Introduction

This update to the care guide has been a long time coming, and I figure since the community has hit 10,000 users it was time to do the new update.

This care guide should not be your only source of knowledge on cornsnake care, but as a community we wanted to put together a guide that covers as many aspects of cornsnake care as possible. I hope with many voices we can create one of the most complete care guides anyone can find. I do want to point out that what works great for one keeper may not work at all for another keeper, so this care guide as with all care guides should be used as input to figure out the best way for you to care for your snakes.

Some parts of this care guide have been contributed in large part by specific users, and they will be noted as close to their contribution as possible.

Equipment list

This is the first part of the care guide because without these you may struggle to care for your snake properly. There are many options in what equipment you use. You can save alot of money by buying equipment that is not reptile branded, but there are a few cases that a few reptile focused brands are many times better and safer for both you and your pets.

- **Enclosure**
  The most important aspect of an enclosure is the ability of the enclosure to keep the snake in and keep harmful things out
- **Heating Elements**
  These include but are not limited to heat lamps, ceramic heat emitters, heat mats, and radiant heat panels.
- **Thermostat**
  Thermostats are what you plug your heating Elements into. Thermostats turn the equipment off and on automatically as needed to hold the temperature steady. These should not be confused with rheostats.
- **Temperature gauges**
  These are going to be your thermometers.
- **Humidity gauges**
  These are going to be your hygrometers.
- **Feeding tongs**
- **Feeders**
- **Hides and water bowls**
- **Bedding**

Enclosure Type

There are many options to use for enclosures, but the most important aspect is safety and

security of the enclosure for the snake. Blocking gaps around lids, and inbetween door panels are very important while your snake is still small.

- **Clear Plastic Tote Boxes**
  These are the cheapest option out of all of the options, and are ideal for starting a hatchling in before moving it to a larger permanent enclosure. They hold humidity and heat very well, but can be damaged by overheating, or ultraviolet light over time. They are easy to modify to use heat lamps if they are big enough. Depending on the lid these can be the most secure enclosures to keep a corn snake. They are lightweight and easy to move. **If you are going to use plastics in or for your enclosure you need to learn about the different kinds of plastics to know which is safe for your pet.** The biggest downside to tote boxes is that they are ugly, but snake rack systems are basically shelves with tote boxes in them.

  The Sterilite gasket boxes, and other types of gasket boxes work best because their lids are made to stay down tight. Any tote box with a lid that stays down tight or can be modified to stay down tight will work. (examples https://i.imgur.com/o2sOB7A.jpg https://i.imgur.com/fzmAwgO.jpg Wingnuts have been used to hold the lid down better)

- **Glass Enclosures/tanks**
  Glass Enclosures and TanksThese seem to be the most common enclosures that keepers will use. You can buy them at most pet stores. You can find them used on Craigslist, or Facebook Marketplace. You can put a heat lamp over the top of them, and or a heat mat under them. You can use these to set up bioactive enclosures. These look great and will double as an art piece in any room you put it in.

  The down sides are few, but worth noting.
  1. Glass tanks and enclosures don't hold humidity or heat well.
  2. They are heavy even when you clear them out.
  3. They are glass and can break.
  4. If you need to run a cable into the enclosure you have to go through or around the lid if cable port holes are not built in.
  5. The cable port holes could be big enough to let a little baby corn snake out.
  6. The lids may be designed for fish, or other animals that are not going to spend time at the top of the enclosure, or are not shaped like a string. The lid may have gaps in the corners where a little corn snake can slip out. https://i.imgur.com/mUQcS5K.png
  7. If the enclosure is front opening the door could have gaps that a little corn snake could slip out.

  One of the most annoying aspects of glass enclosures is that they are too expensive to want to get rid of when you upgrade to a larger size once your snake is an adult, but the larger and nicer ones have many more ways a baby corn snake can escape. I would recommend using a 20 gallon long tank, if you want to use a glass enclosure to start a hatchling in glass. A 20 gallon long is small enough that you can find the snake when you need to, but are often not too big that you can’t find the snake.

- **Wood Enclosures**
  Wood enclosures offer vary unique advantages, and drawbacks. 2 of the main reasons why you may choose wooden enclosures over all others is how easy they are to build, and how easy it is to get the materials.**The ability to make your own enclosure any way you want it, and any size you want it is powerful.** You need it to be the perfect size for where you want to put it, No Problem. You want to use a heat lamp No Problem. You want to build in a spot for a heat mat, No Problem. If you want to make a multi-level enclosure, No Problem. Wood enclosures don't need to even be fully built out of wood. You can incorporate plastics, glass, and screens into your enclosure. Your ability to design, engineer and build your own enclosure is going to be your limitations. Wood has a few drawbacks, and these are why most people don't use wood. **Wood absorbs moisture, and is impossible to disinfect without first sealing the wood.** Your wood sealant must be safe for long term exposure once dried. What I could gather from professional enclosure builders is that fiberglass resin is the best to use to seal wood. Wood can be heavy, but can be very strong. **You must use reptile safe woods.** I asked a bunch of breeders and they said you can even use pine, but you want to make sure it is kiln dried pine. You can never use ceder.

- **Polyvinyl Chloride (PVC) Enclosures**
  These enclosures are much like wood enclosures with less of the drawbacks. You can buy these enclosures as a kit and have them shipped to you, buy them at your local reptile expo prebuilt or you can design and build them yourself. We are starting to see many more of these plastic enclosures in reptile keeping.**The biggest downside is cost and availability**. A 8 foot by 4 foot hardwood sheet of plywood is going to be at least half of the cost of an 8 foot by 4 foot sheet of plastic of the same thickness. You can get wood at any major hardware store, but unless you live in a major industrial city you will not likely have a place where you can buy large plastic sheets.

Enclosure size

Enclosure size is a bit of a hot debate. The minimum size for a cornsnake is a 20 gallon long aquarium, or under bed storage box equivalent with a 30 inch by 12 inch footprint, but **DO BETTER THAN THIS!** This size was what breeders breed their cornsnakes in. Only since the internet have breeders started questioning if they should use bigger tubs, and many still use tubs that are only a little bigger (16x32 inches). There is no such thing as a maximum size, but at some point the additional size is less and less important, and becomes more and more inconvenient to the keeper. I suspect inconvenience and effectiveness comes to a crossroad at dimensions of 2.5 feet wide, 5.5 feet long, and 5 feet tall. I suspect that even a large cornsnake could go days in an enclosure this size without you spotting it.

Sadly there are still alot of adult cornsnakes in 20 gallon long enclosures because someone who just wanted to make a sale told them that the 20 gallon long would be big enough. 40 gallon breeders are the largest tanks you will find in most pet stores, but only the smallest adult cornsnakes won't outgrow these enclosures. It is not till you get to 75 gallon aquariums that you will get to a size that a cornsnake will never outgrow.(excluding hybrids and record setting cornsnakes)

We really should stop measuring reptile enclosures in volume. Measuring in volume is backwards to say the least.

- A 20 gallon long is 30" x 12" x 12" with a 2.5 square foot footprint
- A 40 gallon breeder is 36" x 18" x 16" with a 4.5 square foot footprint
- A 75 gallon is 48” x 18” x 21” with a 6 square foot footprint

I am a tall guy and my arms stretched out in front of me reach a little more than 2 feet. This means that I would have problems reaching into a 75 gallon tank, lifting a hide with one hand and pulling a snake out with the other hand unless this is a front opening enclosure, and I have yet to see a front opening glass enclosure that big. Then we got to ask if the enclosure can even hold 75 gallons if it would all spill out of that front opening.

Most pet stores are not going to carry a 75 gallon aquarium, and if they do it is not going to be front opening. The largest enclosures I see in most pet stores are 40 gallon breeders. These are too small because most cornsnakes will get 5 feet long, with **the rule of thumb being that a snake needs 1 square foot of floor space for every foot of body length**. This really leaves cornsnakes in a predicament. Most pet stores would have a cornsake to sell, but would not have an enclosure that an adult cornsnake would thrive in.

My recommendation is wood or pvc enclosures. You can buy kits from some online sellers and still pay for shipping, or you can buy from a local reptile expo and buy one that is already built and you won’t need to pay for shipping. You can also build your own wood enclosure if you have the tools and skills to do it. These enclosures come in these common sizes.

- 48” x 18” x 18” with a 6 square foot footprint
- 48” x 24” x 24” with a 8 square foot footprint

The largest prebuilt enclosure I have never seen at a reptile show was a 30” x 60” x 30” with a footprint of 12.5 square feet. This was intended for large pythons or boas. I suspect that most enclosures larger than 8 square feet are going to be made custom.

Beyond 10 square feet you start to run into diminishing returns in effectiveness for just a single adult cornsnake. This brings up the topic of cohabitation, which should be left to expert keepers to attempt.

Humidity Contributed by /u/solarguy2003 *Italicized* Portions added by /u/pokeplants

Snakes are not overly fussy about humidity. Anything between 40 and *85%* will work fine. This is typical house humidity, so you may not have to do anything at all. Low humidity can make it hard to get a good complete shed. High humidity can make your substrate get moldy, especially aspen. High humidity also increases the risk to the snakes for health problems like scale rot and stomatitis (mouth rot).

Recently https://reptifiles.com/corn-snake-care-guide/ has been updated to say that humidity up to 75% is safe for cornsnakes. This is new care information, but their reasoning is sound, and I had seens my snakes handle spikes upto 95% on a rainy week.

Enclosure type can play a big role in how much humidity is held in the enclosures. Screen top enclosures won't hold humidity very well, but plastic or wooden enclosures with a vent panel will hold humidity alot better. Plastic tote boxes hold humidity the best, and are the most prone to super high humidity.

I recommend keeping 2 hydrometers in the room with your enclosures, and 2 inside your enclosures. This way you know what the base level humidity is in the room, and have 2 humidity gauges to average the humidity together to get a better idea. 6 inches closer to the water bowl, or closer to a heat lamp or mat will make a huge difference in readings. ***Both digital and mechanical hygrometers can fail randomly.***

- **Humidity To Low _**
  If your humidity is too low, there are several things you can do.

1. You can mist the tank periodically.
2. If you have a screen top, you can cover part of the screen to reduce evaporation.
3. You can also put a dish towel over part of the screen and mist the towel rather than the bedding to avoid mold problems.
4. You can put in a (very) high humidity hide, which is just a plastic box with a lid and a hole for the snake to get in. Put some damp sphagnum moss in the box so the snake can enjoy 90-100% humidity for a shed. That effectively gives them a humidity spectrum so they can self regulate to a degree.
5. Cyprus, *Coconut Fiber, or Coconut Husk* substrate is very good at retaining moisture and humidity without going moldy.
6. You can put in a bigger water dish, or multiple water dishes, *or move the water dish to the hot side of the enclosure.*
7. *A humidifier could also be added to the room if the humidity just won't get high enough.*

- **Humidity To High**
  If the humidity is too high, there are many things that can be done.

1. You can reduce the number, and or size of the water dishes, *or move the water dish to the cool side of the enclosure.*
2. Before putting the bedding/substrate in the tank, you can dry it out in the oven set on "warm" which is typically 150F. *Occasionally turning the bedding in the oven will speed up the drying.*
3. You can put a tiny fan on or around your enclosure. *I would recommend a computer cooling fan placed on the screen of the enclosure to pull the air out.*
4. *Switching to a heat lamp, or a ceramic heat emitter rather than heat mat will lower the humidity significantly.*
5. Perhaps you and your snakes deserve a *dehumidifier or* a room air conditioner which can also help you regulate tank temperatures.

Bedding

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Heating

I am going to start off by saying that all heating Elements should really be regulated by a thermostat. You can't regulate the sun with a thermostat, so keep your enclosure out of direct sunlight.

Enclosure types and your indoor humidity is going to play a big part into what heating you can use. Also the type of bedding will affect the humidity, so keep that in mind.

If you can keep the whole room that has your enclosure in the mid 70s you won't have to use as powerful heating elements.

For using lamps, ceramic heat emitters, deep heat projectors, or anything else that will socket into a lamp you will need to fix the thermostat probe to the center of the hot spot. If you are not using a thermostat take your heat readings with your thermometer from the center of the hotspot.

- **Ceramic Heat Emitters**
  These are a great heating option if you have a screen topped enclosure, and are using overhead heating. They are cheap, and produce no visible light, so they can be left on at night.
- **Deep Heat Projectors**
  These are often praised as the best heating option. The claim is that they produce infrared light that can penetrate deeper into flesh, and this will warm the snake faster. They are more expensive, and produce very little visible light, so they can be left on at night
- **Mercury Vapor Bulbs**
  These are the best sun mimic, but they are powerful, **maybe too powerful**. I would only recommend this in very tall enclosures where the basking spot is more than 2 feet away from the lamp. These produce a full spectrum of light, both UVa and UVb. As a UVb producer, mercury Vapor Bulbs have a lifespan of over a year compared to other UVb lamps that only last for 6 months. Do not use these with Amelanistic/Albino or Leucistic cornsnakes.
- **Black/Red or any other colored heat bulb**
  These are the cheapest option for overhead heating. The black ones will produce a fair amount of light, but in a large enough enclosure the light may not be significant enough to bother the snake in the darker spots, so they can be left on at night. Red, blue or other colored lights are hard on the snake's eyes.
- **Heat Mats/Heat Tape**
  Heat mats get a bad reputation, but they are the cheapest option, and can be the best option. They are the easiest to set up, but have limitations. While other heating options can heat an entire enclosure, heat mats will only produce a small hot spot, provided that the room that has the enclosure stays between 72 and 83 degrees. In rooms that stay, or

get colder than 72 degrees a second heat mat, on a second thermostat, set to 78 degrees, can be set next to the hotter heat mat to provide a heat gradient like effect. A heat mat should be enough if it is big enough for the snake to coil up over.

The bedding in the enclosure will trap the heat of the heat mat inside of it, and a hide over a heat mat will also trap a pocket of warm air

To set up a heat mat, the heat mat should always be set up under the enclosure. The heat mat does not need to be adhered to the bottom of the enclosure. I recommend putting the thermostat probe in between the heat mat and the enclosure, so adhering the mat to the enclosure would get the in way. Reddit user u/Desdinova recommends hot gluing the thermostat probe inside of the enclosure to the bottom of the enclosure in the center of the hot spot. I don't like doing this because the snake could eventually dislodge the thermostat probe over time, but by putting the probe inside of the enclosure the reading for the thermostat will be more accurate.

Heat mats work best with glass enclosures, or plastic tote box enclosures

I like to put reflective foam insulation panels under all of the enclosure. This way all of the heat from the heat mat will be put into the enclosure, and not into whatever the enclosure is sitting on. You can buy these at most large hardware stores that sell construction supplies.

- **Radiant Heat Panels**
  I think there is only one provider of radiant heat panels, and that will be **Vivarium Electronics.** The 40 watt panel works fine, but in a 2 foot tall enclosure, or taller you may need to add a basking platform. This makes at least the Vivarium Electronics heat panel one of the most power efficient enclosure heating elements.

  Radiant Heat panels only work with wood or PVC enclosures, and having too much ventilation will let the hot air out. Heat panels produce very little infrared light but heat the air very well. With my PVC enclosures a Radiant Heat Panel will heat the warm side to 88 degrees, but the other end of the PVC will be 80 degrees, while the room is sitting at 77 degrees.

  One of the biggest downsides to heat panels is availability. **Vivarium Electronics** often has a long back order, and because of the lack of competitors the price is high. They do say they have built in safety features, but I don't want to cut open a $75 piece of equipment to find out what is used inside of their panels

  Thermostat probe placement is also tricky. In order to get a hot spot of 88 degrees that is just 18 inches under the panel, the panel has to get to 140 degrees. This is plenty hot enough to cause a burn, but because the plastic used is not a good conductor of heat it would take direct contact with the panel for a few seconds to get painfully hot to the touch. Some people fix the thermostat probe to the inside bottom of the enclosure, but I have worked out that I can suspend the thermostat probe about 3 inches away from the heat

panel, as seen in this photo https://i.imgur.com/gPcaNns.jpg .

One thing I like about heat panels is because they go inside of the PVC enclosure, you can stack PVC enclosures. You can do this with lamps also if you put a cage on them.

- **Heat Cables**
  These may be the least used heating elements, but can be used creatively. You can use it under an enclosure like a heat mat or heat tape, but you have the advantage of laying it more densely when you want it hotter, and less dense where you want it less hotter. This will require space under the enclosure.
  One thing that grinds my gears about heat cable is that websites will have the description of the **heat cable be 12 feet long, but the first 6 feet of the cable will be the power cable** to the heat cable. So read those descriptions carefully. Enclos

Lighting

Cornsnakes need a day and night light cycle. They don't need lights inside of their enclosures, but there has been a growing movement to provide snakes with UVb lighting, and any plants inside of a bioactive enclosure will need lighting. It is important the room that has the enclosure in it is lit during the day, and dim at night. A lightly shaded window will provide enough light during the day. At night the room can be dimly lit. If you must have a light on in your room at night, try to limit yourself to a small desk lamp on the other side of the room away from the enclosure.

If you are using UVb it should be a lower output bulb, and there is believed to be reasons not to expose albino/Amelanistic cornsnakes to UVb light. Using a vitamin supplement sparingly could be used rather than a UVb light, but mor info on that in the feeding segment.

Night Drops

I am stopping here for the time being, but in short I think night drops a bad, and even worse when the snake needs to heat to digest it's food after feeding.