

Eastern Tiger Salamander

Ambystoma tigrinum

Upland Amphibian Species Profile

Appearance and Range: Tiger salamanders have a large distribution, spanning across the US. The Western tiger salamander (*Ambystoma mavortium*) inhabits Canada, the Great Plains, and south to Mexico. The Eastern tiger salamander (*Ambystoma tigrinum*) has a discontinuous range across the Southeast and Central U.S. All tiger salamanders are typically black or dark brown with yellow patterning which comes in a variety of stripes, dots, and blotches on its back, belly, and sides. Tiger salamanders can grow to be 8 inches long as adults, making them the largest in the mole salamander family (*Ambystomatidae*). Larvae of tiger salamanders look similar to other pond-breeding salamander larvae but are generally larger than other salamander larvae they share breeding ponds with. They have three sets of big bushy gills, a long caudal fin that runs along the back, large rounded heads, and generally a tan or grey coloration.

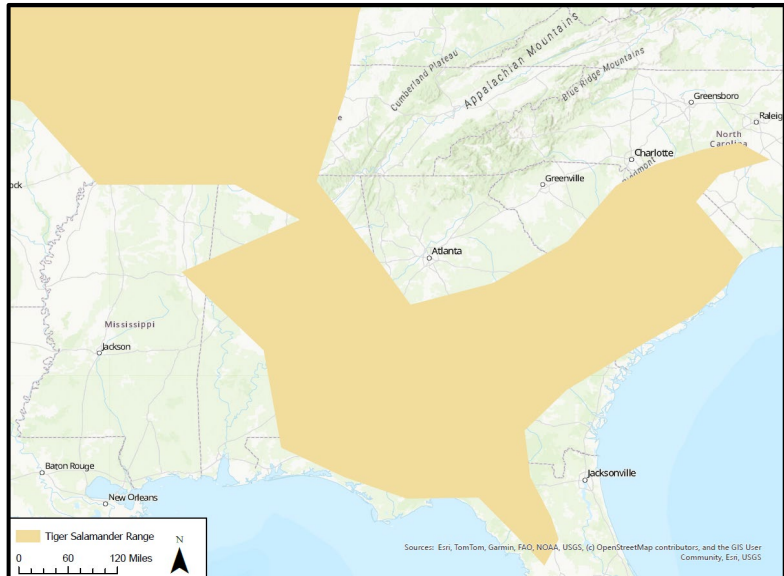


The aptly-named tiger salamander, crossing a road in South Carolina.



A larval tiger salamander captured during a South Carolina survey effort.

Natural History: Tiger salamanders occur throughout much of North America but have a relatively-patchy distribution in the Southeast. They require intact upland habitats, which are comprised of sandy soils, embedded with breeding ponds. These ponds are usually ephemeral, meaning that they go dry from time-to-time. Once a year, typically during the first warm rain in winter, adults emerge from burrows, and other refugia, to migrate to breeding ponds where they mate. Males deposit packets of sperm called spermatophores that the females pick up to fertilize their eggs. Tiger salamanders will travel up to a half mile from refugia to a breeding wetland. Once eggs hatch in spring, larvae can take up to 5 months to metamorphose into adults. Tiger salamanders have been recorded as living up to 14 years in captivity.



Tiger salamander distribution within the range of the gopher tortoise.



Upland Snake Conservation Initiative

www.gophertortoisecouncil.org

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Fire: Friend or Foe? Tiger salamanders typically breed in ponds that occasionally go dry. Naturally, fires would sweep across these dry wetland basins and remove accumulated thatch and muck. This creates more open aquatic environment where salamander larvae can more easily find food. Today, prescribed fires implemented in the growing season are needed to keep the habitat intact.



Tiger salamanders often have to cross roads in order to reach their breeding ponds every year.

Why did the Tiger Cross the Road?

Roads are pervasive in the Southeast, and many currently pass between uplands where tiger salamanders spend much of their time in their breeding wetlands. In some areas, hundreds of individuals may be killed each breeding season. Numerous studies show that wildlife underpasses dramatically reduce road mortality for tiger salamanders when implemented.

Tiger salamanders are one of the few pond-breeding salamander species that can tolerate the presence of larger fish in their breeding wetlands, but still prefer wetlands that dry at least periodically.



Surveying for tiger salamanders in a large ephemeral wetland in Central Florida. Cleaning gear after survey efforts helps to prevent the spread of harmful diseases.

Ephemeral ponds are wetlands that periodically go dry. As a result, droughts and manmade alterations can leave habitats unsuitable for salamanders.

Conservation Challenges: Like many pond-breeding amphibians, tiger salamanders succumb easily to the loss or degradation of their breeding ponds. In the range of the gopher tortoise, tiger salamanders are on the decline. Development and hydrology alterations have eliminated many breeding wetlands. Even in protected areas, off-road vehicles often preferentially drive through ephemeral ponds which alters their hydrology and can directly impact salamanders. Roads also kill many tiger salamanders each year, as do invasive fish that are introduced into deeper wetlands.

For More Information:

Krysko, K. L. and K. M. Enge. 2019. Pp 502-508, in K. L. Krysko, K. M. Enge, and P. E. Moler (Eds.). *Amphibians and Reptiles of Florida*. University of Florida Press, Gainesville, FL.

The Gopher Tortoise Council. Upland Snake Initiative. Available at <https://gophertortoisecouncil.org/education-outreach/upland-snake-initiative>