Uromastyx geyri Müller, 1922

FAMILY: Agamidae

COMMON NAMES: Sahara Mastigure, Saharan Spiny-tailed Lizard, Geyr's Dabb Lizard (English); Fouette-queue du Sahara (French); Lagarto de Cola Espinosa de Geyr (Spanish)

GLOBAL CONSERVATION STATUS: Currently being assessed by IUCN Global Reptile Assessment.

SIGNIFICANT TRADE REVIEW FOR: Algeria, Mali, Niger

Range States selected for review

Range State	Exports* (1994-2003)	Urgent, possible or least concern	Comments
Algeria	0	Least concern	No trade reported
Mali	15,940	Possible concern	Level of harvest for export likely to be sustainable but no systematic population monitoring in place to confirm non-detriment.
Niger	14,217	Possible concern	Level of harvest for export likely to be sustainable, but no systematic population monitoring in place to confirm non-detriment.

* Excluding re-exports

SUMMARY

Uromastyx geyri is a relatively small, slender, long-tailed dabb lizard. The species is found on rocky outcrops in semi-desert areas in southern Algeria, eastern Mali and northern-central Niger, where it is considered rare. The species is exported for the pet trade, with demand predominantly from the USA, Europe and Japan. *U. geyri* has been described as rare, but has an extensive range, with an extent of occurrence of perhaps 100 million hectares or more. If it occurs at population densities comparable to those of other *Uromastyx* species, its population may number several hundred thousand individuals so that harvest for the recorded level of export is unlikely to have a significant impact on wild populations.

All *Uromastyx* species were listed in CITES Appendix II in 1977. The Nomenclature Committee recommends adoption of Wilms (2001) as the basic reference for *Uromastyx. U. geyri* are recognised by some as sub-species of *U. acanthinura*, with the result that there may be some confusion in the reporting of trade in both species. Trade in this species was not consistent over the period 1994-2003, with the majority of specimens being exported from Niger and Mali between 2001 and 2003. Niger exported a total of just under 16,000 wild-caught specimens in the period 2001-2003. Mali set export quotas of 32,000 from 2001 onwards but recorded exports have been nearer 10% of this figure on average over these three years. Benin, not considered a range State, also traded large numbers, primarily re-exports.

No systematic population monitoring is known to be carried out in either Mali or Niger and no information was available on the basis on which non-detriment findings have been made, or on how Mali's export quota was set. Given the significant trade volumes and potential rarity of the species, trade from both Mali and Niger has been classified as of Possible Concern. No trade has been reported from Algeria and therefore is of Least Concern.

SPECIES CHARACTERISTICS

The CITES Nomenclature Committee recommends adoption of Wilms (2001) as the basic reference for *Uromastyx* (CITES, 2004). This considers *U. geyri* to be a distinct species, although it is recognised by some as a sub-species of *U. acanthinura (*Wilms and Fagre, 1995).

Uromastyx geyri is a relatively small (average length 34 cm), slender, long-tailed dabb lizard, with light beige to orange ground colour and a pattern of light dots (Schleich *et al.,* 1996). It is found on rocky

outcrops in semi-desert areas in southern Algeria, eastern Mali and northern-central Niger and has been recorded at altitudes from 500 to 2000 m (IUCN, *in prep*.).

Little specific information is available on the ecology of this species in the wild. *Uromastyx* species in general are oviparous with clutch sizes between 8 to 20 eggs. Eggs are laid in female burrow systems in the late spring-early summer or at the beginning of the dry season. They hatch after an incubation period of approximately 8 to 10 weeks (Bahiani *et al.*, 1997; Schliech *et al.*, 1996; Zug *et al.,* 2001) and the hatchlings stay within the burrow system for several weeks to months before leaving to establish their own burrows (Peters, 1971). The smaller *Uromastyx*, of which *U. geyri* is one, may reach sexual maturity in two or three years (Gray, 1995). Wild-caught *Uromastyx* specimens have been know to live for 20 years in captivity with estimates of a lifespan of 25 years (Bartlet, undated).

As adults, *Uromastyx* species appear to be exclusively herbivorous, feeding on a wide range of desert vegetation. Young animals in captivity, at least, readily take insects and other invertebrates (Gray, undated; Pough *et al.,* 2001; Schleich *et al.*, 1996).

The species has been reported as rare (IUCN, *in prep*.) but evidently has a wide range, with an extent of occurrence (based on the distribution provided in Wilms and Böhme (2000)) of around 100-120 million hectares. No estimates of population densities for *U. geyri* have been located, but studies of the closely related *U. acanthinura* in very arid environments in Algeria have estimated population densities of between 0.1-1.0 individuals per hectare (Schliech *et al.,* 1996; Vernet *et al.,* 1988), while studies of *U. aegyptius* in somewhat more productive environments in the Middle East have found densities of up to six animals per hectare (Robinson, 1995). If the species occurs in even a small portion of its area of occurrence at comparable densities, its global population is likely to number several hundred thousand, if not millions.

A draft assessment undertaken within the framework of the IUCN Global Reptile Assessment (IUCN, *in prep*.) indicates that the species is affected by collection for subsistence use for food and for subsistence use and domestic trade for medicine, as well as by collection for export in the pet trade. However, no data on rates of collection or intensity of exploitation were available. The assessment also indicates that the species is affected by habitat loss although most other authorities note that the desert habitat of this and other *Uromastyx* species is generally not suitable for extensive conversion to agriculture. Livestock grazing is likely to affect food availability for this species through direct competition.

Participants at a workshop in Malaga assessed the species within the range States bordering the Mediterranean as Near Threatened, citing a significant decline because of over-collection for food, medicine and the international pet trade, and habitat degradation, thus making the species close to qualifying for Vulnerable under Criteria A2cd. (IUCN, *in prep*.).

INTERNATIONAL TRADE

A number of *Uromastyx* species are internationally traded for the pet trade, and all were listed in CITES Appendix II in 1977.

Table 1: Exports excluding re-exports of live wild *Uromastyx geyri*, 1994-2003

Export Country	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Niger								3100	3269	9571	**15940**
Mali			2400	1617			200	3000	4600	2400	**14217**
Total	**0**	**0**	**2400**	**1617**	**0**	**0**	**200**	**6950**	**9694**	**12371**	**33232**

(Source: CITES trade statistics derived from the *CITES Trade Database*, UNEP World Conservation Monitoring Centre, Cambridge, UK.)

COUNTRY ACCOUNTS

Algeria

Status:

Recorded from southern Algeria, specifically the Air and Hoggar Mountains (Wilms and Böhme, 2001). The species is considered rare in Algeria (IUCN, *in prep*.).

Management and trade:

No trade was reported in *U. geyri*. Small numbers (ca 100 in total) of *Uromastyx* of unknown origin, recorded either as *Uromastyx* spp. or *U. acanthinura,* have been recorded by Spain as imported from Algeria in the period 1994-2003. *Uromastyx* species recorded from Algeria (following Wilms and Böhme, 2000) are *U. acanthinura, U. dispar* and *U. geyri*. Part of the species' range is protected in the Hoggar or Ahaggar National Park in Algeria (IUCN, *in prep*.). In the absence of reported trade in this species and low levels of trade at the genus level, trade from Algeria is considered Least Concern.

Mali

Status:

The species is known from the north-eastern part of the country. Joger (2003) estimated the total population for the country at around 7,500 individuals although given the extent of occurrence in Mali this seems low, and its basis requires clarification.

Management and trade:

Just over 14,000 specimens have been recorded as exported from Mali in the period 1994-2003 with most (10,000) in the most recent three years (2001-2003).

Mali additionally reported the export of over 23,000 specimens of *Uromastyx* spp. between 1996 and 2002. Following Wilms and Böhme (2000), two species of *Uromastyx* occur in Mali: *U. geyri* and *U. dispar*, with this trade therefore potentially involving either.

Mali set export quotas of 32,000 live specimens per year of *U. geyri* in 2001, 2002, 2003, 2004 and 2005. Recorded exports have been approximately 10% of these quotas on average over the years 2001 to 2003. In 2006 the quota was reduced to 2,000 specimens (along with a quota of 30,000 for *U. dispar (qv*), not previously under quota). The basis for these quotas is not clear and in the absence of information on the status of *U. geyri* in Mali exports are considered of Possible Concern.

Niger

Status:

Reported from the Air region in northern central Niger (IUCN, *in prep*.; Schleich *et al.,*1996).

Management and trade:

A total of just under 16,000 wild-caught specimens have been recorded as exported from Niger in the period 1994-2003, all in the last three years (2001-2003). Trade for 2002 and 2003 are based on reported imports only, with no corresponding exports recorded in CITES annual report data. In 2001 Niger also reported the export of just over 1,200 specimens declared as captive-bred. Niger set export quotas of 15,000 in 2004 and 10,000 in 2005.

The UNEP-WCMC CITES Species Database, following Wilms and Böhme (2000), currently lists *Uromastyx geryi* as the only *Uromastyx* species occurring in Niger. However, *U. dispar* (as recognised by Wilms and Böhme, 2000) has been recorded in adjacent parts of Chad, Mali and Algeria, and it is likely that this species also occurs there. The latter, like *U. geyri*, is sometimes considered a subspecies of *U. acanthinura,* just over 300 specimens of which were recorded as exported from Niger in 2001. Given the lack of information on the status of the species in Niger and the significant levels of exports, trade from Niger is considered of Possible Concern.

PROBLEMS IDENTIFIED THAT ARE NOT RELATED TO THE IMPLEMENTATION OF ARTICLE IV, PARAS 2(a), 3, or 6(a)

In 2001 Niger reported the export of just over 1,200 specimens declared as captive-bred. Ranched specimens from Benin and Togo have also been recorded in more recent years. Although *Uromastyx*

spe + cies are bred in captivity, they are not known to be particularly easy to breed (Bartlet, 2003), and no information has been found on captive breeding programmes in these countries. The origin of these specimens may therefore merit further investigation.

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