

No. 5.

Garter, Ribbon & Water Snakes

*Thamnophis, Nerodia, Natrrix
& Xerochrophis spp.*

An Introductory Information Leaflet

from

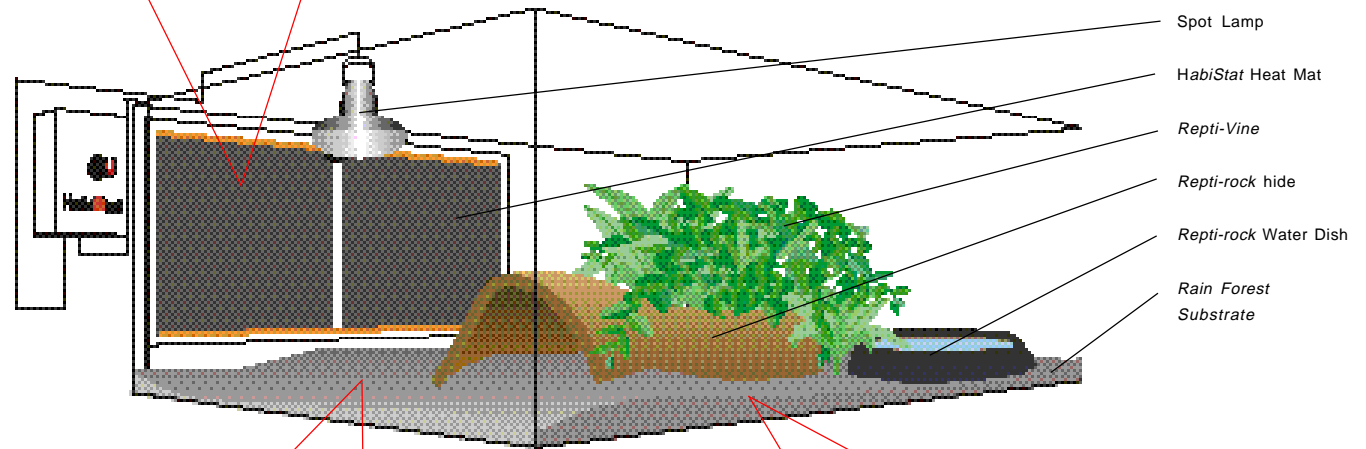
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Background Heat Use Use a heat mat between half and two thirds the size of the cage to provide background heating. The hottest spot in the cage should not be above 32°C while the coolest should not be below 20°C. Use a *HabiStat Mat - Star* if the temperature is too hot but put the whole cage in a cooler place if the temperature is not cool enough.

Food: The easiest food for captive snakes of this type is *Garter Grub* which is an artificial of blended nutrients specially formulated for snakes. Cut into strips and offered on a clean surface this food should provide a complete diet. For rapid feeding and conditioning, 'snake sausages' should be fed in multiples of four or five and by not cutting the joins between several sausages the snake will be forced to eat a larger meal than it perhaps intended to. Other items that should be offered are: mice, from pinkies to small adults, rat pups and on occasion, earthworms. Do not feed anything of unknown or dubious history such as wild or pet rodents or cat and road kills.

Cleanliness and Hygiene: A routine cleaner for all nonporous surfaces could be *Vetaclean*, followed by a thorough rinse. Any little graze or blemish on the animals themselves would benefit from the first aid afforded by dabbing the wound with *Vetadine*. As far as human hygiene is concerned, *Vetasept Surgical Scrub* will clean hands and surfaces while *Vetasept Hand Rub* will allow adequate cleansing and disinfection even in cases when water is unavailable.



A Cage Suitable for Garter,
Ribbon and Water Snakes

Hot Spot If necessary local area of higher temperature can be created with a *Basking Spot Lamp* or a *Pearlco* ceramic. Use them in conjunction with a *HabiStat* thermostat for precise control. Hot spots should be maintained for the same day length as the lights, sixteen hours in summer, eight in winter.

Cage Decor: Use *Rain Forest Substrate* as a base medium as these will stand up to the periodic spraying with water these snakes sometimes need. Cork Bark or Curio Wood could be used to make an interesting three dimensional display. While draping *Repti-Vines* in the cage will provide refuges the snakes can hide in or move through to loosen shedding skin. *Repti-rock* caves and water dishes would lend even more functionality and security.

Cage Set Up The cage should be set up to allow an active snake plenty of scope to climb, bask in a hot spot, move to a cooler spot, drink and hunt for food. The snakes should also be able to secrete themselves into refuges and rub themselves against something when shedding their skin.

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Shopping List

Not every thing is needed to begin with, usually one item from each of the categories marked •. Try alternatives as your collection and experience grows. A basic minimum is given to help decide what options to add.

- **Plastic Vivaria**
- **HabiStat, Heat Mats** 6x11/7w
- **Rain Forest Substrate**
- **Repti-rock Dishes, Hides & Caves**
- **Thermometers**

Or a convenient starter kit is available

- **Melamine Vivaria Vivarium Lids**
- **HabiStat, Heat Mats** (6x11/7w, 11x11/12w, 17x11/20w, 23x11/28w, 29x11/35w, 35x11/42w & 49x11/55w) & **Strips** (17x6/10w, 23x6/15w, 35x6/22w & 47x6/30w)
- **Pearlco Bulb Ceramics** (60w, 100w, 150w, 250w, Reflectors & Holders)
- **Basking Spot Bulbs Ordinary, Day & Red Night Types** 100 w & 60w + Lamp holder and Lead
- **Thermometers** (Alcohol, dial, minimum - maximum & electronic digital)
- **Hygrometers** (Dial & electronic digital)
- **HabiStat Thermostats** (Mat-Stat/100w, Temperature/300w, Twin/2x300, Pulse Proportional/600w, Dimming/600w & Night Time Drop Function)
- **HabiStat Light Switches** Sun & Moon Switches or Night Eye
- **HabiStat Cool Control & MiniFan**
- **Repti-Vines**
- **Savannah Substrate**
- **Desert Substrate**
- **Repti-Grass**
- **Cork Bark Curio Wood**
- **Reptile D₃ & Activa Professional Lights** (18"/15w & 24"/18w)
- **Arcadia Control Units** (15w, 2x15w, 18w & 2x18w)
- **Frozen Rodents**
- **Frozen Prepared Foods**
- **Reptavite**
- **Reptasol**
- **Vetaclean**
- **Vetadine**
- **Vetasept Surgical Scrub**
- **Vetasept Hand Rub**
- **Books & Leaflets**

Garter, Ribbon & Water Snakes

...Biology

This group of North American and Eurasian snakes are common over much of the temperate and sub-tropical regions of those continents. They are often associated with water and prey upon other animals found in similar habitats, mainly amphibians and fish. Most species are not large snakes, 30 to 120 cms. being an average length. In colouration the Garter and Ribbon Snakes are often pretty striped animals while the Water Snakes are a little plainer, having blotched or fairly simple markings.

...Housing

Many types of cage can be used to house snakes. For hatchlings and other juveniles, the moulded clear plastic tanks with a fitted lids are very useful. For larger animals the purpose made vivaria are probably more appropriate. The types with sliding glass doors to the front being especially resistant to escape. Another often used cage is a converted aquarium. A special adapting lid is used to contain the reptiles and house any equipment that may be used.

The cage may not have to be large as many specimens seem to thrive in quite small cages. The length of the cage added to its width should be longer than the total length of the snake. Of course, the cage could be larger as this would allow the animal room to grow and make it easier for the owner to manage the environment.

The cage should be set up in a manner similar to the diagram overleaf. If done correctly there will be a hot spot near 30°C, while the coolest part of the cage could be nearer 20°C. The hot spot should only operate during the day. Light should be present for a similar period; about sixteen hours in summer dropping to eight in winter.

The quality of light needed to keep snakes is a topic of much discussion. Some say diurnal species need UV light while others doubt that but freely admit benefits may accrue. To be on the safe side a lamp like Activa Professional would do no harm.

Much of the success achieved in keeping these snakes will come from the skilful manipulation of ventilation. The snakes cannot stand damp stagnant conditions. Fresh air moving into the cage is essential. Use the upward draughts caused by heated air rising to flush out the cage and drag fresh air in.

...Husbandry

Snakes may be kept safely, either singly or in groups. These snakes are not territorial in captivity and rarely show interest in each other let alone aggression. Be cautious when mixing with other types, as kingsnakes for example, will find them an acceptable meal.

To handle a snake, the whole animal should be gently grasped and held in the hands. Let it move through the fingers but do not grasp it tightly. The hand should provide support and restraint is applied by slowing down but not stopping the flow of movement. Don't be surprised if the cheeky reptile gives you a harmless nip for your trouble! The wound will probably be quite insignificant but it would be best to clean it like any other minor graze. Bites are, however, quite rare as the more normal defence is to void smelly faeces. Even this tactic is soon abandoned as the snake settles down to life in captivity.

In time the cage will begin to look scruffy as waste is deposited. As everything recommended for the cage is washable or disposable, a good clean out is easily done. The cage set up advised in this leaflet is practicable and can be made to look pleasing to the eye. If a more natural set up is envisaged, it may be best to wait until some experi-

ence is gained. In any case, some of the very informative books on Snakes could be investigated.

...Food & Feeding

Feed the snakes once or twice each week as adults and a little more frequently if younger. Feed as much as can be eaten in five minutes. In the wild frogs and other amphibians with a few fish will make up the bulk of the diet. In captivity a compromise is possible as a natural diet is neither readily available nor the type of food many people would be happy offering. The artificial diets mentioned overleaf were specifically developed to overcome these problems and can be used with confidence. To add variety some heat treated fish, fish scented 'pinkie' mice or earthworms could be offered and may be taken. Some species also eat slugs while one to two rare species eat nothing else.

A water dish kept full of fresh water should always be available. This dish should be quite small so that the snake can drink but makes total immersion difficult. A larger bathing dish can be supplied for a few hours, a couple of times each week. Damp and wet conditions lead to skin ulceration and other diseases.

...Reproduction

To sex these snakes look at the tail of the animal. In males there is a hemipenial bulge posterior to the vent. The males are also generally smaller and slimmer and have longer, more gradually tapering tails.

Eggs are laid after mating in the case of water snakes while Garter and Ribbon snakes have fully formed young. Neither are likely to breed in captivity without a winter rest or hibernation. Read up on the more advanced aspects of keeping snakes if breeding is anticipated.

...Health & Disease

These snakes live for about five to ten years in nature but as many will already be adult when purchased, no real estimate of life expectancy as a pet can be made. They suffer from few diseases and veterinary attention is rarely needed. An environment and diet as described in this leaflet will preclude most problems. Good practice, hygiene and first aid will probably deal with rest. If real disease is discovered, a vet must of course, be consulted. Pet snakes do not pose a real threat to human health. All the normal hygiene precautions regarding humans and animals should, however, be observed.

Three problems probably account for 90% of all captive disease. The first relates to skin and eye problems caused by dirty conditions. Small abscesses occur under the scales and eyes are often inflamed. Damp or wet conditions exacerbate the situation and the disease is avoidable if the cage is completely dry. In spite of them being water snakes, they cannot tolerate being wet for prolonged periods.

The second disease commonly seen in captivity is a lack of vitamin B₁, Thiamine. This appears as a loss of stability and the snakes moves about in a disoriented and 'jerky' manner. Quite a lot of raw fish contains an enzyme that breaks down thiamine. If fish is fed, it must be treated to deactivated the enzyme. Heat will do this quite successfully, so fill a cup with freshly boiling water. Into this, fully immerse a couple of pieces of fish and leave for five minutes. Cool the fish and feed as the enzyme will now be denatured.

Sometimes a snake will be found to have a mouth infection, and this is the third of the most frequently seen problems. A cheesy mass may be seen in the mouth and soreness of the tissue is also common. The symptom of 'mouth rot', *necrotic stomatitis*, is indicative of a more general infection and veterinary advice must be sought. Pet snakes do not pose a real threat to human health. All the normal hygiene precautions regarding humans and animals should, however, be observed.