broome farm to become commercially viable. He said crocodile farming is a long term venture and all the farms should work together. From: *The West Australian, Perth, Australia, 30 November 1991*

Palau:

ONLY ONE SPECIES OF CROCODILE, *CROCODYLUS POROSUS*, OCCURS IN PALAU, AND DARNED FEW OF THEM. The crocodile populations of the Republic of Palau, Caroline Islands, western Pacific Ocean, were surveyed by Professors Messel and King from 8 to 24 June 1991 under the auspices of the government of Palau, The Nature Conservancy of the U.S., WWF International-South Pacific Program, the Nagao Foundation of Tokyo, and the U.S. Fish and Wildlife Service.

In addition to documenting the status of the crocodile populations, the survey also cleared up the often repeated assertion that *Crocodylus novaeguineae* and *Crocodylus mindorensis* also occur in Palau. Only *Crocodylus porosus* was found in the wild and we were unable to discover any evidence that the other species ever occurred there. The presence of the other species was first reported in 1968 by Kimura, who we believe misidentified the species. Every other report is based on Kimura's publications.

Our surveys used the standard methods for repeatable surveys developed in Australia. Each waterway was surveyed from its mouth to an upstream point beyond which it was not possible to take a 5m boat. Palau waterways are short, narrow and often quite shallow. Every major crocodile habitat in Palau was surveyed, including 27 rivers, bays, freshwater and saltwater lakes, mangrove estuaries and lengthy stretches of island shoreline, yet this involved only 112.4 km of waterways. Only 42 crocodiles were seen in the wild, and only two very small viable populations were discovered, each with 17 animals sighted.

The Palau crocodile populations were brought to this extremely endangered status by the official program of extermination operated from 1966 through 1981 by the Office of Territorial and International Affairs, U.S.

Department of the Interior, overseeing the Trust Territory of the Pacific Islands. In 1969, that administration signed a contract with a group of Australian hunters that required them to "...kill all crocodiles which it had the opportunity to exterminate regardless of size." Palauan hunters were trained and paid to continue the extermination after the Australians left. The final major attack on the crocodiles came in 1979-1981 when a joint effort between two Japanese and several Palauan hunters very nearly completed the extermination effort.

The government sanctioned killing, from 18 December 1979 when *Crocodylus porosus* was listed as 'Endangered' on the U.S. Endangered Species Act (ESA) until the hunt stopped in 1981, was in violation of Sections 3(12), 6(f), and 7 of the ESA.

The only hope of saving the Palau crocodiles lies in setting aside protected sanctuaries and in captive propagation which could provide crocodiles for stocking the sanctuaries. No sanctuaries yet exist in which crocodiles can be protected. Nevertheless, conservation may yet be thwarted by government bureaucracy as the U.S. Fish and Wildlife Service (FWS) has threatened to confiscate the 41 captive crocodiles in the only existing Palauan crocodile farm because the owner collected the animals with permission of the Palau wildlife officials but not under permit from the FWS. -- Prof. Harry Messel, *School of Physics, University of Sydney, NSW 2006, Australia*, and Prof. F. Wayne King, *Florida Museum of Natural History, Gainesville, FL 32611, U.S.A.*

EUROPE

VICE CHAIRMAN'S REPORT. As in previous years my activities for the CSG in 1991 included coordinating and advising the European Community (EC) on new developments concerning its policy for the conservation of crocodilians and working with other CSG members on the various crocodilian issues for the forthcoming CITES meeting in Kyoto. On 10 July 1991 the EC agreed that the only imports of wild collected caiman or the skins would be from the following: *Caiman crocodilus crocodilus*-Colombia, French Guiana, Suriname and Venezuela; *C.c. fuscus*- Nicaragua (under export quota); *Caiman c. yacare*- No imports from any range state into the EC. Imports of caimans or their skins from captive breeding or ranching

operations or from introduced populations are not affected by this restriction.

Problems of enforcement of the EC-CITES regulations have occurred once again in Italy whose authorities had allowed import of *C. crocodilus* skins from Guyana in early 1991 despite an existing EC import ban established to support Guyanas efforts to better control its caiman resource.

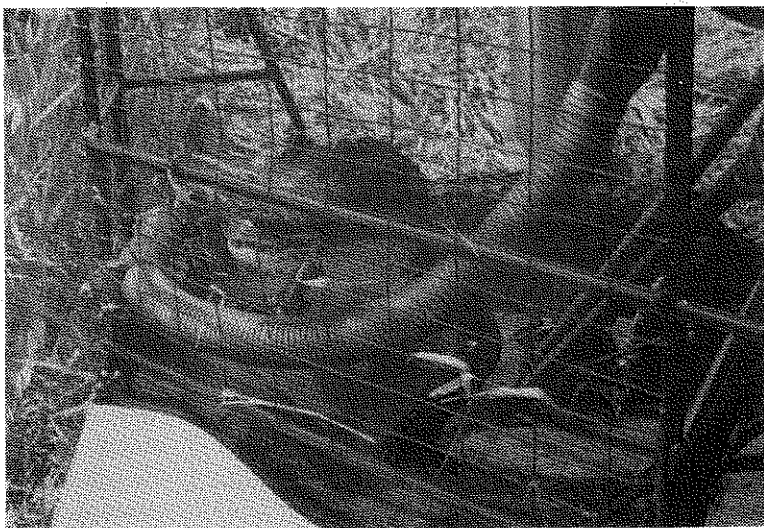
Other work involved two CITES resolutions concerning universal marking of crocodilian skins and changes in the regulations governing captive breeding and ranching requirements for Appendix I trade.

No further information has been received concerning reports of crocodile farms to be established in Portugal, France or Greece. An existing crocodile farm near Pierrelatte in southern France is now open to the public and successfully breeds alligators. Other species are also on view and while most of the stock has been acquired from zoos the owner, Mr. Luc Fougeirol, reports that French CITES authorities have deposited confiscated specimens at the farm. -- Dr. D. Jelden, *Vice Chairman for Europe, Ernährung und Forstwirtschaft, Postfach 18 02 03, 6000 Frankfurt am Main 1, Germany.*

NEW TANNING TECHNOLOGY. Since the beginning of this century chromium has been a primary ingredient for tanning. The normal level of trivalent chromium used for high quality leather is 4%-5% by weight. However, about 30% of the chromium offered to the hides is left in the tanning liquor and wasted. Chromium pollution by tanneries is a serious problem, particularly in the developing world.

A recent article "Reduction of chromium pollution and wastage in leather tanning", circulated by the UK Department of Environment, describes a new two stage tanning process called TAL developed by ICI. In the first stage a tanning liquor based on titanium, aluminium and magnesium is used. In the second stage a chromium tan is used containing 9% chromium instead of 17% usually used. The

resulting leather contains 3% chromium but has characteristics comparable to traditional leather. Residual chromium in the spent liquor is reduced because less chrome is used initially and the rate of uptake is greater. This reduces chromium content of the spent liquor from 1,200 to 350 ppm and the level in treated effluent to 10 ppm. The process removes a potential constraint on production and requires no additional capital equipment. The British Leather Company has conducted extensive research and trials to identify the optimum tanning properties of the various combinations of metals used in the first stage and has demonstrated the commercial viability of the process. In addition to some modest immediate savings in tanning reagent costs, British Leather Company expects to save some US\$275,000 in costs that would have been required to meet future standards for clean technology. Interested Parties may contact: Dr. Matt Walker, Technical Manager Wet End, The British Leather Co. Ltd., Tranmere Tannery, Birkenhead L41 9BS, United Kingdom. -- Submitted by Stephan Gorzula, *Biosphere Consultancies, 14 Ferry Road, Millport, Isle of Cumbrae, KA28 0DZ Scotland. UK.*



Female alligator defending her nest. Bill Kline photo.

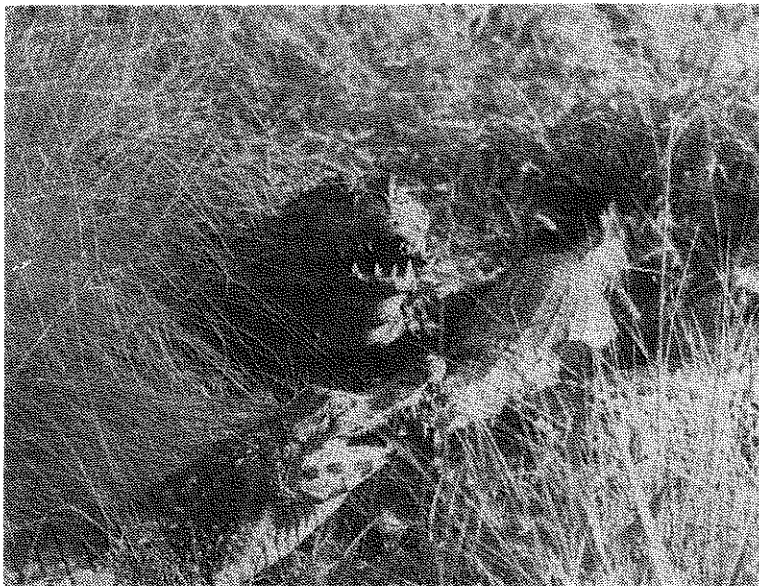
NORTH AMERICA

United States:

HAZARDS OF EGG COLLECTION. During the Florida Alligator egg collection program on Lake Okechobee in 1991, the female alligator shown above took exception to Bill Kline and his

assistant taking her eggs, and climbed into the back of the airboat to dispute the point. Bill says the alligator was finally persuaded of the long term conservation advantages of sustainable utilization, and gave up her eggs and returned to the marsh. -- Bill Kline, 3191 E. Road, Loxahatchee, FL 33470, USA.

TEXAS EGG HARVEST REPORT. The Texas Parks and Wildlife Department issued 219 nest stamps to landowners for the 1991 alligator egg collection. A total of 208 clutches of alligator eggs, containing a total of 7,818 eggs, were picked up by permitted egg collectors. Of these, 7,418 eggs were placed in three incubation facilities and 6,284 (84.7%) successfully hatched. -- William C. Brownlee, Texas Parks and Wildlife



Feeding time at El Bagual. Adult *Caiman yacare* are fed once a week on Friday evening. C. Mercolli photo.

Department, 4200 Smith School Road, Austin, TX 78744, USA.

SOUTH AMERICA

Argentina:

WINTER CARE OF CAIMANS. At El Bagual Ecological Reserve we were not able to suppress lethargy this winter in Broad-nosed (*C. latirostris*) and 'Black caiman' (*C. yacare*) hatchlings hatched in early 1991 even though heat was applied in the environmental chambers. We

used the same system with Tegu lizards the previous year with good success, but the same technique was not effective with caiman. We began to offer additional heating in June 1991 at the onset of cooler winter weather when the *C. latirostris* babies had already gained 282% body mass in the preceding 4 months and the *C. yacare* had gained 90% in 2 months. The caiman became very inactive and did not feed until by the end of winter in mid-September they had a body mass loss of 68% (*C. latirostris*) and 20% (*C. yacare*). With the beginning of warmer weather the animals in the environmental chambers became more active and are feeding with a food conversion rate of 30-33%. At the present time (November 1991) we are waiting for nesting to begin. Courtship should have already

occurred and we expect nesting by late November/December. -

- Alberto A. Yanosky & Claudia Mercolli, El Bagual Ecological Reserve, Salta 994, 3600-Formosa, Argentina.

Venezuela:

THE FIRST RECORD OF MELANOSUCHUS NIGER FROM VENEZUELA. Prior to its decimation by excessive hide hunting, the black caiman was distributed throughout the Amazon River drainages of Bolivia, Brazil, Colombia, Ecuador, and Peru. It is known to occur outside the Amazon drainage only in Guyana and French Guiana. In Guyana, *Melanosuchus* occurs in the upper Essequibo and Rupununi rivers and

associated wetlands which it probably colonized by crossing seasonally flooded savannas between the Rupununi and the nearby Ireng which flows into the Río Branco, a Brazilian tributary of the Amazon. In French Guiana, *Melanosuchus* occurs in the Kaw region which it may have colonized through coastal marshes and estuaries from adjacent Brazil and the Amazon delta. Why it has not been recorded from the Orinoco River drainage is not clear.

The Amazon and Orinoco rivers are connected through the Brazo Casiquiare River. There are waterfalls and rapids on the Brazo

Casiquiare, but during the rainy season some of the rocky outcrops are submerged and should not prevent a large crocodilian such as *Melanosuchus* from moving north into the Orinoco. Neither should they prevent *Crocodylus intermedius* from moving south into the Amazon.

During the 1960's, hundreds of thousands of *Caiman crocodilus* hides were exported from Venezuela to markets in North America and Europe. While a majority of the hides were taken from the llanos of central Venezuela, at the peak of the effort, hunting spread into the southern and eastern frontier regions as well. In March 1967, while hunting in northern Amazonas state, John H. (Jay) Wilson discovered what he thought was an extremely large and dark *Caiman crocodilus* plodding across a parched and cracked mudflat in a dry savanna south-southeast of Puerto Ayacucho. The animal had a dead duck in its mouth. Probably because the dry season had prolonged into a severe drought, the caiman was emaciated and wandering in search of water. The animal was killed and because it was the largest caiman he had ever seen in Venezuela, Jay had the full belly hide tanned for his personal collection. Only later did he realize it was a *Melanosuchus*. In 1991, the hide was donated to the Florida Museum of Natural History herpetology collection. That hide, UF 83553, measures 329 cm (10 ft. 9½ in.) from the tip of the chin to the end of the tail. An estimated 16 to 18 cm (6¼ to 7 in.) is missing from the tip of the tail. Allowing an extra 12.5 cm (5 in.) for the estimated straight-line length which would have extended anterior to the chin end of the hide yields an estimated total length for the animal of 360 cm (11 ft., 10 in.). The greatest width, 86 cm, is at the level of the 13th transverse ventral scale row (two-thirds of the distance from the rear of the frontleg to the front of the hindleg).

The collection site is at approximately 5°37'N latitude, 67°34'W longitude, or about 7 mi. south-southeast of Puerto Ayacucho, Amazonas state, Venezuela. This locality and other wetlands further upstream in the Orinoco drainage need to be revisited to confirm the presence of *Melanosuchus* in Venezuela. -- F. Wayne King, Florida Museum of Natural History, Gainesville, FL 32611, U.S.A.

BREEDING PROGRAM IN VENEZUELA. On 15

June 1990 a new regulation controlling the installation and operation of breeding facilities for Baba (*Caiman crocodilus*) was published in the OFFICIAL GAZETTE. This regulation is the result of a number of meetings between Venezuelan wildlife officials, university researchers, conservation organizations, tanners and landowners. This new captive breeding activity was begun to allow utilization of a percentage of young Babas that fail to hatch or do not survive the first year of life due to high natural predation. It is estimated that up to 90% of these could be successfully raised and 10% of these would be available for use in reintroduction programs. A summary of progress since 1987 in captive breeding facilities operating under special permission from PROFAUNA is given below.

	1987	1988	1989	1990
Facilities	4	12	10	17
Nests recorded	-	-	3,503	13,350
Collected nests	89	468	399	2,813
Eggs / nest	32.4	28.9	27.6	28.7
Incubated eggs	2,886	13,534	11,004	80,643
Hatchlings	2,104	9,417	9,572	70,909
% Hatch	72.9%	69.6%	86.9%	87.9%

-- Lic. Alvero J. Velasco B. Servicio Autonomo PROFAUNA. Edif. Camejo, Entrada Oeste, Mezzanina, CSB, Caracas 1010, Venezuela.

MARNR-CITES RESEARCH PROJECT. During May and June of 1991, fieldwork began to investigate the status of the Baba (*Caiman crocodilus crocodilus*) in Venezuela subjected to use. The program is being implemented by PROFAUNA of the Ministerio del Ambiente y de los Recursos Naturales Renovables (MARNR) and financed by CITES. The first project report on the lower Apure river region and the plains of Guarico State were submitted in November 1991. Additional research was conducted on abundance and size structure of

babillas on the Cienagas de Juan Manuel wildlife reserve south of Maracaibo Lake. The project, which will continue in 1992, will provide information on the present situation of caiman populations and be used to define improvements in the commercial use program that has been underway since 1983. -- Lic. Alvero J. Velasco B. *Servicio Autonomo PROFAUNA, Edif. Camejo, Entrada Oeste, Mezzanina, CSB, Caracas 1010, Venezuela.*

BABA SMUGGLER DETAINED. The National Guard detained a 21 year old US national attempting to leave the country with 200 hatchling *Caiman crocodilus* at the Simon Bolivar airport in December. Following information received from the Ministry of Environment and Renewable Resources (MARNR) the alleged smuggler, Mario Robinson of Los Angeles, California, was searched and the caiman were discovered secreted in tubes in a suitcase. The ultimate destination of the caiman was said to be Tokyo, Japan. Robinson, who has been working for only a month for a Los Angeles Company called 'Accurate Zoologica Impex', said this was the first time he had been involved with smuggling caiman, but that many other persons had entered or left the country with this type of cargo. -- Translated from *NACIONAL, Caracas, Sunday 22 December 1991*

TRADE



The following prices in US dollars were reported to the editors. The CSG cannot guarantee the accuracy of these reports and makes no endorsement or advertisement of sales or prices.

Alligator mississippiensis in Texas, USA: September 1991- 450 wild salted belly skins, average length 8 feet = \$36.14 per foot length; 22 wild salted belly skins, length 7 - 10 feet = \$36.00 per foot length; 1 wild salted belly skin, length 12 feet = \$47.00 per foot length

Alligator mississippiensis in Italy: December 1991- Raw wild belly skins average length 8.5

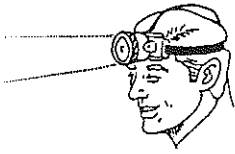
feet = \$6.75 per cm width. Raw farmed skins, 24-29cm width = \$3.00 per cm width. Raw farmed skins, 30-39cm width = \$4.25 per cm width.

IMPORT DATA, SWITZERLAND AND LIECHTENSTEIN. The following imports were reported for 1990. *Alligator mississippiensis*: 7,113 skins from the USA via France or Italy. *Caiman crocodilus crocodilus*: 35,606 sides, 8,980 sq. feet sides, 4,726 sq. m sides/skins and 1,192 skins, mostly from Venezuela and Guyana via Italy or France, and 4,656 sides directly from Venezuela. *Caiman crocodilus fuscus*: 5,117 sides, 46 skins, 1,823 skin pieces, 5,294 sq. feet sides, 2 sq. m sides, mostly from Colombia or Guatemala via Italy and France. *Caiman crocodilus yacare*: 3,224 sides (origin Bolivia via Italy). Another 1,191 sides from Paraguay were confiscated. *Crocodylus niloticus*: 395 skins of Zimbabwe, Sudan and Botswana origin. *Crocodylus novaeguineae novaeguineae*: 1,444 skins and 24 sq. m skins, all except 11 from Papua New Guinea via France or Italy. *Crocodylus porosus*: 750 skins origin in PNG and Indonesia mostly via France. The complete 1990 Annual Report can be obtained from: -- Dr. Peter Dollinger, Head, Division of International Traffic, Swiss Federal Veterinary Office, CH-3097 Liebefeld- Berne, Switzerland.

SCIENCE

POSTCRANIAL MORPHOLOGY. Studies of postcranial ontogeny of crocodilians are being conducted by Chris Brochu of University of Texas. Results on the ontogeny of the ileum were presented as a poster at the Society of Vertebrate Paleontology Annual Meeting in October 1991. Continuing research has focussed on ontogenetic changes in the limb bones, girdles and atlas-axis complex. Fusion of the scapularcoracoid, ilium-ischium and axis-odontoid peg has been documented. This work forms a background to Chris's proposed PhD thesis study on the systematics and phylogeny of archosaurs, with an emphasis on eusuchians, from the perspective of the postcranial anatomy. -- Chris Brochu, 4th Floor Geology Bldg. University of Texas at Austin, Austin, TX 78713-7909, USA.

PERSONALS



Ami Doltan,
Karmon 14,
Jerusalem 96308,
Israel, is no longer
with the crocodile
farm in Honduras

and is now in charge of a farm in Israel raising Nile crocs.

Jenny Turton, Graduate School of Tropical Veterinary Science and Agriculture, James Cook University, Townsville, Qld 4811, Australia, is a vet who graduated from Melbourne University in 1986 who has since held a private dairy practice in Victoria, Australia, and served as a veterinary field officer in Swaziland. She has just begun her Masters degree research at James Cook in crocodile diseases with Professor Philip Ladds. She intends to study the effect of stress on growth, survival and disease incidence in *C. porosus* hatchlings. Stress will be induced by manipulating husbandry practices such as stock density and pen temperature, and will be assessed by blood corticosterone levels. Differing husbandry practices are thought to cause stress and lead to increased death and disease in hatchlings.

Phil Hall, Faculty of Forest Resources, Alemaya University of Agriculture, P.O. Box 138, Dire Dawa, Ethiopia, writes that he is settling into his new teaching position, despite occasional disruptions due to civil unrest. He reports there is a 2 m Nile croc in the campus zoo but its origin is unknown. Dire Dawa, at 6,200 feet elevation, is too high and cool for a natural occurrence. He hopes to get an opportunity to see crocs in the field and says a remnant population of elephants persists despite severe persecution from poachers.



Crocodylus mindorensis hatched at CFI, Palawan, Philipinnes, I Sarsagat photo.

OBITUARY CHARLES DELANESSON. Charles Delanesson was one of the most famous crocodile hunters in Madagascar during the 1940s and 50s, providing skins for French tanneries, and he was one of the most unusual people that I have ever met. He killed crocodiles over 5 m length and told a very good story about one of 6.15 m. However, Charles loved nature and became very interested in the crocodiles themselves. He was the first to try and breed Nile crocodiles and his farm in Madagascar was the first captive breeding operation for crocodiles registered by the CITES Secretariat.

Working with just his wife and family of 14 children he kept his crocodiles in the mountains 20 km from the capital, Antananarivo. Although his farm never became very big, and on several occasions he was ready to stop, his love of crocodiles carried him through.

I first met him in 1987 during the first CITES survey of Madagascar. No one knew more about crocodiles than he did. He was convinced of the presence of both *Crocodylus niloticus* and *C. robustus* in Madagascar and explained that he had killed crocodiles as small as 1.8 m which had 30 eggs in them. The chances are that these were stunted Nile crocs, but who knows?

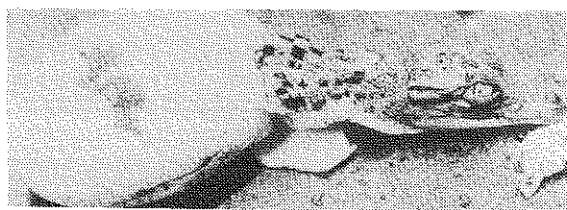
When I returned to Madagascar in 1989 to begin the ranching program, Delanesson was skeptical but eventually recognized the benefits of the project, persuading local people not to break the eggs before they could be collected. Always complaining about the administrative system, and quick to doubt anything a scientist told him, Delanesson nevertheless worked seriously and with a passion on the crocodile project.

This incredibly tough 65 year old man, who walked everywhere barefoot, disappeared in October 1991 while collecting crocodile eggs in the west of Madagascar and was later found murdered and cut into pieces by 'Dahalos' (bandits). His son was later found to have suffered the same fate. With the death of Charles Delanesson the crocodile world has lost a character and a friend. He will be impossible to replace in Madagascar. - O. Behra, Deputy Vice Chairman for Africa.

CORRECTIONS

MUGGER RESEARCH AT RAMATIRTHA. NEWSLETTER 10 (3), Page 9, line 9. should read ...'for muggers reared' not 'for muggers restocked'. -- Dr. Lala A.K. Singh, *Similipal Tiger Reserve, Khairi-Jashipur, Orissa 757091, India.*

NEWSLETTER 10(3): page 25, Preliminary Schedule of the 11th Working Meeting. The dates indicated for Thursday, Friday and Saturday are confused and erroneous. The correct dates are Thursday 6, Friday 7 and Saturday 8 of August 1992. The preliminary schedule for those days remains as indicated.



Crocodylus porosus hatchling, Madras Crocodile Bank, India.

EDITORIAL POLICY - The newsletter must contain interesting and timely, not outdated, information. All news on crocodilian conservation, research, management, captive propagation, trade, laws and regulations is welcome. Photographs and other graphic materials are particularly welcome. If you wonder why news from your area is not reported, it is because you have not sent it in. Whenever possible, the information will be published as submitted over the author's name and mailing address. Even if the editor has to extract information bit by bit from correspondence or other works, the revised news items will be attributed to the source. The information in the newsletter should be accurate, but time constraints prevent independent verification of every item. If inaccuracies do appear in the newsletter, please call them to the attention of the editors so corrections can be published in later issues. The opinions expressed herein are those of the individuals identified and, unless specifically indicated as such, are not the opinions of the CSG, the SSC, or the IUCN-World Conservation Union.

GROUP TRAVEL TO ZIMBABWE

The CSG has negotiated a group travel fare of \$2,278.00 (Cash or cheque payment) per person from the USA to Victoria Falls, Zimbabwe. The rate is available on Northwest Airline from many US cities including Atlanta, Austin, Dallas, Ft. Lauderdale, Houston, Chattanooga, Little Rock, Memphis, Miami, Nashville, Norfolk, New Orleans, Orlando, Tampa and San Antonio. Departures from other US cities may vary up or down by no more than \$125.00. In addition travellers from U.K. and elsewhere in Europe may join the group in London to secure reduced group rates and reservation advantages.

The group will travel on the 29th of July 1992 via Boston to London and continue the same day on Air Zimbabwe to Harare arriving Friday 31 July and continuing that day to Victoria Falls. Return from Zimbabwe is scheduled for 14 August from Victoria Falls returning via London to the US to arrive around midday on 15 August. Note that this routing and fare does not require additional fares in the US for many travellers and does not require overnight stays or expense in London or Harare. The fare also includes a confirmed reservation between Harare and Victoria Falls.

To secure these rates the CSG must assemble a travelling group of 30 people minimum. We have booked 60 seats and will book more if necessary. The airlines must be advised by 30 April 1992 of the groups composition although additions, changes and deletions are allowed until 30 June 1992. Tickets must be purchased and reservations confirmed by 30 June 1992.

We therefore urge all participants to immediately contact our travel agent and make preliminary reservations. We are also continuing to research even lower fares and should these become available travellers with reservations with the group will be given priority access to these.

CALL TODAY: Universal City Travel, Gainesville, Florida, USA

Toll free 1 (800) 527 9783
Fax (904) 374 9651

CALL FOR PAPERS

PAPERS ARE INVITED FOR PRESENTATION AT THE 11TH WORKING MEETING OF THE CROCODILE SPECIALIST GROUP, AT VICTORIA FALLS, ZIMBABWE, 2 - 7 AUGUST 1992.

A preliminary schedule of the meeting is presented below. Papers are invited on topics pertaining to the conservation, research, management, husbandry, and sustainable use of crocodilians and related topics. Papers are particularly invited upon the following topics: status of critically endangered species, new techniques for conservation, reports on successful management programs, new information and breakthroughs in crocodilian research. Papers are strongly encouraged from researchers in developing countries, young researchers, and nonacademic researchers. While the standards for presentations are expected to be uniformly high, some editorial assistance will be available and a portion of the program has been reserved for these papers.

Three formats of presentation are available; Invited Keynote lectures, 15 minute talks and posters.

INVITED KEYNOTE LECTURES on broad topics of universal interest will be of one hour's duration, including time for questions and discussion. They are intended to be integrative, innovative and of superior quality. The schedule committee, in consultation with the CSG Steering Committee, will invite individuals to give keynote lectures.

TALKS. Talks will be restricted to 15 minutes maximum (including time for questions) and time limits will be strictly enforced. Facilities for display of color slides, overhead transparencies, and video will be available. Talks should be presented in English and it is not certain if translation facilities will be available. There are 64 slots of 15 minutes duration for talks.

POSTERS are passive displays of text, data and pictures that can be affixed to a vertical surface (display board/ notice board) of approximately 1.5 m x 1.0 m. An area with suitable surfaces will be available for display of poster presentations which can remain assembled and visible for

extended time periods. Authors of posters will be asked to remain in attendance near their display to answer questions for periods of one hour.

TO APPLY TO PRESENT A PAPER: Send an abstract of your presentation to:

Dr. J. P. Ross, Executive Officer CSG, Florida Museum of Natural History, Gainesville, FL 32611, USA.

Abstracts should be clearly printed on a single sheet of 8½" x 11" or A4 paper and must include your name, your address for mailing, the proposed title of your presentation, an indication that your presentation will be "15 minute talk" a "Poster" or "Either". The remainder of the single page should contain a brief summary of your presentation. Do not exceed one page. Papers with more than one author must indicate a single author to whom all correspondence will be directed. Abstracts must be received by 15 March 1992. It is not necessary to provide detailed data in your abstract and we will permit some reasonable flexibility between what you propose and what you actually present.

The schedule committee, with the CSG Steering Committee, will review the abstracts received. Presentations will be accepted and assigned to talk sessions or poster presentation based on the content and the relevance to the CSG topics that we wish to cover. Because of the limited time available it may be necessary to assign some authors who request talks to the poster sessions.

Authors will be advised of the acceptance and placement of their papers by 30 March 1992. Authors whose abstracts are accepted will be asked to bring publication quality text and figures to the meeting to be included in the Proceedings. Detailed instructions for the presentation of posters and written papers will be distributed with letters advising of acceptance. As a general guide, previous CSG guidelines and common practice in scientific journals may be followed.

Steering Committee of the Crocodile Specialist Group

For further information on the CSG and its programs, on crocodile conservation, biology, management, farming, ranching, or trade, contact the appropriate officer on the Steering Committee:

Chairman: Prof. Harry Messel, School of Physics, University of Sydney, NSW 2006, Australia. Tel: (61) (2) 692 3383 Fax: (61) (2) 660 2903.
Deputy Chairman: Prof. F. Wayne King, Florida Museum of Natural History, Gainesville, FL 32611, U.S.A. Tel: (1) (904) 392 1721 Fax: (1) (904) 392 9367.

Africa: Vice Chairman: Dr. Jon Hutton, 16 Cambridge Ave., Highlands, Harare, Zimbabwe. Tel: (263) (4) 739 163 Fax: (263) (4) 708 554. Deputy Vice Chairman: Olivier Behra, Project TCP/MAG/8954, c/o FAO Rep, BP 3971, Antananarivo, Madagascar. Tel: (261)(2) 28831 WWF Fax: (261)(2) 33986.

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IUCN Species Survival Commission: Chairman: Dr. George Rabb, Chicago Zoological Society, Golf Road, Brookfield, IL 60513, U.S.A. Tel: (1) (708) 485 0263 Fax: (1) (708) 485 3532.

CITES Observers: Dr. Obdulio Menghi, Scientific Coordinator & Jacques Berney, Deputy Secretary General, CITES Secretariat, Case Postale 78, CH-1000 Lausanne 9, Switzerland. Tel: (41) (21) 200 081 Fax: (41) (21) 200 084.