

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Proposals Concerning Export Quotas

A. PROPOSAL

Transfer of the Ugandan population of Crocodylus niloticus from Appendix I to Appendix II subject to an annual export quota of 2500 skins from ranching for 1992, 1993 and 1994.

B. PROPONENT

Uganda and Zimbabwe.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Reptilia
12. Order: Crocodylia
13. Family: Crocodylidae
14. Species: Crocodylus niloticus
15. Common Names: English: Nile crocodile
French: crocodile du Nil
Spanish: Cocodrilo del Nilo

16. Code Numbers:

2. Biological Data

Uganda is a landlocked African country with about 17 million people in an area of over 236,000 km². Forest/woodland still cover 25% of the country's surface and there are a number of large and important protected areas (IUCN, 1990). Amongst these the Murchison Falls National Park (3840 km²) is of particular importance to crocodiles.

The Nile crocodile is not only one of the best studied crocodylians in the world, but also one of the better researched elements of the African fauna. Considerable information is available on the crocodile's general biology, ecology, populations and conservation in a large and readily available literature. In the first instance, interested Parties are referred to Cott (1961), Graham (1968) and Hutton (1984).

21. Distribution: There is strong anecdotal evidence to suggest that at the turn of the century crocodiles were widespread and abundant in virtually all suitable habitats in Uganda, with the exception of Lakes George and Edward where, until recently, they had no existed in recent geological time (Baker, 1866; Churchill, 1908; Cott, 1961; Parker and Watson, 1970).

Crocodile numbers and the animal's range were much reduced during the 1950's and 1960's as a result of hunting, and when exploitation pressures ceased, strong population recovery was prevented by human pressures. Today,

crocodiles are widely distributed, but low in numbers, being reduced even within their former stronghold of the Murchison Falls National Park. However, they have recently recolonized Lake Edward.

The Government of Uganda has a crocodile management plan which includes the collection of eggs from the Murchison Falls and the subsequent raising of young crocodiles, a significant portion of which are to be released into the wild for restocking depleted habitats.

22. Population: The decline of crocodile in Uganda is discussed at some length by Cott (1961), Cott and Pooley (1972) and Parker and Watson (1970). Briefly, an official eradication campaign for the stated purpose of fisheries development started in 1928 and ended about 1948. During this period over 1700 adult crocodiles and 117,000 eggs were destroyed on the shores of Lake Victoria within 80 km of Entebbe. Despite this organized control, over more than 15 years, in 1948 it was reported that "There are, unfortunately, plenty of large crocodiles still left" (Pitman, 1948) and although the decline of crocodiles in Uganda is often attributed to this control programme, it was in fact the introduction of commercial exploitation for skins which had the most dramatic effect on crocodile populations.

The first commercial cropping for skins is believed to have started in 1944 on Lake Kyoga and in 1945 several thousand skins were exported, almost entirely from Lakes Kyoga and Kwana (Pitman, 1946).

By 1948, in just four years, the Kyoga population had been reduced to such an extent that finding crocodiles was difficult and the hunters' attention switched to the Semliki River and elsewhere. In just four years the crocodiles of the Semliki had been reduced to such low numbers that hunting was no longer economic, but this time crocodile hunting was country-wide and largely uncontrolled. Between 1953 and 1955 over 30,000 skins were exported and by 1958 it was reported that illegal crocodile hunting was common even within the Murchison Falls National Park (Cott, 1961).

Parker and Watson (1970) consider that about 54,000 crocodile skins came out of Uganda between 1960-1965 and certainly by 1969 no crocodiles were seen during a survey of Lake Kyoga, there was little or no breeding stock on Lake Victoria and few crocodiles left in the Semliki River and Lake Albert (Parker and Watson, 1970).

From 1970 very few skins were exported from Uganda and in 1974 the export of crocodile skins was prohibited for a period of five years (SI 75 of 1974) and this appears to have been extended into the early 1980's.

The Murchison Falls Populations

The crocodile population of the Victoria Nile between Murchison Falls and Lake Albert is almost entirely within the protected area of Murchison Falls National Park and had always been exempt from legal control and cropping, though the population was subjected to illegal hunting in the 1950's (Cott, 1961). This population was surveyed in 1969 (Parker and Watson, 1970) and again in early October 1991 between which dates it appears to have markedly declined, though it is still at a viable level (it should be noted that the two surveys were not strictly comparable, conditions being less favourable for seeing animals in 1991) (Hutton, 1991).

In early 1991, the Board of Trustees of Uganda National Parks gave authority for the collection of 4000 crocodile eggs to start a crocodile ranch. The object was to boost the wild population through the return of juveniles at a rate higher than would normally survive using the private sector to facilitate the programme. 4050 eggs were collected in just 4 days, from 76 nests. Over 100 additional nests had been destroyed by monitor lizards before the collection exercise.

The Murchison Falls population will benefit from crocodile ranching which is considered to be the most appropriate conservation activity for crocodiles in Uganda at present, subject to the successful return of young animals equivalent to 5% of the number of eggs collected.

23. Habitat: Uganda is a relatively small country with a rich diversity of species and habitats. An important watershed, and source of the White Nile, wetlands are particularly well represented in Uganda. According to the IUCN (1990) Uganda has 8832 km² swamps, 365 km² swamp forest and 20,392 km² of other wetlands.

Swamps, especially those which are papyrus dominated, are not prime habitat for the Nile crocodile, and more open waters, with sand banks and other suitable basking and nesting places, are subject to heavily concentrated gill-net fishing pressures. This is considered to be the principal limiting factor to crocodile populations. It would be extremely naive to believe that any kind of legal protection or management could increase numbers in the majority of waters in Uganda. When crocodiles were ubiquitous and widespread in the 1940's there were only approximately four million people in Uganda, and gill-net fishing was rare. Today population exceeds 16 million (Statistics Dept., Ministry of Planning and Economic Development) and a large proportion of this population is involved in fishing for a livelihood, for which gill-netting is the principal technique.

3. Trade Data

31. National Utilization: All utilization of the Nile crocodile was prohibited in Uganda in 1974 through SI 75 of 1974. Subsequent to the expiry of this prohibition, no permits for hunting or other utilization were given until 1991, when the Departments of Fisheries and National Parks licensed a crocodile ranch - Uganda Crocs Ltd. which is based at Katebo on the shores of Lake Victoria.

Uganda Crocs has authority to collect 4000 eggs a year for 10 years from Murchison Falls National Park subject to various terms and conditions, principal amongst which is the requirement that a number of young crocodiles of 1.5 m total length, in the ratio of 3 females to every male, equivalent in number to 5% of the number of eggs collected are released back into the Park after a period of acclimatization.

There is a firm management plan for crocodiles in Murchison Falls which, in the short term, relies on crocodile ranching to assist with the rebuilding of this important population (see Annex B).

32. Legal International Trade: There is no trade in crocodiles from Uganda, nor has there been for many years. This quota request is to allow the legal exportation of ranched crocodile parts and derivatives from the year 1992 until 1994 when it is hoped that a ranching proposal according to Resolution Conf. 3.15 can be submitted and accepted at the ninth meeting of the Conference of the Parties.

33. Illegal Trade: Although there is no evidence, the decline of crocodiles in Murchison Falls National Park may be related to the market for crocodile skins in Sudan which, until recently, has been very active. Both northern Uganda and southern Sudan are torn by civil strife and the illegal movement of crocodile skins in the recent past cannot be discounted.

34. Potential Trade Threats:

341. Live Specimens: No live specimens will be exported from Uganda.

342. Parts and Derivatives: Since all the specimens exported from Uganda will be derived from a single well controlled ranch, which is part of a conservation programme, there will be no threat to wild populations from Uganda exports.

4. Protection Status

41. National: In general the crocodile is protected in Uganda in terms of the 1964 Fish and Crocodiles Act (Chapter 228 of the Laws of Uganda) in which provision is made for the catching of crocodiles and the sale and movement of crocodile skins and matters connected therewith. The Act is administered by the Commissioner for Fisheries. Within National Parks and Game Reserves the crocodile is protected and cannot be exploited without a separate permit from the appropriate authority, the Director of National Parks or the Chief Game Warden.

42. International: In 1991 the Nile crocodile is listed in Appendix II of CITES under Resolution Conf. 3.15 in Botswana, Malawi, Mozambique, Zambia and Zimbabwe; and under Resolution Conf. 5.21 in Ethiopia, Kenya, Madagascar, Somalia, Sudan and Tanzania. Elsewhere the species is in Appendix I, though there are current proposals to downlist the species in South Africa as well as Uganda.

43. Additional Protection Needs: While it would be an advantage for more prime crocodile habitat in Uganda to be gazetted to fall within protected areas, it is not reasonable to expect any such changes in the short term. Wetlands management is under review by the IUCN wetlands project for East Africa and, wherever possible, the sustainable use of crocodiles, with a view to their long-term conservation, will be considered.

Outside Uganda, there would appear to be some merit in strictly controlling export from neighbouring countries, particularly the Sudan, to ensure that there is no incentive to illegally hunt crocodiles in Uganda.

5. Information on Similar Species

Crocodylus cataphractus may occur in Uganda, but has not been reliably reported in recent years. Osteolaemus tetraspis occurs in the West, on the edge of its range.

Neither species is affected by the present management Crocodylus niloticus.

6. Comments from Countries of Origin

It should be noted that in 1984, at a workshop on the implementation of CITES in Africa, 25 African countries agreed that the Nile crocodile was not endangered and

did merit inclusion in Appendix II. The SADCC political grouping of southern African countries stated that the Nile crocodile is not currently threatened within extinction and should be moved off Appendix I (SADCC, 1988).

7. Additional Remarks

71. Quota Request: A export quota of 2500 ranched skins of the Nile crocodile is requested to allow Uganda's first commercial crocodile ranch to export its produce.

Zimbabwe co-submitted this proposal to make it receivable by the CITES Secretariat. In accordance with the text of the Convention, only a Party may propose an amendment to Appendix I or II, and a Party is a State for which the Convention has entered into force (Article XV, paragraphs 1 and 2, and Article I, paragraph h). As the Convention entered into force in Uganda on 16th October 1991, Uganda was not able to submit a proposal before the 150 day deadline for the submission of such proposal. The joint submission make the proposal receivable and avoids its submission for consideration under the postal procedure shortly after the eighth meeting of the Conference of the Parties.

For the same reason, it was impossible for Uganda to submit a ranching proposal under Resolution Conf. 3.15. However, the quota is only for ranched specimens and it is intended that a ranching proposal should be submitted to the ninth meeting of the Conference of the Parties. According to Resolution Conf. 7.14, quota proposals referring only to specimens reared in captivity from wild eggs or hatchlings will be less rigorously examined than quotas including wild cropping.

72. Uganda's Crocodile Ranch: The crocodile ranch at Katebo belonging to Uganda Crocs Ltd collected 4050 eggs from the upper reaches of the Victoria Nile within Murchison Falls National Park in February and March 1991. The eggs came from a total of 76 nests. A number of eggs equivalent to about 10% of this number were rejected on site and a further 30 were rejected as inviable before setting in the incubator.

Of the 4020 eggs incubated, 3483 hatched (86% of fertile eggs) and after six months 3100 young animals remained (11% mortality). Most deaths occurred in the first few weeks after hatching.

With the collection of 4000 eggs, an 80% hatch, a 90% survival and a 5% return to the wild it is estimated that the farm will produce about 2500 skins per annum, hence the level of the requested quota.

The ranch uses technology from Zimbabwe, where the operator was a practicing veterinary surgeon for 3 years. All the hatchlings are maintained in a heated, indoors environment. Small non-economically important fish are caught in Lake Victoria and fed to the crocodiles fresh every morning. Growth rates and survival is comparable with the Zimbabwean average.

73. Information in Terms of Resolution Conf. 7.14:

- a) There is one well-documented scientific survey of the population to be exploited which shows that the Murchison Falls population of crocodiles is above minimum viable levels and not in danger of extinction.

- b) The species is non-migratory.
- c) Uganda has a management programme for the species (see Annex A).
- d) The entry of specimens into trade will be controlled and will not lead to a reduction in CITES controls on trade in other species.
- e) The products exported will be marked according to the Uniform Marking System used on all other exports of Nile crocodile skin.
- f) Uganda is capable of issuing all necessary permits in terms of Article IV, paragraph 2(b) and 3 of the Convention.
- g) Uganda is a new Party to CITES, but will meet its annual reporting requirements.
- h) Uganda has not entered a reservation on the species.

Additional information:

- 1) The total wild harvest shall be 4000 eggs for ranching.
- 2) 2500 ranched skins are to be exported each year.
- 3) All the specimens will be reared in captivity.
- 4) There will be no captive-born individuals in the short term.

A full annual report will be submitted to the Secretariat giving the total harvest, the number and type of wild, captive-born and ranched specimens exported (if any).

8. References

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POLICY AND MANAGEMENT PLAN FOR THE NILE CROCODILE IN UGANDA

Introduction

The Nile crocodile Crocodylus niloticus grows up to 5 m in length and is the dominant predator of the water's edge throughout much of sub-Saharan Africa.

The presence of this animal can conflict severely with human interests such as fishing and livestock production. At the same time, the hide of the crocodile is of considerable value in commercial trade. For the reasons, crocodiles were hunted and their numbers much reduced in Africa in the 1940's, 50's and 60's.

In Uganda, the removal of formerly ubiquitous and common crocodiles allowed the widespread introduction of gill net fishing and this, probably more than any other factor, has prevented the animal from re-establishing itself as it has elsewhere in Africa.

The issue of crocodile management in Uganda is, therefore, complex, requiring both conservation and control measures and including sustainable use.

POLICY FOR CROCODILES

1. The Government of Uganda will ensure that crocodiles do not become extinct in Uganda, and to this end will conserve and encourage the species wherever this does not conflict with legitimate human interests.
2. Conservation measures may include sustainable use where this can be shown to be beneficial to wild population.
3. Wherever they adversely affect human populations, crocodiles will be discouraged and may be subject to control methods.
4. Crocodiles in Uganda will be managed according to a management plan for the species drawn-up by the CITES Scientific Authority for Uganda.
5. Management activities will be undertaken by the appropriate Heads of Departments according to the management plan and within the appropriate laws of Uganda.

MANAGEMENT PLAN FOR CROCODILES

1. Management within Different Areas of Uganda
 - i) Within National Parks and Game Reserves crocodiles will be managed to remain above minimum viable levels, at least, and will be encouraged to increase to levels corresponding to those attained in recent history.
 - ii) Elsewhere, crocodiles may be managed for a sustainable off-take, or controlled as necessary.

- iii) The relevant authorities will monitor the status of wild crocodiles in areas under their management and report on this annually to CITES (if required in terms of any downlisting of the Uganda crocodile population to Appendix II).

2. Management Authorities

- i) Within National Parks all wild crocodile management will be the responsibility of the Director of National Parks.
- ii) Within Game Reserves all wild crocodile management will be the responsibility of the Chief Game Warden.
- iii) Elsewhere, all wild crocodile management will be the responsibility of the Commissioner of Fisheries.
- iv) Crocodile utilization in any form, anywhere in Uganda will be subject to the scrutiny, approval and co-ordination of the CITES Scientific Authority for Uganda.
- v) All crocodile utilization, including crocodile ranches, will be licensed by the Commissioner of Fisheries.
- vi) Where collection of eggs from National Parks and Game Reserves is involved, additional agreements with, and permits from, the relevant management authorities will be required.

3. Sustainable Use

- i) Sustainable use will normally be restricted to crocodile ranching, according to the CITES definition, involving the collection of eggs.
- ii) As noted in Sections 2 (iv - v), above, all crocodile ranches will be subject to:
 - a) Approval from the CITES Scientific Authority;
 - b) Permit from the Commissioner of Fisheries;
 - c) Approval and licence from the department responsible for the land on which the resource occurs.
- iii) Applicants wishing to undertake crocodile ranching will submit a written proposal to the CITES Scientific Authority indicating, at least:
 - a) Expertise in the field of crocodile farming;
 - b) Finances sufficient for three years of operation without an income;
 - c) Adequate land and water resources for the size of ranch outlined;
 - d) Access to sufficient food to feed the number of crocodiles requested;
 - e) Specific information on the source of crocodile eggs and written approval from the appropriate authority.
- iv) In all ranching situations, a number of crocodiles equivalent to 5% of the number of eggs collected will be made available to the appropriate authority for restocking depleted habitats. These will be transported at the expense of the licensed rancher to the point of release.
- v) The animals made available for re-stocking will be:
 - a) In the ratio of 4 females to 1 male;

- b) 1.3 - 1.5 m total length;
 - c) In good health and acclimatized to a natural environment after spending at least 6 months in a semi-natural enclosure at the licensed ranchers' expense.
- vi) If the return of a cohort of animals is not requested within three years of the collection of the eggs producing those animals, the requirement for the return of that cohort will fall away.
 - vii) No rancher will reintroduce any crocodile stock to the wild except under the supervision of the relevant authorities.
 - viii) Egg quotas will be decided by the appropriate authority for the resource and will normally be renewable for a minimum of five years, as will all permits from the Commissioner of Fisheries.
 - ix) Egg collection will be supervised by officers of the appropriate authority.
 - x) Licensed ranches will be required to make the following written reports each year to the CITES Scientific Authority, the Commissioner of Fisheries, and the authority granting the permit for egg collection:
 - a) By 30th June a report giving:
 - the number of nests opened;
 - the locality of each nest marked on a 1:50 000 map;
 - the total number of eggs in each nest;
 - the number of eggs rejected from each nest;
 - the number of eggs incubated and the number hatched.
 - b) By 31st December a report giving:
 - the mortality rate of animals in each class over the last 12 months and the causes of such mortality, and
 - production, sales and export of products in the last 12 months.

4. Export of Crocodiles, their Parts and Derivatives

- i) The export of live crocodiles of any status or origin will be discouraged.
- ii) All hide exports will require a CITES permit and will bear a tag complying with the CITES Uniform Marking System. These will be paid for by the appropriate licensed rancher.
- iii) A CITES export permit will only be granted where the rancher supplies:
 - a) A completed application form;
 - b) A detailed packing list with a skin size for each numbered tag;
 - c) A proforma invoice.

OUTLINE CROCODILE MANAGEMENT PLAN FOR MURCHISON FALLS NATIONAL PARK

Objectives

The objectives of crocodile management in Murchison Falls National Park are to maintain the breeding population of crocodiles between Murchison Falls and Lake Albert above minimum viable levels, at least, and to increase this and other sub-populations wherever possible.

Methods

1. Crocodiles will be conserved through a system of "headstarting" in which crocodile eggs are removed from the Park and hatched, and young crocodiles raised in captivity until they can be released into the wild with a high probability of survival.
2. This system of conservation will be implemented for a period of 10 years from 1991 and will rely on private sector involvement in which a portion of the eggs removed are reared in a crocodile "ranch" for commercial skin production, the farmer carrying all expenses and responsibilities related to the return of juvenile animals to the Park.
3. This return of juvenile crocodiles will include a number of animals equivalent to 5% of the eggs removed from the Park.
4. The initial egg quota will be 4000 p.a. and will include infertile eggs, or those inviable for other reasons.
5. After five years this quota will be reassessed and may encompass all eggs laid provided the survival of released animals is satisfactory.
6. No individual crocodile "rancher" will receive a quota in excess of 4000 eggs p.a., nor will a quota normally be given for a period exceeding 10 years.
7. The Department of National Parks will monitor the survival of the first cohort of juveniles released into the park.
8. The juveniles to be released will be:
 - a) Acclimatized to living in the wild by their maintenance in semi-natural conditions for at least six months before release.
 - b) 1.5 m total length.
 - c) In the ratio 4 females to 1 male.
9. Juveniles will not be released in any locality in numbers exceeding 25 individuals. Every attempt will be made to effect the release in "juvenile" habitat.
10. To prevent further depletion of the crocodile population between Murchison Falls and Lake Albert all fishing in this stretch of the Victoria Nile will be prohibited once the supply of rations to the Parks staff is regularized.
11. In the meantime, fishing will be restricted to the section between Paraa crossing and Buligi Range Post, and will be limited to the minimum number of boats and nets which will

take a catch adequate to feed the Parks staff. These levels will be determined through the implementation of a system of catch and consumption monitoring.

12. For purposes of egg collection, the Victoria River will be divided into four egg collecting zones:

Zone A: From Murchison Falls - Paraa crossing. North Bank.

Zone B: From Murchison Falls - Paraa crossing. South Bank.

Zone C: From Paraa - Lake Albert. North Bank.

Zone D: From Paraa - Lake Albert. South Bank.

13. Licensed "ranchers" will be given a priority rating based on the date of approval of their permission to collect eggs from the Director of National Parks. The first licensed rancher will commence egg collection in Zone A. If the Park authorities are satisfied that after every reasonable effort, the license holder has been unable to collect his full quota in Zone A, he may be allowed to transfer his activities to Zone B, and so on.
14. Each collector will be given one week to collect his quota, the first being required to finalize all egg collecting activities by February 10th at the latest.
15. Any subsequent collector will be required to commence collection in Zone A, moving to subsequent zones only when all reasonable efforts to locate eggs are no longer successful.
16. Licensed egg collectors will be required to:
 - a) Employ crocodile "wardens" between 1st January and 1st April each year to locate and guard crocodile nests from predation.
 - b) Record the precise location of each nest opened for collection with a cross reference to a data card giving the number of eggs in that nest and their fate.
 - c) Record the precise location on any nests of the season which were found predated during the course of collection activities.
17. The crocodile population of the Victoria Nile between Murchison Falls and Lake Albert will be subject to annual monitoring. This will comprise a series of aerial surveys during February of each year.