CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

Seventeenth meeting of the Conference of the Parties
Johannesburg (South Africa), 24 September – 5 October 2016

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Inclusion of the Mt. Kenya Bush Viper *Atheris desaixi* in Appendix II in accordance with Article II, paragraph 2 (a), of the Convention and Resolution Conf. 9.24 (Rev. CoP16), Annex 2 a.

B. Proponent

Kenya*:

C. Supporting statement

1. Taxonomy

1.1 Class: Reptilia

1.2 Order: Squamata

1.3 Family: Viperidae

1.4 Genus and species: *Atheris desaixi* (Ashe, 1968)

1.5 Scientific synonyms: None

1.6 Common names: English: Mt. Kenya Bush Viper, Ashe's Viper

1.7 Code numbers: Not applicable

2. Overview

This proposal seeks to list Mt Kenya bush viper in CITES Appendix to help regulate trade and enhance enforcement for its conservation. Mt. Kenya Bush viper is endemic to Kenya and has a restricted range in mid-attitude forests in central Kenya. The species is reported to be in decline in its known sites to the extent of depletion as a result of habitat degradation and illegal collection. Natural densities are very low and census is very difficult to carry out. No meaningful monitoring of trade is possible without a CITES listing and no records exist as all the trade is illegal. There is evidence of international live trade to meet demands for zoos and private collections mainly in Europe and USA. There is also evidence that it is very hard to breed this species in captivity meaning that majority of species are obtained directly from wild collections.

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3. Species characteristics

3.1 Distribution

Atheris desaixi is a Kenyan endemic species with a restricted range. Two main isolated populations are known; one around Igembe and Ngaya forests in Nyambene Hills and the other at Chuka, south–eastern Mt. Kenya forest (Ashe, 1968, Spawls *et al.* 2002, Malonza & Muchai, 2008, Ngwava, 2010.

3.2 Habitat

Mt. Kenya Bush Viper occur in mid-altitude forests from around 1200-1700m. Mt. Kenya Bush Viper is a forest species, and specifically prefers low bush usually around forest edges or clearings. A recent study reported presence of the species in Chuka and the surrounding farmlands. The extent of suitable habitat is low within human modified areas. The extent and proportion of suitable habitat in natural forest is very low.

3.3 Biological characteristics

Mt. Kenya Bush Viper is one of the African bush vipers that frequent forests and swamps (Visey-Firtzegarld, 1975). The genus comprises about 11 species, 7 of which occur in East Africa; 3 are endemic and 2 near endemic (Spawls et al., 2002). Mt. Kenya Bush Viper is an arboreal, nocturnal and live bearing species like some other vipers (Greene, 1997). Brood size is about 10—13 young who measure 17cm – 22cm (Spawls et al., 2002; Spawls, 2002).

3.4 Morphological characteristics

Mt. Kenya Bush Viper is a medium-sized stout-bodied species and a length of about 60cm.The head is covered with small and strongly keeled scales. Has a beautiful colour and pattern is variable; greenish-black to charcoal black, each scale edged with yellow or yellowish-green creating a speckled effect or a series of yellow loops. On the hind body and tail the speckles may fuse into yellow or yellow zigzags. The belly is yellow on the front half, progressively becoming purplish-black to the rear and under the tail. Females are larger than males.

3.5 Role of the species in its ecosystem

Mt. Kenya Bush Viper prey mainly arboreal species like birds and lizards but occasionally descend on the ground to feed on small mammals-

4. Status and trends

4.1 Habitat trends

Mt. Kenya Bush Viper occurs in moist and dry forests that are under high pressure of human encroachment due to their high agricultural potential and increasing human population. There is ongoing and inferred habitat loss caused by habitat modification and degradation. Recent study failed to find the species in its historically recorded sites that are now within human habitation. There is discernible current and future fragmentation. The study also found that historically the species was commonly found in the last two decades than today (Ngwava, 2010). Apart from Ngaya community forest, all the other sites are outside protected areas.

4.2 Population size

It is very hard to estimate the population size of Mt. Kenya Bush Viper due to its rarity. In its type locality of Chuka it appears to have been almost depleted and intensive searches by experts including the locals yielded only 12 individuals sighted between April and September (Ngwava, 2010). The population in Igembe may as well be depleted or its historical habitat may have been lost as intensive searches were unfruitful (Ngwava, 2010). In Ngaya forest only one individual was found during a one week sampling (Malonza & Muchai, 2008) while subsequent searches were not successful (Ngwava, 2010).

4.3 Population structure

Mt. Kenya Bush Viper lives mostly solitarily. Those which have been found in Chuka area and Ngaya forest were all singles but they can be found in close by bushes (Malonza & Muchai, 2008, Ngwava, 2010).

4.4 Population trends

Serious habitat degradation in combination with ongoing collection, are reasons for concern: Observation rates (encounters) of individuals in the late 1960s was very high (Ashe, 1968), as compared to the recent surveys (Ngwava, 2010). This means that wild collection coupled with habitat degradation has depleted or caused population decline.

4.5 Geographic trends

Mt. Kenya Viper is dependent upon good indigenous forest cover – it is expected that they will disappear in sites under pressure of deforestation, logging or agricultural use. Experts failed to locate substantial individuals in the recent sampling in the species range sites.

5. Threats

Because of its specialized habitat requirement Mt. Kenya Bush Viper is threatened by habitat loss and degradation, reducing the extent and quality of its habitat. These threats includes; Illegal collection, overgrazing, fuel-wood collection, logging and agricultural expansion. Wherever they occur they are in very low numbers and mostly associated with certain short trees. This makes them very vulnerable to illegal collectors who selectively target them. The illegal collectors were reported to use destructive methods that involve cutting down the tree branches/stems to make the vipers easily detectable (Ngwava, 2010).

6. Utilization and trade

6.1 National utilization

No domestic use is known for Mt. Kenya Bush Viper apart from tourist attraction in reptile parks.

6.2 Legal trade

There is an increasing market for Mt. Kenya Bush Viper in the international pet trade but with no legal records (UNEP-WCMC, 2015).

6.3 Parts and derivatives in trade

Only live animals are known to be in trade.

6.4 Illegal trade

Collection and exports of is prohibited but is often ignored by local people. In the European market wild caught individual were selling for €4000 (Source, EC consultation letter, July 2015, UNEP-WCMC, 2015).

6.5 Actual or potential trade impacts

From the method of collection of Mt. Kenya Bush Viper, there is increased habitat destruction and degradation which easily deplete local populations

7. Legal instruments

7.1 National

The species is protected by the Kenya Wildlife (Conservation and Management) Act, 2013 categorised as vulnerable and listed in schedule 4 for special protection.

7.2 International

Not yet listed in the IUCN Red List but its assessment is underway.

8. Species management

8.1 Management measures

No captive breeding in Kenya and all specimens in international trade are from wild caught individuals.

8.2 Population monitoring

There has been rapid assessment of its distribution, abundance and impact of trade on Mt. Kenya Bush Viper (Ngwava, 2010).

8.3 Control measures

8.3.1 International

The species is under review for IUCN Red Listing.

8.3.2 Domestic

The species is protected by the Kenya Wildlife (Conservation and Management) Act, 2013.

8.4 Captive breeding and artificial propagation

Hobbyists report some captive breeding success. But in reality they are not easy to breed in captivity and on a commercial scale and not economically profitable and hence the vast majority are still collected in the wild. (Source, EC consultation letter, July 2015; UNEP-WCMC, 2015).

8.5 Habitat conservation

Mt. Kenya Bush Viper present in Ngaya forest a government protected community forest.

8.6 Safeguards

Inclusion of the species in CITES Appendices will help monitor the trade through the permitting system and detection of illegal.

9. Information on similar species

Mt Kenya Bush Viper cannot be confused with any other bush viper due to its unique coloration and pattern. The IUCN assessment of the Kenya Horned Viper has been done and soon will soon be published under threatened category.

10. Consultations

The species is endemic to Kenya.

11. Additional remarks

Given that this species is endemic and with a restricted range mainly outside protected areas it should be listed to suppress any future demands and control illegal trade.

12. References

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