

Striped Newt

Notophthalmus perstriatus

Upland Amphibian Species Profile



Male striped newt eft pictured above. Adult striped newts breed in the fall and winter.

Natural History: Striped newts have a complex lifecycle. Like most amphibian species, they go through metamorphosis. However, these newts have several stages of maturation, which occur on land or in water, and individual newts may not undergo each stage. Larvae start out fully aquatic with external gills. As they grow, these larvae either transform into an eft, or a paedomorphic adult. Paedomorphs are fully aquatic newts that retain their gills and are capable of reproduction. If pond conditions dry, larvae may transform into an eft. This is a subadult stage where they exit the wetland to live in the adjacent uplands. After a period of time on land, efts will then transform again into aquatic or terrestrial adults. Both paedomorphs and aquatic adult stages can reproduce and lay eggs attached to submerged vegetation. Striped newts typically breed in ephemeral or semipermanent ponds, dome swamps, borrow pits, and marshes. Their preferred upland habitats are xeric hammocks, longleaf pine savannas, and mesic flatwoods. Newts will migrate to and from their respective ponds and will recolonize ponds with the ideal environmental conditions. Not much is known about their terrestrial existence as an eft or an adult when they leave their home wetland.

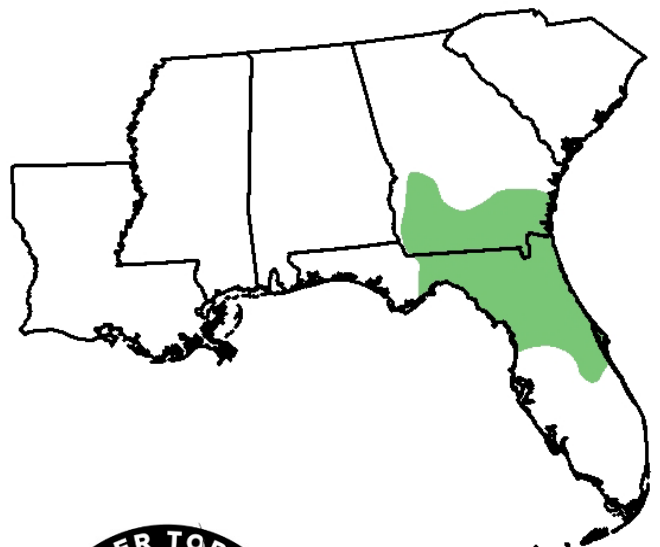
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Eft— old English dialect/archaic name for a newt, pertaining to its terrestrial phase.

Range and Appearance: Striped newts are a unique species of salamander. They are endemic to the Southeastern United States only residing in South Georgia and North Central Florida. Adults are olive color on the dorsal side of their body with yellow bellies. They are covered with small black dots and have distinctive orange-reddish stripes and blotches usually running the length of their bodies. Adults are an average 2-4 inches long. Striped newt larvae have big bushy gills and a distinct dark stripe running through their eyes down to the upper region of their tail fin. In their terrestrial subadult phase, newts are called “efts”, which are normally between 1.5 to 2 inches in length. Their skin becomes granular, has a bright reddish orange appearance overall, and develops distinct red stripes along their bodies.

Taxonomy

The closest relative to the striped newt is the black-spotted newt, *N. meridionalis*, in Southern Texas and Mexico. There are no subspecies of the striped newt, but the eastern newt, *N. viridescens*, also occurs throughout the Southeast.



**Upland Snake
Conservation Initiative**

www.gophertortoisecouncil.org

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Conservation Challenges: Amphibians are highly imperiled throughout the world. This is due to their extreme sensitivity to slight environmental changes such as change in pH, humidity, temperature, plant composition, and variable hydrologic periods. Striped newts rely on ephemeral wetlands, water bodies that periodically fill up and dry out, in order to carry out their lifecycle. Alteration of habitat and habitat loss from development, agriculture, or timber production, have led to the loss of ephemeral wetlands. Changes in temperature, vegetation, and precipitation can alter pond hydroperiods. The result of these rapid changes makes ponds unsuitable for striped newts to utilize. Decreased habitat management, such as lack of prescribed fire or fire suppression, introduces woody encroachment of the understory and further alters both their upland and wetland habitats. Additionally, introduction of invasive species and predatory fish species also creates unsuitable conditions for the striped newt. Striped newts are state designated threatened, protected both in Georgia and Florida. In Florida, known occupied newt ponds have a 500m buffer around them to reduce and mitigate impacts from habitat modification.



An adult striped newt within some aquatic vegetation in an ephemeral pond.



Striped newt and gopher frog surveys on a Wildlife Management Area (WMA) in Florida.

What You Can Do To Help: Sharing the value of proper habitat management will benefit the striped newt and many other species that share their habitats as well. Disinfecting boots, waders, or other field equipment can reduce the spread of diseases. More information on disinfecting gear is available at <https://parcplace.org/species/parc-disease-task-team/>. Supporting and visiting local American Zoological Association (AZA) facilities that participate in striped newt reintroduction programs can also benefit conservation for newts and many other species.

For More Information:

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The Gopher Tortoise Council. Upland Snake Initiative. Available at

www.gophertortoisecouncil.com/edu/snakeinitiative.php