

# Pickerel Frogs and the Department of Defense

Picture by Paul Block-Fort A.P Hill, VA



Although it possesses skin secretions toxic to many animals, the Pickerel Frog (*Lithobates palustris*) may have received its name from being used as fish (pickerel, specifically) bait by anglers. It is widely distributed across eastern North America and is confirmed present on many military properties.

**Description:** Pickerel Frogs measure about 2-4 inches (4.5 - 7.5 cm) in snout-vent length, and can be identified by the two rows of dark-squarish spots running down the back between its dorsolateral folds. The background color around the spots is dark green-brown. Pickerel Frogs are sometimes confused with Southern Leopard Frogs (*L. sphenoccephalus*), but can be distinguished by the square spots and the bright yellow on the underside of the hind legs, which Leopard Frogs lack. The belly is light-colored and blotched.



**Range:** This species ranges from Quebec to Wisconsin, and south to southern South Carolina, northern Georgia, southern Mississippi and Alabama, and southeastern Texas. It is absent from Florida and the western United States.

**Habitat:** Pickerel Frogs tend to be associated with cool, clear water in ravine forests and meadows. Unlike other frogs of the region, they are frequently encountered in caves. Adult frogs are predatory, primarily consuming insects and other invertebrates, but can eat small vertebrates. Tadpoles eat periphyton and phytoplankton that are scraped from aquatic vegetation.

**Behavior:** These frogs produce toxic skin secretions that are irritating to humans and can be fatal to other small animals, especially other amphibians. Many frog-eating snakes avoid these frogs for this reason.

**Military Interactions:** While often not abundant, this species is confirmed present on many DoD properties. This frog may be encountered both in military training and housing areas, if suitable wetlands are present.

**Conservation Status:** The Pickerel Frog has no federal conservation status. It is considered a Species of Greatest Conservation Need (SGCN) in nine states at the periphery of its range. It has a NatureServe Raking of G5-Secure, and is listed as Least Concern by the IUCN Red list.

**Threats/Planning Considerations:** The species is known to be susceptible to ranaviruses, a disease that may cause mass mortality. Other threats include destruction and fragmentation of habitats. A habitat management practice to benefit this species is retention of forested riparian zones and meadows along streams, and avoiding activities that result in siltation and/or chemical runoff of herbicides or insecticides.

## Occurrence on Military Lands

| Confirmed  | Potential   |
|--|---|
| Confirmed present on 67 military properties (9 Air Force; 38 Army; 2 Marine Corps; and 18 Navy). | Up to an additional 72 military properties (16 Air Force; 42 Army; 1 Marine Corps and 13 Navy). |

