

lizards

Family Crotaphytidae—Collared and Leopard Lizards

There is only one representative of the collared lizard family in Los Alamos County, the collared lizard. These lizards are large, alert lizards that are active during the day. They have well-developed legs and long tails.

• Collared lizard (*Crotaphytus collaris*)

Family Phrynosomatidae—Earless, Spiny Tree. Side-blotched, and Homed Lizards

The lizards in this family are slender, long-tailed or squat-bodied, and spine covered. They are diurnal, and some members can be arboreal. Most species lay eggs but some give birth to live young.

- Short-horned lizard (Phrynosoma douglasii)
- Prairie lizard (Sceloporus undulatus)
- Tree lizard (*Urosaurus ornatus*)
- Side-blotched lizard (*Uta stansburiana*)
- Lesser earless lizard (Holbrookia maculata)

Family Teiidae—Whiptails

The whiptails are diurnal, alert predators. Some members of this family are parthenogenetic, that is, all individuals are female. The offspring are identical to the mother, generation after generation.

- Chihuahuan spotted whiptail (*Cnemidophorus exsanguis*)
- Checkered whiptail (Cnemidophorus grahamii)
- New Mexico whiptail (Cnemidophorus neomexicanus)
- Plateau striped whiptail (*Cnemidophorus velox*)
- Little striped whiptail (Cnemidophorus inornatus)

Family Scincidae—Skinks

Skinks are fossorial and active during the day in secretive habitats. Some species give birth to live young.

- Many-lined skink (Eumeces multivirgatus)
- Great Plains skink (Eumeces obsoletus)



Family Name: Crotaphytidae

Common Name: Collared and Leopard Lizard

Scientific Name: Crotaphytus collaris
Common Name: Collared Lizard



Note the long tail.



Note the black collar.

The complete range of the five subspecies of collared lizard is fairly extensive within the greater portion of the American Southwest. The northeastern edge extends west from southwest Illinois all the way to eastern Utah and extends south through central Texas and all of New Mexico and Arizona to central Mexico. In New Mexico, collared lizards are found at elevations from 900 to 2750 m (2970 to 9075 ft). They can be seen—sunning on basalt rocks or tuff cliffs—in White Rock Canyon and all along the southern edge of the Pajarito Plateau from late April or early May after hibernation.



Note the broad head and short snout.

This large, robust lizard has a broad head, short snout, and long tail. The males—larger in size—have different

markings than the females. The back, sides, and limbs of the male are greenish, while the female has a slight greenish tinge. The throat of the male is dark-spotted—green to bluish—while the throat of the female is unmarked or lightly spotted. In breeding season the female gains color with spots and bars of red or orange on the sides of the neck.

These large, robust lizards like boulder-strewn or talus slopes where the vegetation is sparse, providing good lookouts for prey—primarily grasshoppers but also other lizards, berries, leaves, and flowers. When startled or pursuing prey, they can move nimbly and rapidly by jumping from rock to rock. At times they will run with forelegs lifted off the ground and tail raised. (Unlike other lizards, the collared lizard does not readily lose its tail, which is used for balance.)

This lizard is common until August. As temperatures cool, they return to hibernation. The males are highly territorial and will aggressively keep other males from their territory. Although females are less territorial, they tend to occupy specific home ranges.



Common Name: Earless, Spiny, Tree, Side-blotched, and Horned Lizards

Scientific Name: *Phrynosoma douglasii*Common Name: Short-horned Lizard

The complete range of the short-horned lizard roughly coincides with the Rocky Mountain Range, extending to both sides of this range from southernmost Canada south to central Mexico. In New Mexico, the short-horned lizard occupies the western two-thirds and is chiefly a mountain dweller in the more arid and southern portions of its particular range. An occasional specimen was captured in the pit-fall traps in the Pajarito wetlands during the past six years. They have been noted during field surveys in the piñon-juniper woodlands and the ponderosa pine forests of the Pajarito Plateau and in gardens of White Rock.



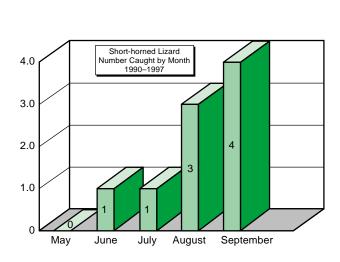
Note how well this lizard matches with background colors.

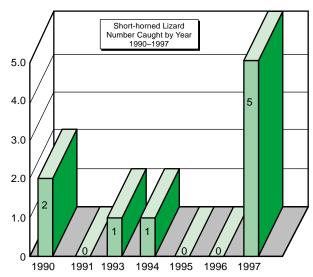
The most striking aspect of this lizard is an oval body and daggerlike head spines. One can hardly resist picking up this waddling lizard (sometimes called a "horny toad") as it

scurries across the forest or woodland floor. These solitary lizards are often hard to see because they flatten against the ground. Their coloration—dull yellow, brown, or gray—and spiny skin blend them into the surrounding landscape. The rear throat and chest are usually buff or orange-yellow.

This lizard bears live young and has a litter size varying from 9 to 30, depending on the size of the female. The young are able to fend for themselves within an hour of birth—the mother provides no parental care.

The short-horned lizard is sometimes a favorite pet of children. However, the lizard does not do well in captivity because it does not receive the large numbers of ants needed to survive.







Common Name: Earless, Spiny, Tree, Side-blotched, and Horned Lizards

Scientific Name: Sceloporus undulatus

Common Name: Prairie Lizard

This species, sometimes called "swifts" or "blue bellies," is one of the most widely distributed lizards in the US. It can be found throughout the area and is one of the most adaptable species in New Mexico. On the Pajarito Plateau, the species occupies a wide range of habitats. Bogert (1979) found the species from 1640 m (5412 ft) at the Rio Grande to near 2500 m (8250 ft) in ponderosa pine forests. The prairie lizard was the most common lizard collected in the pit-fall traps in the Pajarito wetlands.

The main body color of various populations may closely match the dominant ground color—gray, brown, or reddish. There are light stripes along either side of the back that extend from



Adult prairie lizard.

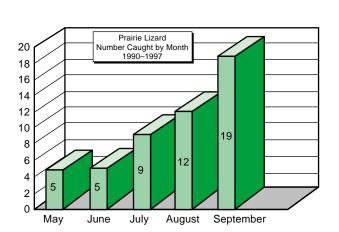
behind each eye onto the tail. The throat of a male usually possesses a pair of blue spots, one on each side. Males also have bright blue belly patches edged with black between the limbs. These colors may also be present in females. Females can lay clutches of 4 to 17 eggs, and hatchlings can be seen around mid-June to September. We have observed these lizards displaying territorial behaviors. If one lizard enters another's territory, the owner will chase the other off or fight. The owner will also do "push-ups" to show the intruder that they have entered into occupied territory.

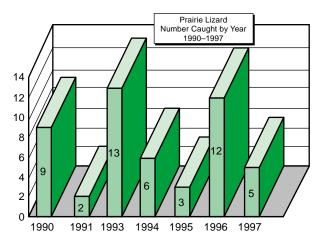
These lizards are seldom active at temperatures much below 32°C, and they can tolerate levels a few degrees above 38°C for only relatively brief periods. They bask on the ground, but often find elevated sites on rocks, logs, stumps, posts, tree trunks, or cliffs. They also thrive around human-made structures such as stables, sheds, houses, woodpiles, and rubbish heaps, all of which tend to attract insects that comprise the major part of their diet. Wherever loggers have cut ponderosa pine decades earlier, decaying logs provide shelter in crevices and under bark.

Prairie lizards are sit-and-wait predators that prey mainly on spiders and other small arthropods. Bogert says, "Casual observations would suggest that, from suitably elevated basking sites, these lizards can scan most of the terrain within a radius of two meters. The distance at which they detect the presence of their prospective prey would depend in part on its size, or other peculiarities, but ordinarily only moving arthropods attract the reptile's attention. Dead or immobilized creatures of suitable size go unnoticed."



(Clockwise from left): note blue throat and belly patches; hatchling prairie lizard; note the light stripe down each side of the back.







Common Name: Earless, Spiny, Tree, Side-blotched, and Horned Lizards

Scientific Name: Urosaurus ornatus
Common Name: Tree Lizard

The distribution of the tree lizard in the US begins in the north from the southern extent of Wyoming south through western Colorado, east-central Utah, west-central New Mexico, all of Arizona, and deep into Mexico along the Pacific Ocean. In New Mexico this species can be found west of the Rio Grande and on many of the mountain ranges along the eastern margin of the Rio Grande drainage basin. Degenhardt (1975) considered this species to be one of the three most widely distributed and abundant lizards in Bandelier National Monument. Bogert (1979) found the lizard to be uncommon within Laboratory boundaries—being on the periphery of its range at this altitude. He found it restricted to canyons or rocky terrain with sparse vegetation and collected specimens near the Rio Grande in Ancho Canyon at the 1640-m (5412-ft) elevation. He also saw tree lizards at Tsankawi Ruins where they inhabited the rocks below the cliffs in the piñon-juniper woodland at 1950 m (6435 ft). We have not found any of this species during our surveys in the Pajarito wetlands.

The coloration and pattern varies from population to population, possibly influenced by the color of the soil. Possible colors include dark brown or black—when the lizard is in its dark phase—tan, sooty, or gray. The scales on the back have two bands of large scales that are separated by a strip of smaller scales. The male will have blue or blue-green belly patches, which may be connected by a blue throat patch. The female will have whitish, orange, or yellow coloration on the throat and no belly patches.

Though the vernacular name would indicate that the animal inhabits trees, they are mostly found on cliffs and rocks in the Jemez Mountains. Often found in pairs or groups, this lizard is masterful at hiding by keeping a tree trunk or branch between itself and a potential enemy. This species can be more readily seen in the morning or late afternoon, foraging for a wide variety of arthropods.



Note how the pattern on the back of the lizard resembles tree bark.



Common Name: Earless, Spiny, Tree, Side-blotched, and Horned Lizards

Scientific Name: *Uta stansburiana*Common Name: Side-blotched Lizard

This lizard has a widespread distribution throughout the western US and New Mexico but has not been found in Los Alamos County. However, it might be found in the County near the Rio Grande and has been reported from Santa Fe and Rio Arriba counties. They can be found in areas with sand, rock, grass, shrubs, and scattered trees.

The side-blotched lizard is relatively small, with a body length 3.7 to 5.9 cm (1.5 to 2.4 in.). The tail is often longer than the body. Its coloration varies from brownish to gray to yellowish with a dark blotch behind each forelimb. The upper surface of the body can be marked with large or small spots or without a pattern. Juveniles have a white stripe on each side of the body beginning just below the nasal openings and extending back through the eye, over the shoulder, and onto the tail.

Mature females can lay as many as 3 clutches annually with 2 to 5 eggs in each clutch. The length of the breeding season will vary geographically, being longer and producing larger clutch sizes further south.

This species is generally a ground dweller, mainly found along sandy washes that have scattered rocks and bushes growing low to the ground. It is an insectivore that will "sit and wait" for insects, scorpions, spiders, mites, and ticks.



Note that the side blotch is sometimes present or absent.



Common Name: Earless, Spiny, Tree, Side-blotched, and Horned Lizards

Scientific Name: Holbrookia maculata Common Name: Lesser Earless Lizard

This lizard has a widespread distribution throughout the western US from southern South Dakota south through the Great Plains to central Texas and west through New Mexico and Arizona into Mexico. It has not been found in Los Alamos County but has been reported from Santa Fe and Rio Arriba counties.

The color of this ground-dwelling lizard—brown, tan, or gray—matches the soil where this species lives. Considered as moderate in size, the lesser earless lizard averages only 10 to 13 cm (4 to 5 in.) in length but seems larger because of a broad head and stout body with short legs. The back is marked with scattered dark patches, with the back of each patch edged with a lighter color. There is a pair of black spots on each side of the belly with a light-bordered dark stripe on the thighs. When gravid, the females develop an orange-pink to bright crimson coloration that permeates the dorsal color.

This lizard is a fast runner and cannot be easily caught by hand. It is best adapted to living on or beneath the surface of sandy or loose soils where it burrows headfirst for protection. The females may lay up to six eggs from April to September, depending on geographic location. The hatchlings emerge a month after the eggs are laid and grow slowly throughout the first year.

These animals eat grasshoppers, butterflies, moths, spiders, and various other insects. They often forage out in the open away from vegetation and other natural hiding places because they can quickly burrow into the ground when danger threatens.



Note the crimson permeation of the female.



Scientific Name: *Cnemidophorus exsanguis*Common Name: Chihuahuan Spotted Whiptail

The range of the Chihuahuan spotted whiptail stretches from north-central New Mexico south to central Mexico at elevations between 760 and 2440 m (2500 to 8000 ft). Bogert found this species near the mouth of Ancho Canyon at an elevation of 1650 m (5445 ft). Degenhardt (1975) reported that this species has the widest distribution of any whiptail in Bandelier National Monument. He obtained specimens between elevations of 1615 and 1830 m (5330 and 6039 ft), mainly in grassy, semi-open areas of several canyons including White Rock Canyon. However, this lizard may not range farther north than the mouth of Los Alamos Canyon.

Body length of the Chihuahuan spotted whiptail is 2.5 to 10 cm (1 to 4 in.). The upper body is brown or reddish brown with cream to pale yellow stripes, spots, or both. The tail is bluish or greenish. All are female with an average life span of four years.

This species lays a clutch of 1 to 6 eggs; larger females produce more eggs. The eggs are elliptical, parchment-shelled, and cream-colored, averaging about 10 by 18 mm (0.4 by 0.75 in.) in size.

This species forages for food by digging under objects to find insects, spiders, and scorpions.







Scientific Name: Cnemidophorus grahamii Common Name: Checkered Whiptail

The distribution of this species begins in the north in southernmost Colorado and extends south through central New Mexico into southwestern Texas and slightly into Mexico. It is commonly found in those habitats in the Rio Grande drainage that are continuously disturbed by flooding and by humans at elevations from 270 to 2100 m (900 to 6900 ft). This whiptail has not been reported for Los Alamos County but has been found in Rio Arriba and Santa Fe counties.

The body length of this whiptail is 28 to 40 cm (11 to 16 in.). The distinguishing characteristic of this lizard is a dark checkered pattern on a yellowish to cream colored upper body. There are six pale stripes along the body plus a stripe down the center. The underside of the body is whitish and not marked. The throat and chest may have a few black spots. The tail is brown to yellowish.

This species seems to prefer those areas that are relatively open where the soil can be hard packed or sandy but conducive to running. It will forage for long periods in places that it can dig in the soil or root through debris to find insects, such as butterflies, grasshoppers, spiders, and centipedes.





Note the checkered pattern on the back and the open terrain.



Scientific Name: Cnemidophorus neomexicanus

Common Name: New Mexico Whiptail

The New Mexico whiptail is found along the tributaries of the Rio Grande. It seems to prefer those areas that are flooded regularly and contain human evidence such as ditches, fences, and trash piles. This species was not captured at the Pajarito wetlands nor has it been found in Los Alamos County.

This species of whiptail is also all-female and has both stripes and spots. It is small and slender—the body length is 0.8 to 1.2 cm (2 to 3 in.). The seven stripes are a well-defined light color over a brown or black body. The single most identifying characteristic of this species is the stripe that goes down the middle of the back, which is wavy or zigzagged. The belly is a light blue, and the tail is greenish. (The tail of a juvenile is bright blue.)

The New Mexico whiptail lays a clutch of 1 to 4 eggs in the summer that hatch in 50 to 60 days. It likes to utilize human-disturbed areas to hide and to hunt for spiders and insects.





Note the wavy stripe down the middle of the back.



Scientific Name: *Cnemidophorus velox*Common Name: Plateau Striped Whiptail

This is a wide-ranging whiptail—encompassing the four corners region of the American Southwest—and is generally restricted to the piñon-juniper woodland. This was the common whiptail found in the pit-fall traps of the Pajarito wetlands. Bogert (1974) also found the species in Guaje, Bayo, Pueblo, Los Alamos, Sandia, and Pajarito Canyons, and Cañada del Buey.

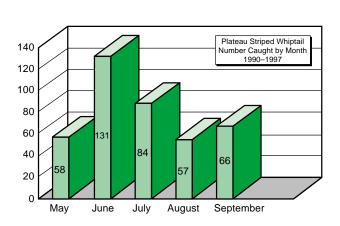
The plateau striped whiptail is an all-female species that ranges from 6.25 to 10 cm (2.5 to 4 in.) in length. Along the back are six distinct light-colored stripes running from head to tail with a possible, less distinct, stripe down the middle of the back. Between the stripes the body is blackish brown, and the end of the tail is light blue. (The whole tail of a juvenile is bright blue.) The belly of the adult is pale in color and is unmarked or tinged with blue.

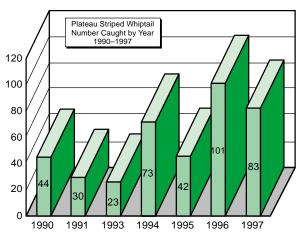


Adult and juvenile; note the blue tail and the lack of spots in the dark fields between the light stripes of the adult.

Bogert (1979) found that the plateau striped whiptail was largely confined to the ecotone where piñon-juniper woodland merges with ponderosa pine forest in canyons ranging at elevations from 1900 to 2075 m (6270 to 6847 ft). They often seek cover under shrubs such as squawbush, Apache plume, or shrub-like clumps of Gambel oak, constantly moving in and out of the shade to maintain an optimum body temperature.

The whiptail lays a clutch of 3 to 5 eggs during June and July. The eggs hatch during the last half of August, and the hatchlings are 3 to 4 cm (1.2 to 1.6 in.) in body length. The primary diet of this species is insects, which are actively pursued by the whiptail—unlike lizards who utilize the 'sit-and-wait' method.







Species: Cnemidophorus inornatus Common Name: Little Striped Whiptail

Cnemidophorus inornatus is widespread throughout the Chihuahuan Desert of the southwestern United States and Mexico with disjunct populations to the east, north, and south. The subspecies *C. i. juniperus* is disjunct, occupying mainly the San Juan Basin of northwest New Mexico and extending northward up the valleys of the Pecos River and the Rio Grande to the foothills of the Jemez and Sangre de Cristo mountains.

This species is one of the smaller whiptails. Body length is 5 to 7 cm (2 to 3 in.). Six to eight yellow or white stripes extend down the dark-colored back that becomes lighter with age. The tip of the tail is blue or purplish blue, and the underbelly is bluish white. The young are not as blue underneath. The little striped whiptail can be found within the pinon-juniper woodlands and open ponderosa pine forests where the ground is gravelly, sandy, or silty to elevations up to 2272 m (7498 ft). It will hibernate in narrow burrows, plugging the entrance with dirt. They will emerge in April with the juveniles and adult males most active early on. The diet consists mainly of insects, spiders, and centipedes.









Family Name: Scincidae Common Name: Skinks

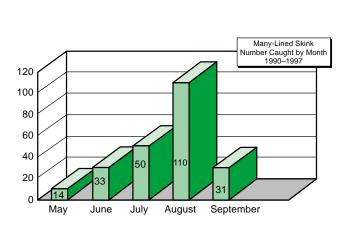
Scientific Name: Eumeces multivirgatus
Common Name: Many-Lined Skink

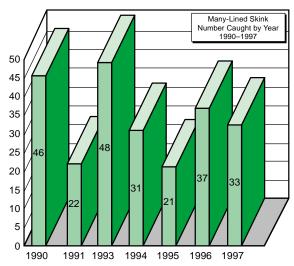
In the US, the many-lined skink is distributed southward from southern South Dakota through the southeastern corner of Wyoming, northwestern Nebraska, central Colorado, and most of New Mexico. In this area Bogert (1979) frequently found this skink by overturning logs and rocks. He found specimens in Bayo, Pueblo, Sandia, and Cedro Canyons and in Cañada del Buey. This was the most common skink found in the pit-fall traps in the Pajarito wetlands. Generally, this species is found in wet or damp areas along streams or enclosed basins.

The many-lined skink ranges in size from 5.6 to 8.75 cm (2.25 to 3.5 in.). It is a slim, short-limbed, long-bodied skink with a very long tail. The body coloration can vary. Stripes can also vary in numbers and color, with some specimens not having stripes. Males may develop bright orange or red lips during the breeding season. The young have a bright blue tail.

Nests can be found beneath sunken rocks. The species will watch over their eggs and the very young, which range in number from 7 to 21.

These lizards eat insects, spiders, mollusks, and lizards.







(Clockwise from upper left): note the bright blue tail of the juvenile; adult many-lined skink; immature.



Family: Scincidae Common Name: Skinks

Scientific Name: Eumeces obsoletus Common Name: Great Plains Skink

In the US, the Great Plains skink is distributed throughout the southern Central Great Plains. In New Mexico, this species is usually found along major rivers and tributaries and in riparian areas with permanent or intermittent streams. Within the Pajarito wetlands, the Great Plains skink is less common than the many-lined skink (*E. multivirgatus*).

This is the largest skink in the area, measuring 8.75 to 15 cm (3.5 to 6 in.) long. It is light gray, olive-brown, or tan on top with many black or dark brown spots. The spots unite along the surface making scattered lines. The sides are usually flecked with salmon. The young are blue-black to jet black with a bright blue tail and orange and white spots on the head and along the sides.

This species is mostly found in wet to damp microclimates. It can be found in rodent burrows among leaf litter and organic debris. These lizards are secretive and do not tolerate hot, dry conditions. They come out on cool mornings and following rainstorms.

The Great Plains skink is not intimidated and will bite if disturbed. Depending on its size, the female will lay a clutch of 7 to 24 eggs, usually in an excavated nest under a rock. Their primary diet is caterpillars, grasshoppers, spiders, and beetles—which they locate by sight or smell.



Mature Great Plains skink.



(Clockwise from upper left): a juvenile develops stripes but keeps the bright blue tail; very young Great Plains skinks are blue-black to jet black with a bright blue tail; immature Great Plains skink.