



The care, maintenance, and breeding of
**LAMPROPELTIS
GETULUS
CALIFORNIAE**
(Blainville, 1835)

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■ **INTRODUCTION**

Since the end of 1994 I have owned a pair of *Lampropeltis getulus californiae*. As far as I know, no Dutch literature concerning this subspecies has been published yet. Therefore, I would like to write down some information on these animals. Additionally, this story, to me, is a guideline for keeping and breeding this subspecies. The bulk of information stems from different literature sources, with additional information from other breeders and from my own experience, although the latter is minimal. This is due to the relatively short period that I have had these animals in my possession.

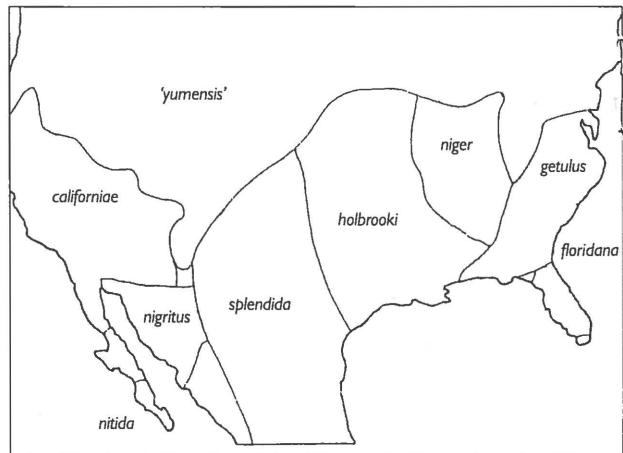
■ **DISTRIBUTION**

Lampropeltis getulus californiae occurs in a large part of the Southwestern United States. It is reported from the states of Oregon, Arizona, Nevada, California, the south of Utah, and from the Baja California peninsula in Mexico.

■ **SPECIES DESCRIPTION**

The scales of this species are smooth and shiny. The subspecies occurs in a striped and banded morph. I am keeping the striped variety. The animals may differ both in ground coloration as well as in pattern. The coloration is usually black or brown with 21 to 44 white, cream or yellow bands or stripes. It is striking that animals from the coastal regions are usually brown, while

Figure 1: Distribution of subspecies of *Lampropeltis getulus*.



specimens from the desert regions have black bands with clear white bands. Additionally, the number of bands varies considerably, with snakes from the Mojave desert having the highest number. The striped form, which I have in my possession, is only found in and around San Diego county, and has the colors described above.

My animals are dark brown with cream-white stripes. These stripes run all the way along the back, with one stripe down the middle and two on the sides. The venter is light, although specimens (either ringed, striped, or intermediate) with dark venters are known as well. The maximum size of this subspecies is 150 cm.

■ **TERRARIUM**

My animals are kept solitary, in a terrarium that measures 70 x 33 x 60 cm (l x h x w). The substratum consists of sawdust, which I think is practical because of its good absorption and low price. A heating pad of 30 x 12 cm is placed inside the terrarium.

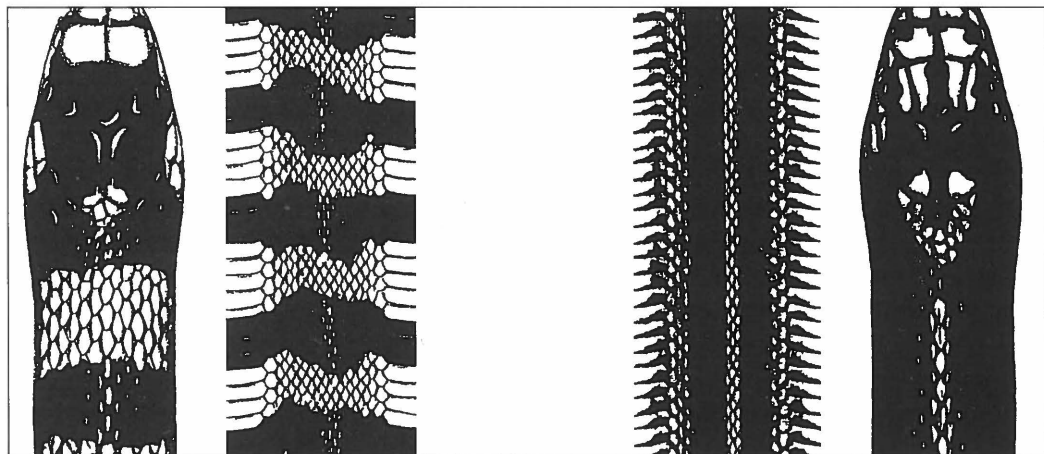
The terraria are decorated with plastic plants, branches, a water container, and some shelter where the snakes can hide if they feel like it. In my opinion the latter is very important. If one chooses not to offer a hiding place, it is very likely that the snakes become restless and suffer from stress. Of course, there is also lighting present, in the shape of a halogen bulb. This serves both for illumination as well as heating.

■ **TEMPERATURE**

In the summer the temperature inside the terrarium should be between 25 and 30°C. Personally, I have a halogen spot light in the terrarium which makes the temperature rise to about 40°C, locally. Both animals benefit from this warm spot regularly, if not daily. The halogen spot light also serves for illumination of the terrarium.

On the floor there is a heating pad to assure that the temperature at night remains around 20-24°C. During hibernation, this pad is turned off. The room in which

Figure 2: The banded and striped phase of the California King snake



the terraria are placed is continually kept at 20°C by central heating, except during hibernation. The nocturnal decrease in temperature is not a problem.

The light intensity is increased from 0 to 10 hours within a period of one month. This is done in steps of approximately 2 hours at a time. The heat intensity, through the heating pad, is decreased from the start. For example 2 hours light and 22 hours heating pad, 4 hours light and 20 hours heating pad. The temperature during hibernation is discussed in the section on breeding.

■ BREEDING

Lampropeltis getulus californiae reaches maturity at an age of approximately 2,5 years. Breeding these snakes is relatively easy. According to most literature it is essential to give the animals a hibernation period of at least two months at a temperature of about 15°C. However, this is contradicted in other papers. My female was placed in hibernation for three months at temperatures varying between 11 and 16°C. On the other hand, the male was only hibernated for 6

weeks at the same temperatures as the female. Both animals did not receive any food in the two weeks prior to their hibernation, to ensure that their stomachs were completely empty. If this precaution is not taken, there may be some problems with remaining food that starts to rot inside the stomach. Both animals were hibernated separately.

At the end of February 1994, both animals were taken out of hibernation and fed heavily, receiving two to three mice a week. Mating occurred on March 24 and on April 1. In both instances the male was introduced into the terrarium of the female. During mating the male chased the female through the terrarium for about 30 minutes. According to some papers, the male would frequently bite the female during this period. However, I have not observed this with my male. During the chase, the male mounts the female and introduces his hemipenis. After intromission of the hemipenis the actual fertilization will take place. The entire procedure can last up to 4 hours. In my snakes both matings lasted less than three hours. Four weeks after the first mating I placed a container with humid sphagnum in the terrarium.

This can be used as a place to deposit the eggs. During breeding periods the water dish is removed to avoid deposition of the eggs in the water container. However, in that period water is offered for an hour every day. Also in the breeding period, the shelter is removed so the eggs cannot be deposited in the dry sawdust. Usually, the eggs are laid approximately fourteen days after shedding.

Lampropeltis getulus californiae, banded form.

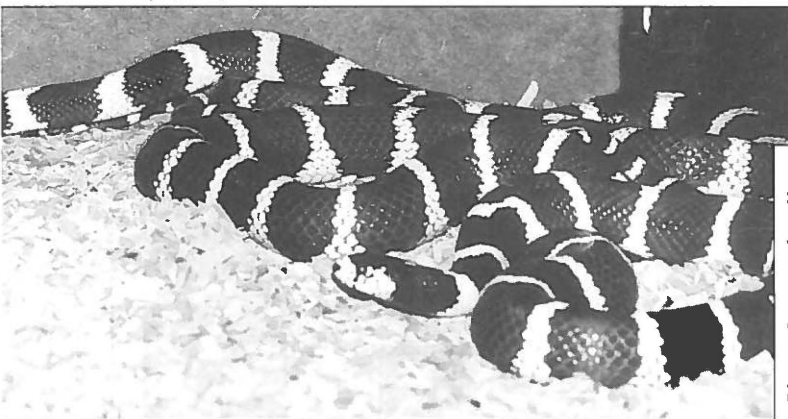


Photo: Jan van der Meer

Californian kingsnakes normally produce small clutches of 4 to 12 eggs, which are relatively large. Eggs are between 42 and 50 mm long, and between 20 and 22 mm in diameter. Once the eggs are deposited inside the container with sphagnum, they are transferred to a different container, filled with vermiculite, which is placed inside an incubator. Inside this incubator water is heated, which in turn heats the air above it. This also creates a high humidity.

The eggs are incubated at a temperature of about 28°C and hatch after roughly 60 days. Juveniles, which measure around 30 cm after hatching, are kept in separate terraria to avoid cannibalism. If the female is in a good condition she might even produce several clutches per year. Matings of striped and banded morphs usually produce offspring with traces of bands as well as stripes.

■ FOOD

All animals in my possession are fed with mice, although subadult rats are also eagerly taken. For some individuals snakes are also included in the menu. This can be a danger if the animals are not housed separately. Juveniles are fed with pinkies at first, after that they gradually take larger prey, depending on their size.

■ DEFENCE

If the animals are in danger, for whatever reason, they are supposed to vibrate their tails. I have personally observed this phenomenon in my male. The reason why they vibrate their tail is because they produce a sound which resembles that of a rattlesnakes' rattle. If one picks up the animal it can excrete a substance from its cloaca which smells very bad. Also, the animal will bite at everything that moves. According to the literature it might be possible that this scent plays a role during the mating season.

■ CONCLUSION

In my opinion, these snakes are relatively easy to keep, given proper care and attention. The only drawback might be that they have to be kept separately to avoid cannibalism. However, there are several *Lampropeltis* lovers who keep their animals together all year round, without problems.

I would like to call on everybody who keeps *Lampropeltis getulus californica* to contact me. This includes striped morphs, banded morphs, as well as intermediate forms.

English translation by Twan Leenders

English corrections by Mark Wootten

■ LITERATURE

- Markel R.G., *Kingsnakes and Milksnakes*
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