

# **E**XPERiences WITH A PRIVATE SERUM DEPOSITORY

*Remarks on the contribution of J.M.W. Mavromichalis "Difficulties with obtaining sera; the consequences of an accident" in Litteratura Serpentina 18 (6) (1998) 156-160.*

## **Dieter Schmidt**

People that are interested in snakes and who want to acquaint themselves with their way of life and even bring them into their houses, take care of them in a terrarium and breed them, are laughed at by most people or even greatly criticised. The life threatening venomous bite from a snake is always brought up. Of the almost 3000 species alive today, only about 410 species have an effective venom delivery system. And most of these snakes are hardly dangerous to man. They have a weakly acting venom, are often reluctant to bite, are very rare or live hidden and normally speaking never encounter people.

The contribution of Mavromichalis appears to confirm the dangers of keeping snakes in the terrarium. Are the problems that occurred with the biting incident, that was described, really necessary? Without a doubt, all snake enthusiasts will agree with me that keeping venomous snakes by private people, should be an exception and that responsible obligations to society should strongly limit the risk.

In contrast to what many opponents to keeping exotic animals say, it has to be said that under certain conditions these animals are certainly suited to being kept in the terrarium, if they are treated with the necessary respect.

As with keeping any other wild animal in private hands, be it as a hobby or for research purposes, keeping snakes demands a great deal of personal

responsibility towards the animal and its living environment.

Keeping dangerous reptiles and in particular venomous snakes, requires, aside from the species-specific care requirements, all kinds of special facilities to avoid the possible dangers that could arise from dealing with these animals. Therefore only snake keepers with years of experience should involve themselves with these animals. Apart from the required knowledge, these terrarium keepers should also be able to guarantee conditions that make the risks to man and animal as small and predictable as possible.

The working group snakes, of the "Deutsche Gesellschaft für Herpetologie und Terrarienkunde E.V. (DGHT)" based itself on the experience of numerous snake keepers, to support interested terrarium keepers. They also wrote a note on keeping venomous snakes in private terraria for government representatives that evaluate the keeping of venomous snakes. This memorandum can be requested on the homepage of the DGHT (<http://www.dght.de> click on AG Schlangen). One has to realise that biting accidents can never be ruled out with absolute certainty.

As a rule, it is not advisable that the keeper himself should keep a stock of the specific mono- or polyvalent antiserum. This is, however, regularly prescribed by government institutions. It only gives more security in those cases where immediate clinical treatment is not possible because of distance and where professional treatment, with an antiserum and any possible side effects, is not assured locally. There are several reasons why a keeper of venomous snakes should go directly to a suitable medical institution instead of doctoring himself:- the limited time fluid or freeze-dried antisera can be sto-





red (even in a refrigerator), the regular replacement costs that result from that and especially the risk of an immune response and the resulting anaphylactic shock.

Anyone who keeps venomous snakes should therefore inform themselves on how to quickly reach a medical institution with knowledgeable physicians and a public serum depot or a depot that belongs to a society.

Good results on stocking antisera have been had by the serum depository Berlin E.V. (Serumdepot Berlin E.V.). This society has targeted itself at providing information on this interesting group of snakes and gives its members support in obtaining permission to keep these animals in the federal state of Berlin and several other German federal states, where keeping venomous snakes is banned in principle. The society also strives to acquire and stock commercially available antisera in the appropriate way and store these antisera in a hospital in Berlin with a knowledgeable medical team. Finally the desire to issue guidelines, that will assure professional and species-specific care and housing for venomous snakes, as well as exchanging information and observations.

In the mean time several, state appointed, veterinarians in Berlin have made membership of this society a requirement for obtaining permission to keep venomous snakes.

The serum depository Berlin E.V. was founded in 1982 but has clearly intensified its activities since about 1994. Today there are more than 40 members.

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All required sera, for the species kept by the members of this regional society, are regularly restocked when they pass their storage date. Professional medical personnel can provide the right assistance in case of emergency. For further information on venomous snakes literature was provided to doctors and nurses (for instance Trutnau: "Giftschlange", Stuttgart 1998). Because, unfortunately, very different treatment methods are still prescribed, the most up to date literature had to be referred to (like: Junghanss, T.; Bodio, M., Notfall-Handbuch Gifttiere. Stuttgart - New York, 1996 and others).

In contrast to what many people still think, an extremity that has been bitten by a snake with a locally acting toxin, has only to be kept still without applying pressure. With snakes whose venom primarily contain neurological and hemotoxic compounds, the compression-immobilisation method has to be applied, with a light bandage, while the extremity has to be kept still. By immediately using an extractor, part of the injected venom may be sucked out of the wound.

The society also placed guidelines for first aid in case of snakes bites, on the Internet (<http://home.t-online.de/home/Schmidt-Schoenow>).

With a yearly contribution to costs, the members allow the manager of the Serumdepot Berlin E.V. to buy the appropriate sera for their collection of venomous snakes, especially when the present sera have passed their use-by date. The sera are delivered to a pharmacist that is connected to the medical institution.

When new species are included in the collection of members of the society, then the new specific serum is acquired, after a decision is made at a member's meeting. This may, however, result in a change of contribution for all members.

To further increase security, agreements were made with Berlin Friedrichsfelde and Leipzig Zoo whereby their stocks can also be used for first aid. There are also contacts with the toxicological department of the technical university in Munich (Toxikologischen Abteilung (11. Medizinische Klinik) of the Klinikums Rechts der Isar der Technischen Universität München). The contacts with these serum stocks are also important because the Serum Depot Verein Berlin, now not only has members in Berlin but also in surrounding German federal states.

All warnings and bans will not keep many an enthusiastic snake keeper from keeping venomous snakes. While keeping dangerous animals cannot be advised, it should also not be condemned indiscriminately. It is much more important to guide this hobby in the right direction and ensure the proper conditions for both people and animals.

*Translation: Ron Winkler  
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