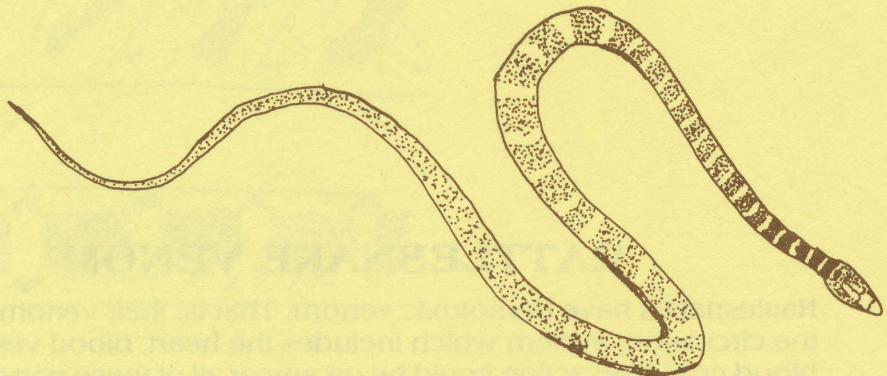


Key To The
SNAKES
of

Joshua Tree National Monument



By David E. Spiteri

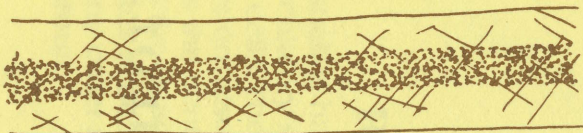
KEY TO THE SNAKES

1A. Without a rattle at the end of the tail—(all are harmless to man).

2A. Small 4"-14" long; worm-like in appearance; secretive; very nervous; pinkish in color:

Western or Desert Blind Snake (*Leptotyphlops humilis humilis*)

2B. Not worm-like in appearance.

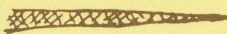


3A. Stripes running along length of body.

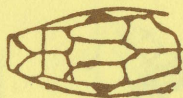


4A. Blunt tail; slow moving; docile; heavy bodied; 12"-42" long grayish with three rust colored stripes, one on back and one on each side:

Desert Rosy Boa (*Lichanura trivirgata gracia*)

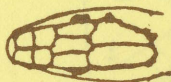


4B. Tail to a tapering point; active; slender.



5A. Nasal (nose) scale modified and enlarged; yellow or beige dark-bordered stripe; 24"-48" long:

Mojave Patch-nosed Snake (*Salvadora hexalepis mojavenensis*)



5B. Nasal (nose) scale not modified or enlarged; pale yellow stripe down each side of the body; 30"-60" long:

California Striped Racer (*Masticophis lateralis lateralis*)

3B. No stripes running along the length of the body.

4A. Nasal (nose) scale modified.



5A. Front of the head compressed dorso-ventrally (top to bottom) to resemble a wedge from a side view; small, 10"-17" long; saddle-like markings on back alternating from brown or black to red or orange; prefers sandy area:

Mojave Shovel-nosed Snake (*Chionactis occipitalis occipitalis*)

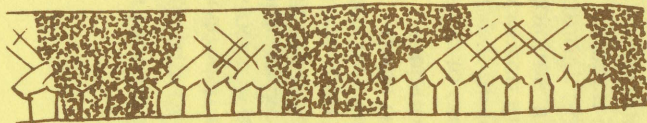


5B. Nasal (nose) scale obviously modified into an enlarged blunt snout; pinkish to tanish background color with brown blotches on back; 12"-20" long:

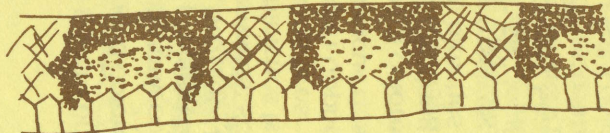
Western Leaf-nosed Snake (*Phyllorhynchus decurtatus perkinsi*)

4B. Nasal (nose) scale not modified.

5A. Black bands on a white background.



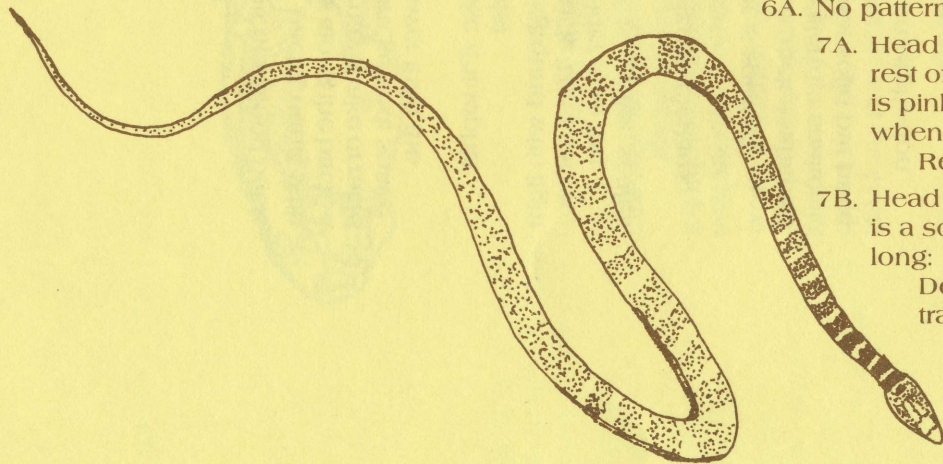
6A. Black bands encircling entire body; 30"-82" long:
California King Snake (*Lampropeltis getulus californiae*)



6B. Black bands not encircling entire body; belly without a pattern but solid white to cream color; may have some red between black band; 20"-40" long:

Western Long-nosed Snake (*Rhinocheilus lecontei lecontei*)

5B. Pattern on back is not banded, but, may be blotched, spotted or solid color.



6A. No pattern on back.

7A. Head black and neck region with black crossbands; rest of body may be tan or brown or reddish; belly is pink; very fast and nervous; will bite viciously when handled but is not poisonous; 30"-72" long:

Red Racer (*Masticophis flagellum piceus*)

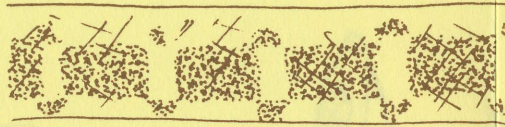
7B. Head black with light ring around neck; rest of body is a solid color brown to olive-grey; small 7"-15" long:

Desert Black-headed Snake (*Tantilla planiceps transmontana*)

KEY TO THE SNAKES continued

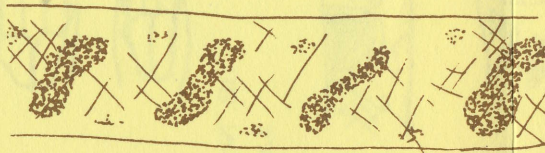
6B. Spotted or blotched pattern on back.

7A. A single row of solid colored blotches along back.



8A. Yellowish or straw-colored background with dark brown to black blotches along the back; a large snake, 36"-100" long; may shake or rattle tail but is harmless; scales are keeled; space inbetween blotches is narrower than the blotches themselves:

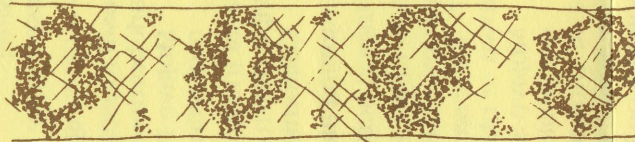
Great Basin Gopher Snake (*Pituophis melanoleucus deserticola*)



8B. White to cream colored background with light brown blotches along the back. The spaces between the blotches are wider than the blotches themselves; belly is white; scales smooth; 30"-54" long:

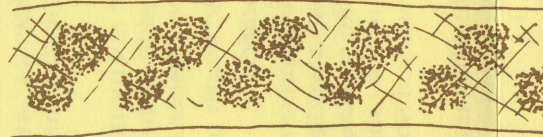
Desert Glossy Snake (*Arizona elegans eburnata*)

7B. Blotches are not solid colored or is spotted.



8A. Head is very distinct from the neck. V-shaped marking on top of the head; slender snake; 24"-43" long; blotches are not solid but have the ground color inside them:

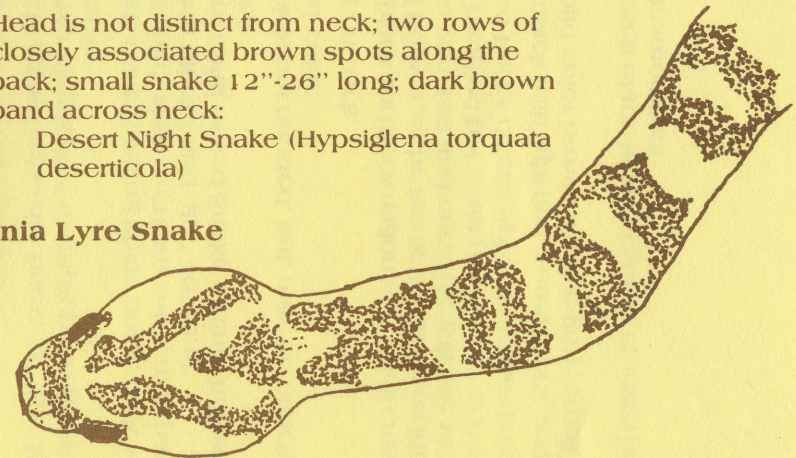
California Lyre Snake (*Trimorphodon vandenburghi*)



8B. Head is not distinct from neck; two rows of closely associated brown spots along the back; small snake 12"-26" long; dark brown band across neck:

Desert Night Snake (*Hypsiglena torquata deserticola*)

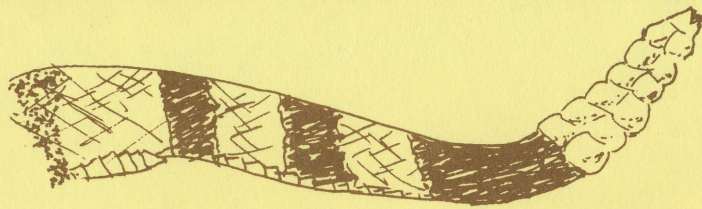
California Lyre Snake



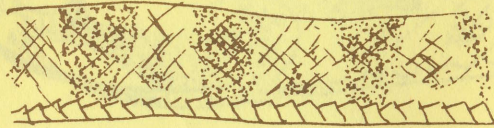
1B. With a rattle at the end of the tail—Rattlesnake (Dangerously poisonous)

2A. Modified horny scale protruding over each eye; moves with a sidwinding motion; cream, tan pink or gray color without a conspicuous pattern; small 17"-31" long:
Mojave Desert Sidewinder (*Crotalus cerastes*)

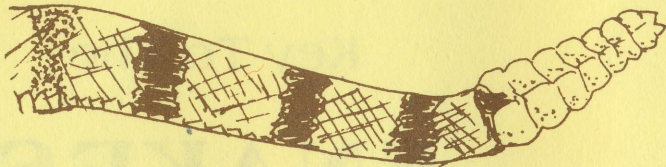
2B. No modified horny scale protruding above the eyes.



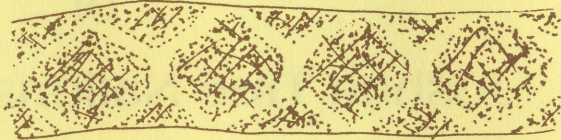
- 3A. Tail is composed of black and white rings more or less evenly spaced but last ring touching the rattle is black and much larger than the rest, (about twice as wide as the other black rings); 15"-62" long;
 Southern Pacific Rattlesnake (*Crotalus viridis helleri*)
- 3B. Black and white rings on tail more or less even width.



- 4A. No distinct pattern on back; salt and pepper speckling on body; 24"-52" long;
 Southwestern Speckled Rattlesnake (*Crotalus Mitchellii pyrrius*)
- 4B. Distinct diamond or rectangular pattern on back.



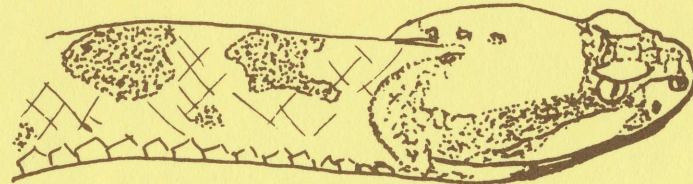
- 5A. White bands on tail wider than black bands; ground color greenish gray, olive green or occasionally brownish or yellowish; 24"-51" long; very irritable; drop for drop of venom this is the deadliest rattlesnake in the monument:
 Mojave Green Rattlesnake (*Crotalus scutulatus scutulatus*)
- 5B. Black and white bands on tail evenly spaced.



- 6A. Conspicuous white bands in front and behind the eyes; gray, brown or sometimes pink color on the back with brown diamond or hexagonal blotches; fainter smaller blotches on the side; 30"-89" long; very irritable:
 Western Diamondback Rattlesnake (*Crotalus atrox*)
- 6B. Tan pink or reddish color; diamond on back usually less well defined than the Western Diamondback to which it is related and often confused with; much milder temperament than the Western Diamondback; 30"-65" long;
 Red Diamond Rattlesnake (*Crotalus ruber*)

RATTLESNAKE VENOM

Rattlesnakes have hemotoxic venom. That is, their venom attacks the circulatory system which includes the heart, blood vessels and blood cells. The action could be on any or all of these parts together. The venom also includes a small amount of neurotoxic venom which attacks the central nervous system including the brain and nerves. This is the deadliest type of venom. The Mojave Green Rattlesnake, (*Crotalus scutulatus*), has a higher percentage of neurotoxic venom than any other rattlesnake in the Monument, thus, making it more dangerous.



The snakes of the Joshua Tree National Monument are extremely varied in appearance and habits; each one being uniquely evolved for its niche. We are fortunate to have a national monument that preserves these natural phenomena for us, guarded by park rangers that are dedicated and knowledgeable.

Snakes are cold-blooded vertebrates. They utilize external temperatures to maintain their own. Because of the excessive heat of summer in the desert, snakes will estivate. That is, they will go below ground where temperatures are more stable and remain there through the extreme heat periods.

Spring is the best time to observe snakes in the desert. Snakes that feed on lizards are usually more active in the daytime (diurnal) while most rodent-eating snakes will be out at night (nocturnal). Rattlesnakes are mostly nocturnal but the young ones often feed on lizards and are prone to be diurnal.

If you see a rattlesnake, stay six to ten feet away and observe it. Do not try to kill it; you may be endangering yourself. Remember, all wildlife in the Monument is protected by law.

Desert biology has a vast wealth to offer. Let's all enjoy it.

ABOUT THIS KEY

If you are fortunate enough to spot a snake in the Monument, let's hope that you have this identification key handy for there is something in all of us that simply has to have the proper name for the living things we observe.

This type of identification key is called a dichotomous key, meaning you always have only two characteristics to choose from. If it is not 1A then it is 1B. Then proceed to 2A or 2B and so on until you get to a single possible characteristic. Try this key out on the specimens of snakes in the visitor center. The more you use it the easier it gets.

The key has been designed to use the most obvious characteristics of the snakes; one should be clearly distinguishable from the other, as in rattles or no rattles on the tail, stripes or no stripes on the body.

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