

# Eastern Newts and the Department of Defense



Picture by: PA DMVA

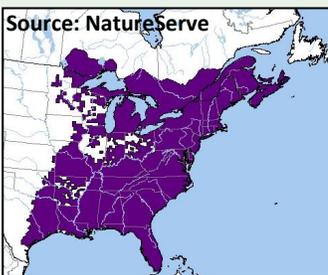


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The Eastern Newt (*Notophthalmus viridescens*) is a salamander species that ranges throughout most of eastern North America. It is the most common salamander species on military lands.

**Description:** The Eastern Newt has three life stages: larval stage; juvenile stage (terrestrial form called the “eft”); adult (aquatic) stage. The juvenile eft stage is typically bright red-orange or dark brown in color with black-bordered red spots. The adult aquatic stage varies in color depending on age and sex, ranging from yellowish-brown to greenish-brown dorsally with black-bordered red spots or lines. Its ventral color is yellow, and black spots speckle the belly. By contrast, terrestrial adults are dark brownish in dorsal coloration. Adults are typically 2¼ to 4 inches (5.7 to 12 cm) in length.

**Range:** The Eastern Newt’s range extends from the eastern U.S. and adjacent southeastern Canada, west to Minnesota, eastern Kansas, and eastern Texas.



Source: NatureServe

**Habitat:** Adults and larvae inhabit freshwater ponds, lakes, swamps, and slow-moving water. In the south of its range, however, adults frequently live on land during droughts and outside of the breeding season. Adults breed in the water and larvae spend several months there developing, before migrating into wooded (both deciduous and coniferous) forests as a terrestrial eft.

**Behavior:** The timing of breeding varies throughout the range, depending on local conditions. Females lay several hundred individual eggs on submerged vegetation. The aquatic hatchlings develop in the water and eat small invertebrates, including water fleas, snails, and beetle larvae. Although the length of the larval period varies, they usually transform into a terrestrial eft phase after 2 to 5 months. Some eastern newt populations skip the eft stage and immediately transform into breeding adults. The efts eat small invertebrates, including snails, springtails, and soil mites. They usually transform into the mature, breeding phase after 2 to 3 years on land.

**Military Interactions:** The Eastern newt is very common on military properties. Newts may benefit humans by helping to control the populations of unwanted aquatic insects, including mosquitoes. Pet owners should ensure their cats and dogs do not kill and eat newts, as they can excrete skin toxins as a defense mechanism.

**Conservation Status:** Eastern Newts have no federal conservation status; however they are state-threatened in Kansas and Iowa. NatureServe ranks them as G5-Secure and the IUCN lists them as Least Concern.

**Threats/Planning Considerations:** The bright colors and skin toxins of Eastern Newts generally ward off most predators; however, they are still eaten by birds, mammals, and fishes. Other threats include chytrid fungus, leeches, ranavirus, deforestation, and road mortality. Protection of wetland habitats and surrounding forested habitats would benefit this species.

## Occurrence on Military Lands

Confirmed	Potential
Confirmed present on 79 military properties (12 Air Force; 42 Army; 6 Marine Corps; 19 Navy)	Up to an additional 108 military properties (23 Air Force; 42 Army; 1 Marine Corps; 42 Navy)

