

VETERINARY AND LEGAL IMPLICATIONS OF THE USE OF SNAKES IN TRADITIONAL DANCING IN EAST AFRICA

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INTRODUCTION

Dancing is a long established part of culture in East Africa and often plays an important role in uniting communities. In recent years, attempts have been made to encourage, and where necessary to revitalise, dances in order to ensure that ethnic (tribal) customs and rituals are not forgotten.

Although most Africans dislike snakes and many are superstitious about them (FitzSimmons, 1962; Mbindyo & Okelo, 1979), there are tribes that include snakes in their folklore and revere them (Pitman, 1938). On Ukerewe Island, Lake Victoria, for example, green snakes are considered to be a good omen, especially if found in the house. A few Africans, such as the WaSukuma of Tanzania, handle snakes and use them in their traditional ceremonies.

Mbindyo and Okelo (1979), writing about Kenya, state that, "There are no snake charmers in the country". This may be true if snake charming is defined as practised in India, but there is no doubt that certain East Africans are able to handle snakes with great skill, some because of a tradition in this respect, others because they have worked at a snake park and gained practical experience of reptiles. Dance troupes have capitalised on this and there are several groups that advertise themselves as performing "ngoma za nyoka" (snake dances) and travel considerable distances to dance in front of both indigenous and expatriate audiences.

Little has been published on the use of snakes in traditional dancing nor the health and welfare considerations that may arise. In this paper we discuss veterinary and legal implications, with particular reference to Tanzania.

MATERIALS AND METHODS

The data in this paper were collected primarily during the course of work with one group, based at a Roman Catholic Mission, near Morogoro, Tanzania.

In addition, relevant information was obtained by discussion with individuals who are involved in, or knowledgeable about, traditional dancing in East Africa.

BACKGROUND

The snakes used in dances are captured in the wild. Valuable (usually large) specimens may be collect from hundreds of kilometres away. Local people receive payment for notification or assistance.

On arrival, a snake is usually given a cursory examination. If there are many ticks (usually *Aponomma* spp.) present, these are pulled off by hand. Forceps or pliers are then used to remove the fangs of venomous species, such as mambas (*Dendroaspis* spp.) and most of the large teeth of pythons and sizeable colubrids. The purpose of tooth removal is to protect handlers by minimising physical damage and/or envenomation if the snake bites.

Often the snakes are accommodated in the box in which they were transported. One or two dance teams are now housing pythons and other larger species in specially designed cages or enclosures.

Water is usually provided. Whether the snakes feed or not depends upon the knowledge and approach of the staff involved. Some snakes are never fed or are offered a totally unsuitable diet: at one location pythons were given "unga" (flour) on the assumption that they would eat this, and it was only when a small dog found its way into the enclosure and was swallowed by a python that the dancers accepted and believed that snakes are carnivorous! The long-term survival of some pythons prior to that time may have been due to their eating rodents that were attracted to the flour.

The level of hygiene also varies enormously. Rudimentary cleaning of boxes or cages to remove faeces and slough is routine but often infrequent and inadequate. Likewise, water containers may go days without attention, possibly because many Tanzanians believe that snakes do not drink water.

Use of the snakes during and in preparation for a dance seems to be almost standard. They are brought into the dance area in a wooden box or basket and then are either removed by hand or allowed to "escape" on to the floor. One or more of the dancers hold the snakes or, if it is a python (usually *Python sebae*), the handler drapes it around his body. Members of the audience may be invited to touch or to handle the reptile during the performance, but usually told nothing about the snake at this time. Sometimes people have a snake forced upon them, usually causing consternation and alarm. From time-to-time snakes are teased - for example, by threatening them so that they attempt to strike.

Each performance lasts less than an hour, after which the snakes are put back into their box or basket.

It has not proved possible to ascertain with any accuracy for how long the snakes used in dances live, but judged from the need to collect replacement specimens, the lifespan of small species may only be a few weeks. Large pythons fare better and a number are still alive and in reasonable condition 2-3 years after first being captured.

VETERINARY IMPLICATIONS

Other than the Mission near Morogoro, which consults the Faculty of Veterinary medicine, Sokoine University of Agriculture, veterinary attention for snakes used in dances is the exception rather than the rule.

The main veterinary problems appear to be as follows:-

- a) traumatic injuries arising from capture or transportation.

Some specimens are already damaged when caught, others have wounds inflicted as a result of the use of sticks or tongs. Snakes that are sloughing are particularly prone to

skin injury (Cooper & Jackson, 1981). Infection is often a sequel to wounds, especially when hygiene is poor. Many of the bacteria involved are Gram-negative opportunists such as *Pseudomonas aeruginosa* and *Aeromonas hydrophila*.

- b) stomatitis caused by a combination of tooth removal and rostral damage caused when the snake strikes or rubs its head against the wall of its enclosure; again Gram-negative bacteria are usually implicated (Cooper & Sainsbury, 1994).
- c) initiation and dehydration, usually as a result of the snake's not feeding or having inadequate access to water but also often following skin wounds or stomatitis.
- d) bacterial septicaemia and death as a sequel to infection of wounds but also possibly associated with immunosuppression of the snake following prolonged exposure to environmental stresses, as postulated by Cooper and Needham (1983).

The main thrust of the work with the Mission near Morogoro was to teach handlers how to reduce ill-health and death in their snakes and, at the same time, to provide instruction that would minimise the risks to handlers from zoonotic and environmental organisms such as *Salmonella* and *Pseudomonas* spp. respectively. Tuition primarily consisted of advice on housing and feeding different species of snake, hygiene and provision of basic treatment.

Advice on aspects of management such as housing and feeding is well accepted by dancers and usually implemented. Although members of the troupe may be remarkably confident about catching and handling snakes, their knowledge of reptile biology is usually very limited. For example, simple advice on how to help a snake to shed its skin is welcomed and generally followed. Books and articles about reptiles can help in educating such people but in Tanzania many of those involved speak little English; there is a need for literature in Swahili.

As mentioned earlier, training in hygiene had the dual effect of protecting snakes and staff. Hot water was advocated as the cheapest and best disinfectant and when chemical agents were used there were local products which could be purchased easily, used safely and appeared to have no deleterious effects on humans or reptiles.

Any guidance on treatment of snakes had to take into account the low income of the personnel involved; medicines cost money and if they are to be used, must be as cheap as possible. In addition, the measures recommended needed to be sustainable when there was no longer expatriate advice and assistance available. Thus, for example, the staff were taught how to remove ticks and mites manually or by application of local preparations, rather than by use of expensive and potentially dangerous modern parasiticides. Skin wounds or lesions on the mouth were not treated with antibiotics but cleaned by washing thoroughly under a water tap (or in the river!) and protected from infection primarily by hygienic measures and irrigation with mild disinfectant. A gift of adhesive polyurethane dressings ("OpSite": Smith and Nephew) provided an opportunity to teach the staff how to apply this product to wounds and it proved to be an excellent method of treatment, as has been reported previously (Cooper, 1981).

The question of tooth removal remains contentious. Ideally one would like to outlaw it. The procedure can sometimes be discouraged, when the species is non-venomous, but nearly all dancers consider tooth removal essential when working with poisonous snakes.



Plate 1. A python (*Python sebae*), used in dances, is handled prior to treatment of skin lesions. (Photo: Margaret Cooper)

An alternative approach to rendering these snakes relatively safe might be to ligate their venom ducts (Cooper, 1974), but this technique needs to be carried out under anaesthesia by an experienced veterinary surgeon and if the snake is not adequately marked, there is the danger that non-operated and operated snakes may be confused and transposed.

The authors' experiences in Tanzania indicate that the use of snakes in dances is very likely to lead to health and welfare problems. This is supported by observations elsewhere. For example, Hodges (1993) said in the context of similar snake dances in Java, "some of the dance antics can hardly have been beneficial".

LEGAL CONSIDERATIONS

While no legislation in East Africa specifically relates to snakes used in dancing, some statutes are relevant. Thus, for example, the Tanzanian Wildlife Conservation Act No. 12 of 1974 provides protection for most species of wildlife, including reptiles, and therefore the collecting and keeping of snakes should be permitted only under licence.

Welfare legislation may also be applicable. In Kenya, for instance, The Prevention of Cruelty to Animals Ordinance (Chapter 360), Revised 1963 - which is largely based on the British Protection of Animals Act 1981 (Cooper, 1987), provides penalties for those who cause unnecessary suffering to captive animals, including (apparently) reptiles.

CONCLUSIONS

The use of snakes in dances presents a dilemma for those who care about the health and welfare of reptiles and yet who also believe that African cultural traditions should be preserved and encouraged. It is most unlikely that, in the foreseeable future, the use of

snakes for this purpose will be banned or tightly controlled. To most Africans snakes are of no intrinsic importance and their "welfare" is not worthy of serious consideration.

Therefore, assuming that this use of snakes will continue, the following approaches are suggested:-

- 1 There is a need for stricter enforcement by the authorities of the legislation that applies to the taking and keeping of protected species and the welfare of captive animals. Such measures could reduce the number of snakes caught and might encourage better care of them once they are in captivity;
- 2 A code of practice for those who keep and use snakes for dancing is worthy of consideration. The code could cover such issues as housing, feeding and handling, and provide guidelines on the frequency with which a specimen is put on public display and how this is done. Codes of practice are increasing and feature other types of animal usage in East Africa - for example, covering the farming (ranching) of ostriches and crocodiles (Cooper, 1995) - and the compilation of one covering snakes would not be difficult. Adherence to such a code could prove beneficial to those who use snakes, as well as to the reptiles themselves, since (a) specimens that die because of poor management have to be replaced, at a cost (b) many of the audiences that watch the dancing are expatriate visitors and it is only a matter of time before tourists question the way in which the snakes they see are caught, kept and used, and (c) exhibition of live snakes to local people can, if carried out humanely, be very educational (Muhairwa, personal communication) and do much to promote the welfare and conservation of these reptiles;
- 3 Local veterinarians should be encouraged and helped to take an interest in these reptiles to provide help and advice when needed. This move will be helped by the development in recent years of courses in wildlife diseases at the Faculties of Veterinary medicine in Kenya, Tanzania and Uganda.
- 4 Advantage should be taken of the expertise and experience already available in some parts of East Africa - for example, at the better snake parks and serpentaria in Kenya - in order to build up and disseminate information, preferably in Swahili and other local languages, on the biology, care and management of captive reptiles.

The authors would welcome comments from others with experience or knowledge of this subject.

ACKNOWLEDGEMENTS

We are grateful to Father Harry Tulleman and the staff of the Msongozi children's Theatre Group for helpful discussions, and other friends and colleagues in East Africa for their opinions and experiences. Mrs Alyette de Munck provided access to her (1938) copy of Pitman's *The Snakes of Uganda*. The British Small Animal Veterinary Association (BSAVA) presented a copy of their *Manual of Reptiles*, and Smith and Nephew generously donated samples of "OpSite". An early draft of this paper was read and commented upon by Jim Crees, MRCVS, A.P. Muhairwa, BVM and Maxwell Cooper, BSc.: we are indebted to them for their help.

REFERENCES

- Cooper, J.E. (1974). Ketamine hydrochloride as an anaesthetic for East African reptiles. *Veterinary Record* **95**, 37-41.
- Cooper, J.E. (1981). Use of a surgical adhesive drape in reptiles. *Veterinary Record* **108**, 56.
- Cooper, J.E. and Jackson, O.F. (1981). Editors *Diseases of the Reptilia*. Academic Press, London and New York.
- Cooper, J.E. and Needham, J.R. (1983). Isolation of potentially pathogenic bacteria from healthy mambas (*Dendroaspis* species). *Veterinary Record* **113**, 135-136.
- Cooper, J.E. and Sainsbury, A.W. (1994). Oral diseases of reptiles. *Herpetological Journal* **4**, 117-125.
- Cooper, M.E. (1987). *An Introduction to Animal Law*. Academic Press, London and New York.
- Cooper, M.E. (1995). Legal and ethical aspects of new wildlife food sources. *Biodiversity and Conservation* **4**, 322-335.
- FitzSimmons, V.F.M. (1962). *Snakes of Southern Africa*. MacDonald, London.
- Hodges, R. (1993). Snakes of Java with special reference to East Java Province. *British Herpetological Society Bulletin* **43**, 15-32.
- Mbindyo, B.S. and Okelo, G.B.A. (1979). *Common Venomous Bites and Stings in Kenya*. Health Education Division and Audio-Visual Aids Centre, Nairobi.
- Pitman, C.R.S. (1938). *A Guide to the Snakes of Uganda*. The Uganda Society, Kampala.