EXAMINATION OF PROPOSALS TO AMEND APPENDICES I AND II

A. Proposal

Inclusion of *Lycodryas citrinus* in Appendix II.

*Lycodryas citrinus* (Domergue, 1994)

This species has a very limited range and specific habitat, yet is highly exploited. It is not included in either the IUCN list or the CITES Appendices. It was classified as 'data deficient' under the most recent CAMP 2001 evaluation. However, new, recently-acquired information reveals the danger that this species faces, mainly with regard to commercial exploitation.

The colourful *Lycodryas citrinus* is Madagascar's most spectacular snake because of its bright yellow and black alternating transversal stripes. The species description originates from a single specimen harvested in a deciduous forest of the Morondava region, in western Madagascar. Another individual was also captured in the same type of forest in the same region, but no subsequent collection has been reported from this locality since. The new collections that have been reported all originate from two places with rather specific plant and geological formations. Indeed, all recent data indicate that this species occurs in semi-deciduous forest that grows on karstic formations ('tsingy') in western Madagascar. The area lies between the Manambolo River to the south and the Mahavavy River to the north. However, no collection has been reported for the area between the Manambolo and Tsiribihina Rivers.

The two specimens harvested in the forest to the south of the Tsiribihina River are probably part of an isolated population. The sites where specimens are currently known to occur are thus two protected areas: the Bemaraha and Namoroka National Parks.

Moreover, field surveys indicate that the distribution of this species is linked to rather specific ecological factors. The species is in fact arboreal and occurs in shrub and bush formations associated with small, shallow, highly humid canyons which are sheltered from the wind. The species thus seeks out the hottest but least exposed places. This specific habitat renders this species vulnerable to harvesting. Those who know the region well know exactly where they can capture a *Lycodryas citrinus* (Raselimanana, pers. comm.).

The snake's filiform shape, vividly-coloured and shiny aspect, and docile character make it very attractive to animal lovers and experts alike. The sites in which it is currently known to occur are in protected areas.

Local villagers have confirmed that certain unscrupulous persons foray into these parks to harvest this snake at the request of collectors.

This situation in fact reinforces the need to implement an effective control system through the incorporation of *Lycodryas citrinus* in CITES Appendix II, in order to ensure the sound and transparent management of its trade and collection.

B. Proponent

Madagascar.

C. Supporting statement

1. Taxonomy

1.1 Class: Reptilia

1.2 Order: Squamata

1.3 Family: Colubridae

1.4 Species: *Lycodryas citrinus* (Domergue, 1994)

1.5 Scientific synonym: *Stenophis citrinus*

1.6 Common names: English:
French:
Spanish:

2. Biological parameters

*Lycodryas citrinus* is a filiform snake with a small head and protruding globular eyes. It is not very long; the total length of the holotype was 415 mm (Domergue, 1994). This snake is nocturnal, starting to come out at nightfall. Its gracile build and prehensile neck and tail enable it to slide through branches and twigs.

Its dorsal and ventral sides are bright, shiny yellow with glossy black rings. When immobile, the animal looks like an amusing children's toy made of very shiny, yellow and black plastic. This characteristic is unique to this species.

This species reproduces during western Madagascar's hot rainy season. It is among the rare ovoviviparous snakes which give birth to live young resembling the adults (Miguel *et al.*, 1998). These authors report that a pregnant female kept in captivity gave birth to two young that reached 18 to 20 cm in length after two days.

In the wild, *Lycodryas citrinus* feeds on lizards. The remains of geckos and *Brookesia* (Raselimanana, pers. comm.) were found in the stomach contents of an adult.

2.1 Country of Origin

Endemic to Madagascar.

2.2 Distribution

Recent collection data indicate that the range of *Lycodryas citrinus* is confined to the area between the Manambolo River to the south and the Mahavavy River to the north, and the species was reported in only two sites: the Bemaraha Tsingy National Park and the Namoroka Tsingy National Park (Raselimanana pers. comm.), covering an estimated area of 1,849 $km^2$ (ANGAP).

2.3 Habitat availability

This is an arboreal species found in more or less intact natural forests. It occurs in less dense shrub vegetation found on highly eroded limestone formations, and in hot, sub-humid microclimates such as in small, shallow canyons. The canopy is rather open and the undergrowth is not very dense.

2.4 Population status

No data available. In the wild, the animal is rather plentiful locally.

2.5 Population trends

No data available yet.

2.6 Geographic trends

The occurrence of this species between the Manambolo and Tsiribihina Rivers is highly likely if the individuals south of the Tsiribihina really are from this region.

2.7 Role of the species in its ecosystem

As a predator, this species helps keep a balance in the karstic ecosystem of western Madagascar, in the transfer of energy and the cycle of matter.

2.8 Threats

The main threat this species faces is illegal harvesting. Field harvesters are willing to take risks and pay people considerable amounts of money for the collection of these animals, even in protected areas. In Antsalova, for example, some carriers have said they would travel several dozen kilometres in search of specimens of this species, for an average daily salary of MGF 25 000. A farmer from the Bemaraha National Park area said that illicit harvesters often entered the park with local guides to collect animals, mainly geckos and snakes.

3. Utilization and trade

3.1 National utilization

No data available.

3.2 Legal international trade

It is highly likely that all Lycodryas citrinus specimens entering international trade are from the two protected areas (the Namoroka and Bemaraha National Parks), or at least from the areas surrounding the reserves. Licit trade is in fact supplied with potentially illicit harvests.

According to data on fauna exports for the years 2001, 2002 and 2003 (MEF, 2001; 2002; 2003), four live Lycodryas citrinus individuals were exported to the United States of America in 2001; 15 were exported to Switzerland in 2002; and there were no exports in 2003. This drop in exports for 2003 could be explained by the effectiveness of the strategy adopted by officials and the conservation project implemented in the commune of origin, together with the active help of local populations. Indeed, since 2002, these entities have organized screenings for goods, even in handbags taken out of the region, in order to prevent the trafficking of local wild animals, especially local endemic ones such as Lycodryas citrinus and Brookesia perarmata. However, the animal may be exported under a false name, or in some cases, declared under names that only go so far as the genus.

3.3 Illegal trade

The people of Antsalova have reported the presence of Lycodryas citrinus carcasses in specific places, where they had been tossed for reasons that are unknown. They are convinced that these animals come from the reserve located a few kilometres from the city. It is believed that the criminals (the local harvesters) do this when they are unable to bring their goods to destination owing to strict controls at the Antsalova airport.

3.4 Actual or potential trade impacts

While no study on trade impacts has been conducted, this species' particular habitat makes it highly likely that collections are carried out in the same area (Raselimanana & Rakotomalala, an unpublished report), which could bring about a sharp decline in the population level, especially since collection is illegal.

3.5 Captive breeding for commercial purposes

No data available on captive breeding in the country.

4. Conservation and management

4.1 Legal status

4.1.1 National

*Lycodryas citrinus* is found in two protected areas. Nevertheless, the species is not protected or managed under the current legislation.

4.1.2 International

This species is not included in either the IUCN list or the CITES Appendices.

4.2 Species management

4.2.1 Population monitoring

No monitoring.

4.2.2 Habitat conservation

The habitat falls within the network of protected areas, and, in principle, benefits from conservation efforts like the other ecosystems.

4.2.3 Management measures

No management measures can be in place until the species becomes protected by law.

4.3 Control measures

4.3.1 International trade

No data available.

4.3.2 Domestic measures

Local officials and CAN-FORET officials at Antsalova have carried out pre-boarding passenger and baggage screenings in order to prevent the trafficking of wild animals from protected areas.

5. Information on similar species

This is a very unique species with specific characteristics.

6. Other comments

Two field studies need to be conducted urgently: the first is an assessment of the population density for each area of distribution; the second is a verification and identification of the sites where the species is presumed to occur outside the protected areas.

7. Additional remarks (if necessary)

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8. References

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