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 Kenya horned Viper, *Bitis worthingtoni* 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: *Bitis worthingtoni* Parker, 1932

1.5. Scientific synonyms: Keniabitis worthingtoni, 2014

1.6. Common names: English: Kenya Horned Viper

1.7. Code number: Not applicable

2. Overview

This proposal seeks to list Kenya Horned Viper in CITES appendix II so as to regulate and have sustainable legal trade and enhance enforcement for species conservation. Kenya Horned Viper is endemic to Kenya and has a restricted range in high altitude areas of the Rift valley and adjacent highland plateaus. The species populations are reported and inferred to be in decline or depleted in documented. The decline and depletion is as a result of habitat degradation, loss and illegal collection. Estimating wild population size is hard as it occurs in very low densities. No meaningful monitoring of trade is possible without a CITES listing and all current in the species

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 evindence that it is very hard to breed this species in captivity meaning that majority of species in trade all originally came from the wild.

3. Species Characteristics

3.1 Distribution

Kenya Horned Viper is a Kenyan endemic species with a restricted range. The main population is within the Rift valley plateau in areas adjacent to Lake Naivasha including the private wildlife sanctuaries. It may be present on the areas south of Naivasha towards Mt. Longonot and Kedong valley and north through Gilgil and Elmenteita into Nakuru. The other two historical reports are in Uasin Gishu and Kinangop plateaus (Spawls *et al.* 2002; Spawls 2002). It could be in Hells Gate and Lake Nakuru National Parks.

3.2 Habitat

Kenya Horned Viper occurs in high altitude areas grassland and scrub at altitudes of about 1500m and above. Being a terrestrial species it prefers rocky and broken countryside. Its habitat is within the prime agricultural areas for livestock, horticulture and other agricultural activities with high and ever increasing human population (Spawls *et al.* 2002).

3.3 Biological Characteristics

Kenya Horned Viper is one of the typical African viper genera that comprise about 16 species, a terrestrial and live bearing species. The brood is of 7-12 young ones which are roughly about 10cm

3.4 Morphological characteristics

Kenya Horned Viper is a small stout viper of about 35cm. It is a horned viper with a broad, flat, triangular head, thin neck and a short tail. Body covered with small overlapping and keeled scales. A single horn-like structure is raised on each of the eye brows. Body colour is grey and along each flanks a dirty white or cream dorsolateral stripe is present, bordered by a series of semi-circular, triangular or square black markings above and below. There is a dark arrow on top of the head. Underside is dirty-white and heavily stippled with grey

3.5 Role of the species in its ecosystem

Kenya Horned Viper is a terrestrial species preying mainly on ground dwelling animals like small mammals (rodents) some of which are pests to crops and lizards.

4. Status and trends

4.1 Habitat trends

The quality of habitat for Kenya Horned Viper continues to decrease due to increased human population and demand for more land for agriculture.

4.2 Population size

It is very hard to estimate the population size of Kenya Horned Viper due to its rarity. Given its habitat preference and trend in the change of its habitat it is clear that populations are already depleted in most of its historical records especial those outside the floor of the Rift Valley.

4.3 Population structure

Kenya Horned Viper lives mostly solitarily but it possible to find individuals sheltering in nearby covers.

4.4 Population trends

The past and ongoing habitat degradation coupled with illegal collection, are reasons for concern. Reports from areas where they used to be commonly collected show that the species is now rare than ever before. This means that wild collection coupled with habitat degradation has depleted local populations. For instant apart historical records there are no recent museums specimens from Uasin Gishu and Kinangop plateaus meaning they may be locally extinct in these areas. In addition there are no new sites records.

4.5 Geographic trends

Kenya Horned Viper is dependent upon good indigenous bush, grass and scrub cover and is expected to disappear or decline in sites under pressure of slash-and-burn and intensive agriculture.

5. Threats

Being a terrestrial high grassland and scrub species with specialized habitat requirement Kenya Horned Viper is threatened by illegal collection, habitat loss, degradation and wild fires which are common mainly in rangelands such as the private wildlife and livestock sanctuaries in the Rift Valley. All these reduce the extent and quality of its habitat.

6. Utilization and trade

6.1 National utilization

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

6.2 Legal trade

There is an increasing market for Kenya Horned Viper in the international pet trade but with no legal records.

6.3 Parts and derivatives in trade

Only live animals are known to be in trade.

6.4 Illegal trade

Collection from the wild and exports of this species is prohibited. In the European market, wild caught individual are offered at €1000 (Source, EC consultation letter, July 2015; UNEP-WCMC, 2015).

6.5 Actual or potential trade impacts

Kenya Horned Viper is easy to collect because is a slow moving species that can result to local population depletion.

7. Legal instruments

7.1 National

The species is protected under the national Wildlife Conservation and Management Act, 2013 and categorised as a protected species in schedule 4 for special protection.

7.2 International

The species has no international protection. It is not yet listed in the IUCN Red List.

8. Species management

8.1 Management measures

There are no captive breeding facilities for commercial purposes in Kenya and all specimens in international trade are from wild caught individuals.

8.2 Population monitoring

No population monitoring has been done but it is inferred from the ever declining extent and quality of habitat that the species population is declining and even depleted in most of its sites.

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 under the Wildlife Conservation and Management Act, 2013

8.4 Captive breeding

Hobbyists report some captive breeding success. However, there are no documented cases of breeding of the species in captivity on viable commercial scale and hence the vast majority of specimens in illegal market are from the wild (Source, EC consultation letter, July 2015; UNEP-WCMC, 2015).

8.5 Habitat conservation

Kenya Horned Viper should be present in Hell's Gate National Park-Naivasha as well as Lake Nakuru National Park.

8.6 Safe guards

Inclusion of the species in CITES Appendix II will help monitor the trade through the permitting system and ensure a sustainable trade.

9. Information on similar species

Kenya Horned Viper cannot be confused with any other bush viper due to its unique coloration, pattern and appearance.

10. Consultations

The species is endemic to Kenya.

11. Additional remarks

Given that this species is endemic, has a restricted and decreasing range it should be listed so as to regulate and have sustainable trade. The IUCN assessment of the Kenya Horned Viper has been done and soon will be published under threatened category.

12. References

Spawls S. 2002. Of vipers and mountains. SWARA magazine East African Wildlife Society. 25:24-28.

Spawls, S., K. Howell, R. Drewes and J. Ashe 2002. A field Guide to the Reptiles of East Africa: Kenya, Tanzania, Uganda, Rwanda and Burundi, Academic press.

UNEP-WCMC, 2015. Review of species which may warrant further consideration in preparation for CoP17. Technical report 25pp.