

Corn Snake - Basic Care Sheet

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Common Name:	Corn Snake
Scientific Name:	<i>Pantherophis guttatus</i>
Native to:	Southern / Eastern USA, northern Mexico
Size:	Hatchlings are approx 20-30cm (8-12"); fully grown adults are 120-180cm (4 - 6 feet).
Appearance	Corn Snakes come in an amazing variety of colours and patterns, ranging from the normal orange, brown and grey with black and white chequered bellies, to bright red and orange, to almost pure white, with stripes, motley patterns, Aztec patterns, almost no patterns and almost everything in between.
Housing	<p>A large fully grown corn snake will require a 90x60x60cm vivarium (3ft x 2ft x 2ft) though any corn snake should not feel lost in the space. For most corn snakes, being able to extend their body across the floor with no more than one corner is good, though each snake differs in their preference. The housing (vivarium/tank/rub/tub) is probably too small when the snake is a little longer than the length plus width of the floor.</p> <p>Housing snakes together in the same container is not recommended but is not unheard of. There are many examples of cannibalistic young corn snakes. Males may increase the stress of a female through sexual harassment if housed together. There are many pairs including male and females that live together, seeming content, for their entire life.</p> <p>A secure lid or doors (lockable or use a window wedge) are essential as corn snakes are determined escape-artists and are able to get through holes and gaps smaller than you might imagine. It should have solid and secure walls, a floor and a roof!</p> <p>It's also worth blocking all holes through walls and floorboards in the room(s) in which your snakes are kept just in case of escape.</p>
Substrate	<p>The floor of the container should be covered in a material that is absorbent, maintains hygiene and enables easy clean-up. The most suitable substrate depends on several factors.</p> <p>Suitable substrates:</p> <ul style="list-style-type: none">■ Newspaper /paper kitchen towels – best for hatchlings (not very attractive, but easily and cheaply changed). Shredded newspaper is used for adults but is not recommended as it can be dusty and contains pigments that stain your snake.■ Astroturf (two pieces, swap them around for cleaning and drying). Snakes prefer something they can burrow into.

- Beech chips (soiled chips are easily removed with your hand inside a plastic bag, and replaced with clean). Snakes have difficulty burrowing into the chips. They can be dusty.

The following are those most preferred by me and my corn snakes:

- **Aspen shavings** –expensive if you have a lot of snakes, and you need to buy from a reliable source to avoid contamination with mites.
- **Lignocel** – an excellent proprietary hemp product used by UK breeders. Must be stored in a dry place.
- **Aubiose and Hemcore** – as above, but much cheaper (highly recommended). Must be stored in a dry place.

If you choose to use chips, shavings, Lignocel or Aubiose or any small-particle substrate you should remove your snake for feeding, to ensure that no substrate is ingested.

Dust in any substrate can cause respiratory infections, so it is to be avoided if possible.

Sawdust and coniferous wood shavings should never be used as the resin from pines and cedars emits a noxious and potentially toxic vapour.

Materials like cat litter and highly processed substrate for other animals should be avoided. My advice is to go for natural materials.

Hides

A hiding place should be provided at both the warm side and the cool side, for your corn snake to feel secure inside. This can be anything you can lay your hands on (e.g. cardboard boxes, loo rolls, or coconut halves for hatchlings or something more robust such as a purchased hide from the pet shop for adults), so long as your snake has a way in and out, and can fit its entire body inside without much excess room.

Providing branches to climb on, plastic/silk foliage, and other objects to decorate the enclosure expands the snake's interest and encourages exercise. This means of exercise can be especially important for females prior to breeding to help avoid being egg-bound.

Heat

A daytime temperature gradient of 21°C - 29°C (70°F - 85°F) should be provided (night time temperatures can be a little lower though this is not essential).

The hide in the warm end of the viv should have a floor temperature at 27-29°C, and the cool hide would ideally be 21-23°C. Corns are pretty hardy but temperatures should never exceed 30°C or go below 20°C for more than an hour or so. Too high and the snake will dehydrate and eventually die, too cold and digestion and growth slow down and the snake eventually goes into brumation.

The ideal way to provide this is with a heat mat/cable at one end of the container, heating between a third and half of the floor area of a vivarium, or heating the same area from underneath if using a plastic RUB or other container.

All heat sources should be controlled by a thermostat to prevent overheating or burns. The thermostat probe should ideally be placed directly on top of the mat inside or outside the container, and a thermometer probe placed directly above the mat inside the container where the snake will be lying. Both should be checked regularly. Please note that non-pulse thermostats can heat the mat above the set temperature. Uncontrolled heat sources can crack glass tanks and damage plastic rubs if not carefully controlled.

Consider placing an insulating mat underneath your container to ensure heat from the mat or cable heats your snake and not your furniture.

Lighting is not required for corn snakes as they are primarily diurnal, preferring to come out at dawn and dusk, even though they can be seen during daylight hours. If you want to showcase your snakes in a vivarium, we suggest a strip of 12v led lights stuck to the ceiling of the tank/viv. These give off very little radiated heat and so don't interfere with the thermostatic heat control of the environment.

Humidity

Corn snakes require relatively low humidity around 35-45%. In their natural environment they'd encounter variable humidity so stability is not especially important. Raising the humidity level during shedding using a moss box (soaked and squeezed moss in an open plastic box eases the shed. Low humidity is usually the cause of incomplete shedding

Food

Hatchlings should be started off on frozen/defrosted pinkies (one-day-old mice) served at 30 degrees C, once every five days, then two pinkies every five days, the food size increasing as your snake grows. As a general rule, the food item should not be much more than the girth of the widest part of the snake and consider 1½ times the girth to be the maximum.

Here's a rough guide to what a corn snake should be eating:

Hatchlings	1-2 pinkies
6-12 months	1-2 fluffs
Yearlings	large fluffs to small mice
18-24 months	small to medium mice
24-36 months	medium to large mice

Defrost the food item in normal room temps for 2-4 hours depending on size; before feeding, put the mouse into a sandwich bag so it stays dry, and put the bag in hot tap water so it warms up (ideally 30-32°C which is the temperature of a live mouse). Feeding with tweezers or forceps is highly recommended, so that fingers never come into contact with food items and vv. Never feed by hand; your snake will start to associate feeding with the sight and smell of fingers and may strike at fingers when hungry. This is not a good way to treat any snake.

Other food items include rats and day-old chicks. Rats have slightly higher fat content and so may result in a fat snake if eaten over a prolonged period but otherwise offer a good alternative. Day old chicks are very close to mice in nutritional terms though they are too large for all but fully grown corn snakes and it is recommended that the beak and feet/lower legs are removed.

Corn snakes will sometimes refuse food while they are shedding, during breeding season (especially males which may not feed from February until May), if a female is gravid and close to laying, if the temperature is too low, or if you haven't provided a decent hiding place.

If corns are regularly overfed they will become fat and unhealthy which can cause stress, and will shorten its lifespan. Corn snakes should not have a waist at the join of body and tail; there should be a smooth tapering. If you have a fat snake, reduce feed to no more than every 14 days unless a female and gravid or close to breeding. It may take several years for some corn snakes to lose excess fat.

Corn snakes in the wild tend to feed at dawn and dusk, and this will be tagged in their genetic memory. Offering food at these times is best practice and may encourage a reluctant snake to feed.

If a food item is regurgitated, remove immediately and leave your snake alone to rest and recover for at least two weeks before offering food again. Then offer only a small item and build up to normal feeding over 2-3 months. Offer a small mouse instead of a large one, a pinkie instead of a fluff. If a second regurge occurs further investigation is required. Consider that the food items may be contaminated; wait for two weeks then try a much smaller item from a new source.

If your snake is not eating:

1. Don't panic. Your snake can go for a long time without needing to eat. Hatchlings regularly fail to eat for 3 months and adults for much longer.
2. Stop worrying. Re-read No.1 above.
3. Check the temperature; make sure there are warm and cool hides.
4. Check the food source; make sure it's not contaminated.
5. Provide fresh cool water.
6. Wait until the next scheduled feed (no need to try sooner), defrost then warm the food in the evening; move the snake to a dark box; encourage the snake to feed by dragging the food item around in front of the snakes nose but don't make contact with the head; if the snake doesn't strike, leave the food and snake in the dark box in a warm place overnight.
7. Repeat the above until the snake eats.
8. If your snake is an adult male he may not eat from February until May. His mind is on sex! Back off! Try him in a month.

9. If your snake is female and gravid (with eggs) she may not feed. This would typically be around April to June; it's important to offer food regularly as they will need so much nutrition for the eggs. Try offering slightly smaller food items. Many females will let you know if their hungry; they may actively seek more food once the first item is ingested.

10. Some hatchlings just seem not to know how to feed and may not eat for many weeks. This is fairly common. If you have a non-feeding hatchling there are many, many techniques to get it to feed. If you want advice, email Simon or search online and try any and all that you want. Most hatchlings will eventually eat and those that don't may not be fully functional. It is then worth considering euthanasia, though each breeder must decide for themselves according to their values.

If you're not a breeder and you have a non-feeding hatchling, take it back to the breeder. They should not have given it to you.

Water

Clean fresh water is essential and should be provided and changed every 2-4 days as corn snakes drink often. They will also sometimes 'take a bath' in it to aid cooling or shedding, and may also soil it.

Some people choose to use bottled mineral water as it contains no chlorine, fluorine, ozone or other man-made chemicals. On the other hand, most use tap water. If it's good enough for humans to drink, then it's likely to be OK for snakes and in the wild a snake will drink water that is far more toxic than most humans could stand. You choose!

The water bowl should be placed at the cool end of the container so that bacterial growth is not accelerated by heat from the mat.

Some water bowls are better than others. Shaped and textured resin bowls from pet supplies are good but do tend to encourage bacterial growth as they have pores in the resin surface that harbour bacteria, so next time you rinse and refill, the bacteria are already present. This is not necessarily a bad thing as a small bacterial presence may be good for your snake, but you would need to check and possibly change more often.

Glazed ceramic bowls (like casseroles) keep water fresh for much longer than resin. They don't have pores and so bacteria can be easily and permanently removed. They do tend to look pretty like tableware though!

Plastic tends not to be very good, mainly because the bowls get knocked over. Some people use dog bowls. Nuff said!

Stainless steel is great but ugly.

Glass bowls are similar to glazed ceramics and Gü pots (from Gü puddings) are fabulous for hatchlings up to yearlings as they tend to be too square and too heavy to knock over and are very easy to rinse/clean. Cheap too!

Care Tasks

Daily:	<p>Check that the snake is there, and the water is fresh and unsoiled (max 3 days unchecked). If the water bowl has been soiled, clean thoroughly as described below, if not, rinse the bowl out, wipe out with clean kitchen paper, and rinse with clean cold water, refill and replace. If the water hasn't been soiled it may be left for up to 3 days.</p> <p>Check the vivarium for poo (you'll be able to smell it), remove using a plastic sandwich bag (turn the bag inside out, put it on your hand like a glove, grab the handful of substrate surrounding the poo, invert the bag and tie a knot in it) then clean the area with an unscented baby wipe (I use unscented Asda baby wipes) to remove urates (white or grey material or powder).</p> <p>Check the temperature (27-29°C inside the warm hide, 21-23°C in the cool hide).</p>
Every 2-4 days	<p>Change the water.</p> <p>Change hatchlings substrate/paper (more often as required).</p> <p>Handle the snake for 5-30 minutes, the more the better unless it's especially anxious or gets too cold, but avoid for one day prior to and two days after feeding, and also when blue, gravid or ill.</p> <p>If the snake has pooped on the hide, branches, etc, these should be removed, hosed/scrubbed, rinsed and replaced.</p> <p>Shed skin should be removed.</p>
Every 5-14 days	<p>Feed the snake. Change paper substrate.</p>
Every 4-8 weeks:	<p>Change fibre/wood/hemp substrate. Wipe inside of container thoroughly. I use unscented Asda baby wipes then wipe with a clean damp cloth.</p> <p>Clean and disinfect the water bowl: thoroughly scrub the bowl all over, soak it in Milton solution for 20 minutes, then rinse in warm water, then soak in warm clean water for 10-20 minutes to remove scent. Cool, refill and replace.</p> <p>Rearrange the vivarium features, add new furniture.</p>
3-6 monthly	<p>Put the snake in a temporary RUB, and completely clean and disinfect the whole vivarium, top to bottom, then do the same with all the equipment:</p> <p>Thermometers/stats: If these are electronic, wipe, if they're not electronic, soak them for 10 minutes in Milton, rinse and dry.</p> <p>Heat mats: Switch off, wipe with wipes/dilute Milton, then with a clean damp cloth.</p>

Hides/furniture: Scrub with hot soapy water, soak in Milton for 10 minutes, rinse then soak in warm water for 10-20 minutes to remove scent then cool before replacing.

If you use bark hides, scrub with toothbrush or washing up brush or similar, soak in hot water and dry.

Plants: If you use living plants, remove them and repot them, cleaning the pot thoroughly before re-using.

If you use plastic plants, soak them in warm soapy water, agitate or brush them to get the dirt off, rinse in clean warm water. If disinfecting, use dilute Milton and thorough rinsing/soaking.

Vivarium: Remove the glass if you can. Remove the substrate (I scoop it into a bin liner sellotaped along the door runner followed by vacuum for the last dusty bits).

Wipe down entirely, floor to ceiling, including vents with a Milton-soaked cloth or kitchen paper. I use an old toothbrush to get into the corners. Leave for 20 minutes. Wipe with a clean wet cloth. Dry with kitchen paper, wipe again with rinsed, clean wet cloth, dry with paper.

Replace mat, stat, thermometers, fresh substrate, bowls hides, furniture and plants. Switch on the mat, let it warm up for 20 minutes, and replace the lucky snake.

I recommend re-arranging the vivarium in a completely different style after each major clean, so that your snake has a much more exciting, invigorating place to explore.