

# WILPLIFE NOTES

# Narrowhead gartersnake

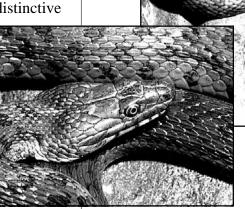
The narrowhead gartersnake is state listed as a threatened species by the New Mexico State Game Commission.

### **PESCRIPTION**

With its narrow head, distinctive

coloring, and aquatic habitat, the narrowhead gartersnake is easy to distinguish from its more common gartersnake relatives. Usually 16-18 inches long, the narrowhead gartersnake is a

well-camouflaged snake with a face that brings to mind a pair of needle-nose pliers. Its coloration is a soft putty-brown, dotted with dark olive-gray spots. Occasionally these spots are reddish, which accounts for its scientific name Thamnophis rufipunctatus, meaning "having ruddy-colored spots." (Most other gartersnakes are typified by a rounded head and longitudinal stripes down the back.) Young narrowhead gartersnakes resemble their parents but tend to have ruddier spots than the adults. Both young and adult narrowhead gartersnakes have small yellow eyes placed high on their heads.



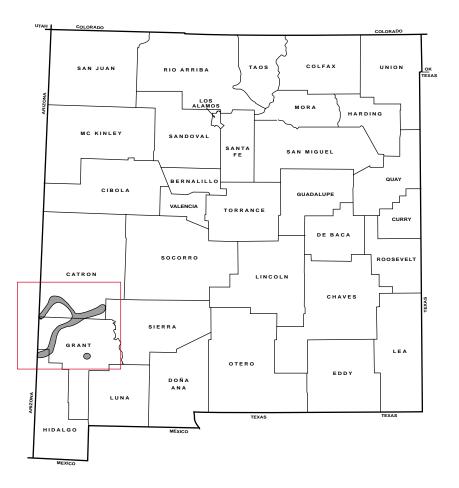
Photos: Charlie Painter

## AQUATIC HABITAT

This gartersnake is most at home in the water, particularly swiftflowing, rocky streams of the desert Southwest. At present, they're only found in association with so-called 'wild' waters, particularly near riffles, boulderrimmed pools, or in nooks and crannies of partially submerged rock clusters and debris. Narrowhead gartersnakes do not live along 'tamed' waters — that is, natural or slow moving, muddy rivers that cut through meadows, have broad expanses of sand or gravel, or which are lined with grasses and low-growing vegetation up to the water's edge.

Streamside rocks and overhanging plants serve as basking sites from which narrowhead gartersnakes, at the slightest sign of disturbance, immediately slip away to hide under boulders in the stream. If a human attempts to handle a narrowhead gartersnake, it will try to bite and will void the foulsmelling contents of its anal scent glands on an unwary intruder.

The narrowhead gartersnake remains active at lower temperatures than other gartersnakes in the same habitat. It must be able to do this to freely move about in the cold waters of rushing streams. However, it will seek out warm 'micro-climates,' such as those found near thermal springs or underground seeps. Occasionally, this penchant for



seeking warm water can be deadly for narrowhead gartersnakes. On two occasions, biologists found dead narrowhead gartersnakes in the scalding waters of Turkey Creek Hot Springs in the Gila Wilderness. It appeared they entered the hot water and were unable to find their way out before succumbing to the lethally high temperatures.

#### FEEDING

Narrowhead gartersnakes use the rocky riffles of rivers as foraging areas. Using their prehensile ('grasping') tail to anchor themselves among the rocks and their long narrow head to probe into underwater cracks and crevices, they pursue small fish and other species. Common prey includes the longfin dace, fathead minnow, desert sucker, Sonoran sucker, green sunfish, and rainbow trout fry. Adults narrowhead gartersnakes have been known to

include toads, frogs, tadpoles, and tiger salamander larvae in their diet.

## BREEDING and HIBERNATION

Female narrowhead gartersnakes mature at 2.0 and males at 2.5 years of age. Mating likely takes place in early or mid-spring in warm micro-climates along stream margins, including rock and debris piles. Females emit scent trails for the males to follow. Nearly all adult narrowhead gartersnake females observed and studied by researchers in the field were found to be gravid (pregnant) during the breeding season. In mid-July, females bear their young alive in litters of three to eight, usually one litter per year. Young narrowhead gartersnakes are on their own from birth. watching out for predators such as bullfrogs, carnivorous fishes, wading birds, raccoons, and other snakes. In late fall, narrowhead

gartersnakes seek out crevices and hiding places, deep within debris piles, in which to hibernate until spring.

#### DWINDLING NUMBERS

Narrowhead gartersnakes used to be common from central Arizona, eastward into western New Mexico, then southward into western and central Chihuahua and northwestern Durango in Mexico. With widespread human alterations of the natural habitat, their numbers have dwindled sharply.

Today, in New Mexico, this species is only found along the drainages of the San Francisco River, Tularosa River, and portions of the Gila River.

Narrowhead gartersnakes used to live at Wall Lake, but the introduction of the non-native bullfrog, as well as habitat alterations resulting in the lake becoming silted in, have caused its disappearance there.

As human intervention upon the land continues — cattle grazing, heavy recreational usage, agriculture, building development, water diversion, and other factors — we continue to lose more stretches of wild rivers. The sobering fact is, as the Southwest's wild rivers go, so goes the narrowhead gartersnake.

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