

Jefferson Animal Hospital East

Kentucky Exotics Center

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OWNING A PET SNAKE

General Information

Several species of snakes are commonly kept as pets. These include king snakes, garter snakes, Burmese pythons, various boa constrictors, and ball pythons. The needs of your particular species may differ from the needs of the generic "snake", so be sure to discuss any particulars with your veterinarian. The ball python will be used for this discussion, as it is one of the most common if not the most common species of pet snakes. Most of the information concerning the ball python is applicable to other terrestrial snake species.

Most snakes sold as pets are easy to handle and usually non-aggressive. Many, especially the ball python, may not eat for weeks to months after the stress of going to a new environment. This can be normal, or can be a sign of a more serious disease that requires prompt veterinary attention.

Ideally, captive-bred animals should be purchased as pets. Wild caught snakes are less tolerant of stress, more likely to refuse to feed, and often harbor internal and external parasites.

Male and female snakes look identical; your veterinarian can carefully probe the cloacal area to determine the sex of your new pet. Hatchling ball pythons are about a foot long and grow to about 3 feet by 3 years of age. At maturity (reached in 3-5 years), adults reach 5-6 feet in length. Depending upon their care, ball pythons can live 10-20 years.

How do snakes differ anatomically from other pets?

Most snakes have only one functional, simple lung (usually the right lung). The lung extends most of the snake's entire body length.

Snakes have a cloaca, a common opening for the urinary, digestive, and genital tracts. By inserting a special probe in the cloacal area, a veterinarian can tell the sex of your snake.

Snakes have no limbs; many people feel the spurs that are present in the cloacal region of some snakes represent vestigial limbs.

Snakes have numerous pairs of ribs.

Snakes have a three-chambered heart; people, dogs, and cats have four-chambered hearts.

Snakes have no diaphragm; this prevents coughing and airway clearance, and snakes with simple respiratory infections easily develop pneumonia because of this. Respiratory infections in reptiles are always more serious than similar infections in mammals.

Males have two reproductive organs called hemipenes.

Snakes have spectacles instead of eyelids.

How do I select a snake?

Most owners buy snakes locally from a pet store, although mail ordering from reptile breeders is also common. If you buy a pet through the mail, make sure you know what you're getting! Ask about a guarantee if the pet isn't what you want.

Young, captive-raised animals make the best pets. Older imported animals are harder to tame, may harbor internal parasites, and often suffer from the stress of captivity. Avoid sick-looking animals. Don't try to be a "Good Samaritan." Many sickly-looking snakes are terminally ill. Trying to nurse a sick snake back to health after purchasing it will rarely work. Just the stress of a new environment is often enough to kill a sick snake.

Start out right with a healthy pet. Avoid snakes that appear skinny, have loose skin or sunken eyes, and appear inactive or lethargic. A healthy snake is usually bright, active, and alert. The eyes should be clear; cloudy eyes usually indicate the snake is about to shed. While not a sign of illness, shedding is very stressful to snakes and it would be best to purchase a snake that is not about to shed. As you examine the eyes, check for mites, which are tiny black dots that often move. Make sure no lumps or bumps are present; simply running your hands slowly down the snake's body will allow you to detect any swellings. The vent or cloaca should be clean and free of wetness or stool stuck to it. If possible, GENTLY open the mouth. There should be a small amount of clear saliva present, and a pink tongue and oral cavity. Mucus that is cloudy or "cottage cheese" in appearance is a sign of mouth rot, as is redness or pinpoint hemorrhages on the mucus membranes. Always inquire about the guarantee in case the snake is found to be unhealthy.

My snake looks healthy? Does he need to see the veterinarian?

Within 48 hours of your purchase, your snake should be examined by a qualified reptile veterinarian. The visit includes determining the animal's weight, as well as checking for lumps and bumps. The animal is examined for signs of dehydration and starvation. A fecal test is done to check for internal parasites. Many veterinarians consider all snakes (even those bred in captivity) to have some type of parasite, so your snake may be routinely dewormed. The oral cavity is examined for signs of infectious stomatitis (mouth rot). No vaccines are required for snakes. Your doctor may recommend blood tests, cultures, or radiographs (X-rays) to check for other diseases. If all turns out well, your snake will be given a clean bill of health. Like all pets, snakes should be examined annually and have their feces tested for parasites annually as well.

HOUSING YOUR PET SNAKE

What type of cage does my snake require?

Smaller juvenile pets often do well in a 10 or 20 gallon aquarium, or even plastic shoeboxes (cut small air holes!). As your snake grows, he must be moved to more comfortable enclosures. These can often be purchased or built by the pet owner. Your veterinarian or pet store may have examples of these larger enclosures to give you an idea of the proper habitat for an adult snake.

Does my snake need bedding in his cage?

Substrate, or bedding material, should be easy to clean and nontoxic to the snake. Newspaper, butcher paper, towels, or preferably Astroturf is recommended. When using Astroturf, buy two pieces and cut them to fit the bottom of the cage. With two pieces, one is placed in the cage and one is kept outside the cage and is always clean. When the turf inside the cage becomes soiled, you'll always have a clean, dry piece to replace it. Clean the soiled turf with ordinary soap and water (avoid harsher products unless your reptile veterinarian approves them), thoroughly rinse it, and hang it to dry to be used at the next cage cleaning.

AVOID sand, gravel, wood shavings, corn cob material walnut shells, and cat litter, as these are not only difficult to clean but can cause impaction if eaten on purpose or accidentally should the food become covered by these substrates. **Cedar wood shavings are toxic to reptiles!**

What else do I need in the cage?

Natural branches are enjoyed by the snake. Make sure they are secure and won't fall onto the snake and injure it. Ideally, the branch should slope from the bottom of the enclosure to the top and end near a heat source so the snake can bask. Rocks (large ones) in the cage also allow for basking. A hiding place is appreciated by all reptiles and should be available. Artificial plants can be arranged to provide a hiding place, as can clay pots, cardboard boxes, and other containers that provide a secure area.

A heat source is necessary for all reptiles, which are ectothermic (cold-blooded) and need a range of temperatures to regulate their internal body temperature. Ideally, the cage should be set up so that a heat gradient is established, with one area of the tank warmer than the other end. In this way, the snake can move around its environment and warm or cool itself as needed. Purchase two thermometers and place one at the cooler end of the cage and one at the warmer end near the heat source. The cooler end of the cage should be approximately 70-75 F, while the warmer end should be 90-95 F. An inexpensive way to do this is to supply a focal heat source using a 100-watt incandescent bulb with a reflector hood, although pet stores sell other types of heat lamps. Your heat source should be placed **OUTSIDE** and above one end of the cage, which should be covered by a screen top to prevent the snake from escaping or burning itself on the bulb. At night, heat is not necessary as long as the temperature remains at 65-70 F.

Heating pads can also be used for warmth; speak with your veterinarian to learn the correct way to use them if you choose this form of heating.

"Hot Rocks" or "Sizzle Rocks" are dangerous, ineffective, and should be avoided!

What about UV light?

While UV light is necessary to provide Vitamin D-3 for most reptiles, veterinarians are divided about the need for UV light for snakes. This is because snakes consume whole prey as the diet, and the prey is "nutritionally balanced" for snakes. However, providing UV light would not be harmful and may be beneficial, so it would probably be wise to provide some type of UV light such as a Vita-Lite. Speak with your veterinarian about their feelings regarding the need for UV light for your snake.

FEEDING YOUR PET SNAKE

What do snakes eat?

Unlike most pets, snakes eat whole prey items including mice, rats, gerbils, and hamsters. Larger snakes will also eat whole rabbits. Since snakes eat entire prey items, this simplifies things for snake owners, and most certainly prevents many dietary-related diseases so commonly seen in other reptiles. However, it does present a problem. Namely, you must provide some type of prey to the snake. If you're squeamish about killing rodents for your snake and then watching it eat the prey, a snake is probably not the pet for you!

Ideally, your snake should be provided either a thawed, previously frozen prey item, or a freshly killed one. It is not recommended to feed live prey to snakes for several reasons. First, the prey obviously knows it is prey and unless killed and eaten immediately, it certainly suffers some psychological stress. Second, and surprising for most snake owners, is the fact that **even a small mouse can severely injure and even kill a snake if the snake isn't hungry!** For humane reasons, strongly consider feeding dead prey. The only exception would be if you know that your snake will immediately kill and eat the prey **and you will watch the snake do this.** Even with this care, there is still a slight possibility of injury to the snake. Unweaned, infant prey (pinkie mice), are safe to feed alive to smaller, younger snakes.

How often should I feed my snake?

That all depends upon the size and age of your pet. Smaller snakes usually eat twice each week, and larger snakes eat once every week to once every few weeks. Follow your veterinarian's guidelines. Your pet snake will also tell you how often he needs to eat by his response to your feeding schedule.

My snake won't eat! What's wrong?

There are many causes of anorexia, or failure to eat in pet snakes. These could be benign causes such as the stress of a new environment, shedding, pregnancy, or breeding season anorexia. Failure to eat could also be a sign of a more serious problem such as cancer, kidney failure, gout, or parasites. Your veterinarian can help determine the cause of your snake's anorexia after a thorough physical examination and appropriate laboratory testing.

Do I need to give my snake vitamins?

As a rule, no. However, since your snake "is what he eats", it's important to make sure that your snake's prey is healthy and well fed. Many owners raise their own rodents for feeding to their snakes for this reason. If you'd like, it probably wouldn't hurt to insert a multi-vitamin/mineral tablet into the stomach or abdomen of the dead prey prior to feeding your snake, but check with your veterinarian about this first.

What about water?

Fresh water in a crock that won't easily tip over should be available at all times. Snakes will not only drink from the water bowl but will often bathe in it as well (although it is perfectly acceptable to mist the snake with water a few times a week too). Make sure the water stays clean; many snakes love to eliminate in their water bowl as well as drink from it.

COMMON DISEASES OF PET SNAKES

What are some of the common diseases of pet snakes?

Common conditions of pet snakes include infectious stomatitis (mouth rot), parasites, respiratory disease, difficulty shedding, and septicemia.

What are the signs of these diseases?

Infectious Stomatitis (Mouth Rot) is seen as pinpoint hemorrhages on the gums or an excess amount of thick mucus, often like cottage cheese, in the mouth. In severe cases, the snake will exhibit a severe swelling of the mouth and exhibit open-mouth breathing.

Parasites are often encountered in pet snakes. They often cause no clinical signs and are detected on an annual fecal examination. They may, however, cause diarrhea or weight loss.

Most respiratory infections are caused by bacteria, and in snakes are often seen in conjunction with mouth rot. Snakes with respiratory infections may have excess mucus in their oral cavities, nasal discharges, lethargy and loss of appetite, and possibly open-mouth breathing and wheezing.

Some snakes have difficulty shedding. Often this is due to improper environmental temperature or humidity. A special concern is the snake with retained spectacles (eye caps). The spectacles are normally shed during the shedding process. When they are not shed but rather retained, your veterinarian should be consulted about removal. Improper removal can result in permanent eye damage and blindness.

Septicemia or toxemia is a condition where microbes such as bacteria or toxins invade the blood stream and other body organs. Snakes with septicemia are critically ill and are often near death. They exhibit lethargy, lack of appetite, open-mouth breathing, and often have a red discoloration on the scales of their bellies.

How can I tell if my snake is sick?

Signs of disease in snakes may be specific for a certain disease, such as a cottage-cheese type discharge in the mouth of a snake with mouth rot, or non-specific, such as a snake with anorexia (lack of appetite) and lethargy, which can be seen with many diseases. ANY deviation from normal should be a cause for concern and requires immediate evaluation by your veterinarian.

How are snake diseases treated?

Infectious Stomatitis (Mouth Rot), usually requires injectable antibiotics, as well as rinsing the mouth with antibiotic solutions. Atropine (to reduce the thickness of the oral secretions) and vitamin C may also be needed.

Several deworming medications are available either as an oral or injectable drug. The type of parasite identified on the microscopic fecal examination will determine which drug is needed.

Respiratory infections are most often caused by bacteria; other organisms, including parasites, can cause respiratory problems as well. Your doctor may want to do radiographs (X-rays), blood tests, and cultures to determine the cause of the infection. Occasionally, allergies can cause nasal discharge as well. Treatment for true infections involves antibiotics given orally or as injections, and possibly nose drops. Sick snakes require intensive care, including fluid therapy and force feeding, in the hospital.

Shedding problems (retained skin and eye caps) can usually be treated by providing extra humidity to allow the snake to shed the retained skin. Your veterinarian should be consulted about various ways to increase the humidity and aid in removal of the skin and eye caps so that no permanent damage is done to your pet snake.

Septicemia is a true emergency that requires aggressive treatment in the hospital. Antibiotics, fluid therapy, and force-feeding are needed in an attempt to save the snake.

Any of these diseases can be severe enough to cause a loss of appetite and lethargy. When seen, these signs indicate a guarded prognosis and the need for hospitalization and intensive care, which can include fluid therapy and force-feeding.

SPECIAL PROBLEMS OF PET SNAKES

General Information

Snakes have several unique problems; understanding these problems will allow you to better care for your pet and minimize future health care problems.

Anorexia

Anorexia means lack of appetite or refusal to feed. Snakes commonly exhibit anorexia. Anorexia can be a "normal" condition, often associated with pregnancy, the breeding season, incorrect environment, incorrect diet, or most commonly the stress of a new environment. "Abnormal" anorexia is most often caused by a disease such as infectious stomatitis (mouth rot), parasites, kidney failure, or gout. Your veterinarian will need to perform a thorough physical examination and run laboratory tests in order to make sure your snake's anorexia is not caused by a specific disease. Getting the snake who suffers from "normal" anorexia to eat is a challenge but is usually successful with time and patience.

Salmonella

While turtles are most commonly incriminated in spreading *Salmonella* bacteria to their owners, any reptile, including snakes, can carry the bacterium. This bacterium can cause severe gastrointestinal disease or septicemia (blood poisoning). Many animals and people carry the bacteria without showing any clinical signs (remember Typhoid Mary?), yet shed the bacteria in their feces which can infect others.

Prevention, through proper hygiene, is the best way to control the disease. Since most snakes which carry *Salmonella* are not ill, they usually require no treatment (treatment often fails to kill the bacterium anyway).

Lumps and Bumps

Snakes are commonly seen with various lumps and bumps either on their bodies or within their bodies.

Various conditions can cause these lumps and bumps. External lumps could be caused by infections, as is the case with abscesses, tumors, or parasites. Internal swelling can be caused by various organ problems (such as kidney disease, parasitic infections of the stomach), retained eggs in some species of snakes, tumors, and even constipation!

Your veterinarian may need to run certain tests to determine the cause of the specific swelling. Once the cause of the swelling is known, the doctor will decide if medical or surgical therapy will best solve the problem. Many lumps and bumps are benign and do not pose a life-threatening risk to your snake. Others can be signs of more serious disease. The sooner your snake is examined, the better its chances of recovery.