

KEEPING AND BREEDING SNAKES OF THE GENUS *LAMPROPALTIS*

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INTRODUCTION

Although I've been keeping and breeding snakes for twenty years, over the last seven years I've developed a special interest for snakes of the genus *Lampropeltis*. Like most people the striking and flashy colours of this genus attracted me.

THE ANIMALS

The animals I currently own and breed are:

- Californian kingsnake
(*Lampropeltis getulus californiae*)
- Spotted kingsnake
(*Lampropeltis getulus holbrooki*)
- Mexican kingsnake
(*Lampropeltis mexicana mexicana*)
- Durango kingsnake
(*Lampropeltis mexicana greeri*)
- Grey-banded kingsnake
(*Lampropeltis alterna blairi*)
- Central-Plains milksnake
(*Lampropeltis triangulum gentilis*)
- Puablan milksnake
(*Lampropeltis triangulum campbelli*)
- Sinaloan milksnake
(*Lampropeltis triangulum sinaloae*)

HOUSING

All of my animals are housed individually, in terraria made out of plasticized hardboard. It is important to house the animals individually, for King and Milksnakes are snake eaters by nature and have a tendency towards cannibalism.

My terraria measure 60 x 40 x 25 CM (L x W x H). The terraria are soberly decorated, with hiding boxes, for which I use plastic lunchboxes, and water bowls, which are cleaned out twice every week. Furthermore I use wood shavings as a substrate and I use bottom-heating pads, on one-third of the terrarium. The terraria are placed in a room that is illuminated by fluorescent lighting and daylight.

FEEDING

I feed my snakes once every week. The prey items I use vary from a slightly haired (fuzzy) mouse, for a Central Plains milksnake, to a half-grown rat, for a Californian kingsnake. I only offer dead prey to my animals.

ANNUAL CYCLING AND BREEDING TECHNIQUES

Before breeding with the animals, it is important to take account of the following:

- Are the gender and age of the animals known?
(I know both gender and age of all my animals).
- Are the animals in good health and free of parasites?
- Do you have enough food items in stock, or do you know a reliable source for your rats and mice?





Lampropeltis triangulum campbelli

The most important period lies between the first of August and the first of December. In this period the females have to gain a large amount of bodyweight before they are hibernated. In this period, I offer the females two prey items every week whereas the males only get one.

It is very important to establish an overall temperature, ranging from 24 to 28 degrees Celsius, to ensure good digestion. The females store fat in the anterior (front) part of the body, which is used to produce the eggs later on. On the whole, males need less food, compared to females of the same size, they also store less fat. But it's important the males are well fed before hibernation, since they often do not eat during the mating season

From the first of December to the first of March, the animals are hibernated at temperatures ranging from 8 to 12 degrees Celsius, depending on the outside temperature. I establish this temperature by switching of the central heating in the room. Furthermore it is important to stop feeding the animals two weeks before hibernation, to ensure there is nothing remaining in the digestive tract of the animal.

The animals are only offered water during this period. Finally all the lighting is switched off. On the first of March I turn the heating back on, to about 28 degrees Celsius, and the animals are given a photoperiod of 16 hours. The snakes usually take food 24 hours after being warmed up again. It is of

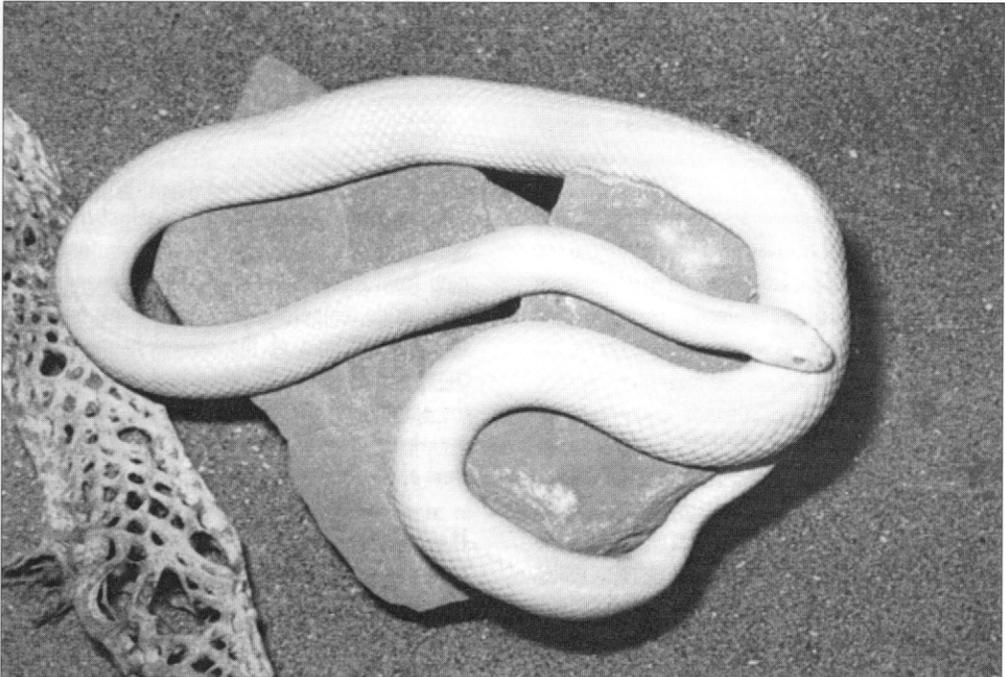
great importance, to vary the temperature from 28 degrees during the day, to 24 degrees during the nighttime. When the snakes are submitted to temperatures of 28 degrees or higher 24 hours a day, this can cause male-sterility in some species.

A good clue as to when the animals are being kept too hot is in their behaviour. When the animals try to get away, as far as possible, from the heat source, by crawling up against the glass or when the animals are constantly submerged in the water bowl.

Make sure there is a gradient, in temperature, in the terrarium, so the animals can decide for themselves at which temperature they are most comfortable at.

Individuals that eat well, will shed their skin shortly after the first of March (usually between the 20th and 31st of March). Females tend to be the most receptive for fertilisation, from the 3rd until the 14th day after shedding. The easiest way to see if a female is receptive is to place her in the male's terrarium, if she whips her tail or curls up when the male touches her, or when she tries to get away from him, she is not yet ready to mate. If this occurs the male will try to overpower her, or he will lose interest.

If a female on the other hand reacts by stretching her body and crawling slowly through the terrarium, with her tail lifted in the air to give the male entrance to her cloaca, she is definitely ready to mate!



Lampropeltis Getulus californiae (albino)



To ensure good fertilisation, it is advised to place the animals together at least two times, with several days in-between. When the eggs start to develop within the female, she will try to fend off the courting male.

Usually the females will continue to feed during gestation, they only stop eating for about three weeks before the eggs are laid. The development of the eggs will take about 28 to 45 days depending on the species and the surrounding temperature.

INCUBATION

When a female is about to shed her skin, I always provide a nesting box. Use plastic ice cream boxes (2,5 litre) with an entrance in the side. I fill the box, to one-third, with moistened wood shavings. The majority of the eggs are laid about 7 to 14 days after shedding. Also make sure you remove the waterbowl and put back a smaller one, so the female won't make a mistake and lay her eggs in the water bowl.

When the eggs are laid they are usually clumped together, I never try to separate the eggs. Fertilised eggs are white and rather solid, unfertilised eggs are soft and will eventually turn yellow.

Before the eggs are laid, make sure you have an incubator ready. In the past I used an old refrigerator but nowadays I use an incubator made out of plasticized hardboard. The incubator is heated by two light bulbs that are connected to a thermostat. After the eggs have been laid, I place them in a small plastic box (1 litre) which is filled with moistened vermiculite. I bury the eggs half in the vermiculite and a top, with air holes drilled in it, is placed on the box. The whole is placed in the incubator, set to a temperature of 27 degrees.

CARING FOR THE YOUNG

When the young have hatched (depending on the species between 60 to 75 days of incubation), I place them separately in plastic boxes measuring 20 x 10 x 7 (L x W x H). These are placed on a heating cable. As a substrate I use toilet paper and for shelters I use toilet roll tubes. Furthermore I use small water bowls, which can't be tipped over, it's important to keep the substrate as dry as possible.

After the young have shed their skin for the first time, I start feeding them live pinkie mice, once or twice every week. During the growth of the snakes the prey items get larger, up to the moment the prey is able to bite back, from then on I only offer pre-killed prey.

When a youngster refuses to eat, I try to tempt it with a pre-killed pinkie mouse, with a damaged nose. If after that, the snake still refuses to eat, force-feeding is needed. Do not start force feeding too soon however; some snakes eventually start feeding after a few weeks of refusal.

THE ANIMALS IN MY COLLECTION

- Californian kingsnake

(*Lampropeltis getulus californiae*)

Description: Black with cream coloured or yellow bands around the whole of the body. There is also a desert form, which is pitch-black with white bands, there are also striped and albino specimens available. Range: Southwestern U.S. Length: 140 cm. Number of eggs: 8 to 15. Incubation time 60 days.

- **Spotted kingsnake**

(*Lampropeltis getulus holbrooki*)

Description: A black snake with a white or yellow spot on each scale of its body. Range: From the Gulf of Mexico up to the Mid-west of the U.S. Length: 100 cm. Number of eggs: up to 20 small eggs. Incubation time: 60 days.

- **Mexican kingsnake**

(*Lampropeltis mexicana mexicana*)

Description: A grey snake with dark-red or reddish brown saddles outlined with a small black edge. Range: From Southern-Texas to North Mexico. Length: 100 cm. Number of eggs: 9 to 15. Incubation time: 60 days

- **Durango kingsnake**

(*Lampropeltis mexicana greeri*)

Description: This snake has a wide colour range, from light grey to cream coloured, or pale yellow with red bands outlined by black edges. The width of the bands varies; sometimes they are no more than small saddles with a little red in the centre. Range: From Southern-Texas to North Mexico. Length: 100 cm. Number of eggs 6. Incubation time: 60 days.

- **Grey-banded kingsnake**

(*Lampropeltis alterna blairi*)

Description: A grey snake with wide orange bands. These bands are separated by small black ones. Range: From Southern-Texas to Northern Mexico. Length: 100 cm. Number of eggs: 10. Incubation time: 65 days.

- **Central Plains milksnake**

(*Lampropeltis triangulum gentilis*)

Description: A small, banded snake, with yellow and red bands separated by small black ones. Range: Northern-Texas, Colorado, West-Kansas. Length: 80 cm. Number of eggs: 6 to 10. Incubation time: 60 days.

- **Pueblan milksnake**

(*Lampropeltis triangulum campbelli*)

Description: A very striking snake, due to its equal bands. The yellow black and red bands all have the same width and are very rich in colouration. Range: Southern-Mexico. Length: 110 cm. Number of eggs: 8 to 14. Incubation time: 65 days.

- **Sinaloan milksnake**

(*Lampropeltis triangulum sinaloae*)

Description: Bright red snake with small yellow and black bands. Range: North-western-Mexico. Length: 110 cm. Number of eggs: 8 to 12. Incubation time: 65 days.

*Translated by Peter Schilperoord
Corrections by Mark Wootten*

