Uromastyx dispar Heyden, 1827

FAMILY: Agamidae

COMMON NAMES: Sudan Uromastyx, Sundanese Uromastyx (English)

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

SIGNIFICANT TRADE REVIEW FOR: Algeria, Chad, Mali, Mauritania, Sudan

Range States selected for review

Range State	Exports* (1994-2003)	Urgent, possible or least concern	Comments
Algeria	0	Least concern	No trade reported
Chad	0	Least concern	No trade reported
Mali	125,362	Possible concern	Primary exporter for the species; no systematic population monitoring in place or basis for ensuring non-detrimental nature of exports was available; Mali also exports considerable quantities of other *Uromastyx* species.
Mauritania	0	Least concern	No trade reported
Sudan	2	Least concern	Insignificant exports

*Excluding re-exports

SUMMARY

Uromastyx dispar occurs in a broad band across northern Africa, from Mauritania and the southern part of Western Sahara east to northern Sudan and (probably) extreme southern Egypt. It is found in arid areas with rocky slopes in mountain valleys.

Uromastyx species are internationally traded for the pet trade. All species of *Uromastyx* were listed in CITES Appendix II in 1977. *U. dispar*, commonly known as the Sudan Uromastyx, currently dominates the international trade in *Uromastyx* species, with high levels of reported exports from 1998 onwards. The USA is the main reported importer of the species.

The main exporter of *U. dispar* over the period 1994-2003 was Mali. There is little information on the size of the population of this species within Mali or elsewhere and therefore it is not possible to determine whether harvesting for international trade is detrimental to wild populations. However, if it occurs at population densities comparable to those of other *Uromastyx* species, its population may number several hundred thousand at minimum, and quite possibly several million, so that exports are likely to be well be within sustainable limits. However, in the absence of concrete information on the basis of non-detriment findings, the high level of trade in this species from Mali should be considered of Possible Concern. Zero or insignificant exports from other range states are of Least Concern.

SPECIES CHARACTERISTICS

The CITES Nomenclature Committee recommends adoption of Wilms (2001) as the basic reference for *Uromastyx* (CITES, 2004). This recognises *Uromastyx dispar* as a separate species from *U. acanthinura*, although it has been in the past considered a subspecies of the latter. It considers *U. maliensis,* described by Joger and Lambert (1996) and still treated by some as a separate species, as a synonym for *U. dispar.*

Uromastyx dispar, commonly known in the pet trade as the Sundanese Uromastyx, has a brownish head with light spots, the back pale brown with dark spots and legs dark brown. Adults reach an average length of 36 cm (Walls, 1996).
The species occurs in arid areas with rocky slopes in mountain valleys. It can be found in palm oases and fields such as pastureland (IUCN, *in prep*). This species has a fragmented range and occurs at altitudes from 100 up to 2,000 m in Algeria, Chad, Mali, Mauritania, Sudan, Western Sahara (UNEP –WCMC, 2006; IUCN, *in prep.*). Some consider that the species also occurs in Somalia (Bartlet, 2003).

Little specific information is available of the biological characteristics and ecology of *U. dispar* in the wild. *Uromastyx* speices in general are oviparious 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 and hatch after an incubation period of eight to ten weeks (Bahiani *et al.*, 1997; Schliech *et al.*, 1996; Zug *et al.,* 2001). 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. dispar* is one, may reach sexual maturity in two or three years (Gray, 1995). Wild-caught *Uromastyx* specimens have been known to live for 20 years in captivity with estimates of a life span of 25 years (Bartlet, undated).

Like other *Uromastyx* species, *U. dispar* appears to be entirely or very largely herbivorous as an adult; juveniles, in captivity at least, feed enthusiastically on insects and other invertebrates if these are offered (Gray, undated; Pough *et al.,* 2001; Schleich *et al.*, 1996).

Few population data are available although preliminary information from the IUCN Global Reptile Assessment (IUCN, *in prep.)* indicates that it can be locally common. Vernet *et al.* (1988) in a study in a highly arid environment at Beni-Abbes in Algeria estimated densities of the very closely related *U. acanthinura* at 0.1-1.0 individuals per hectare. Robinson (1995) found population densities of the similar and also closely related *U. aegyptius* several times that (4.4-6.3 individuals per hectare) in a still arid but somewhat more productive environment in Kuwait.

In the absence of population information we sought to estimate the probable order of magnitude of the species' population using available information on distribution and densities. From the estimated distribution provided by Wilms and Böhme (2000), the extent of occurrence is some 200 million hectares. Given that the species reportedly has a fragmented range and using the lower end of the population density estimates given above, it seems likely that the population numbers many hundreds of thousands of individuals, and quite possibly several million.

The draft of the IUCN Global Reptile Assessment indicates that the species is threatened by over-harvesting for the international pet trade, and subsistence use for food and medicinal purposes. Habitat loss is not noted as a current or predicted future threat to this species (IUCN, *in prep*.).

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

Uromastyx species are internationally traded for the pet trade. All species of *Uromastyx* were listed in CITES Appendix II in 1977.

Table 1: Exports excluding re-exports of live wild *Uromastyx dispar* from range States, 1994-2003

Export Country	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Mali			2433	967	18012	13778	15303	26955	29114	18800	**125362**
Sudan									2		**2**
Total	**0**	**0**	**2433**	**967**	**18012**	**13778**	**15303**	**26955**	**29116**	**18800**	**125364**

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

COUNTRY ACCOUNTS

Algeria

Status:

Occurs in south-western Algeria.

Management and trade:

No trade in *U. dispar* was reported although between 1994 and 1997 16 specimens recorded as *Uromastyx spp*. were re-exported from Algeria, which may have been *U. dispar*. After this time Algeria's only *Uromastyx* exports were *U. acanthinura.* Trade is of Least Concern.

Chad

Status:

Recorded from northern and eastern Chad in the regions of the Tibesti and Ennedi Mountains (Wilms and Fagre, 1995).

Management and trade:

No trade reported in *U. dispar*. Chad has exported one specimen of *Uromastyx acanthinura* over the 10-year period. However, Chad is not considered to be a range State of *U. acanthinura* and therefore this may have been *U. dispar,* which is the only *Uromastyx* species known to occur in the country and considered by some to be a sub-species of *U. acanthinura.* In the absence of reported trade in this species and low levels of trade at the genus level, trade from Chad is considered Least Concern.

Mali

Status:

Occurs in northern and eastern Mali. No population data available.

Management and trade:

The most significant exporter of *Uromastyx dispar* was Mali, from which the gross trade of 125,362 specimens was reported. Particularly high quantities were exported from 1998 to 2003. In addition, Mali has exported 23,397 specimens of *Uromastyx spp.* between 1996 and 2002, which could be *U. dispar* or *U. geyri*, the only two species known to occur in the country. Furthermore, Mali has recorded the export of *U. acanthinura,* which is not known to be present in Mali, although *U. dispar* and *U. geryi* are considered sub-species of *U. acanthinura* by some authors. In addition Mali reported the export of 1,297 captive-bred specimens in 2002.

Exports in 2004 have declined to around 10,000, although it is not clear whether this is part of a long-term trend or not.

From 2001 to 2005 Mali set export quotas of 32,000 specimens of *U. geyri,* for which trade was considerably lower than for *U. dispar*. However, a quota of 30,000 *U. dispar* has been set for 2006 and the quota for *U.geyri* reduced to 2,000.

Export may be within sustainable limits but population information is lacking and it appears that the wild population is not monitored, no quotas were set for this species until 2006 and no information has been found on whether non-detriment findings have been established and, if so, on what basis. Therefore the trade in this species from Mali is of Possible Concern.

Mauritania

Status:

No information available.

Management and trade:

No exports have been recorded from Mauritania. Ten specimens of *U. acanthinura* were exported from Mauritania in 2000. Some have identified Mauritania as a range State for *U. acanthinura*, alternatively these could be specimens of *U. dispar*, which is considered by some as sub-species of *U. acanthinura*. In

the absence of reported trade in this species and low levels of trade at the genus level, trade from Mauritania is considered Least Concern.

Sudan

Status:

Recorded in northern Sudan (Welch, 1982) and western Sudan, with a single record from Wadi Halfa (Baha El Din *in litt*., 2006).

Management and trade:

Sudan exported two specimens of *U. dispar* in 2002. Exported specimens of *U. acanthinura, U. ornata, U ocellata and U. aegyptia* have also been recorded. Trade in *U. dispar* from Sudan is of Least Concern.

Other countries NOT SELECTED FOR REVIEW

The range of *U. dispar* is also believed to extend to the Adrar Souttouf region of Western Sahara (IUCN *in prep*.).

CAPTIVE BREEDING

Table 2: Reported trade in captive-bred (C) and ranched, (R) specimens (re-exports excluded)

Export Country	Source	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Mali	C									1297		**1297**
El Salvador	C								16	4732	1880	**6628**
Ghana	R										100	**100**
USA	R								20			**20**
Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**36**	**6029**	**1980**	**8045**

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

Mali reported the export of 1,297 captive-bred specimens in 2002. As well as re-exporting *U. dispar*, Ghana has started to export specimens as ranched. El Salvador's reported exports included over 6,500 specimens recorded as captive–breed in 2002 and 2003. However, imports into El Salvador of this species were only recorded from 2001 (1,560 individuals; 3,000 in 2002; 500 in 2003). Given that the genus is difficult to breed in captivity, current captive-breeding facilities in these countries should be verified to ensure exports recorded as captive-bred or ranched are not wild exports or re-exports. Noting that wild-collected specimens are not always easily acclimatised and mortality amongst them is not uncommon, some hobbyists recommend keeping captive-bred or ranched rather than wild-caught specimens. Captive-bred *U. dispar* may therefore sell for higher prices than wild specimens, and captive-breeding may gradually replace wild harvesting as techniques improve (Bartlet, 2003).

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

The taxonomy of the genus *Uromastyx* and the geographical distribution of individual taxa require clarification.

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