

#### CARE SHEETS

## Care of Amphibiams





Photos by *Jim Horton*Text by *Roger and Holly Carter* 

Amphibians are found all over the world in areas such as swamps, forests, plains, deserts, lakes and rivers. Amphibians include toads, frogs, salamanders, newts, and the legless, wormlike animal called Caecilians. They range in size from the Japanese giant salamander, which can reach lengths of five feet and weigh close to 100 pounds, to many frogs that may be as small as half an inch long. Most may only live a few years while some of the larger species, like the giant salamander, can live as long as 20 years. The Horned Frogs of South America, the Pixy frog of Africa, and the Amphiuma of the United States are large animals ranging from twelve inches to eighteen inches and can inflict a painful, although not serious bite. Most of the common amphibians are small and show more interest in escaping than biting.

Most amphibians lay eggs in water. From these eggs hatch tadpoles that eventually become small versions of the adults. Amphibians require water as all or part of their habitat. The skin on amphibians provides a gas exchange similar to breathing and they absorb moisture through their skin. Let tap water sit 24-hours for chlorine evaporation.

For housing your amphibian, an aquarium with water and land separation is necessary, filtration is recommended. Heating units are not usually needed as these animals need a cooler temperature of 60 to 75 degrees. Ease of cleaning is a must as these animals breathe through their skins and cannot tolerate pollution. Disease occurs because of unclean conditions, or lack of a variety of foods. Foam rubber, which is used for furniture cushions, is an excellent choice to provide the separation of land and water. It can be cut or styled to fit any container. An escape-proof lid is necessary, as an extended time out of water can cause death. Heat lights are not necessary, but a UV light source plugged into a timer to provide a day and night light cycle can be beneficial.

Food requirements include a variety of insects, fish, crustaceans, and other amphibians, with insects and worms making up the bulk of the diet. Captive amphibians will benefit from insects dusted with vitamin/mineral powder at least once a week. These animals are opportunists when feeding and will eat almost anything that will fit in their mouths. Live insects are preferred, as amphibian eyes cannot see unless there is some movement.

Large animals like Horned Frogs will eat live or dead mice. Use tongs when offering dead mice to avoid being bitten by the frog. Toads and some salamanders follow many of these same requirements, but can be maintained with a smaller water area.

A planted terrarium with a water dish and occasional misting can take the place of an aquarium. Some of these animals have foul to toxic skin secretions as part of their defense mechanism, so washing ones hands is advised after handling any of the amphibians. The tropical Amphibians do not hibernate. Those from temperate climates can hibernate, but probably will not unless the household temperature drops into the 50 to 60 degree range. Feeding and cleaning of your amphibian should take approximately one hour per week. Meeting these requirements for housing, temperature and diet should keep your animals happy and healthy for a long time. If you think that your animal may be sick, take it to a veterinarian who treats exotic animals.



### **CARE SHEETS**

## Care of Aquatic Turtles



Red-eared slider
Text by Roger and Holly Carter

AQUATIC TURTLES are found in lakes, ponds, rivers, marshes and swamps all over the world. Some of the Male Map Turtles of the southern United States are only approximately three inches long. The Painted Turtles and Sliders average seven or eight inches long. The common Snapping Turtle can be over 12 inches long. And the Alligator Snapping Turtle can be over 30 inches long. These sizes are the lengths of the turtle shells, not the whole animal. Some Alligator Snapping Turtles weigh over 200 pounds. Snapping Turtles are not recommended as pets for beginners as they live up to their name and snap. An adult Snapping Turtle can bite off your fingers. The other turtles can give a painful nip. In captivity, turtles can live over 30 years, and often live up to 70 years. They have their own personalities and make very nice pets.

The set up for an aquatic turtle needs to be simple for ease of cleaning. An aquarium half full of water with a dry area at one end allows the turtle to climb out and dry off under an incandescent basking light with a temperature of about 85 to 90 degrees. A UV light source can be beneficial for the turtle as it helps in metabolizing calcium and vitamin D3. The lights can be plugged into a timer to give the turtles a day and night cycle. You can set up your aquarium to represent the wild habitat with rocks, driftwood and live or plastic plants which will look attractive, but it will be much harder to clean. Turtles produce a lot of waste matter. Use a good aquarium filter, not an undergravel filter. The filtration system should be oversized for the aquarium. For example, if you keep an aquatic turtle in a 20 gallon aquarium, you need a filtration system for at least a 50 gallon aquarium. If you do not use a filter, you may have to manually clean the aquatic turtles water at least once a day. Having a good filter system will minimize daily cleaning.

Aquatic turtles are carnivorous, and eat a variety of aquatic animals from insects to fish daily. There are some commercial turtle foods available in pellet form that are more complete diets. The dried insect larvae that is sold as turtle food does not seem

to have enough nutrition requirements. If you provide insects, fish, and crustaceans as a variety two or three times a week, supplements will not be necessary. Some of these turtles will slow down or stop eating during the winter months and go into hibernation, others will stay active all year. Turtles are egg layers but need a hibernation time to reproduce properly.

Cleaning and feeding of your Aquatic Turtle will take about one hour every week. Meeting these requirements for housing, temperature and diet should keep your animals happy and healthy for a long time. Dietary imbalances are the main cause of a soft shell, mouth rot, and other health problems. If you think your turtle is sick, take it to a veterinarian who treats exotic animals.



### **CARE SHEETS**

## Care of Boas and Pythons



Photo by Jim Horton
Text by Roger and Holly Carter

BOAS AND PYTHONS - Boa Constrictors are large snakes found throughout Central and South America, and comprise eleven subspecies. The average size is seven or eight feet long, and twenty to thirty pounds in weight. Some specimens grow to ten feet in length. They bear live young, with babies ten to twelve inches long. Pythons include the Ball Python, a snake from West Africa that averages four feet long; the Burmese Python and Reticulated Python, large snakes from South East Asia averaging seventeen feet long, and weighing approximately two hundred pounds, with some specimens reaching twenty-five feet long. All of the pythons lay eggs. Ball python hatchlings average eight inches long and Burmese Python hatchlings average eighteen inches long. Burmese Pythons and Ball Pythons are quite gentle and docile, and Ball pythons can also be very timid and shy. Most Reticulated Pythons are aggressive and unfriendly. Boas and Pythons can live 25 to 30 years or more. One Ball Python in a zoo lived 47 years.

An adult Ball Python can be kept in a twenty-gallon aquarium. An adult Boa Constrictor can be kept in a fifty gallon or larger aquarium, but an adult Burmese Python needs a large cage. Most people who keep large Pythons build their own cages. One rule of thumb is that the length of the cage should be equal to the length of the snake. Boas and Pythons are tropical snakes that require extra heat. They do not hibernate as do temperate-zone snakes. Cages can be heated with heating pads under part of the cage or with an incandescent light bulb above the cage which reflects the heat and light into the cage through a screen or a perforated metal top. Be sure to use ceramic sockets and do not place the light bulb in the cage because the snake might crawl on it and be badly burned. Leave one end of the cage cooler than the rest, so that if the snake becomes too warm, it can move to a cool area. These snakes do well at a temperature of 85 to 90 degrees. A UV light source can be beneficial, but is optional.

Young Boas and Pythons, and adult Ball Pythons need a place to hide to feel secure. Pet stores sell a wide variety of plastic hide boxes of different sizes, but disposable cardboard boxes from common products like cereal, tissues or soft drinks are an economical alternative. An easily maintained cage uses newspaper as a substrate. Use a good, heavy water dish so that the snake cannot tip it over and flood the cage.

Boas and Pythons are constrictors that eat warm-blooded prey such as mice, rats, rabbits, and birds. They will eat live rodents, but the rodents can bite and injure your snake. Frozen rodents are preferred, and are available from some pet stores and private breeders. Thaw the rodent in hot water until it is soft, grab it with a pair of tongs, and wiggle it in front of the snake. The snake will think the rodent is alive, bite it, constrict it, and eat it. Babies and young might eat once a week or every other week while the adults might only need to eat once a month. The snakes do not need vitamin or mineral supplements as long as their food items are healthy and have been fed a good quality diet. These snakes might bite you if you have the smell of their food items on your hands. Do not feed a big Python if you are alone. The bite itself is not serious, but they will try to constrict you. You can get the smaller ones to let go if you hold their heads under water for a period of time. The snake will release its hold when it comes up for a breath of air.

An individual Boa or Python will take a few hours a month in feeding and cleaning. Meeting these requirements for housing, temperature and diet should keep your animals happy and healthy for a long time. If you suspect your animal is sick, take it to a veterinarian who treats exotic animals.



### **CARE SHEETS**

## Care of Box Turtles



Photo by Jim Horton
Text by Roger and Holly Carter

BOX TURTLES are terrestrial turtles that do not swim, even though they may wade into shallow water to drink. They lay eggs with an average nest size of 2 to 5 eggs. Box Turtles eat a variety of insects, earthworms, and carrion as well as a variety of vegetable matter, or fruits, and especially cactus fruit. In captivity, they will eat a good quality brand of dry dog food that is soaked in water until is soft. A calcium supplement added to their food will help keep their shell strong. Bait shops are a good source from which to purchase your items such as live crickets and earthworms to be used for your pet's food. The turtles should be fed two or three times a week. They can become overweight. This can be seen as rolls of fat at the leg openings. This also prevents them from closing their shell. Box Turtles are found in a wide variety of habitats that include prairies, plains, and lightly wooded forests throughout the United States.

Most Box Turtles are very shy and will withdraw into their shell when approached or picked up. Some may be aggressive enough to give a painful nip, but they cannot do any real damage. They can clamp their shell very tightly because their plastron (the underside part of the shell) is actually hinged near the front and rear. The shell length of an average adult is four to five inches. One adult Box Turtle can be kept in an enclosure about the size of a 10 gallon aquarium. If several Box Turtles are kept together, they need a fairly large enclosure. They need a shallow water dish large enough that they can climb into so that they may soak. The water may have to be changed daily because they will probably defecate in it.

For substrate, sand is NOT good because the turtle might swallow some in its food. Aquarium gravel also is NOT good because it can cause abrasions to the plastron. The best substrate is cypress mulch, because it is soft and the turtles can dig into it. Box Turtles are not as temperature dependent as tropical reptiles, but a heat light suspended over one end of the enclosure gives them a basking site of 85 to 90

degrees if they want to warm up. Use a ceramic socket for the light bulb because it can take the high temperatures that an ordinary lamp socket cannot. Using a UV light source is beneficial because it helps the turtle metabolize calcium and vitamin D3. These lights can be plugged into a timer to give the turtles a day and night cycle. These are temperate zone animals that can hibernate at a temperature of 50 to 60 degrees. If they become lethargic in the fall or during the winter, they should be allowed to hibernate. In captivity, Box Turtles can live 30 to 50 years.

Cleaning and feeding of your Box Turtle will take about one hour every week. Meeting these requirements for housing, temperature and diet should keep your animals happy and healthy for a long time. If you think that your turtle may be sick, take it to a veterinarian who treats exotic animals.



### **CARE SHEETS**

## Care of Colubrids



Photo by *Jim Horton*Text by *Roger and Holly Carter* 

RAT, KING, MILK AND BULL SNAKES are grouped together not because they are the same species, but because of similar requirements needed for maintenance. These animals range in adult size from as small as twelve inches to over eight feet. Their temperament is usually very good, but wild-caught ones may need taming. Rat Snakes include those that are world-wide as well as North American. King and Milk snakes are mostly from North and South America; Bull, Pine and Gopher snakes are mostly from North America. The Rat, King and Bull snakes can live as long as 25 to 30 years. King and Milk snakes should be kept separate from other snakes because they can, and will, eat other snakes, even snakes as long as they are. All of these animals are considered temperate climate animals, needing a cooler temperature for hibernation or as a cyclical change to stimulate breeding, feeding or normal lifestyle.

Temperatures ranging from a daytime high of 85 degrees to a night time low of approximately 65 degrees is ideal. A yearly hibernation period of at least six weeks at a temperature from 50 to 60 degrees is recommended so the animals have an opportunity to shut down activity and feeding, and, as in true hibernation, is a time of sleep.

Caging requirements are simple. A cage about twice the length of the animal is appropriate. Climbing branches are optional but desirable. For bedding, newspaper, pine or aspen shavings are recommended. A box to hide in or shelf will give the animal a sense of security. A water dish with clean water should be available at all times. An escape-proof lid is a must, as these are active, curious animals. Under-cage heat is optional if your home temperature is normally 70 to 80 degrees. A UV light source or enclosed heat light is beneficial, but optional. The lights can be plugged into a timer to provide a day and night cycle.

These snakes eat whole animals, such as mice, rats and birds. They will eat live rodents, but the rodents can bite and injure your snake. Frozen rodents are preferred, and are available from some pet stores and private breeders. Thaw the rodent in hot water until it is soft, grab it with a pair of tongs and wiggle it in front of the snake. The snake will think the rodent is alive, bite it, constrict it, and eat it. When the snakes are very young, they will also eat lizards, frogs and eggs. Many of these animals are also snake eaters and do not differentiate their own siblings or mates. It is therefore wise to always keep these animals in separate cages. Supplements are usually not necessary if they are fed whole prey items. Many of these animals will stop feeding during the winter, even if kept at warm temperatures. If feeding stops but the snake looks and acts okay, it may be due to hibernation, and feeding should resume in March or April. Again, it is best to keep these animals in separate cages and chaperone breeding activities.

Many mutations and color varieties are found in these species. They are egg layers and need to have a hibernation period before successful breeding occurs. Wild-caught animals usually have parasites and some do not accept captivity readily. Captive-born animals are considered the better choice. These animals are usually hardier, easier to manage and quite attractive. The Rat, King, Milk, and Bull snakes are more active than Boas or Pythons but can become just as tame. Their low cage maintenance make them very popular as pets.

Feeding and cleaning of your Rat, Kingsnake, Milksnake, and Bull snakes will take a few hours a month. Meeting these requirements for housing, temperature and diet should keep your animals happy and healthy for a long time. If you suspect that your animal may be sick, take it to a veterinarian who treats exotic animals.



#### **CARE SHEETS**

### Care of Garter and Ribbon Snakes



Photo by *Jim Horton*Text by *Roger and Holly Carter* 

Garter snakes and ribbon snakes are small, very active, excitable slender snakes found throughout most of the United States and Canada. Wild-caught specimens may bite; however, this does not cause any real damage. They will most likely spread musk and fecal matter on you when they become agitated, but they can be tamed, and make an easy to care for, if somewhat active, pet. They grow to about three feet in length and live ten to fifteen years. Some color mutations have been noted, including the albino species. Most Garter and Ribbon snakes have at least one stripe going down the body, with spots or blotches on their sides.

Housing requirements are simple. You will need an aquarium about twice the length of the snake, and a secure lid. Cut or fold newspaper to fit the housing, pine or aspen shavings are also considered to be useful bedding. Frequent cage cleaning is necessary to prevent overly wet conditions, which can cause fatal skin blistering. A box for the snake to hide in, some branches, and a water dish with fresh water at all times will complete your pets housing. Reptile heating pads or lights are not necessary as basic room temperatures of 75 to 80 degrees are fine. In the winter, this species hibernates. They can be cooled down to a low temperature of about 55 degrees and allowed to go dormant for approximately three to four months.

The Garter and Ribbon snakes are somewhat active during this time and will need to have clean, fresh drinking water available. A UV light source is beneficial, but optional. Regular day and night light cycles are necessary.

The diet of the Garter and Ribbon snakes consists mostly of worms, fish, amphibians, and an occasional mouse or lizard. They can become accustomed to eating dead food offered to them with a pair of tongs. Mice should be offered dead, but the other foods can be offered alive. These snakes tend to eat as often as two or three times a week, which is more frequent than the rodent eaters. Supplements of vitamins and minerals are not necessary as long as they receive a variety of food.

Garter and Ribbon snakes give birth to live young usually around August, but must have a hibernation period before there is successful breeding. These snakes are not too likely become overweight because they are so active.

Cleaning and feeding of the Garter and Ribbon snakes will take about one hour a week. Meeting these requirements for housing, temperature and diet should keep your animals happy and healthy for a long time. If you suspect that your animal is sick, take it to a veterinarian who treats exotic animal.



### **CARE SHEETS**

## Care of Geckos



Text by Roger and Holly Carter

The Leopard Gecko is a ground dwelling lizard found in India and Pakistan. Adults average 8 inches long and hatchlings average 3 inches long. Their bodies are covered with scaly bumps with dark spots on the backs and sides and wide bands on the tails. In captivity they can live almost 20 years. These animals are very tame and make good pets. The Tokay Gecko is a tree dwelling lizard from South East Asia that can reach lengths up to 12 to 14 inches. This is not a lizard for everyone as its temperament does not fit into the "pet" category. This species is very aggressive and will readily bite.

The Leopard Gecko will eat a variety of insects and will also eat newborn mice. All of these should be dusted with a vitamin/mineral supplement and offered alive to the lizards 2 or 3 times a week. The Leopard Geckos shed their skin in patches, not in one piece like snakes, and may eat their shed skin. Several Leopard Geckos can be kept in a large enclosure, although weak specimens may have to be kept by themselves.

The Tokay Geckos are very hardy and easy to maintain but do not become a hands-on animal unless you spend a great deal of time working with them. Tokays are nocturnal, and are able to run up walls and ceilings. This lizard will eat a variety of prey. Almost anything that can fit in the mouth is fair game, including all types of insects, spiders, lizards, amphibians, mice, and hatchling birds. Live insects dusted with a vitamin/mineral powder can be offered 2 or 3 times a week. Fresh-killed or thawed mice of a suitable size can be offered to the lizard with a pair of tongs once a week.

One adult Tokay will fit well into a 10 - gallon aquarium with a good secure top. They can climb up glass and may even hang upside down from the cage top.

Geckos are tropical animals that do not hibernate and will require extra heat. Do not use hot rocks because they can burn the animal. Place a heat pad under part of the cage, leaving the rest of the cage as a cool spot; or place an incandescent light above one end of the cage, which directs the heat and light into the cage creating a hot spot of 75 to 85 degrees. Make sure the light fixture is secured so it will not fall into the cage

and use a ceramic socket for the light bulb instead of the ordinary lamp socket. A UV light source is beneficial to all geckos but the length of exposure time can be minimal because of nocturnal habits. The lights and the heating pad can be plugged into a timer to give the lizards a day and night cycle. Newspaper cut or folded to fit the bottom of the cage makes a good substrate. Water in a dish should be readily available, and misting should be done two or three times a week. A box to hide in should be provided. Pet stores sell a variety of hide boxes, but disposable cardboard boxes from tissues and cereals are also suitable.

Taking care of your Gecko should take less than one hour a week. Meeting these requirements for housing, temperature and diet should keep your Geckos happy and healthy for a long time. As with many other lizards, Geckos can readily lose their tails if they are alarmed, but will regenerate new ones in time. The new tail, however, will not look exactly like the original tail. If you think your Gecko is sick, take it to a veterinarian who treats exotic animals.



### **CARE SHEETS**

### Care of Green Iguanas

The Iguana lizards originate from rain forests and jungles in Central and South America. They can grow to six feet in length with most of the length in the tail. The Iguana's tail can detach if the lizard becomes alarmed or tries to protect itself during a struggle. The tail will regenerate in time; however, the new tail will not look exactly like the original. Each lizard has its own personality ranging from a very docile animal to a very aggressive biter/tail whipper, and the bite may require stitches. Iguanas can live as long as 20 years, and they can become very personable pets.

Iguanas are mostly vegetarians when adult. Young animals are more prone to eat insects such as live crickets and roaches. The diets should have a wide variety of vegetable and fruit every day with weekly vitamin/mineral supplements provided in a bowl or dish. Vegetables include romaine lettuce, spinach, kale, broccoli, cauliflower, cucumbers, tomatoes, collards, turnip tops and bulbs, peas, all types of beans, corn, beet tops and bulbs and carrots. Fruits include melons, grapes, apples, peaches, pears, bananas, berries of all kinds, and all types of squash. Vitamin and mineral supplements are available at your local pet shop. There are also commercially prepared pellet and canned diets which are very good, but boredom can set in unless this too is supplemented with a variety of greens. Food variety is the key; and if possible use untreated grasses such as clover, alfalfa, timothy, dandelion and plantain.

Iguanas require sizable housing so the animal can fully spread out. An aquarium or enclosed cage at least twice the length of the lizard with enough room to comfortably turn around is recommended. The Iguanas are tropical animals and cannot hibernate, therefore, they require extra heat. A heat source such as an under the cage reptile heating pad, heat tapes, or enclosed overhead lights are recommended to provide a temperature of 85 degrees with a hot spot of about 90 to 95 degrees. Hot rocks and light bulbs inside the cage should be avoided because they can cause burns. An enclosed UV light source should be within six inches of the animals favorite resting place. The lights can be plugged into a timer to coincide with natural day and night cycles. An escape proof lid or screen should keep the Iguana securely in its cage. Newspaper or Astro-turf are good to use for substrates. Sand, shavings or dirt are not recommended due to moisture absorption. Daily or bi-weekly misting with a hand-held spray bottle is highly recommended. This helps to clean and moisturize the skin which aids in the shedding process. Water should be provided in a non-tip bowl or pan that is accessible to the animal. Branches are necessary for climbing and exercise, so adding branches that are strong enough to support the animal is very beneficial. Plaster or plastic branches are available but real branches can be used. These should first be washed with a 5% bleach solution to kill any germs, fungus, bugs, etc., then rinsed thoroughly. These branches should be arranged to provide a "hot" basking area and a "cool" resting area.

Cleaning cages, preparing food, and feeding an Iguana will take an hour every day. Meeting these requirements for housing, temperature and diet should keep your animals happy and healthy for a long time. Iguanas are egg layers, and egg binding in females is somewhat common in captivity possibly due to their getting less exercise in their cage environment. If you think your Iguana is sick, you should take it to a veterinarian who treats exotic animals.



### **CARE SHEETS**

### Care of Monitors

Text by Roger and Holly Carter

The Monitor lizards are found in Asia, Africa, and Australia. Some Monitors are large in size and grow to five feet in length. The smaller monitors are about 3 feet in length with most of this size consisting of its tail. They can live to about 20 years. Large Monitors can inflict serious bites that might require stitches. All are primarily carnivores. Some are highly aquatic while others are from desert localities. Temperament varies with each species. Aquatic types such as the Nile, and Water, and many smaller types such as Goulds, Dumeril and Brooks, have high strung, excitable personalities, as opposed to the desert savanna species, the Savanna Monitor, which is calmer and more sedate.

Housing should be roomy, approximately three times the length of the animal. Aquatic species should be provided with a large water container which allows the animal to completely submerge. Frequent cleaning is necessary since the animal will frequently defecate in the tub. Some large climbing branches will usually provide basking or exercise areas. These are tropical animals that require extra heat, and they cannot hibernate. Heating should consist of an enclosed and secured heat lamp or some under-cage heat pads or tapes covering about half of the cage. A "Hot Spot" of about 90 degrees with the rest of the cage about 75 to 80 degrees will provide a good median temperature. An UV light source at a distance of approximately six inches over a favorite resting site is beneficial. The light can be set on a timer to provide a day and night light cycle. Cage substrate and furnishings should be easy to clean. Newspapers, shredded aspen or pine shavings are best for ease of cleaning. Elaborate plantings or rocks should be avoided as these will be rearranged by the animal and could cause injury as well as deter the owner from proper cleaning.

Foods should be mostly meat protein, such as mice, rats, birds, fish or crustaceans. Rodents can inflict serious bites to your pet and should not be offered as live food. Feeding the Monitor a whole animal as opposed to parts of one is more beneficial for total nutrition. Fruits and some vegetables should be offered weekly in a dish. Dry dog foods that have been soaked to a mushy consistency and mixed with egg, fruits, and vegetables can be used in place of whole animals. However, your pet's diet should be balanced out by adding reptile vitamin/mineral powder to its meals. Tongs may be useful in feeding as the Monitor can be very quick to strike when feeding. These lizards are usually heavy-bodied animals, but care should be taken to prevent them from becoming overweight. Water should be provided at all times either in a large bathing container or a sturdy bowl. Injury resulting from cage mates is often encountered and it is best to keep animals separate. Breeding requires wet/dry cycling and eggs are laid in sand or sphagnum moss. These animals are egg eaters, so females should be separated from others and watched for egg laying.

Meeting these requirements for housing, temperature and diet should keep your Monitor happy and healthy for a long time. Depending on the animal's growth, activity or temperament, cage cleaning and feeding can be as often as three times a week. Poor cage keeping and improper nutrition are the main causes of problems with Monitors. Parasites are usually present and if you think your Monitor is sick, you should take it to a veterinarian who threats exotic animals.