

Basic Guidelines for  
Care & Maintenance of  
**Reptiles and  
Amphibians**

These notes are for quick reference only.  
Every effort should be made to find out about the  
unique requirements for individual species.



**NSHS**

NOVA SCOTIA HERPETOCULTURE SOCIETY  
c/o Nova Scotia Museum of Natural History  
1747 Summer Street  
Halifax, Nova Scotia  
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## Introduction

Although many reptiles and amphibians (herptiles) may require less care than some traditional pets, the care that they do need is specialized and extremely important. These animals can't tell you when they're sick, they can't meow or bark when they're hungry; It's up to the owner to make sure that their needs are met. Improper husbandry often results in unnecessary illness, vet bills and/or death of the herptile.

*Please do not purchase these animals on impulse or as a novelty.* They are living creatures that deserve the best care that you can provide. Be sure that you can make the financial and time commitments necessary to properly care for any animal that you choose to keep.

By carefully observing your pets and researching their natural history and husbandry, you will begin to understand these fascinating creatures. The information provided here covers basic needs and is meant to help get the beginner herptile keeper off to a start on the right foot. There are thousands of kinds of herps (short for herptiles) and each species or group of species has its own particular needs. *Please do your homework before obtaining a new pet!*

There are several good reference books and several hobby magazines which provide up-to-date care information. This is still a relatively new hobby and advances in captive maintenance and breeding are constantly being made. You can also find information on the internet, most of which is accurate, but be aware that not everything that you find is guaranteed to be 100 percent correct. Please do not hesitate to contact the Nova Scotia Herpetoculture Society if you are having trouble finding information on reptiles or amphibians.

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Please feel free to contact the NSHS for more specific information or advice. Write to the address on the front cover or contact one of our members listed below:

Society information, lizard care:  
Neil Meister at 876-2692  
or e-mail [geckomeister@eastlink.ca](mailto:geckomeister@eastlink.ca)

General inquiries on reptiles and amphibians:  
Michael Macdonald at 477-4983

General inquiries, snake care:  
J. & P. Serpent Gardens  
455-4620  
[johnseverance@hfx.eastlink.ca](mailto:johnseverance@hfx.eastlink.ca)

## General Notes

- Research specific requirements for each species. Especially regarding diet and temperature. An animal kept too cool may not eat, one kept too hot may dehydrate. If incorrect requirements are not met, the animal will eventually die.
- Find out how much it will cost to properly set up a home and care for your pet before you purchase it.
- Purchase captive-bred animals, if possible. Animals born in captivity are generally less stressed and healthier than wild-caught ones. This also helps to ease pressure on wild populations.
- Do not mix species without careful research. Some herptiles may carry diseases or bacteria harmful to species from different habitats or geographic areas. Some species may be aggressive towards others.
- Keep animals of different sizes apart. Large individuals may intimidate or even eat smaller members of the same species.
- Wash your hands after handling herptiles or cleaning enclosures. Also do this after working with each animal or group of animals to prevent spreading bacteria or other disease.
- Snakes of ten feet or more in length should always be handled by at least two people.
- Use galvanized screening or rubber coated mesh to prevent lizards from getting their toes caught and possibly broken.
- If the top is covered, ventilation panels should be built into the sides.
- Provide branches for climbing species to act as basking sites.
- Shelters or hide boxes can be constructed from slabs of bark, overturned or halved flower pots, plastic containers or cardboard or wooden boxes. There should be an access hole or doorway.
- Provide various shelters for animals to hide in. Some should be in the warmer part of the enclosure and some should be in the cooler part.
- Some herps benefit from having a humidified shelter containing a substrate such as vermiculite, sand (for some desert species), moss or paper towel to which a small amount of water is added on a regular basis. A dry shelter should also be provided.
- Most amphibians need high humidity and a constant source of water. Covering part of the top may help increase humidity inside the vivarium.

## Housing

- Animals should be able to move freely about their enclosure.
- Aquariums with screen tops are suitable for many small to medium sized species.
- Hard plastic terrariums (Pen Pals, etc.) are adequate for many small species.
- Iguanas, monitor lizards, tortoises, boas and pythons will likely require custom-built cages.
- Tops should be secure and be locked or fastened in place, especially regarding snake cages.
- There should not be any rough or sharp edges inside the vivarium.
- Use a thermometer to check temperature inside the vivarium. Check the basking site(s) and the cooler areas and make sure that they are within the desired range for the species being kept.
- Incandescent lighting is the best way to provide heat for most lizards and turtles. Many types of reptile basking lights are available. Spot reflector bulbs can also be used. Use different wattages or a rheostat (dimmer) to adjust temperature.
- Create a temperature gradient within the enclosure so that the animals can thermoregulate (adjust their body temperature by moving between basking sites and cooler areas).
- **Hot rocks are not suitable.** The heat that they provide is too localized to adequately heat the enclosure and they can have hot

spots which cause burns. If this is the only heating device available to you, try burying the device under gravel or sand or placing a flat rock on top of it to disperse some of the heat. If a hot rock is too hot for you to leave your hand resting on it, it's too hot for your reptile!

- Undertank heating pads should cover 1/3 to 1/2 of the bottom area of the enclosure.
- Adjust amount of substrate to control heat from heating pad or use a rheostat or thermostat.
- Timers can be used to control lighting and/or heating devices.
- Keep the enclosure away from draughts.
- Animals should not be able to come into direct contact with lightbulbs or electrical equipment. Place them outside of the cage and direct the lights through a screened top or opening.
- Most herps benefit from a night-time drop in temperature of 5 to 10°C. This is especially important for desert species.
- Many amphibian species require cool temperatures (10 to 20 °C). Research the requirements of each species.
- Do not heat aquaria housing newts.
- Full-spectrum lighting (fluorescent) is beneficial for most diurnal species of lizards and turtles. It also encourages plant growth.
- Follow directions and warnings on all electrical devices.
- Do not place Glass or plastic vivaria in direct sunlight as they can quickly overheat and kill the occupants.

## Substrate

- Suitable substrates will vary, depending upon species.
- Do not use corn cob bedding. It molds easily if it gets damp and it can cause intestinal blockage if it is ingested.
- Orchid or reptile bark is good for many forest species. Potting soil without perlite (little foam balls) may also be used.

- Newsprint is suitable for many herps such as monitors and large snakes.
- Do not use cedar shavings, they may be toxic to your pet!
- Pine shavings or aspen bedding are suitable for many snake species.
- Astro turf may be used, but loose ends must be trimmed. Iguanas have been known to ingest pieces.
- Play sand or reptile sand is suitable for desert species. It is important that they receive adequate supplements, or animals (especially geckos) may ingest large amounts of substrate and develop intestinal blockages. Leave a shallow dish of calcium supplement or cuttlebone shavings in the enclosure with juvenile or gravid female desert-dwelling geckos to prevent this.
- Paper towel is a cheap, safe substrate for baby leopard geckos and similar species.

## Water

- Most herps should have a water bowl. Change water at least every 2nd day or whenever it has been fouled.
- The water dish should be large enough for the animal to soak in and it must be easy for it to get in and out of.
- Anoles and most geckos benefit from daily misting. Some will not drink from a dish.
- Dechlorinate water used for amphibians. Leave water standing in a bucket for 24 hours to allow chlorine to dissipate.
- Water should be at room temperature before being used.
- Water containers should not be deep enough for animals to drown (especially important for terrestrial turtles).

# Diet

## Insect-eating lizards

- Insect-eating lizards should be fed prey items 1/4 to 1/2 the size of the animal's head. Feed 4 to 6 insects 3 or 4 times per week. Non-breeding adults may eat a bit less. Reproductively active females & juveniles should eat a bit more (6 insects every 2nd day or 3 insects per day).
- If there is a build-up of uneaten insects in the vivarium, reduce feeding.
- Uneaten insects may injure or stress herps.
- Crickets, roaches and superworms should be fed a high-quality diet before being offered to animals. A mixture of tropical fish flakes, dry dog food and/or commercial insect food works well. A piece of orange, carrot or other fruit or vegetable matter should be also used. Also add a piece of fruit or vegetable to mealworm colonies to provide moisture and increase food value.
- Consider raising mealworms as a backup food supply.
- Feed freshly molted (white) mealworms, if possible. Use regular mealworms sparingly, pinch them in the middle with forceps if you they're being left in a dish to prevent escapes.
- Insects should be dusted with calcium/vitamin D<sub>3</sub> supplement (Rep-Cal, Miner All I) at every second feeding. Juveniles and breeding females can be given dusted insects at every meal. A multivitamin supplement should be used once per week.
- Supplements without phosphorus are best for insectivores.

## Turtles & Tortoises

- Box Turtles will eat a variety of foods, including fruit, vegetables, worms, insects and cat food (use this sparingly).
- Most omnivorous turtles can be fed every second day.
- Most tortoises are mainly vegetarian. Find out the requirements for your animal, some should eat more green matter and others can have more fruit.

- Tortoises should be fed daily with an occasional fasting day once every week or so.
- Turtles and tortoises may refuse to feed if their diet is not varied enough. They can simply get bored of eating the same things all of the time.
- Aquatic turtles can be fed good quality turtle food such as Reptomin or Reptile Ten. Avoid turtle food made from ants or ant eggs as they are not very nutritious. Offer a variety of vegetables, worms and insects to complete the diet.

## Iguanas:

- Although there have been many conflicting Iguana diets published over the years, Iguanas are strictly folivorous throughout their entire life span and should be fed a strictly vegetarian diet consisting mainly of Calcium-rich greens and vegetables. The bulk of the diet should consist mainly of leafy green vegetables, such as collard greens, red and green swiss chard, dandelion greens, parsley, romaine lettuce (although not an ideal food), etc. A smaller portion of the diet should include other vegetables such as grated squash, carrot, cooked sweet potato and green beans. Calcium-rich fruits like strawberries, as well as raspberries, bananas, peaches, pears, mangoes, kiwi and blueberries should make up the remainder of the diet. Food should be dusted with Calcium and Vitamin D<sub>3</sub> on a once or twice-weekly basis, as well as with a multivitamin powder sprinkled over the food once every one to two weeks.
- Edible flowers such as dandelion can be used when available.
- Iceberg lettuce should be completely avoided, as it contains no nutritional value for Iguanas. Spinach and beet greens should also be avoided, as they are high in phosphorus and oxalates which may have detrimental effects on the Iguana's health if offered regularly. Other foods to be avoided or offered sparingly due to a high level of phosphorus include broccoli, brussels sprouts, cauliflower, and cabbage. These foods also bind with iodine and may cause thyroid disease if fed on a regular basis. Kale and bok choy can be offered in small amounts; however, they are also high in phosphorus and should be fed

sparingly. A commercially prepared diet can be offered as a topping in addition to the regular diet for variety; however, not all commercial diets provide adequate nutrition for the Iguana at all stages of development and may not be nutritionally complete if fed exclusively.

- Insects such as crickets and mealworms should *never* be offered to Iguanas as they are high in phosphorus, contain too much protein, and offer little nutritional value.

### **Colubrid Snakes (Corn, rat and king snakes)**

- Hatchlings should be fed 1–2 pinkie mice every 3–5 days.
- Juveniles should be fed 1–2 appropriately sized rodents (hopper mice/pinkie rats) per week.
- Adults should be fed 1–2 appropriately sized rodents (adult mice/fuzzy rats) every 10–14 days.
- Kingsnakes are prone to obesity due to the high fat content of rodents.
- All rodents should be captive raised. Do not use wild rodents as they may carry disease or parasites.
- Feeding smaller rodents more frequently is easier for your snake to digest than feeding infrequent large meals.
- Previously frozen, thawed & warmed rodents are easy to digest.
- “Snake Sausage” is eaten by many colubrids and is quite acceptable.

### **Boas and Pythons**

- Overall, care is similar to that for Colubrid snakes.
- Never handle your snake after cleaning or handling rodents or other food species. The snake may mistake your hand for food.
- If you handle your snake infrequently and only open the cage to put food in, the animal may become conditioned to strike whenever the cage is opened.
- Large species at adult size often require less frequent feedings (every 10–28 days, depending upon the individual).

- Don’t be alarmed if the snake fasts or has a reduced appetite between November and March.
- Large constrictors will eat piglets, rabbits and fowl.

### **Monitors & Tegus**

- Feed once or twice per week depending on species, age, and weight. Juveniles eat much more frequently, approximately every one to two days to ensure proper growth.
- Most monitors and tegus are carnivorous and/or insectivorous. A largely rodent-based diet is suitable for most species.
- Smaller species and juveniles may eat a large amount of insect prey. The juveniles should gradually start eating pinkie and then fuzzy mice to supplement their insect diets.
- Insects should be offered to even large species to add variety, as well as goldfish, mollusks, fresh fish and crustaceans.
- Do not feed hamburger or other red meat. Whole-animal prey is nutritionally complete. Cooked lean ground turkey can be given sparingly in emergencies or as a treat.
- Tegus and monitors will often consume a dish of chopped whole boiled eggs (shells included). Multivitamins and Calcium/Vitamin D supplement can be easily mixed into this. Avoid offering too many egg yolks; generally, one yolk with a number of egg whites is sufficient.
- Do not overfeed adults. Captive monitors can easily become obese if fed too much or too often. A monitor generally has an appropriate weight if they have a fairly thick tail and exhibit lateral folds down each side of their abdomen. As a rule, it is better to leave an adult monitor a little hungry than too full.
- Fasting for one to two months each year is good for using and replenishing fat stores.
- Clean drinking water should be kept in the enclosure at all times. Monitors do not always require water on a daily basis as they can conserve water efficiently; however, they may still tend to become dehydrated during certain months of the year. Some monitor lizards require a pool of clean, warm water for swim-

ming; however, this is not recommended for all lizards as a general rule because it can lead to skin infections.

### **Amphibians**

- Many amphibians do well with 2 to 3 feedings per week.
- Active species should be fed 3 or 4 times per week.
- Most amphibians are insectivorous. Crickets, waxworms, mealworms and superworms (for large species) are suitable prey.
- Many will also eat earthworms.
- Newts can occasionally be fed turtle sticks such as Reptomin or Reptile Ten.

## **Recommended Species**

In most cases, captive-bred animals will be healthier and better adjusted to captivity than Wild-caught, imported animals.

### **Suitable for Beginners**

- Corn snakes
- Captive-bred Ball Pythons
- King Snakes
- Kenyan Sand Boas
- Leopard Geckos
- Fat-Tail Geckos
- Desert Banded Geckos
- New Caledonian Crested Geckos (Rhacodactylus ciliatus)
- Golden Geckos (Gekko ulikovski)
- Tokay Geckos (easy to care for, but aggressive)
- Armadillo lizards (Cordylus spp.)
- Blue-tongued Skinks
- Fire Skinks
- Curly-tail lizards
- Sudan Plated lizards
- African Bullfrogs (easy to care for, but aggressive)

- Horned Frogs (easy to care for, but aggressive)
- African Clawed Frogs
- Tiger Salamanders
- Giant Toads
- Captive-bred Red-Eyed Treefrogs
- Alligator Lizards
- Green Treefrogs
- Gray Treefrogs

### **Hardy species requiring a bit more care**

- Bearded Dragon
- Green and Brown Anoles
- Savanna Monitor
- Giant Day Gecko
- Gold-dust Day Gecko
- Lined Day Gecko
- Standing's Day Gecko
- Box Turtles
- Tegus (many species can be aggressive)

### **For experienced herpetoculturists only**

- Poison-Dart Frogs
- All Chameleon species
- Leaf-tail Geckos (Uroplatus spp.)
- Iguanas\*\*
- Burmese Python\*
- Reticulated Python\*
- Anaconda\*
- Large species of monitor lizard\*

\* These species are not particularly difficult, but require very large enclosures and/or are difficult to handle due to their large size. Finding suitable food may be difficult as well.

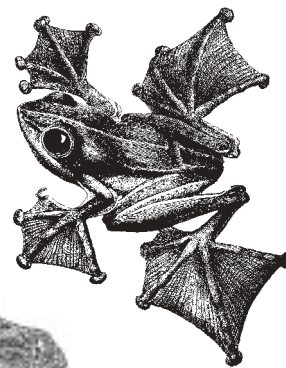
\*\* Iguanas are hardy if given a good diet, large cage (4' x 3' x 5' high, at least) and the proper environmental conditions. Males are often aggressive during the breeding season.

# NEW MEMBERSHIP APPLICATION

The Nova Scotia Herpetoculture Society (NSHS) held its first meeting on November 7<sup>th</sup> 1993, with a small enthusiastic group of individuals sharing an interest in reptiles and amphibians. The club has continued to grow, with members of all ages, and has been incorporated as a non-profit society.

If you're interested in joining our society, please fill out this form and bring it (or a photocopy) to one of our meetings, which are held the third Monday of every month (except July, August and December) or mail it to the address below with your membership fee. Membership is \$12.00 annually, payable each January. Please make cheque or money order payable, in Canadian funds, to the Nova Scotia Herpetoculture Society and mail to:

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Halifax, Nova Scotia  
B3H 3A6



Name: \_\_\_\_\_ Age: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone: \_\_\_\_\_

e-mail: \_\_\_\_\_

Interests: \_\_\_\_\_  
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What do you expect from a herpetoculture society?

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Please feel free to make suggestions:

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