

California Kingsnake care sheet and bioactive terrarium maintenance

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California Kingsnake (*Lampropeltis californiae*) Difficulty: Easy

California kingsnakes are terrestrial snakes found primarily on the southwestern coast of the United States and the northwestern tip of Mexico, including the Baja Peninsula. In the wild they can be found in a variety of habitats, including forests, grassland, scrub, and desert. They spend most of their time on the ground, but they are also reasonably capable climbers.

These snakes are diurnal, which means that they are primarily active during the day. Like other snakes, California kingsnakes are carnivorous, and they use this time to hunt down other snakes, lizards, eggs, and small birds and mammals.

California kingsnakes are known for their distinctive, attractive appearance: oval head, round pupils, slender body, and smooth, glossy scales. They are typically colored in broad, alternating bands of black and white, but other patterns are known to occur. Length is usually between 30-48".

California kingsnakes are some of the most popular pet snakes in the US due to their docile temperaments, hardiness, and attractive coloring. Expect your pet to live 20+ years with good care.

What You Need for a Bioactive California Kingsnake Enclosure:

- 36"L x 18"W x 16"H front-opening enclosure, or larger
- [Exo Terra Reptile Deep Dome Fixture Small](#), x2
- [Arcadia Halogen Heat Lamp, 50w](#), x2
- Plug-in lamp dimmer, x2
- [Arcadia Shade Dweller D3 7% UVB T5 Bulb + Fixture](#)

- [The Bio Dude Solar Grow 36" light and fixture](#)
- [Terra Sahara Bioactive Kit 40 breeder](#)
- [Leopard Gecko Clean Up Crew Pack](#)
- [Terra Sahara Premium Plant Kit, 40 breeder](#)
- [Exo Terra 2qt Pressure Sprayer Mister](#)
- [Exo Terra Corner Water Dish Large](#)
- [Thick climbing branches](#)
- [Cork logs](#)
- [2+ hides/caves](#)
- [Bio Dude Digital Thermometer / Hygrometer, x2](#)
- [Zoo Med Stainless Steel 10" Curved Feeding Tongs](#)

Terrarium Size

When it comes to choosing a terrarium for pet reptiles, keep in mind that larger is always better! California kingsnakes are active snakes that appreciate having plenty of room to stretch out, climb, and explore, and they quickly get bored in small or sparse enclosures.

The minimum enclosure size recommended for housing one California kingsnake is 36" L x 18" W x 16"H, but larger is recommended if you have the space for it!

Because kingsnakes are snake-eaters, multiple kingsnakes should not be housed in the same enclosure.

Lighting

California kingsnakes are diurnal (active during the day), so it's particularly beneficial to provide plenty of light during daytime to help support their mental health. Although they are capable of surviving without UVB lighting, it's best practice to include it as part of the snake's setup so it can still reap the benefits. Our goal as good reptile keepers is not to simply allow our pets to survive — it is to do everything in our power to enable them to thrive. And there is mounting scientific evidence that UVB is, in fact, beneficial to kingsnakes and other species.

Therefore, **we recommend installing an Arcadia Shade Dweller or T8 Zoo Med Reptisun 5.0 in a reflective fluorescent fixture**, long enough to cover about 1/3 to 1/2 of the enclosure's length and placed next to the heat lamps. So for a 36" long enclosure, you will want a bulb about 12-18" long. Do not use other brands — when it comes to UVB, *brand matters!*

If your enclosure has a mesh top, it's best to install the UVB fixture on top of the enclosure. If it does not, it's best to also install a mesh lamp guard such as the Arcadia LampGuardPro over it so the snake can't come in direct contact with the bulb.

Heating

Because kingsnakes are reptiles, they need a range of temperatures within their enclosure so they can regulate their own body temperature as needed. Areas of heat speed up their metabolism and promote activities like digestion and healing. Cool areas slow the metabolism and promote activities like rest and energy conservation.

Your California kingsnake's basking area should be between 85-90°F, and the cool side should be between 70-80°F. Create the basking area by placing a platform or sturdy branch below the lamps.

Many kingsnake keepers will recommend using heat pads as the snake's primary source of heat, but heat pads don't work well in a bioactive enclosure. Instead, use a couple of heat bulbs like the 50w Arcadia Halogen Basking Spot in small dome heat lamps. Plug each heat lamp into a lamp dimmer or dimming thermostat so you can control them if they get too hot.

To monitor the temperatures in your snake's enclosure, place on digital probe thermometer in the basking area, and another on the floor of the cool end.

Humidity

California kingsnakes are a semi-arid species. However, although they can survive dry conditions, they still need access to humid microclimates in order to stay hydrated, keep their lungs healthy, and shed their skin properly. To be specific, **they should have access to a humid hideout at all times.** This hide should be placed on the cool half of the enclosure and lined with moistened sphagnum moss or substrate.

Don't forget to water your plants as needed.

Substrate

To create a California kingsnake vivarium, you will need a bioactive-compatible substrate. That means things like aspen shavings or bark chips aren't going to work. You need a soil-like mix that mimics the conditions of your snake's natural habitat. You can make your own with 60% plain topsoil and 40% play sand, or you can let The Bio Dude do the work for you with a 40 breeder Terra Sahara Bioactive Kit.

Because you're setting up a bioactive habitat, you will need to mix and layer the substrate with sphagnum moss and leaf litter. For best results, combine with an appropriate amount of Bio Dude Bio Shot.

Finally, in order to make the substrate functional, make sure to add semi-arid CUC organisms like powder white/orange isopods and arid springtails. You can also add other species like mealworms, super worms, and death-feigning beetles!

Decorating the Enclosure

Enclosure décor is more than just making your setup look nice. It's also an important part of providing *environmental enrichment* to your kingsnake, which enhances your pet's quality of life by providing opportunities to express natural behaviors, explore, and exercise.

Here are some ideas for ways that you can decorate and enrich your kingsnake's bioactive enclosure:

- ledges
- hollow logs

- thick, sturdy branches
- hides/caves
- plants
- décor

Feeding Your California Kingsnake

Kingsnakes are obligate carnivores, which means that they *must* eat whole animals in order to get the nutrition they need. There is no replacement. Here is a rough sketch of how much and how often you should be feeding your snake, based on age:

- Hatchlings should be fed once every 5-7 days.
- Juveniles should be fed once every 7-10 days.
- Adults should be fed once every 10-14 days

Always feed your snake inside its enclosure, not outside. Contrary to the myth, feeding inside does not make snakes more aggressive. However, use feeding tweezers to offer the prey, not your hand, in order to prevent accidental strikes.

Variety is essential to complete nutrition. Aside from the usual mice and rats, you can add variety to your snake's diet with hamsters, gerbils, chicks, quail, anoles, house geckos, and

Reptilinks. If you have the opportunity to offer your kingsnake an appropriately sized, captive-bred snake as a feeder, do it! However, do not offer live prey if it can be avoided. Frozen feeders should be completely thawed to 75-100°F before offering.

Handling Tips

After bringing your new pet home, do not handle it until it is eating regularly. This can take anywhere from two weeks to two months, so be patient and use this time to make sure your husbandry is on point. Once your snake is ready for handling, handle it at least 1-2x weekly to keep it accustomed to you, but no more than once daily. Handling is also a good way to encourage your snake to exercise and provide additional enrichment!

Wash Your Hands First

Before you pick up your snake, first wash your hands with soap or hand sanitizer. This removes potentially harmful bacteria, viruses, or parasites from your hands, as well as makes your hands smell distinctly inedible. Kingsnakes are very enthusiastic predators, so if your hand smells like food, it might get treated like food.

How to Pick Up a Snake

Next, use a paper towel roll to tap its head (gently). This sets expectations by letting the snake know that it's time for handling, not food. Pick it up with two hands, one behind the head and one supporting the rest of the body. NEVER pick up a snake by its tail — this can really hurt their spine!

Safety with Snakes

Always supervise children closely when they are handling a pet snake (or any kind of pet, frankly). This is as much for the snake's safety as it is for the children. Keep the snake's head away from your face, and always wash your hands and arms with soap or hand sanitizer after handling.

DO NOT Handle If...

Don't handle your snake within 48 hours of a meal, as this can stress them out and lead to regurgitation, which is a traumatic experience that can actually lead to death. Also do not handle if your pet's eyes have turned opaque or cloudy. This means that the snake is preparing to shed and can't see well, making them more jumpy than usual and more likely to bite out of self-defense.

Care information courtesy of [ReptiFiles](#).

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