Maintenance of the Malagasy Population of Nile Crocodile *Crocodylus niloticus* in Appendix II, pursuant to *Res. Conf. 9.24 (Rev. CoP16)* Annex 2(a), paragraph B) rather than to *Res. Conf. 11.16 (Rev. CoP15)*, subject to the following annotations:

1. No skins or products within the artisanal industry from wild *C. niloticus* less than 1m or greater than 2.5m total length will be permitted for national or international trade
2. An initial wild harvest ceiling of 3000 animals per year for the artisanal industry will be imposed for the first three years of operation (2017-2019)
3. No export of raw or processed skins harvested from the wild will be permitted for the first three years
4. Farm production shall be restricted to ranching and/or captive breeding, with national skin production quotas
5. Management, wild harvest ceiling and national skin production quotas will be audited and reviewed annually by international experts for the first three years to ensure sustainability

**Proponent: Madagascar**

**Summary:** The Nile Crocodile *Crocodylus niloticus* is a large crocodile with a wide distribution across sub-Saharan Africa and in Madagascar. The populations of 13 range States, including Madagascar, are included in Appendix II, some under particular restrictions; all other populations are in Appendix I. This proposal only affects the Malagasy population.

The Malagasy population of *C. niloticus* was originally transferred in 1985 from Appendix I to Appendix II under *Res. Conf. 5.21* on special criteria for the transfer of taxa from Appendix I to Appendix II (no longer in effect), and subject to an annual export quota to allow limited trade in wild skins from nuisance animals. At the Tenth Conference of the Parties (CoP10) in 1997 a proposal was accepted to include the species in Appendix II pursuant to *Res. Conf. 3.15* [now *Res. Conf. 11.16 (Rev. CoP15)*] on ranching rather than *Res. Conf. 5.21*. Between 1985 and 1997 the CoP agreed on varying export quotas for wild specimens, ranched species or wild nuisance specimens. From then on the CoP did not set quotas; instead, Madagascar authorized exports in accordance with its ranching programme.

Concerns regarding Madagascar’s compliance with *Res. Conf. 11.16* were raised at the Animals Committee (AC) in 2006 and transmitted to the Standing Committee (SC). The Secretariat visited Madagascar in 2006 and confirmed that Madagascar was not fully complying with the Resolution and that controls of farming operations had been insufficient to prevent abuses. The SC developed a series of recommendations for Madagascar (Annex 1 to SC55 Doc. 13).

At SC60 the SC recommended, in view of persistent concerns about the management of ranching operations in the country, that trade in this species with Madagascar be suspended; this recommendation came into effect in June 2010. At SC65 (July 2014) the SC decided, in view of the progress that Madagascar had made, that the suspension could be withdrawn, conditional on evidence that specific Decrees and Ministerial Orders, complying with the SC’s recommendations, had entered into force.

At the same time the SC noted that Madagascar had agreed to the following actions: submit a zero quota to the Secretariat for wild skins as it did not intend to export any wild skins in 2014 or in the future; adopt a zero quota for ranched specimens for 2014 and 2015; carry out an inventory of live captive-bred animals at the ranches and set annual export quotas for captive-bred skins and products, based on the results of the inventory and production potential on the farms; evaluate the skin stockpile at the ranches; and determine in consultation with the Secretariat how to dispose of the stockpiles on the international market in 2014 (and 2015 if necessary), taking into consideration whether they were legally acquired or not.

As of the time of writing the suspension had not been withdrawn.

*Crocodylus niloticus* is widely distributed in Madagascar in a variety of freshwater habitats below 1500m. It is most abundant in northwest and western area and in the northeast. The wild population has been estimated at 30,000 to 40,000 non-hatchlings although the basis of this is questionable. In 2015, surveys indicated a high proportion of juvenile and sub-adult individuals in the population (36% of sightings); and based on various indices the adult population was estimated at 1500 to 2000 individuals. However, many wetlands remain unsurveyed, and extrapolating from available relative density estimates in these to an estimate of the total or absolute population size in Madagascar is problematic. Survey results conducted since 2000 suggest that in many areas surveyed the population is increasing or stable. Hunters and local communities
are also said to consider that crocodile abundance has increased over the last few years, attributed to a reduction in wild harvest since 2010. The species is affected by habitat degradation, including loss or alteration of nesting areas. Expansion of the human population has resulted in the local extinction of *C. niloticus* due mainly to habitat loss and public safety concerns.

*Crocodile niloticus* was categorised by IUCN as being globally of Lower Risk/least concern in 1996 (needs updating).

Past annual export quotas for wild skins have been 100 to 200 for 1992 to 1997, 500 to 750 wild skins for 1998 to 2007 and 200 wild skins for 2008 to 2011. In addition to the export quotas, a much larger (annual average of ca. 5000 for 1987 to 2009 and ca. 2500 for 2010 to 2015) wild harvest of skins has been permitted for the artisanal industry for the production of finished leather goods and taxidermy specimens (75% of which are said to be sold and used domestically). Export during 2010 and 2015 may have accounted for ca. 625 wild crocodiles per year. Artisanal products purchased by tourists and taken with them as personal effects (pursuant to *Res. Conf. 13.7 (Rev. CoP16)*) have continued to be exported from the country. Specimens are considered exempt and they are not accounted for in Madagascar's trade data.

Madagascar wishes to maintain its population of *C. niloticus* in Appendix II under *Res. Conf. 9.24 (Rev. CoP16) Annex 2(a), paragraph B* rather than to *Res. Conf. 11.16 (Rev. CoP15)*.

The Supporting Statement notes that the proposal reflects the rebuilding of a revised management paradigm for Madagascar's *C. niloticus*, established in 2014 and aimed primarily at sustaining and rebuilding the wild population, and consolidating and better regulating the wild harvest associated with the artisanal industry. The new approach entails moving towards export of products of wild harvested crocodiles that have been processed through the artisan industry. Details of the proposed system are supplied in the Supporting Statement. Some of these are included in the proposed annotation. These are as follows:

1) **Harvest size limits (skins must be over 1 m and less than 2.5 m in total length)**

   All wild skins must pass through registered artisanal tanneries, of which there are currently 14. Each tannery is obliged to register information on each skin which is tagged on arrival; this information is submitted to the relevant Government department on a quarterly basis. Random inspections are carried out on tanneries by Government officials. Morphometric relationships predicting the size of crocodiles from which finished products were derived have been developed and are used to verify compliance with skin size limits. The Supporting Statement notes these limits may need to be adjusted (up or down) over time, as more information becomes available on the population size, structure and trends.

2) **Wild harvest limited to 3000 animals per year for the first three years (2017-2019)**

   A wild harvest of ca. 5000 per year occurred between 1987 and 2009 and ca. 2500 between 2010 and 2015. The harvest ceiling will be reviewed in 2019. Egg collection will continue to be the main source of stock for ranches in tandem to the wild harvest. Quotas are not specified. Improvements in the egg collection system (in place since 1980s) have been proposed and a “desire to implement these has been expressed”. The proposed egg harvests are considered unlikely to impact detrimentally on the wild population.

3) **No export of raw or processed skins harvested from the wild will be permitted for the first three years**

   As noted above, wild skins are tagged on arrival at artisanal tanneries, so that these are distinguishable from those produced through ranching and captive-breeding, which are tagged in accordance with *Res. Conf. 11.12 (Rev. CoP15)*. Products must also be tagged with a label provided by the Government department. The current paper label has been problematic and new options (e.g. plastic tags, embossing, etc.) are being examined. Very small products (e.g. teeth) have been exempted from the requirements of labelling for the time being. However, small products must still comply with skin/crocodile size limits.

4) **Farm production shall be restricted to ranching and/or captive-breeding, with national skin production quotas**

   Skins produced through ranching and captive-breeding, and being exported, are tagged in accordance with *Res. Conf. 11.12 (Rev. CoP15)*. The Supporting Statement indicates that skins that enter the domestic market will also be tagged, and monitored through the registers maintained by tanneries and manufacturers.

5) **Management including harvest quotas and skin production quotas will be audited and reviewed annually**

   Further provisions not specified in the annotation include:
- A hunting season for wild crocodiles, currently specified as between January and September, but in reality due to the wet season they state that the effective hunting season is April to November.
- Permits to take problem animals must be approved by the relevant Provincial Forestry authority, and the skin must be delivered to the local forestry or local government authority if retrieved. Skins of problem crocodiles larger than 2.5m total length are currently not allowed to enter the domestic or international markets, and remain the property of the Government. However, options are being examined for the legal disposal of such skins.
- Population monitoring. Standard surveys will be undertaken inside and outside harvesting areas.
- Compliance with Article IV, particularly the non-detriment provisions, will be assessed annually based on indices from population surveys and the industry. Management and levels of harvest will be assessed annually, in collaboration with international experts in at least the first three years of the program (2017-2019), and harvest levels may be adjusted up or down after three years, on the basis of these independent assessments.

**Analysis:** The Malagasy population of the *Crocodylus niloticus* was originally in Appendix I and is now in Appendix II under the conditions of Res. Conf. 11.16 (Rev. CoP16). The current proposal entails a detailed, substantive annotation that could be counted as a special measure under Annex 4 of Res. Conf. 9.24 (Rev. CoP16) (sub-para. A 2 a iii)) to be approved by the CoP based on management measures described in the Supporting Statement, provided that effective enforcement controls are in place.

If successfully implemented, it appears that management measures specified in the annotation and in the Supporting Statement would ensure compliance with the Convention, particularly Article IV. As noted above, there have been problems in compliance with the Convention in Madagascar with respect to export of *C. niloticus*, resulting in a recommendation from the Standing Committee to suspend trade with Madagascar in the species in 2010. In 2014 the Standing Committee (SC) agreed that these problems had largely been resolved, but that some final steps were needed. These have not taken place, and the suspension is still in effect.

Madagascar indicated to the SC in 2014 that it did not intend to export wild skins at any time in the future. The current annotation indicates that this restriction would only apply for three years from the date of its adoption.

The proposed annotation contains substantive management measures and is not in conformity with recommendations on the use of annotations in Appendices I and II in Res. Conf. 11.21 (Rev. CoP16), which states that substantive annotations should be confined to designation of types of specimens or export quotas, or inclusion or exclusion of geographically separate populations. Any change to the substantive provisions in it would need an amendment proposal to be approved by the CoP.

**References:**
Information not referenced in the Summary section is from the Supporting Statement.