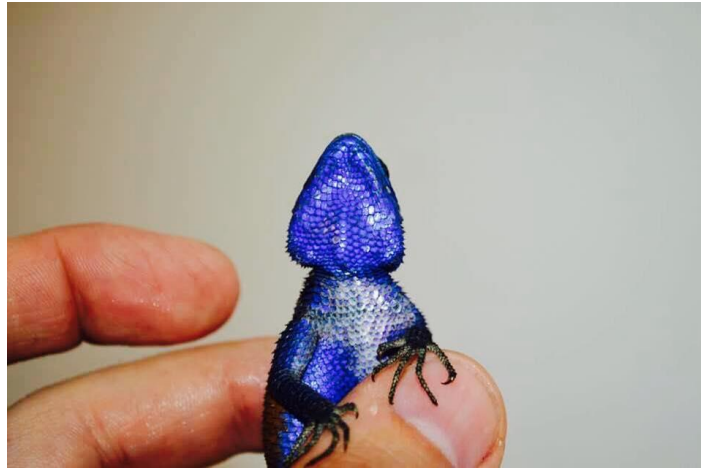


# Blue Spiny Lizard (*Sceloporus minor*)

## Care Sheet



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### Introduction

*Sceloporus minor* is an extremely rare and beautiful spiny lizard from Central America. They are one of my favorite lizards to keep as they have so much going for them: beautiful, hardy, livebearing, and they do well in groups. They are a montane species and experience a wide range of temperatures in nature. A good baseline to compare them to in terms of care is thinking of them like *Abronia* species.

### Description and Sex Determination

One of the best things about *minor* is their smaller size making them a viable option even for apartment dwellers with limited space. In my experience adult *minor* are about three inches snout to vent and about twice that including the tail. There is usually no difference in size between males and females.

The most obvious difference between the sexes is coloration. Adult males exhibit some of the most brilliant blue to be found in any reptile. Females are much more drab in appearance being mostly grey or brown but they can exhibit some baby blue around the head region.

Sex determination can be accomplished right from birth even without judging by coloration. All males, including hatchlings have two post anal scales that resemble eye spots. In adults these scales are fairly obvious but with smaller animals a bright light and magnifying glass will be helpful in seeing these scales.



**Young Adult male**



**Adult female**



**Newborn**

## The Terrarium

When keeping minor indoors I prefer to use all glass terrariums like those made by Zoo Med or Exo Terra. My adults are kept in small groups in 18" x 18" x 24" glass terrariums. All screen enclosures that are typically recommended for chameleons can also be used successfully. All screen enclosures will require a higher wattage basking light and more frequent and prolonged misting sessions. Screen cages are great in that they can be taken outside in appropriate weather without modification.

## The Terrarium Interior

I prefer to keep my minor in fully planted naturalistic glass terrariums. The bottom of the terrarium has a drainage layer of gravel or clay pellets of one to two inches deep. On top of this drainage layer is placed a porous fabric that is used as a weed barrier. On top of the fabric a three inch layer of soil is used. I use a 50/50 mixture of sand and peat moss. Live plants like Ficus sp. and Schefflera sp. are planted directly in the soil layer. A one inch thick layer of dead leaves on top of the soil completes the bioactive substrate. Some people will add springtails and isopods to the soil as cleaner crews but in my experience this is unnecessary. These beneficial insects always find their way into the substrate anyway from the leaves, plants, soil, and branches.

Since minor love to climb the enclosure should have a live plant that takes up about half of the volume of the terrarium which they can climb on, hide in, and drink off of just like a chameleon. Thick branches of various diameters as well as hollow cork tubes should be arranged throughout the cage so that the lizards can perch at a variety of conditions. There should be some branches in the upper parts of the terrarium that are exposed to the basking and UV light and branches toward the middle and bottom that are shaded by leaves. The branches should be placed at a variety of angles: horizontal, diagonal, and vertical. Stacks of thin rock like slate can also be used to provide climbing and hiding spots as well. I still recommend using live plants in the enclosure to provide the lizards with a sense of security.

I also like to cover the two sides and back of the terrarium in 3/8" cork panels silicone to the glass. This provides security, insulation, and added climbing surfaces for the lizards.



**The author's glass terrariums for *S. minor* as well as chameleons**

## Light, Temperature, and Water

Since minor are diurnal and heliophilic animals bright light of the proper spectrum needs to be provided. I believe that minor require or at the least thrive when strong lighting which provides ultraviolet radiation is provided. T5 high output fluorescent lighting has become the gold standard for terrarium lighting and if you are lighting a larger enclosure (24" or taller) they are probably your best bet. LED lighting is also becoming more popular for terrariums but does not provide the proper UV radiation. If you are keeping the lizards in smaller enclosures (mine range from 18" to 24" tall) then a standard T8 fluorescent shop light will be adequate. The shoplights can be purchased for only \$10 for a 48" dual fixture. The bulbs are also cheaper as well. Regardless of whether you choose T5 or T8 a dual bulb fixture is recommended. One bulb should be a 6500K bulb which will provide nice white light and will be very beneficial to both plants and chameleons. The other bulb should be a UVB producing bulb. The T8 bulbs I use and recommend are the Zoo Med 10.0 bulbs. These should be replaced once a year. The T5HO bulbs I use and recommend are the Arcadia 6.0 bulbs. These only need to be replaced every eighteen months. Linear fluorescent bulbs are best if you are lighting several terrariums. However, if you are only lighting one smaller terrarium then a screw-in compact fluorescent bulb may be an effective option. UV producing CFL bulbs are available from Exo Terra and Zoo Med although I have no experience with them. Some keepers swear by them while others will say they are dangerous or ineffective. I cannot say personally as I have never used them. In larger enclosures I am starting to use Mercy Vapor UVB bulbs from Reptile UV. These bulbs provide large amounts of heat, light, and UV all in one bulb. They would likely be too powerful in enclosures less than two feet tall though.

Minor come from a tropical montane climate and so require fairly warm temperatures for most of the year. Like with keeping all reptiles, thermal gradients are the key to success. You want to provide a variety of suitable temperatures from which the lizards can choose. Minor need a basking spot which is provided by a light source. For most of my enclosures my heat light of choice are halogen puck lights. A string of four or five can be purchased for \$20 or less. Only use one per enclosure unless dealing with a very large terrarium. There are a few things to consider when using these lights. First make sure you get the halogen and not xenon puck lights that do not have a self contained dimmer switch. These will not work with a timer. Also, the puck lights should be plugged into a dimmer switch. This allows you to very precisely control the amount of heat produced by these bulbs to achieve the desired temperatures. Use of a dimmer also dramatically increases bulb longevity. A plug-in dimmer can be purchased cheaply online. If you are using a terrarium that is greater than 24" in height than a puck light will likely be insufficient and more typical screw in bulbs in the 40-60 watt range may be needed.



**Halogen puck lights**



**Plug-in dimmer switch**

Both heat lights and fluorescent lights should be plugged into a timer. This allows for a predictable light cycle which the chameleons can follow. This also easily allows you to adjust the time that the lights are on during different seasons. My lights are on for fourteen hours during the peak of summer, eight hours during winter, and ten to twelve hours during fall and spring.

Your heat lights and fluorescent lights should create nice thermal gradients in the terrarium. For minor I try to aim for a localized basking spot of around 90-100 F. The top most part of the terrarium has an ambient air temperature of around 80-85 F and 70-75 F towards the bottom and in shaded regions. A night time drop is natural and is easily accomplished just by turning off the lights at night. My nighttime spring/summer temperatures are around 70 F.

In the wild minor experience strong seasonal variation and I believe that providing this for them in captivity is healthy and conducive to long life and breeding. For three to four months out of the year I brumate the minor. I place their enclosures in my basement where the temperatures are in the 50's F day and night. I will provide fluorescent light for eight hours a day. If they are out and about I will mist occasionally but for the most part they will bury in the substrate or under cork bark sections and become inactive for several months. In the spring I will slowly increase light and temperature until the conditions I described above are created.

To provide your minor with adequate water you will need some way to mist the terrarium. This can be as easy and cheap as a one dollar hand mister that is usually used for hair or as complex as an automated misting system. If you only have one or two terrariums you could possibly get away with hand misting but I think that an automated misting system is one of the best investments you can make. The mist provided is very fine, can be regulated precisely with a timer, and doesn't disturb the animals. I use and recommend MistKing misting systems. I have several MistKing pumps in operation including one that has seen continuous use for ten years without issue. I am also starting to use ProMist pumps and am satisfied so far.

My minor that are in glass terrariums get misted two or three times a day for approximately thirty seconds to one minute each session. However, this is something that needs to be adjusted for every enclosure and keeper. The goal is to thoroughly cover the leaves of the plants and the sides of the terrarium with water droplets and then stop before the soil becomes overly saturated. It is important not to mist the enclosure again until all of these water droplets have evaporated and the top most layer of the soil/leaf litter has started to dry out. To make sure this happens proper ventilation must be present in the enclosure. This is easily achieved by making sure the entire lid of the enclosure is screen and that at least one of the sides has some ventilation openings. All of the terrariums that I have previously mentioned have this type of proper ventilation. I will not list a proper humidity for this species as I have never measured it in my terrariums. It may take time and practice to find the proper misting schedule for your own enclosures. Just remember, it's OK for the terrarium to dry out for most of the day as long as the humidity remains relatively high and the animals have the opportunity to drink daily.

Minor will likely not drink from a water bowl. They receive all of their required water by lapping up the water droplets from misting that has accumulated on plant leaves and the sides of the terrarium.

### Diet and Nutrition

Sceloporus minor are completely insectivorous, or insect eating. I provide my animals with as much variety of insects as possible. My feeders include crickets, mealworms, superworms, red runner roaches, green banana roaches, fruit flies, and bean beetles. Make sure that the insects are of appropriate size. The insects should usually be about the length between the chameleons eyes. Longer is ok for mealworms. As with all insect feeders the insects should be fed a healthy gutload to make them more nutritious. I feed my insects only fresh produce. My gutload often includes apples, sweet potatoe, kale, collard green, dandelion greens, carrot, and peppers.

Minor are voracious eaters and should be fed accordingly. Juveniles are fed daily as much as they will eat. Adults are fed every other day. Plan on four appropriately sized insects per adult animal and up to twelve insects for juveniles per feeding.

All of my feeder insects are dusted with Repashy Calcium Plus or Miner All Indoor formulas.

### Communal Keeping and Breeding

One great thing about minor is that they do well in groups. A typical group for me is one male and two females. Although I have kept larger groups without apparent issues. I have even kept two males and several females in the same enclosure for several months and have not noticed any aggression or ill effects.

Sceloporus minor are seasonal breeders. It is likely that a cooling period is required to get them to breed. Mating occurs in the late summer or early fall. The females will gestate over the winter cooling period and give birth in the spring. In my experience litters are between seven and eleven babies and births occur in March or April.

Newborn care is identical to adults except on a smaller scale. The newborns can be raised together and I have not noticed any aggression. Food items include fruit flies, bean beetles, and pinhead crickets. As the babies grow it is sometimes necessary to separate them based on size as some will grow quicker than others. They will grow rapidly with appropriate care and I have found the newborns to be very hardy and I haven't lost any so far.

#### Some Final Comments

Sceloporus minor are one of my favorite species of reptile to keep. They are small, gorgeously colored, hardy, gregarious, and can live in small beautifully planted natural terrariums. I hope that this care sheet provides the needed information for other keepers to continue on with this wonderful little species.

***\*Please feel free to share this care sheet in it's entirety freely with full credit given to the author.***

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