CARE GUIDE

CORN SNAKE

Ontario Reptile Rescue www.ontarioreptilerescue.ca info@ontarioreptilerescue.ca

Common Name	Corn Snake (also known as red rat snake)
Scientific Name	Pantherophis guttatus
Average Size	100 to 150 cm (3-5')
Average Lifespan	15 to 25 years. As we learn more about the needs of reptiles in captivity, they are living longer and healthier lives, and their average lifespan is an estimate.
Natural Range	Their native habitat includes the southeastern United States.
Temperament	Active and docile.
Behaviour	Corn snakes are crepuscular, meaning they are most active at dawn and dusk. They are a semi-arboreal species and can often be found in trees.
Cohabitation	Corn snakes are solitary animals, they should not be housed together as they are cannibalistic.
Activity Level	Active at dawn/dusk and throughout the night. They enjoy climbing and exploring their environments and are quite active.
Conservation Status	IUCN - least concern
Enclosure Size	 There is an antiquated myth that reptiles will feel "overwhelmed" when they are placed in a large space; reptiles will utilise every inch of space they are provided as long as they feel safe. You can make an animal feel safe by: Limiting your use of reflective surfaces, such as glass Use front-opening enclosures as approaching from above is something a predator would do Provide leaf litter, plants, and plenty of hiding places The minimum size an enclosure should be is the size that allows the animal to have an adequate temperature gradient and room to explore. The minimum size recommended for an adult corn snake is 48x24x24". Floor space and climbing opportunities are equally important.
Enclosure Materials	 Glass: difficult to maintain temperatures and humidity. Has a reflective surface that can stress animals out. Heavy, difficult to move, and easy to break. Wood: heavy, difficult to move. Easier to maintain temperatures and humidity than glass. Needs to be sealed or it will rot. PVC: light-weight, easy to move. Best material to maintain temperatures and humidity. Does not rot, can seal seams to hold water. More expensive. There are different grades of PVC that affect its ability to bend/warp/deform, resist scratching, etc; you get what you pay for when it comes to PVC.
Temperature Range	Warm end: 28-30°C

	Basking surface: 30-32°C Cool end: 20-24°C Night: 20-24°C Temperatures do not need to be exact as temperature fluctuations in nature are normal. If your bulb burns out or you are experiencing a power outage, do not feed your animal until they have had a period of 24-hours with adequate temperatures as they will not be able to digest their food if they are too cold. Measure surface temperatures with a temperature gun (infrared thermometer); use digital thermometers for measuring ambient heat.
Humidity Range	Average humidity should be around 60-75%. Changes in humidity are normal in nature, so don't worry about being exact. Raise the humidity during periods of shedding (75-80%).
Lighting	A light source such as a halogen heat bulb or low-strength UVB is sufficient for corn snakes. A 12 hour on/off cycle is recommended. No light source is required or recommended at night as they are well adapted to see in complete darkness.
Heating	We recommend using halogen heat lamps for day time heat. Halogen bulbs supply heat to animals in the most natural way (from above) and produce infrared A and B, which are the wavelengths that are produced by the sun. These wavelengths penetrate deep into the reptile's body, providing them the energy to efficiently digest their prey and maintain healthy bodily functions. The wattage of the bulb will depend on the ambient temperature in your home, the material of the enclosure, the height at which the bulb is placed, and air flow. Getting correct temperatures in your enclosure is a matter or trial and error and there is no one-size-fits-all approach.
	Additionally, you should use a dimmable lamp and a thermostat to monitor your temperatures more efficiently. The thermostat will detect the temperature of the enclosure and adjust the strength of the bulb to match the set temperature.
	Black/red/blue bulbs that are often advertised for night-time heating are not necessary. Coloured bulbs are known to affect a reptile's vision and any heat source that emits light will interfere with your animal's day/night cycle. If your home gets cold at night (below 20°C), we recommend using a deep heat emitter as these emit heat and no visible light. Deep heat emitters only emit infrared B and C, making them less ideal than halogen bulbs.
	Using heat mats, "belly heat", heat rocks, and heat panels are all outdated methods and there are much safer and healthier options for your reptiles.
UVB	Corn snakes can survive without UVB, however, we have seen the benefits in offering low-strength UVB to them; increased activity, better health, brighter colours, better feeding responses, etc. Use fluorescent linear UVB bulbs that cover half the length of the enclosure. The UVB and basking

	area should overlap so that the animal receives both at the same time. The optimal UVI gradient for corn snakes is 2.0 - 3.0 . There are various factors that can affect the efficiency of a UVB bulb such as mesh screen lids, faulty manufacturing, used bulbs, and distance from the basking area. UV index can be measured with a metering device such as Solarmeter to ensure you are providing adequate amounts of UVB for your animal. Never use coil-type bulbs, mercury vapour bulbs, LED UVB, or any "all-in-one" type of bulb - they are inaccurate and can be dangerous. LED UVB is a new technology and studies using a Solarmeter have found that it is not quite reliable when it comes to UVB output. However, there is hope that as development continues, the quality will continue to improve as well. UVB bulbs need to be replaced as they lose output over time; even if a bulb is still emitting light, it can be emitting no UVB and you will need a Solarmeter to read the output.
Substrate	Corn snakes in the wild live intemperate forests. It is recommended to use a mixture of rinsed play sand and organic topsoil at least 3" deep. We use Reptile Ready's Forest Mix which is a bioactive substrate that includes rinsed play sand, organic screened topsoil, and insect frass. This substrate can be used as a naturalistic substrate as a stand alone, or as a bioactive substrate with isopods, springtails, and live plants. You can create your own mixture as well: ensure the topsoil does not have any additives such as fertilisers, compost, manures, or chemicals. Rinse the play sand to remove dust and allow it time to dry. You can sterilise the substrate by baking it to remove any unwanted microorganisms, but this is a personal choice (30 minutes at 200°C - let cool before adding it to the enclosure). Loose substrate does not cause impaction - improper husbandry does. Never use calcium sand (binds when wet), vitamin sand (binds when wet), ground nut shell such as walnut (dusty and causes gastrointestinal issues), wood bark or shavings (moulds, dusty, unnatural), linoleum (VOCs when heated), shelf liner (VOCs when heated), or reptile carpet (impossible to keep clean, can rip out nails).
Handling	Gently lift them up using both hands and support their full body, they will adjust and get themselves comfortable. The sensitive areas on a snake include the head and tail, they often attempt to retreat if touched there. They will most likely get comfortable on your shoulders as they like to be elevated.
Feeding	Feed adult corn snakes once every 2-3 weeks. The general rule for feeding is that the prey should be approximately equal to the widest part of the snake; many adult corn snakes take an adult mouse. If your animal stops eating, monitor their weight and water intake. If they begin to lose weight quickly, bring them to a vet. All animals at Ontario Reptile Rescue are on frozen/thawed prey.
Diet	Corn snakes are carnivores and they eat a diet of rodents and birds. Prey that they enjoy are: rats, mice, African soft-furred rats, hamsters, gerbils, chicks, quail chicks, and quail eggs. There is no single food that provides a

	balanced diet, you must provide a diverse diet to ensure your animal has access to a variety of minerals and vitamins. Always ensure they have access to filtered or spring water.
Multivitamin + supplements	Occasionally dust prey with calcium powder with D3 and a multivitamin. Ensure to use a multivitamin powder as many animals in captivity can easily develop deficiencies. Follow the manufacturer's directions for usage and frequency. Please be aware that there is limited research conducted on reptile nutrition, with much of our understanding derived from practical observations.

The information in this care guide is based on both practical experience as well as research papers published by reputable sources. Reptile husbandry is constantly evolving as we learn more about these remarkable creatures, never rely on one source for information and always strive to learn more.