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SNAKES

Common Kingsnake

Lampropeltis getula

Lampropeltis getula is a large, glossy kingsnake from the south-eastern USA, black or dark brown with narrow, white to yellow cross-bands that form a chain pattern. It reaches 90-150 cm, eats rodents, lizards and other snakes, and is robust and tolerant. It can live for more than 20 years and is kept singly in a floor enclosure with a basking spot and moderate humidity.

Family: Colubridae Former name: *Lampropeltis getula getula*

KEY FACTS

THE ANIMAL

Adult size	**90-150 cm** total length incl. tail
Lifespan	**15-30 years**
Active	**By day and at dusk**
Lifestyle	**Terrestrial**
Habitat	**Wetland and temperate woodland and meadow**
Difficulty	**Beginner**

CARE

Min. enclosure	**150 × 60 × 60 cm** L × W × H for 1 adult
Temperature, day	**21-28 °C**
Basking spot	**29-32 °C**
Temperature, night	**18-22 °C**
Humidity	**40-60%**
Water	**Water dish**
UVB	**Recommended** Ferguson zone 2
Diet	**Vertebrates**
Kept	**Singly**

BREEDING

Reproduction	**Egg-laying**
Sexually mature	**12-48 months**
Clutch size	**3-25 eggs**
Incubation	**60-70 days** at 26-29 °C

PROTECTION AND PAPERWORK

CITES	**Not listed**
EU annex	**Not listed**
IUCN	**Least Concern (LC)**

About the species

Lampropeltis getula is a large and powerfully built snake with completely smooth, glossy scales. The ground colour is black or dark brown, and over most of the range 17-36 narrow cross-bands in white, yellow or reddish yellow run across the back and form the chain pattern for which the species is known. The head is almost uniformly dark with a pair of pale spots on the scales. Towards the south in Florida, the bands become more numerous (22-54) and broader, and the ground colour a paler brown with yellow speckling; the southern form is now often regarded as a separate species, *Lampropeltis floridana*.

Adults are normally 90-125 cm, and the largest reach 150 cm. The greatest length recorded is about 210 cm. This makes it the largest species in *Lampropeltis*. Newly hatched young are 20-28 cm. The species resembles close relatives, and the pale cross-bands on a dark ground are the best distinguishing feature. In the hobby, the name is often used in a broad sense for the whole kingsnake complex from coast to coast. Since 2009, *Lampropeltis californiae*, *Lampropeltis holbrooki*, *Lampropeltis nigra* and *Lampropeltis splendida* have been separated as species in their own right, and this guide deals with the eastern species in the narrow sense.

The animal is hardy and tolerates captivity well. Young and newly acquired animals can shake their tails, strike at a hand and release a foul-smelling secretion when picked up, but most become accustomed to handling. The species eats other snakes, including venomous ones, and this shapes how it is kept: the animals must be kept separately. Colour and pattern varieties (morphs) exist in captivity. The guide deals with the species itself, not with genetics.

Distribution and habitat

Lampropeltis getula lives in the south-eastern USA, from southern New Jersey and Delaware through Maryland, Virginia and the two Carolinas to Georgia and northern Florida. To the west the range extends to the Appalachians, West Virginia and south-eastern Alabama. The type locality is "Carolina", later restricted to Charleston in South Carolina.

To the west the boundary is sharp: in southern Alabama and central Georgia, the species is replaced over a narrow zone by *Lampropeltis nigra*. To the south it grades into *Lampropeltis floridana* on the southern part of the Florida peninsula, and the two interbreed over large parts of Florida. The kingsnakes in the Apalachicola lowlands in north-western Florida were described in 2017 as *Lampropeltis meansi*, but the hybrid zone with *L. getula* is larger than its whole range, and it is often still included in *L. getula*.

> **Native range:** United States.

HABITAT

L. getula is found in a wide variety of habitats from sea level into montane forest: sandy ridges, pine forest, deciduous and mixed forest, grassland, scrub, floodplains, swamps and marshes, the edges of embankments and streams, and cultivated areas and barns. It is often found near water. It lives under logs, bark, boards and rocks, in stump holes and rodent burrows and along stone walls, and it basks on sunny slopes. It climbs and swims well.

The species is active from March-April to October-November, mostly by day and at dusk; in the warmest part of summer it switches to nocturnal activity. Most of the time is spent lying hidden in leaf litter. In winter it brumates in rock crevices, rodent burrows and hollow stumps. The diet consists of almost anything it can overpower: snakes, including venomous ones whose venom it tolerates, rodents, lizards, birds, reptile eggs and frogs. At mating time, the males fight by pressing each other's forebodies against the ground.

Care

THE ENCLOSURE

An adult needs an enclosure of at least 150 × 60 × 60 cm (length × width × height). Larger is better, because the species is active and explores the whole enclosure. Smaller animals of under 100 cm can manage in 120 × 60 × 60 cm. Juveniles live in a smaller enclosure or a ventilated box to begin with and are moved when they can no longer stretch out and move along the edge. The enclosure should be at least 60 cm high so that lamps and heat can be positioned safely.

The lid must be lockable. The snake finds every weakness, and a front-opening enclosure with a lock or a lid with clips is the safe choice. Do not use tape.

The substrate should be soil that maintains moderate humidity. A mixture of 40 % pure topsoil, 40 % coconut fibre or ready-made terrarium soil and 20 % play sand in a layer of about 10 cm works well, and a layer of dry leaves on top provides cover. Aspen shavings, corn granules and newspaper can also be used. Avoid cat litter, chemically treated substrate, pine and cedar. Feed in a separate box if desired, so that the animal does not swallow substrate.

Furnish with at least two hides, one at the warm end and one at the cool end, so small that the snake lies snugly in them when coiled. Branches, cork and rocks provide exercise and climbing opportunities. The more hides, the more readily the animal shows itself. Remove faeces daily, and replace the substrate completely every 3-4 months.

Read more: Humidity, misting and ventilation

TEMPERATURE

The animal regulates its temperature by moving between warm and cool places, so the enclosure must have a clear gradient. The surface under the heat lamp should be 29-32 °C, measured with an infrared thermometer, and the cool end 21-26 °C. Use two halogen lamps side by side so that the whole coiled animal is heated evenly, and place a pale, flat rock or a piece of wood under the lamps as a basking spot. A black hide by the heat serves as a warm hide.

Switch the heat off at night. The temperature follows the room and may fall 3-5 °C relative to the day, to 18-22 °C, but not below 18 °C. The night-time drop keeps appetite and digestion going.

Never use heat rocks. The heat is too concentrated and causes burns. Heat mats and heating cables can be used as a supplement, but only with a thermostat. Place the enclosure away from windows where the sun can overheat it.

If the animal lies on the basking spot for long periods, it needs more heat. If it never uses it, it needs less.

Read more: Heat and temperature

HUMIDITY AND WATER

The humidity should be 40-60 %, measured with a digital hygrometer in the middle of the enclosure. It is higher at the cool end and at night and lower at the warm end, and that is normal. The figures apply to kingsnakes in general. *L. getula* often lives near water and tolerates the upper part of the range. Humidity is raised with a spray bottle, with moist sphagnum in the hide at the cool end and with a layer of leaves on the substrate. Provide a humid hide when the animal is about to shed.

Always provide a bowl of fresh water, large enough for the animal to lie in. If the air in the enclosure becomes clammy, the bowl should be smaller or removed a few days a week. Scrub the bowl every week with an animal-safe disinfectant.

Read more: Quarantine and hygiene

LIGHTING AND UVB

The species is active by day and basks in the wild. It can manage without UVB, but UVB is recommended for the best welfare. That suits Ferguson zone 2. Use a T5 HO tube of 5-6 % UVB covering about half the length of the enclosure and sitting over the warm side. The aim is a UV index of 2-3 at the basking spot. Over mesh the distance between tube and animal at the basking spot is 25-30 cm, without mesh 35-45 cm, and it should be checked with a UV meter. The tubes are replaced every 12 months.

Supplement with a powerful 6,500 K LED bulb covering most of the length of the enclosure. The light is on for about 12 hours, and the day length is adjusted to the season. There must be no light at night.

Read more: Lighting and UVB

FEEDING

L. getula is a carnivore and needs whole prey. The most important food source in captivity is mice, and as the animal grows, young rats are used. Variety is important: quail, quail eggs, chicks and small snakes can be used, and a varied diet makes the animal healthier and less fussy. Feed thawed, frozen prey. It is safer, because live rodents can bite and injure the snake. Use soft feeding tongs.

The thickness of the prey must be no more than 1.5 times the snake's widest point, or about 10 % of its weight. After the meal there should be a clear, but not large, bulge.

Feeding frequency: - Hatchlings: every 5-7 days. - Juveniles: every 7-10 days. - Adults: every 10-14 days.

If the animal becomes too fat, feed less often or use smaller prey. Do not handle the animal until the bulge has gone. A light dusting of the prey with calcium and multivitamin in equal parts now and then prevents deficiencies. Do not give fruit and vegetables: the snake cannot digest plant material.

Read more: Calcium, vitamins and supplements

BEHAVIOUR AND HANDLING

L. getula is robust and tolerant. Give a new animal about 2 weeks in peace, and start handling only when it eats regularly. Begin with short sessions of no more than 5 minutes, and do not put the animal back until it is calm. Handle no more than once a day. Lift the animal from below, support the body, and let it crawl onto the hand instead of grabbing it.

A nervous animal coils up, hisses, shakes its tail, strikes and releases foul-smelling secretion and faeces. This is a natural defence that fades with time. Bites are harmless, but the snake can hold on. Do not handle the animal when the eyes are bluish and milky before shedding, or just after feeding. Wash your hands before and after, because reptiles can carry salmonella.

Keep the animals separately. The species eats other snakes, including conspecifics, and young animals can eat each other. For breeding, the male is put in with the female under supervision, and the animals are separated again afterwards.

Breeding

SEXUAL MATURITY AND SEXING

The males have a longer, broader tail base with room for the hemipenes. Sex is most reliably determined with a probe, which only an experienced person should use. Males are sexually mature after 1-4 years and females after 2-4 years, in the wild at a length of 60-90 cm. In captivity this often happens earlier, because the animals receive plenty of food. The animals must be fully grown and in good condition before they are bred; a female that is too young or thin risks becoming egg-bound.

MATING

Mating follows the winter rest. In the wild, *Lampropeltis getula* brumates from October-November to March-April in rock crevices, rodent burrows and hollow stumps. The temperature and length of the rest in captivity are not documented for the species. The animals must be free of parasites and in good condition before they are cooled down, and are not fed for the last couple of weeks before the rest so that the gut is empty. Water must always be available. After the rest, they are warmed up gradually and fed well before they are put together.

Always put the male in with the female, not the other way round, and repeat the introduction at intervals of a couple of days until the female has ovulated. The males fight over the females, so do not keep two males together. Feed only when the animals are separated. In the wild, the species mates from March in Florida and from April-May further north.

EGG-LAYING AND CLUTCHES

The female lays the eggs about 60 days after mating, normally in May-August and often after a shed. The clutch is 3-25 eggs, typically about 10. Provide her with a laying box with moist vermiculite or sphagnum on the warm side. The female does not tend the eggs. She is exhausted after laying and needs plenty of food to rebuild her strength. Several clutches in a season occur, but put heavy strain on the female.

INCUBATION

Remove the eggs carefully and do not turn them. If they are stuck together, do not separate them by force. Place them on moist vermiculite in a closed container with a couple of small air holes in the lid, and do not bury them. The vermiculite must be moist, but not so wet that water can be squeezed out. At 26-29 °C the eggs hatch after 60-70 days; the figures are borrowed from *Lampropeltis californiae*. In the wild they hatch after about 60 days. Check the eggs once a week for mould and collapse, and remove bad eggs. The young stay in the egg for a day or two while they absorb the yolk sac. Do not help with the hatching.

REARING THE YOUNG

Newly hatched young are 20-28 cm and weigh 9-14 g. They stay in the nest for about a week, until the first shed. Put each hatchling in a small enclosure or ventilated box on its own, with a hide, water and a heat source. Young eat each other and must never be kept together. After the first shed, offer a newborn mouse every week, and thawed, frozen prey is safest. Animals that will not eat can be helped by scenting the mouse with a lizard. As they grow, increase the size of the prey and the frequency gradually. If they refuse to eat, check the temperatures, and try again after a week.

Health and common mistakes

Most problems are caused by errors in the set-up. The typical ones are:

- Obesity from meals that are too large or too frequent.
- Shedding problems with air that is too dry: provide a humid hide when the eyes turn bluish.
- Burns from heat rocks and unguarded heat bulbs.
- Constipation or intestinal blockage with a temperature that is too low, too little water or ingestion of substrate.
- Mites and internal parasites, especially in wild-caught animals. Use captive-bred animals, and quarantine new animals.
- Respiratory infection with air that is too cold or humid: the animal breathes with its mouth open or has nasal discharge.
- Bites from live prey. Use thawed animals.

A healthy animal has clear eyes and a full body and eats regularly. Weigh the animal every week, because sudden weight loss is often the first sign of illness. Reptiles hide illness, so see a vet with reptile experience if the animal does not eat, loses weight, breathes with its mouth open or seems lethargic.

Read more: Common diseases and signs of illness Read more: Buying animals: captive-bred, wild-caught and transport

Always ask someone who knows

This guide is a good place to start, but it cannot replace experience. Animals differ, and much of what matters most is learned from people who have kept the species for years. Talk to a breeder, an experienced keeper or a vet who knows reptiles and amphibians before you get the animal - and again if anything looks wrong.

The full guide with map and updates: herpy.org/en/snakes/lampropeltis-getula