

# Garter Snakes Care Sheet

Roger Davis – July 2008

## General

Garter snakes are Colubrids of the genus *Thamnophis*, which also includes the ribbon snakes, and are terrestrial or semi-aquatic snakes widely distributed in North and Central America. While taxonomists argue the finer points of classification it is generally accepted that there are 28 species and 60 sub-species of garter snake although only a few are regularly found in captivity. They are among the widest ranging snakes in the world. The common garter snake *T. sirtalis* may be found from Southern Alaska to Northern Mexico.

## Garter snakes in captivity

Garter snakes are a joy to keep. Many are spectacularly coloured and patterned and healthy individuals show an alertness and curiosity seldom seen in other colubrids. The downside is the distinctive odour which arises from the fact that they have a digestive system designed to process aquatic food (even if they don't eat it) and from the presence of anal musk glands which they will readily deploy if startled. The keeping of garter snakes therefore requires a commitment to regular vivarium cleaning.

You can expect an average life span of around ten years for garter snakes in captivity. Females normally reproduce in the age range of one to five years.

Garter snakes are generally quite good natured animals but may become 'cage-protective' if not handled regularly although even then they will soon settle down after a few minutes of handling and the bites are usually quick to heal!

## Housing

Many garter snakes live in colonies and may be kept communally with the proviso that only animals of similar size should be kept together. Some species of garter snake are known to have cannibalistic tendencies and the Western Garter Snake *T. elegans* is notorious for it.

The size of the vivarium required depends largely on the size and quantity of the snakes you are going to keep. Garter snakes are born at around 4" (10 cm) and can grow up to 4 ft (1.2 metres) or more. If you are using a vivarium large enough for the snakes to grow into please ensure that you provide sufficient hiding places so that they do not feel exposed.

As with all snakes a gradient of temperature and humidity should be maintained. It is important to note that at least two hide boxes should be placed across the temperature range to ensure that the snake is not forced to choose between warmth and security.

The temperature of the enclosure is largely dependent of the species kept. Garter snakes range from desert climates through tropical and temperate to downright chilly! Find out the range and natural habitat of your selected species and set the temperature gradient accordingly. As a general guide 25°C to 30°C at the warm end and 15°C to 20°C at the cool end is desirable.

The vivarium must be well ventilated either by convection or by a small electric fan. Computer processor fans are ideal for this, having the advantages of extracting a slow, steady flow of air and of being virtually silent. *Lack of adequate ventilation is the major cause of medical problems in snakes and other reptiles in captivity.*

Humidity is best maintained by the addition of a bunch of regularly moistened sphagnum moss to the vivarium. This is available from most garden centres and is sold primarily for the lining of hanging baskets. Sphagnum moss will contribute to the general humidity of the vivarium and also provide a moist environment for the snake to soften its skin prior to shedding.

Substrate is a matter of personal preference. If the snake is not on display then by far the best choice is newspaper. If appearance is important then bark chippings is a good option although please ensure that the pieces are sufficiently large as not to be ingested by the snake when feeding. Wood shavings are best avoided for this reason.

## **Feeding**

Garter snakes in the wild will eat pretty much anything they can overpower. Fish, amphibians, worms, slugs and small rodents all feature in their diet. I would strongly recommend feeding captive garter snakes on mice. This option provides all the snakes energy and nutrient requirements in one neat package. Some keepers of garter snakes in the past have tried to reproduce the aquatic nature of the diet of some garter snakes but this has often led to the animals deteriorating due to lack of vitamins and minerals. This has had to be remedied with supplements which in itself is a hit and miss affair. Unless your garter snake will positively not eat mice (unheard of in my experience) this option is to be discouraged.

Young garter snakes are able to eat pinky mice after about six to eight weeks. Baby garter snakes will not normally feed before their first shed which is usually around three to five days after birth. Babies can be fed on a preparation such as 'Garter Grub' which comes frozen and contains a complete balanced diet. A piece about the size of their head should be sufficient and this on alternate days. Care should be taken not to overfeed as once they start feeding they are always ravenous.

## **Venom**

This heading may come as a surprise to some. Garter snakes have been sold as pets for many years and considered completely non-venomous. Recently, however, largely due to the work of Dr Wolfgang Wüster and Dr Bryan Grieg Fry, it has been discovered that garter snakes, together with several other 'non-venomous' colubrids do produce a neurotoxic venom similar to that found in the elapids i.e. cobras, mambas etc.

Garter snakes may, however, still be considered harmless to most people. The venom is produced in very small quantities and the snakes have no effective means of delivering it. While they do have slightly enlarged teeth in a position corresponding to that of rear-fanged snakes these are not similarly grooved. Some recipients of garter snake bites have reported tingling or slight swelling at the site of the bite but this is not common. There are currently no documented cases of serious injury resulting from a garter snake bite.

## **Conclusion**

Garter snakes are very rewarding animals to keep. It is unfortunate that they have, especially in the USA, been considered a beginners' snake. While it's true that they are easy to look after, this does not mean that they deserve to be 'grown out of' and traded in for something more challenging. I have acquired a fascination for these snakes and spend far too much of my precious time just watching them go about their daily business.

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