



WILDLIFE NOTES

Texas horned lizard

Phrynosoma cornutum

People tend to misname things. We say "horny toad" when we are talking about lizards. There are three kinds of horned lizards in New Mexico: the Texas, the short-horned, and the round-tail varieties.

Texas horned lizards and their relatives have evolved with changing landscapes over thousands of years. They sleep beneath the sand, eat ants, bask in morning sunshine, harbor parasites, and try to avoid hawks and other predators. Their skin has evolved to minimize loss of water. Texas and round-tail horned lizards lay eggs; short-horned lizards give live birth.

An awkward shape, however, also limits the speed with which horned lizards can move on flat land or through grass. Unlike many lizards, horned lizards do not easily lose their tails when grabbed, nor do they regenerate their tails.

Texas horned lizards live in southern and eastern New Mexico, and their range extends to Kansas, farther east than any of the seven horned lizards in the western United States. Color may vary, depending on the background terrain, but look for a light tan overall, with darker brown spots conspicuously displayed on the back. This is the only species with dark brown stripes from the eyes to the

upper lip, and across the top of the head. Its adult length is three to five inches from tip of head to anal vent.

A horned lizard will dig itself into the sand in the afternoon or evening, then emerge to soak up sun the next morning. Later, it will shuttle between sunny and shady areas, since cold-blooded creatures must avoid overheating. It digs into the ground head first, oscillating its body, and may go down several inches. When the ground is too hot, the horned lizard will seek a shady spot, or even climb into a small bush. Grains of sand are swept from the horned lizard's eye by means of a membrane that coats a foreign object with mucus.

The pineal gland on a horned lizard's head appears to be a "third eye" and may help a lizard know when to sun, but after a century of checking, even zoologists do not understand its function completely. This gland does not function as a true eye though it has a transparent outer covering, a lens to focus light rays, and a retina to receive incoming radiation.

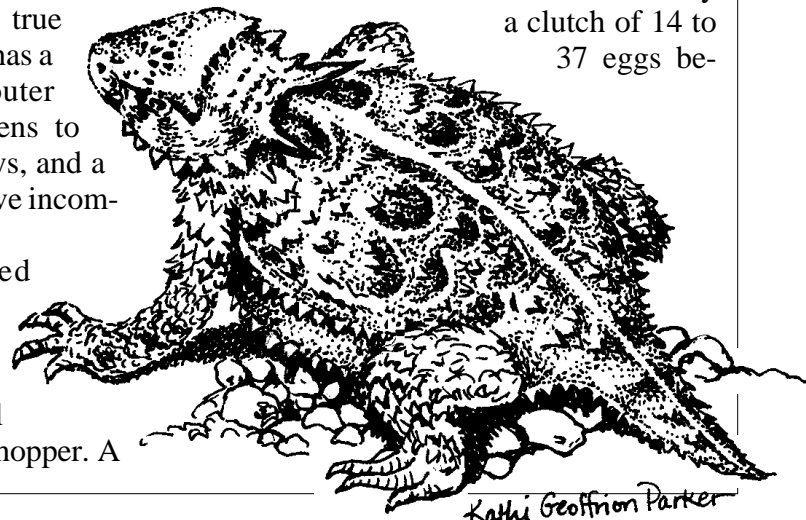
A horned lizard may eat 70 to 100 ants a day, or the occasional beetle or grasshopper. A

horned lizard will lie in wait on an ant trail, take a step or two forward, then flick its tongue out to retrieve the insect. The prime food is harvester ants, which store seeds of green plants. A horned lizard's stomach can be 13 percent of its overall mass, because it needs plenty of room for ants, which contain lots of indigestible material.

Some horned lizards have mite parasites living in their skin folds; the parasites drop off to become free-living adults.

Horned lizards obtain most of their water from food, but will drink dew from plants or water from puddles. A Texas horned lizard will use its back to collect rainwater, arching itself to funnel droplets toward its mouth. Uric acid is emitted in solid form, decreasing the need for water with which to flush kidneys.

Horned lizards lay a clutch of 14 to 37 eggs be-



tween May and July. A third of a female's weight may be devoted to producing a large clutch of eggs. The young shed their skin immediately upon hatching, then molt a few times each year. They hibernate in the winter, when they survive on fat reserves. Adults may hibernate as early as late September, young in early November. They come out in March or April.

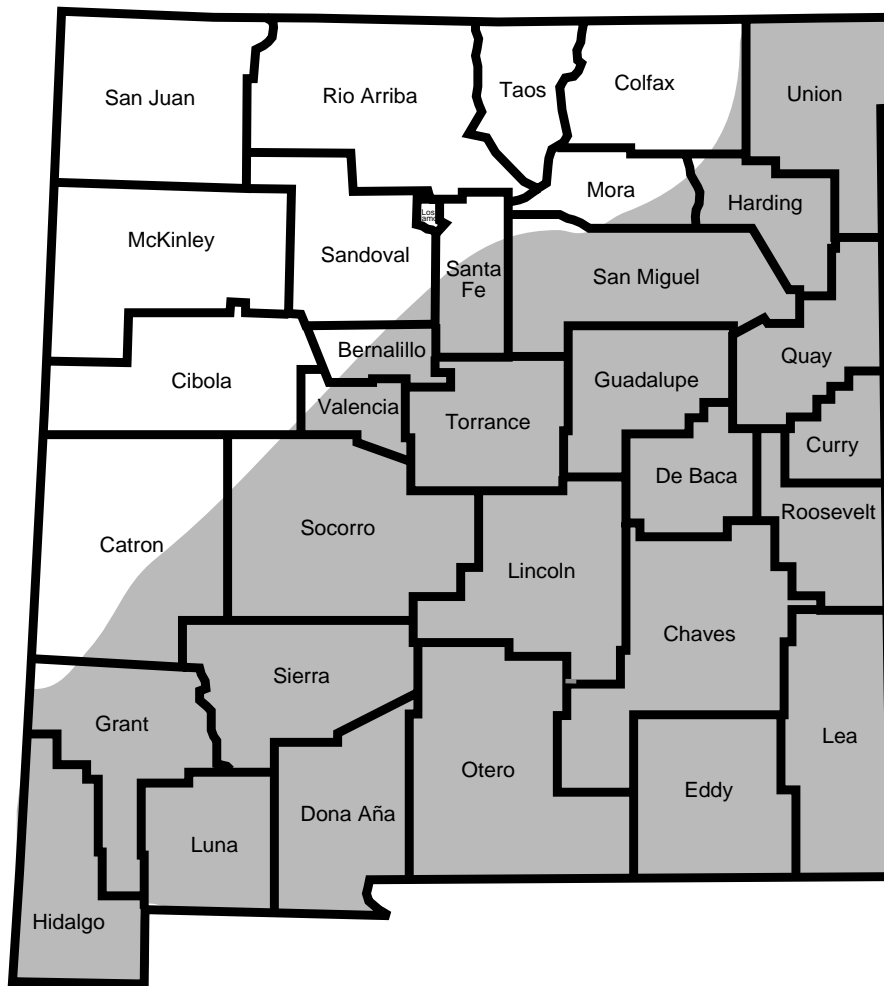
Enemies include hawks, roadrunners, and snakes. Horned lizards are well camouflaged to avoid being seen, but large hawks can spot them from very high up. The spines, which help to distinguish species of horned lizards, also dissuade some predators from trying to swallow their prey. The spines can puncture the windpipe of a bird or poke through the neck of a snake.

Horned lizards normally don't bite. They can inflate their bodies or make themselves look larger or hiss with open mouths. If all else fails, they can squirt blood at their enemies.

A Texas horned lizard can arch its back, protrude its eyeballs, and fire fine streams of blood as far as four feet. The blood can be directed forward or backward. The lizard can increase the blood pressure in parts of its head, and internal reservoirs with blood. Under pressure, blood breaks through sinuses and is sprayed through the pore of a gland.

Usually natural predators, not humans, are the targets of the spraying.

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