



INDIAN MONITOR LIZARDS: A REVIEW OF HUMAN UTILISATION PATTERNS

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Popular herp literature is replete with anecdotes concerning the human utilisation of monitor lizards in India. Here, I have attempted to review such literature, with data from often unconsulted sources, that provide information on the utilisation of these large predatory lizards by man for food, for manufacture of luxury items or traditional medicines.

Prehistoric records

Upper Palaeolithic cave paintings at the Bhimbetka Rock Shelters, near Bhopal, central India, discovered in 1957, feature many of the local animals, including monitors. Since all the species figured are thought to have been hunted by early man for food, it provides perhaps the first record of human utilisation of monitors, over 10,000 years ago. An excellent documentation of these paintings, with brief remarks on 'lizards' can be found in Wakankar and Brooks (1976). Similar paintings, illustrated by Carr (1963), of monitor lizard and other animals, are to be found in certain caves in Australia, executed by the aboriginals. It is thought that by painting and repainting their prey species on the cave walls, early man hoped of the continued survival of their prey species.

Internal commercialisation

Few parts of a monitor lizard are thrown away : eggs are considered a delicacy and the entire animal is also eaten (Murthy 1978, 1988, Anon. 1980); oil from fat is used in the treatment of failing eye sight (Murthy 1988) and in cooking (Auffenberg 1986); the skin is highly prized and used in the manufacture of various leather goods, including drums (Whitaker and Whitaker 1980) and scabbards for kukris (Das 1988).

Unani, the Greco-Arabian system of medicine which is part of the Indian materia-medica recommends the use of various body parts of monitors to cure numerous ailments. The flesh of freshly-killed monitors causes healing in case of thorn pricks and bites of poisonous animals (Hussain 1771, Khan 1911, Vohora and Khan 1979), besides curing tuberculosis, skin problems and sexual

debility (Nadkarni 1954, Vohora and Khan 1979). Monitor fat is an aphrodisiac and the excretion used in the treatment of eye and skin diseases (Hussain 1771, Khan 1911, Vohora and Khan 1979).

Travelling hakims or country doctors who visit the plains during the winter exhibit a variety of drugs and tonics derived from animal sources. The desert monitor (*Varanus griseus*) is the commonest varanid in a hakim's shop, though the land (*Varanus bengalensis*) and yellow (*Varanus flavescens*) monitors may occasionally turn up. Chakraborty and Chakraborty (1987) reported on collection of *V. flavescens* by locals at Birbhum District, West Bengal, for sale to hakims.

An important manufacturer of leather, a fairly significant number of monitors are believed to be in India's the luxury leather trade. Several leather shops at Calcutta's New Market, display products made from these reptiles (Das 1988a). A row of shops in the same market, run by Chinese, offer custom-made lizard shoes to their wealthy clients. The flesh of monitors, until recently, was sold in the market of Thakurpukur, south of Calcutta, and the buyers were presumably low-caste Hindus.

Thus, a significant drain on wild populations of monitors, as a result of internal commercialisation is suspected.

As population and status data are particularly difficult to get, it is hardly surprising that almost no information on past populations exist. The naturalist Senapati (circa 1980) wrote, 'Every hedge in every village in Puri district used to have a godhi as monitor lizards are called in Oriya. In 1903, during my childhood, at Garidipanchan, I would come across the godhi four times a day. But now I have been living in the Puri district for the last twenty years and have seen only one, which was chased by dogs into my house at Bhubaneswar'.

Senapati continues, 'Godhi skin is used to make ladies handbags, and this has resulted in its extermination'.

Elsewhere, the group is thought to have suffered as badly. Dharmakumarsinhji (1978), an experienced naturalist, commented on the decrease of monitor lizards in Gujarat's Kathiawar region, as did Daniel (1970) of the 'once common lizard', both authors presumably referring to *Varanus bengalensis*.

The Indian Wildlife (Protection) Act of 1972 gives legal protection to all the four species of monitors found in the country:

SCHEDULE I : *Varanus flavescens*

SCHEDULE II : *V. griseus*, *V. salvator* and *V. bengalensis*

Foreign Trade

Though the export of reptiles from India has been banned since 1979, large numbers of skins of snakes and monitors are believed to be involved in the clandestine trade. The Convention on International Trade on Endangered Species of Wild Flora and Fauna

(CITES) lists *Varanus flavescens*, *V. griseus* and *V. bengalensis* under Appendix - I, indicating these may not be traded in countries that have ratified CITES, while *V. salvator* is in Appendix -II, and can be exported/imported by these countries, provided shipments are accompanied by appropriate papers from the country of origin.

Brautigam (1986) listed 120 unspecified items manufactured from *Varanus salvator* skins, which were reportedly exported from India, via Mexico, to the U.S.A. in 1983. Among the signatories of CITES, Thailand has entered reservation on *V. bengalensis* and Japan on *V. bengalensis*, *V. flavescens* and *V. salvator* (Gaski 1988).

In 1985, at the 5th meeting of CITES in Buenos Aires, Argentina, Bangladesh's proposal to transfer both *Varanus flavescens* and *V. bengalensis* from CITES Appendix-I to Appendix -II (which would have allowed the country to legally export skins of these 2 species) was not voted, as no delegates from the country were present (Barzado and Inskipp 1985). Large numbers of varanid skins are known to be in the illegal reptile skin trade from Bangladesh, and at least a part of this originate from the Indian state of West Bengal (Das 1988a).

Inskipp (1981) reported that despite laws protecting monitors, large numbers are hunted for the leather trade in India. The same report mentioned that in December, 1979, dealers in Calcutta held over 3 million lizard skins in their stock. Over 50% of these were the 'oval-grained lizard', *Varanus flavescens*, with an almost equal number of 'Agra lizard' and 'Bengal lizard', both presumably because of its present restricted range, is the rarest of the monitors in the stock of exotic leather merchants.

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