

Collared Lizard (*Crotaphytus spp.*)

Difficulty: Intermediate

Collared lizards are a group of 8-14" / 20-36cm long lizards with a large, blocky head, long limbs, and a long tail. Color varies by sex and species, from tan or gray to bright aquamarine and yellow, with males being more colorful than females. Pattern typically features speckling and dark "collar"-like stripes around the neck.

These lizards are native to the American Southwest, Mexico, and the Baja peninsula. Their preferred habitat is dry, rocky terrain and grassland. They are true sun-lovers, and can be found out and about even during the hottest part of the day.

Crotaphytus bicinctores and *C. collaris* are the most common species in the U.S. pet trade. If you pay attention to providing high-quality collared lizard care, they can live for over 10 years.

Shopping List

- 36"L x 18"W x 16"H front-opening terrarium, mesh top
- Dual dome heat lamp with ceramic sockets
- 50w PAR38 halogen flood bulb, x2
- Flagstone or slate tile for basking surface
- Two-outlet rheostat
- Digital thermometer/hygrometer device with probes
- Infrared thermometer ("temperature gun")
- 22" T5 HO desert UVB bulb (Arcadia or Zoo Med brand)
- 24" T5 HO light fixture with reflector (Arcadia or Vivarium Electronics)
- 22.5" ~6500K high-output LED grow light
- Surge protector with digital timer
- Pressure sprayer
- 1.5 cubic ft of naturalistic substrate
- Small reptile hideout/cave, x2
- Environmental enrichment items (logs, branches, plants, rocks, etc.)
- Food and water dishes
- Calcium and multivitamin supplements
- Soft-tipped feeding tweezers

Housing

Although collared lizards vary widely in size, a good rule of thumb is to plan for no smaller than a 36"L x 18"W x 16"H / 90 x 45 x 45cm enclosure. The enclosure should be front-opening for easy access, with excellent ventilation. Ideally, the top should be mesh rather than solid.

Of course, bigger is always better! Larger is particularly beneficial for collared lizards, as this is a very active species with a strong need for enrichment in captivity.

Can multiple collared lizards be housed together?

Preferably no. Collared lizards, particularly males, are known to be territorial as well as potentially cannibalistic. Small groups of one male and up to three females can be housed together for breeding, but the enclosure must be proportionally larger to help prevent conflicts and injury.

Lighting & UVB

Collared lizards are *diurnal*, which means that they are most active during the day. This also means that they are stimulated by the presence of bright white light in their environment, and they require strong, high-quality UVB lighting for survival.

UVB Lighting

UVB lighting can be tricky, because in order to get the right strength of UVB (UV Index, or UVI), distance and potential mesh obstruction must be considered. To provide appropriate UVB to a sun-loving collared lizard, use the [Arcadia Desert T5 HO 12%](#) or [Zoo Med T5 HO Reptisun 10.0](#) bulb, roughly half the length of the enclosure and placed on the warm side. The bulb should be mounted in a reflective T5 HO fixture such as the [Arcadia ProT5](#) or [Vivarium Electronics T5 HO fixture](#).

The basking area should be placed to put the lizard's back at the appropriate distance:

- UVB mounted over mesh: 8-12" below UVB lamp
- UVB mounted under mesh: 14-16" below UVB lamp

(These recommendations are approximations based on available data. For best results, use a Solarmeter 6.5 to determine the best placement to achieve a UVI of 4.0-6.0 in the basking area.)

General Illumination

Bright light with a color temperature of around 6500K is strongly correlated with optimal mental and physical health in diurnal lizards, particularly sun-lovers like collared lizards. Collared lizards with additional "daylight" lighting in their enclosure are likely to be more alert and active than those without, as well as demonstrating better appetite, better color, and more natural behaviors.

Full-spectrum lighting is not the same as reptile UVB lighting, so you will need separate lamps. The [Arcadia Jungle Dawn LED Bar](#) and [Bio Dude Glow & Grow](#) are both excellent lamps for this purpose. You will need one long enough to span at least most of the enclosure, or multiple lamps.

Heating

Humans are warm-blooded, which means that our body temperature is automatically regulated. Collared lizards, however, are cold-blooded, which means that they have to move between areas of different temperatures in order to regulate their body temperature. Collared lizards warm up by basking under the sun in the wild. In captivity, they do best with a halogen heat lamp as a heat source.

- **Basking surface temperature: 104-118°F (40-48°C)**
- **Cool side temperature: 77-90°F (25-32°C)**
- **Nighttime temperature: 68-79°F (20-26°C)**

A cluster of two 50w PAR30 halogen flood bulbs should be plenty to achieve those basking temperatures if you build up the basking platform to be about 8-12" below the heat lamp. However, if you notice that they're getting too hot, dial it down with a plug-in lamp dimmer or reduce the height of the platform. If your basking area is too cool, you will need higher wattage bulbs.

To measure the basking surface temperature, use an infrared thermometer (a.k.a. temperature gun). To passively track basking temperature, use a digital probe thermometer, with the probe placed on the basking surface under the heat source. The [Etekcity 774](#) is a good infrared thermometer, and most reptile-brand digital probe thermometers function well enough.

Humidity

Collared lizards are known to do well at a variety of different humidity levels, with western species being more drought-tolerant than eastern species. **Western species are likely to do well with an average humidity below 40%, while eastern species are likely to do well with an average humidity between 50-70%.**

Keep track of your humidity levels with a digital probe hygrometer with the probe placed on the ground in the middle side of the enclosure. Mist the enclosure with a pressure sprayer 1x/week for western species, and daily or every other day for eastern species.

To help keep your collared lizard well-hydrated, you must provide a humid hide in their enclosure. The easiest way to do this is to place a hide on the cool side of the enclosure and periodically moisten the substrate underneath it.

Substrate

Collared lizards are healthiest and happiest when they are housed on a substrate (a.k.a. "bedding") that imitates the conditions of their natural habitat. Sand or a 60/40 mix of clean topsoil and fine sand is likely to do the trick for this species. Pack the substrate 4" deep for burrowing. In a 36×18 enclosure, that takes about 1.5 cubic ft of substrate.

Here are some naturalistic substrate options appropriate for using with collared lizards: [Jurassic Natural Australian Desert Dragon Habitat](#), [Jurassic Reptile Substrate](#), [Zoo Med ReptiSand](#), [Exo Terra Desert Sand](#), play sand

Feces and urates should be removed daily, and contaminated substrate should be scooped out and replaced. Substrate should be completely replaced once every 3-4 months.

Sick or wounded collared lizards should not be kept on loose substrate. Instead, use paper towels until they are fully recovered.

Enclosure Décor

Decorations play an important role in your collared lizard's enclosure as environmental enrichment. Enrichment items encourage exercise, stimulate your pet's natural instincts, and help promote overall wellbeing. And, of course, they make the enclosure look nice!

Here are some ideas. You don't need all of these things, but you do need enough of them to provide plenty of places to hide and opportunities to climb/explore: cork hollows, cork flats, cholla wood, ghost wood, grape wood; drought-tolerant, nontoxic live plants; magnetic ledges, 3D background

Food

Collared lizards are primarily insectivorous, which means that they eat mostly insects to get the nutrition that they need, although they are also known to eat vertebrates and small amounts of vegetation. Collared lizards should be offered insects first thing in the morning, daily, as many as they will eat without getting fat. For best results, let them chase their prey rather than simply providing it in a bowl.

The key to providing a healthy, balanced diet for your collared lizard is VARIETY! Here is a list of options to rotate through your pet's menu:

Prey options: mealworms, superworms, darkling beetles, black soldier fly larvae, crickets, dubia roaches, discoid roaches, locusts/grasshoppers, iguana Reptilinks, button quail, pinky mice

Offer greens and/or edible flowers to your collared lizard 1x/week. Options include collard greens, cactus pad, spring mix, arugula, kale, pea shoots, alfalfa, bok choy, carrot greens, spinach, dandelion greens/flowers, hibiscus leaves/flowers, clove leaves/flowers, and squash blossoms. Any flowers should be completely free of pesticides and other chemicals!

Treats should be offered less than 1x/week. Options includes papaya, fig, apple, prickly pear, berries, or cherries can also be offered as a rare treat.

Supplements

To ensure that your collared lizard is getting all of the vitamins and minerals that they need, you will need a calcium powder and a multivitamin powder — or a good all-in-one like the [Arcadia Earthpro supplement system](#) or [Repashy Calcium Plus LoD](#). For best results, use as directed by the manufacturer.

Water

Collared lizards are well adapted to living in drought conditions and get most of the water they need from their food and morning dew. However, it's best practice to provide a small bowl of clean water at all times.