

Chapter VIII. New Mexico State Animals

New Mexico Whiptail Lizard *Cnemidophorus neomexicanus*

There are three Whiptail Lizards in the Hall of Reptiles and Amphibians which all play a part in one of the greatest mysteries of nature. The New Mexico Whiptail, pictured here, is an all-female species that is actually a mixture of the other two examples on display at the Museum -- the Western Whiptail, which lives in the desert, and the Little Striped Whiptail, a denizen of grasslands.



Most products of crossbreeding, such as the mule, are sterile. But the New Mexico Whiptail, as well as several other all-female species of whiptail lizard, does reproduce, and all of its offspring are female. Moreover, it reproduces by *parthenogenesis* -- its eggs require no fertilization, and its offspring are exact and complete genetic duplicates of the mother.

Scientists understand only partially how this reproductive mode developed, and it raises many questions. One of the most intriguing is how this cloning affects the lizard's ability to adapt to environmental changes. Since there is no genetic variation except that which occurs through mutation, the New Mexico Whiptail cannot evolve as other species do.

The New Mexico Whiptail Lizard also offers an extraordinary opportunity to learn more about the role of sperm in fertilization, as well as about cloning. Through this anomaly, scientists may learn more about the norm.

New Mexico Spadefoot Toad *Spea multiplicata*

The New Mexico Spadefoot Toad is sometimes referred to as the Mexican Spadefoot Toad or the Western Spadefoot Toad. The largest males grow to be about 2 1/2 inches long.



They are brown, grayish-green, or dark gray with small spots or sometimes blotches on their backs. Some may have light stripes on their backs and sides. Red-tipped knobs or lumps, called tubercles, are scattered over their backs and heads. New Mexico Spadefoot Toads have large eyes like other spadefoots. They have short horny spurs on the bottom of each hind foot which are used to bury themselves in the ground where they remain for months at a time emerging to breed in temporary rain pools created at the onset of the summer monsoon season.

The sound made by Spadefoots sounds like a fingernail running along the teeth of a comb. Some say they give off an odor of peanuts when they are handled.

The New Mexico Spadefoot Toad is most often found in floodplains, washes and other lowland habitats, especially where the soil is loose enough for burrowing and deep enough to avoid freezing temperatures. They may make limited use of pinyon-juniper, but mostly occur in non-forested areas. They are active at night.

New Mexico Spadefoots are carnivores and they eat a variety of invertebrate prey. Termites, ants, beetles and spiders provide the bulk of their sustenance.

House Bill No. 13, adopting the New Mexico Spadefoot Toad as the official state amphibian, the New Mexico Whiptail Lizard as the official state reptile and the Sandia Hairstreak Butterfly as the official state butterfly was approved by the New Mexico House of Representatives on February 5, 2003. It was approved by the Senate on March 19, 2003. The bill was signed by Governor Richardson on April 6, 2003. This bill also placed "The Land of Enchantment" in the statutes as the official state nickname of New Mexico.

New Mexico Cutthroat Trout *Oncorhynchus clarki virginalis*

The Rio Grande cutthroat trout was first recognized in 1541 by Pedro de Castañeda, who wrote of "a little stream which abounds in excellent trout and otter" (the otter is now extinct in the Southwest). This was in all likelihood Glorieta Creek Southeast of present day Santa Fe - now a barren, ephemeral wash for most of its length, harboring only a few exotic brown trout. The Rio Grande cutthroat trout once ranged throughout cool waters of the Rio Grande in Colorado and New Mexico, including the Chama, Jemez and Rio San Jose drainages, along with the Pecos and Canadian drainages



Rio Grande cutthroat trout is the State Fish of New Mexico and is the only cutthroat trout native to the state. It became the state fish in 1955. Yet, over the years, the habitat has shrunk and the population has declined. The fish is found in less than 7%

of its historic range. The decline can be attributed in part to the introduction of non-natives, such as the German brown trout and rainbow trout. This has recently been complicated by the introduction of a devastating parasite which causes whirling disease.

Rio Grande cutthroat trout have a yellowish-green to gray-brown body with scattered black spots. They have a densely spotted tail. Typical Adult: can grow up to a length of 10 inches, weigh up to 1 pound and the life span can be up to 8 years. They inhabit mountain streams and rivers. Feed on insects, zooplankton and crustaceans. They will spawn in either the spring or summer. The female lays between 200 to 4,500 eggs on a gravel nest in flowing water where high levels of dissolved oxygen exist. The Rio Grande cutthroat trout is the southernmost species of cutthroats.

Roadrunner *Geococcyx californianus*

The Roadrunner is a large, black-and-white, mottled ground bird with a distinctive head crest. It has strong feet, a long, white-tipped tail and an oversized bill.

It ranges in length from 20 to 24 inches from the tip of its tail to the end of its beak. It is a member of the Cuckoo Family (Cuculidae), characterized by feet with 2 forward toes and 2 behind.



When the Roadrunner senses danger or is traveling downhill, it flies, revealing short, rounded wings with a white crescent. But it cannot keep its large body airborne for more than a few seconds, and so prefers walking or running (up to 17 miles per hour) usually with a clownish gait.

The Roadrunner makes a series of 6 to 8, low, dovelike coos dropping in pitch, as well as a clattering sound by rolling mandibles together. It has a long, graduated tail carried at an upward angle, and has long stout legs.

The Roadrunner feeds almost exclusively on other animals, including insects, scorpions, lizards, snakes, rodents and other birds. Up to 10 % of its winter diet may consist of plant material due to the scarcity of desert animals at that time of the year.

Because of its lightning quickness, the Roadrunner is one of the few animals that preys upon rattlesnakes. Using its wings like a matador's cape, it snaps up a coiled rattlesnake by the tail, cracks it like a whip and repeatedly slams its head against the ground till dead.

It then swallows its prey whole, but is often unable to swallow the entire length at one time. This does not stop the Roadrunner from its normal routine. It will continue to meander about with the snake dangling from its mouth, consuming another inch or two as the snake slowly digests.

When spring arrives, the male Roadrunner, in addition to acquiring food for himself, offers choice morsels to a female as an inducement to mating. He usually dances around her while she begs for food, then gives her the morsel after breeding briefly.

Both parents collect the small sticks used for building a shallow, saucer-like nest, but the female actually constructs it in a bush, cactus or small tree. She then lays from 2 to 12 white eggs over a period of 3 days, which results in staggered hatching. . Incubation is from 18-20 days and is done by either parent, though preferably the male, because the nocturnally incubating males maintain normal body temperature.

The first to hatch often crowd out the late-arriving runts, which are sometimes eaten by the parents. Usually only 3 or 4 young are finally fledged from the nest after about 18 days. These remain near the adults for up to 2 more weeks before dispersing to the surrounding desert.

The roadrunner became the New Mexico state bird on March 16, 1949.

Black Bear *Ursus americanus*

Smokey the Bear, probably the most famous bear in the history of the United States, was a New Mexico black bear cub found alive in a tree after a massive forest fire in the Lincoln National Forest near Capitan, NM. The cub was nicknamed "Hotfoot Teddy." They searched for the cub's mother, but could not find her. The cub needed veterinary aid for the burns on his paws and hindquarters, so he was flown to Santa Fe to receive professional treatment.

The little bear had gained nationwide attention and was soon renamed Smokey after the symbol for fire prevention. Smokey was presented by the New Mexico State Game Warden to the Chief of the Forest Service to be used to aid the fire prevention program.



In 1950, the U.S. Forest Service and the Advertising Council utilized Smokey as the symbol for fire prevention campaigns conducted all over the country. Smokey received much notoriety, lived to a ripe old age, and was buried at Smokey Bear State Park in Capitan.

The Black Bear became the state mammal on February 8, 1963.