

**UOLUME 2**Western Area

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Captive longevity has been reported at more than 9 years and 3 months (Snider and Bowler, 1992).

## Gray-Banded Kingsnake, Lampropeltis alterna

The gray-banded kingsnake is a medium-sized, nocturnal snake of rocky areas in the Chihuahuan desert. It receives its name from the variable wide, irregular shaped gray bands which extend the length of the snake. Within the United States, the range of the gray-banded kingsnake is entirely within the state of Texas. It occurs in the western panhandle (Trans-Pecos region) and southward into north central Mexico.

The food of this rock crevice dweller in the wild consists of the following items: Eastern fence lizard, *Sceloporus undulatus*, crevice spiny lizard, *S. poinsetti*, canyon spiny lizard, *S. merriami*, whiptail lizards *Cnemidophorus* sp., lizard eggs, canyon tree frogs, *Hyla arenicolor*, and juvenile pocket mice (Wright and Wright, 1957; Miller, 1979; Tennant, 1984, 1985; Switak, 1984; Cranston, 1991). Small snakes have also been listed as a food item by a number of authors (Behler and King, 1979; Tennant, 1981; Mehrtens, 1987) but this has not been widely confirmed. Tennant (1985) stated that this "was the only non-snake eating member of the kingsnake family." In captivity, many other species of lizards have been consumed. See below.

Observations of mating behavior in the wild have been rare. Noncaptive mating has been observed in late spring and early summer (Tennant, 1985; Cranston, 1991) that results in the deposition of eggs 1 to 2 months later (Trutnau, 1981; Mattison, 1988). These eggs, which may number from 3 to 14 (Tennant, 1985; Mattison, 1988; Cranston, 1991) will generally hatch after an incubation period of 55 to 91 days (Mattison, 1988; Trutnau, 1981) at temperatures of 22 to 30° C (72 to 86° F) into young looking very similar to the adults but ranging in size from 17.7 to 30.5 cm (7 to 12 inches).

This is one of the most highly sought after North American snakes in the world. Herpetoculturists seem to lose their minds when it comes to this species. "Alternas," as they are affectionately called by the hard-core herpers, have become so popular that to many they have become an obsession. Their worship has become almost cultish. So heavily are these snakes collected and bred that some people can even tell you exactly where another person has found a particular specimen! This has led to subcults espousing the beauty of their preferred locality types above all others. For instance, the hot item at the time of this writing appears to be the "Langtry alterna" (a specimen collected at Langtry, Texas, or bred from stock collected at or near that area). Others are enthralled with the "River Road alternas." To make matters slightly more confusing, there are two color phases that are referred to as "blairs" and "alternas." Blairs phase has broad orange bands or saddles while the alterna phase has narrow orange saddles.2 The amount of orange within the saddles is also very variable. Dark-phase blairs have almost no orange within the saddles while light phase blairs may have a great deal of orange. Similarly, the alterna phase may have little or no orange in the saddles. Now, add to this that you can have anything in between the two phases, and you begin to understand why no one understands the lingo of the gray-banded kingsnake at first.

Seriously, the gray-banded is a beautiful snake in all of its variable color patterns. It does very well in captivity in the most basic (simplest) of cages and attains an average size 51 to 90 cm (20

<sup>&</sup>lt;sup>2</sup>Saddle = goes part way around body. Band = goes all the way around body.

to 36 inches), average 81.3 cm (32 inches) with a record of 147.1 cm (573/4 inches) (Conant and Collins, 1991). Adults are usually not a problem to feed but hatchlings can be a real challenge.

The basic cage design discussed in the general care section will work very well for this species. The substrates that have worked well include indoor/outdoor carpet (artificial turf), newspaper, aspen and cypress chips, and others. Rocks, numerous hiding places (such as PVC pipes, small hide boxes, etc.), and a water bowl seem to be all that are required to complete the cage for this species. One alternative that has worked exceedingly well but does not appear necessary is the use of false bottoms, under which the snakes may hide. Plastic plants are a nice addition for the more decorative cages. Some keep these snakes in drawer-style cages with nothing but newspaper, however, and they seem to do fine. As with most other snakes, ventral heat is advisable. No special lighting is required. Air temperature may fluctuate quite a bit, but 25 to 30° C (77 to 86° F) during the daytime with a drop at night will work well.

Feeding is not a problem for the adults as they will usually readily accept small prekilled mice. Recently captured specimens may have a marked preference for lizards though and may have to be trained to take mice using scent transfer techniques. Hatchlings on the other hand are notoriously difficult to get switched to pinkies. Some estimate that up to 50% of the babies will not consume anything but lizards voluntarily. Lizards of the following genera have been reported by various authors as food for captive juveniles and adults of this species: Sceloporus (spiny lizards), Cnemidophorus (racerunners and whiptails), Eumeces (skinks), Holbrookia (earless lizards), and Uta, the side blotched lizard (Wright and Wright, 1957; Assetto, 1978; Miller, 1979; Tennant, 1984). In our struggles with babies that refuse pinkies, we have discovered they are particularly fond of 2 other species of lizards, one of which was a tremendous surprise. The first, and not so unexpected, was the ground skink, Scincella lateralis. (Why not? Every other kingsnake in the country seems to relish them, and their ranges do overlap some.) The second lizard, the Mediterranean gecko Hemidactylus turcicus, was a bit more of a surprise initially. In fact, 4 out of 5 hatchlings that had refused pinkies (one of which had refused other lizards), consumed these geckos immediately. After a while (up to 9 months in most cases) they were easily switched to plain pinkies (unscented). Some individuals, however, consumed gecko-scented pinkies immediately.

One individual consumed one Brown Anole, *Anolis sagrei*, another introduced species, but did not consume another; indeed, most North American snakes do not seem to relish eating this species.

With regard to feeding pinkies to the young snakes, a plethora of methods have been devised to make them more acceptable to the snakes. Washing the pinky off and scenting it with a lizard is the first alternative. A recent modification of this technique involves slicing open the abdomen of a dead lizard and dipping the head of the pinky inside (Feldner, 1992). After this comes the proven method of slicing open the head of a dead pinky (called "brain splitting" by the experts) before offering it to the young snakes. Admittedly, these tricks seem a bit strange to the average person; this is one of the reasons juveniles of this species are not recommended for the beginner. Only well-started animals are appropriate for those just starting out in snakekeeping.

Two commonly used alternative methods for very young snakes are pinky pumping and mouse tail assist feeding. The pinky pump is a mechanical device that macerates dead pinkies and forces them into the snake. It has been used with great success over the last several years to feed many young snakes that will not eat otherwise. The other very common method is to gently slide a mouse tail partially down the throat of one of these snakes. They will usually swallow it voluntarily at that point.

Brumation is considered necessary for breeding purposes, although not necessarily for general maintenance since this southern kingsnake may eat throughout the winter if it is not cooled down. The regular cage usually will need no modifications for this purpose; therefore, it is one of the best things to brumate many snakes in, and gray-banded kings are no exception. Four months at temperatures of 20 to 15° C (50 to 59° F) have worked well for many authors, and

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MAINTENANCE DIFFICULTY INDEX: Adults 1, Hatchlings 4

(1 = easiest, 5 = most difficult)

AVERAGE SIZE: 51 to 90 cm (20 to 36 inches)

FOOD: Lizards, mice

CAGE SIZE: 10 to 20 gallon long aquarium

SUBSTRATE: Indoor/outdoor carpet (artificial turf) or newspaper

VENTRAL HEAT: Yes UV LIGHT: No

TEMPERATURE RANGE: 25 to 30° C (77 to 86° F)

SPECIAL CONSIDERATIONS: Although some hatchlings readily take pinkies, most prefer lizards for 6 months. Once started, they are

beautiful, good-eating snakes.



temperatures below this have been well tolerated by those in our care (3.3° C, 38° F for several days during this time produced no ill effects). See the general care section on brumation.

As can be inferred from the breeding data listed above, captive breeding of this snake has become common. This can be accomplished in the usual manner (ie, placing the female in the male's cage) right after brumation ends.

A pair of 19-month-old snakes in our care mated on May 26 through May 28 and the female laid four eggs on July 5, 38 to 40 days later. These eggs hatched on August 29, a 55-day incubation, which is well within the reported range.

In summary, the gray-banded kingsnake is an attractive and generally mild-natured serpent that is relatively easy to maintain and breed. Hatchlings, on the other hand, may be extremely difficult to get to start feeding and are not advisable for beginners, especially in light of their relatively high price.

It is a shame so many great herpetologists and herpetoculturists have become so involved with this species that they have apparently lost interest in most other species of snakes. There are so many other colorful and fascinating North American snakes that need to be studied.

Captive longevity for this species has been listed by Snider and Bowler (1992) at 15 years and 2 months and Slavens (1992) at 15 years and 6 months, but Cranston (1991) believes they will survive more than 20 years in captivity.

## Prairie Kingsnake, Lampropeltis calligaster

The prairie kingsnake, consisting of three subspecies, ranges from southeastern Nebraska and southern Iowa eastward through Illinois, southern Indiana, Kentucky, and Tennessee and eastward