

Introduction

The narrow-headed gartersnake is a semi-aquatic snake that lives in and near Oak Creek. Narrow-headed gartersnakes can be grayish, brown or reddish in color. These snakes may have dark spots but have no stripes and are easily distinguished by their signature triangle shaped head. Young snakes are typically about the size of a No. 2 pencil, while adult snakes can reach up to 3 feet in length with varied thickness.

Narrow-headed gartersnakes do not have venom and are harmless to humans. These snakes spend the majority of the spring and summer within or near the waters of Oak Creek. They primarily feed on native fish and non-native trout species. During the winter months (mid-November to late March) narrow-headed gartersnakes hibernate in dry upland areas adjacent to the creek.



Photo: I. Emmons, NAU

Legal Status

On August 7, 2014 the United States Fish and Wildlife Service listed the narrow-headed gartersnake as “threatened” under the Endangered Species Act (ESA). The ruling, which is based on the best available scientific information, found that the narrow-headed gartersnake is likely to become in danger of extinction with the foreseeable future. The “threatened” status provides the species protection under section 4(d) of the ESA. The Service has also proposed areas throughout the species historical range to be protected as critical habitat. Oak Creek Canyon is included in the current proposal.

Where are Narrow-headed Gartersnakes found?

Currently, narrow-headed gartersnake populations exist in streams and rivers in along Arizona’s Mogollon Rim and in western New Mexico. Small populations exist in Oak Creek, the upper Verde River; the Black and Blue Rivers and their tributaries. Although many small populations exist throughout the species historical range, the most robust population is located in Oak Creek.



Threats to Narrow-headed Gartersnakes:

- Non-native predatory species such as bullfrogs, crayfish and brown trout.
- Destruction of habitat by cattle grazing, recreation and catastrophic wildfires.
- Pollution of rivers and streams.

ADOT Activities That Could Potentially Harm Narrow-headed Gartersnakes

- Development projects in Oak Creek Canyon
 - a. Any project requiring access to Oak Creek or vegetated areas adjacent to the creek.
 - b. Maintenance activities in the canyon
 - Any off-pavement, ground disturbing work: ditch or pipe cleaning-snakes can take refuge in these areas. Hydro-Vac operations- snakes could be present in pipes or culverts.



If you encounter a Narrow-headed Gartersnake:

- Stop work immediately and back out of area.
- Do not touch pickup or disturb the snake. Only individuals with the proper training and permits may handle narrow-headed gartersnakes.
- Report any sightings or encounters to the ADOT Biologist, Coby Teal (928-304-0487) email: bioteam@gmail.com
- If the snake appears to be in distress or has visible injuries:
 - a. Notify your supervisor immediately.
 - b. Contact the ADOT Project Biologist and Coby Teal (928-304-0487)

How to Help Narrow-headed Gartersnakes

- Plan and schedule any maintenance work in Oak Creek Canyon with your DEC or Maintenance Engineer
- Supervisors and Leads should become familiar with the ADOT maintenance review process
- Use caution when driving through Oak Creek Canyon- Snakes have been struck on the highway
- Pick up trash and litter- garbage can attract animals that have been known to prey on snakes
- Only use dedicated restroom facilities- help maintain water quality
- Do not move crayfish or other bait species between locations and do not release live bait animals

---If you don't know or are unsure of what to do, ASK!---

If you observe poaching, collecting, selling, or any other illegal activities, contact AGFD's OPERATION GAME THIEF at **1-800-352-0700**, 24 hours a day or on the internet at

<http://www.azgfd.gov/ogt.shtml>

Additional information for narrow-headed gartersnake life history and habitat requirements is available at:

Arizona Game and Fish Department:

<https://www.azgfd.com/>

US Fish and Wildlife Service:

<https://www.fws.gov/southwest/es/arizona/N-HGartersnake.htm>

<http://nau.edu/gartersnake-research-project/>

<http://oakcreekwatershed.org/>

