

# Corn Snake, Rat Snake

*Elaphae guttata*



**NOTE:** Corn snakes and rat snakes are basically the same snake; they just differ in coloration and a bit in size. They belong to the same family and genus, *Elaphae guttata*.

It is thought by most that corn snakes are *red* rat snakes, others believe that the terms rat snake and corn snake are interchangeable, depending on how they are referred to by the locals in the particular area in which each is found.

For our purposes, we will refer to the snakes as corn snakes in this care sheet.

**AVERAGE LIFE SPAN:** 10 years

**AVERAGE ADULT SIZE:** 2.5 – 5 feet

**CAGE TEMPS:** Warm side – 85 °F  
Cool side – 75 °F

**CAGE HUMIDITY:** No specific requirements

\* If room temperature falls below 70 at night, the enclosure may need a supplemental infrared or ceramic heat fixture may be necessary

**WILD HISTORY:** Most corn snakes purchased at pet stores and from good breeders are bred and hatched in captivity. In order to help reduce the number of snakes poached from the wild, make sure your pet is indeed captive bred.

They are commonly found in the deciduous forest areas, farm areas and rocky hillsides in much of the United States, from as far north as Delaware down to Florida and as far west as Texas. They have also been found in Mexico.

**PHYSICAL CHARACTERISTICS:** Corn snakes are long, slender bodied snakes that are available in a variety of colors and color combinations.

The “corn snake” name comes from the speckled pattern on the body, which is said to look like “Indian corn” or “maize”. They were also often found in the corn stores of the early settlers – most likely they were hunting the rodents that were seeking the corn!

**NORMAL BEHAVIOR & INTERACTION:** Corn Snakes are crepuscular, which means they are most active at dawn and dusk. They are generally ground dwellers but are also semi-arboreal (will climb trees).

Corn snakes are active snakes that, when being held, tend to want to go in several different directions at once. They can be a bit nervous when first being handled. Be sure to support the snake well while holding and do not quickly force the snake in one direction or the other. Guide it gently.

**NOTE:** All snakes should be housed separately, apart from other snakes, even those of the same species. Housing snakes together will create a dominant/submissive hierarchy and will result in one snake becoming stressed to the point of illness, anorexia and possibly death. It is also quite possible for a larger snake to eat a smaller snake! Each species may also harbor different parasites/protozoans/bacteria (even a healthy reptile harbors a small amount at all times), which may make each other ill.

**DIET:** Carnivorous; frozen thawed mice or rats (size depending on age and size of snake)

DO NOT FEED LIVE PREY (see “Snake Feeding” hand-out). Live prey may bite and injure your snake and consequently make your snake afraid of his own food. Live rodents may also harbor parasites that can be transferred to your snake. Snakes injured by live prey are regularly seen by exotic veterinarians.

**FEEDING & SHEDDING:** Feed in the morning or in the evening.

Corn snakes *will* eat mice and rats in captivity. In the wild they prefer rodents, birds, other snakes, frogs and lizards. They are constrictors; which means they constrict their prey to suffocate it and then eat it.

If you have trouble feeding your corn snake, please refer to our “Snake Feeding” fact sheet for help.

A healthy snake will usually eat about every 7-10 days. An adult will eat 1-3 adult mice at each feeding, depending on the size of the snake. Remember it is always easier for a reptile to digest several smaller prey items rather than one larger one.

Some snake owners find it easier to feed their pet in a separate enclosure, free of bedding and furniture, this way you can be sure your snake eats all its food properly and the snake will not pick up any bedding when grabbing prey and mistakenly ingest it along with the prey.

Defecation usually follows 2-3 days after eating. Do not feed again until your snake has defecated from previous feeding.

\*Do not handle for 24 hours after eating to prevent regurgitation.

Depending on the snake's age and size, he or she may shed 2-6 times a year. Young snakes shed more often than older snakes; smaller ones more than larger.

The process of shedding takes about 7-10 days. When shedding is about to occur, the belly will become pink and the skin's overall color will dull. After 5-6 days, it will clear and the snake will soon begin to shed. If the shed does not come off in one piece, it is a sign that its environment is not ideal.

In the wild, reptiles have a much easier time with their sheds, as they are generally in a more naturally humid environment and have access to pools or bodies of water in which they can soak at will. Even reptiles from arid areas find humid places to go during the shedding process, such as cold, moist burrows under the sand or caves.

The shedding process happens when the snake's body begins to grow a new layer of skin; that new layer begins to separate from the old and a very thin layer of fluid forms between the two layers. If your pet's enclosure is too dry, this fluid layer will not form properly, making it difficult for your reptile to shed properly.

To create more humidity, the entire tank can be lightly spray misted twice a day during shedding time. Spray once in the morning and once later in the day. Make sure the later spray dries completely before lights go off for the night, as the droplets will not have proper time to dry and may contribute to respiratory disease.

Some snakes may benefit from a 'moist box' during shedding time. This can be a 'Tupperware'-like container (with the cover on) with moist reptile terrarium moss inside. The container should be big enough for the entire snake to be inside with a hole cut in the side just large enough for the snake to come and go at will. Keep the moss moist but not watery, and place the box on the heating pad in the tank.

**SUPPLEMENTS:** Supplementation is not normally necessary for snakes, as they consume whole prey. If your snake becomes ill, your veterinarian may recommend injecting the prey with supplements that can help the current issue. Do not inject your rodents without consulting your veterinarian first. Over-supplementation is possible and dangerous.

**WATER:** A large bowl of clean fresh chlorine-free water must always be available. Place it on the cool side of your reptile's enclosure. Change it daily, or as needed, as your pet will most likely bathe in it as well. Snakes will often defecate in their water bowl, as the warm water seems to have a laxative effect on reptiles! All water given to reptiles for drinking, as well as water used for misting, soaking or bathing must be 100% free of chlorine and heavy metals. (Not all home water filtration systems remove 100% of the chlorine and heavy metals from tap water). We recommend that you use unflavored bottled drinking water or bottled natural spring water; never use untreated tap water. If tap water is used, you should treat it with a de-chlorinating treatment. De-chlorinator is available in the fish department. If you do not want to chemically de-chlorinate the water, you can leave an open container of tap water out for at least 24 hours. Do not use distilled water, which can cause severe medical problems, since it lacks minerals that are essential to important body functions.

A daily misting or two with chlorine-free water will also be appreciated. However, care should be taken not to allow the enclosure to become damp. Also, do not mist less than two hours before turning the heat lamps off for the day, as the droplets will not have proper time to dry and may contribute to respiratory disease.

**SOAKING:** Snakes benefit greatly from a good deep-water soak at least once a week. A large plastic tub makes a good snake bathtub. Fill the container deep enough so the entire snake's body can be submerged under water, but the snake's head can be out of water. The water should be nice and warm (about 68-70 degrees). Soak your snake for about a half hour at a time.

## RECOMMENDED SUPPLIES:

20L breeder reptile tank (20x13) or fish tank with very secure mesh top.	Light dome and basking bulb (Lg. dome 75 watt for a 20L tank)
Under tank reptile heater – placed under same side of tank as basking light. NO heat rocks.	Temperature / humidity gauge – do not stick to side of tank. It should be moved around to check the temps of different parts of the cage.
Dry hide house	Shredded aspen bedding, newspaper or paper towels for the bottom of the tank
Large crock water bowl – big enough to soak in	Moist box (with terrarium moss) for shedding time
UVB bulb and housing	Corn snake book

**HOUSING & ENVIRONMENT:** Reptiles are ectothermic, or cold-blooded, which means they are dependent on the temperature of their immediate environment to regulate their body temperature. Therefore, we must create an environment with several heat gradients – warm on one end and cool on the other. With this set-up, your pet can go to either end depending on whether he needs to be warmer or cooler.

**ENCLOSURE SIZE:** The enclosure should be a solid glass sided tank long enough to create the two separate temperature gradients (warm and cool); a corn snake tank should be at least a 20 gallon long tank for an adult.

**IT IS NOT TRUE THAT A REPTILE WILL ONLY GROW AS LARGE AS ITS ENCLOSURE ALLOWS!!**

**COVER:** Make sure the cage has an escape-proof metal mesh top. It should fit snugly onto the tank and have strong clips locking it on. It is important that the top is METAL mesh, as you will place the heat lamp directly on top of this cover.

**HEAT PAD:** Reptile heat pads can be adhered directly onto the underside of the glass bottom of the tank. Stick the pad on the glass on one of the very far ends of the tank (opposite the water dish). For safety reasons, make sure to attach the rubber feet (contained in the box) at all four corners of the underside of the tank. This will allow air to circulate underneath the tank and prevent the heat from being trapped under the tank. Leave the heat pad ON 24 hours a day.

A human-grade heat pad may be used on the low to medium setting. Do be sure to allow for proper ventilation for safety reasons.  
\*\*Be sure to purchase a heat pad without automatic shut-off, which are still available.

Heat pads specifically manufactured for reptiles and human-grade heat pads are safe to leave on 24 hours a day. DO NOT use reptile heat rocks. They heat unevenly and have caused severe thermal burns in reptiles and amphibians.

**HEAT LAMP:** Place the heat dome with the basking bulb on top of the cage directly over where the reptile heat pad has been placed on the underside of one end of the tank. The heat lamp should be turned on in the morning, and off at night. (See “Day/Night Light Cycles” below.)

Follow directions carefully with all products – READ THE INSTRUCTION SHEET!!

Always choose fixtures with ceramic sockets and be careful to choose the socket that is properly rated for the wattage bulb that you will be using. Do not place the fixtures by dry wood or flammable fabrics.

All heaters should be placed out of the reach of children and all pets – including cats and dogs.

Be very careful to make sure that your caged pet cannot reach and touch the heating device (bulb) in its own cage. A thermal burn to the face or body can be painful and life threatening.

**BASKING AREA:** A warmer basking area matching the temperature listed at the top of this care sheet must be established on the warm side of the cage. This area is directly under the basking bulb and will be higher in the cage for arboreal species. The basking area should be the warmest area in the enclosure. Maintaining the proper temperature in this spot is extremely important to the health of your pet.

**UVB LIGHT:** Exposure to UVB (ultraviolet B) light is critical in allowing an animal to synthesize vitamin D<sub>3</sub> in their skin and metabolize calcium in their body.

If an animal is not exposed to an adequate level of UVB light, it will gradually develop physical problems from the result of mineral deficiencies such as low blood calcium (hypocalcaemia), soft eggs (females), stunted growth and metabolic bone disorder, which can be fatal if left untreated. In addition, recent studies have linked sub-optimal vitamin D levels with poor immune system function.

All day-active (diurnal) indoor reptiles, amphibians, birds and hermit crabs should be allowed self-selected exposure to UVB lighting for up to 8-12 hours a day. This means they should be able to bask in the light but also get away if desired, much as they might in the wild. Many twilight-active (crepuscular) and night-active (nocturnal) species do get some exposure to the sun and may also benefit from low levels of UVB, which helps regulate their photoperiod and vitamin D levels as well.

Please see our additional “UVB Lighting for Companion Birds and Reptiles” for specific instructions for your particular pet and the UVB bulb that we recommend for him or her.

**HIDE HOUSE:** Place a hide house inside the cage directly over where you have positioned the heat pad, and directly under the heat lamp above.

**WATER BOWL:** The large water crock can be placed on the opposite end of the cage, along with another hide house, if desired.

**BEDDING:** We recommend a shredded aspen bedding since it will not cause impactions in the snake if it is ingested by mistake *and* it is easy to clean – daily spot cleaning becomes easy by just removing the soiled portion of aspen.

Newspaper or paper towels can also be used.

If “reptile carpeting” is used, it MUST be kept extremely clean. The carpeting can foster the growth of bacteria and fungus, which can in turn be very dangerous to your pet. If you insist on using the carpet, purchase two so you can interchange them regularly.

**BRANCHES & PLANTS:** Corn snakes do enjoy climbing so sturdy climbing branches, rocks and plastic plants and can be included as well.

**TEMPERATURES:** Cage temperatures should be monitored daily and kept at the temperatures listed at the top of this page. Use your reptile thermometer to check the temperatures in different places in the cage regularly to make sure they continually match the listed proper temperatures.

\* If the room temperature falls below 70 degrees at night, a supplemental infrared or ceramic heat fixture may be necessary. (These fixtures do not emit a light spectrum that is visible to the snake, so it will not disturb him at night, but they WILL provide the necessary supplemental heat.)

If your snake does not receive the proper heat at the proper temperatures, he may become sick with issues such as respiratory disease and will probably stop eating, as snakes cannot digest their food without proper heat.

**DAY/NIGHT LIGHT CYCLES AND HEATING:** All reptiles must have distinct day and night periods in their enclosure to maintain their biological rhythms.

Corn snakes need 8-12 hours of daytime and 8-12 hours of nighttime. However, as the daylight hours change seasonally outside, daylight hours inside the tank should reflect the same.

**The day period must be light, and the night period must be dark.**

A timer can be used to set the day/night periods so the lights turn on and off automatically.

**HABITAT MAINTENANCE:** Daily maintenance should consist of spot cleaning by removing soiled substrate, cleaning water bowl thoroughly and wiping glass clean.

The entire tank should be cleaned thoroughly at least once every month with:

- A mild dishwashing liquid in warm water (make a weak dilution),  
THEN
- Vinegar & water (1:8)  
OR bleach and warm water (1:32)
- Cage “furniture” should also be scrubbed clean with the same dilution.
- RINSE OFF ALL SOAP AND BLEACH THOROUGHLY WITH PLAIN WATER BEFORE RE-INTRODUCING YOUR PET TO ITS ENCLOSURE!!
- NEVER MIX VINEGAR AND BLEACH – IT CREATES A TOXIC SOLUTION
- NOTE: water used for cleaning does not need to be de-chlorinated, as your pet will not be drinking it or bathing in it.

**GROOMING & HYGIENE:** To reduce the risk of contracting and spreading salmonella poisoning, all handlers should wash their hands after handling any reptile.

**SIGNS OF A HEALTHY ANIMAL:** smooth, even scales; no traces of mites (small, reddish brown spots around pits and nostrils, under scales); clear, bright eyes; rounded, full body; strong, even, smooth jaw line; regular record of healthy feeding and defecating schedule.

It is very important to keep a journal for each animal that records feeding, refusing, defecation, shedding, unusual behavior, changes in behavior and dates of bulb changes. This will help your veterinarian trouble-shoot any health issues.

We recommend physical exams every year or two years with an exotic pet veterinarian for pet reptiles and amphibians. If your vet sees your pet regularly, many common conditions that afflict pet reptiles and amphibians can be caught and treated early. If not caught early enough or if left untreated, many of these conditions can become far worse if not fatal.

**SIGNS OF ILLNESS:** Irregular scales; small reddish brown spots (mites) around mouth, pits, eye area, ear area or under scales; irregular jaw line, ‘dents’ in mouth with (or without) cottage cheese-like material (mouth rot); cloudy eyes or dull colored body when not in a shed; thinned body; irregular feeding and defecating habits. Limp, thin body, lethargy, sunken eyes, pinkish patches or spots on belly or sides; obvious bite marks or wounds from cage mate or prey. Red, fluid filled patches may indicate thermal burns or blister disease.

**SOME COMMON PROBLEMS INCLUDE:**

<b>HEALTH ISSUE:</b>	<b>SYMPTOMS:</b>	<b>TREATMENT:</b>
<b>Mites</b>	Small reddish-brown spots around eyes, pits, mouth & under scales	See exotic pet veterinarian for parasite evaluation and proper medications.
<b>Mouth Rot</b>	Soft, dented mouth & jaw line. Cottage cheese-like material in mouth.	See exotic pet veterinarian for evaluation and proper therapy and medications
<b>Eye Caps</b>	Eyes are cloudy while snake is not in shed. Sometimes happens after a shed when eye caps do not come off along with the shed.	See exotic pet veterinarian. Optimization of enclosure heat and humidity.
<b>Egg Binding in females</b>	Abdominal enlargement, decreased appetite, difficulty defecating	See an exotic pet veterinarian immediately.