#### What is being done?

The New York State Department of Environmental Conservation has produced management actions to be taken in order to protect the eastern spadefoot toad. Population monitoring should be conducted to see population trends. Providing secure vernal pool habitats will also help to increase populations. Invasive species management will also ensure the species it not out-competed. More research needs to be done on the spadefoot in order to better understand how different conservation actions affect them.



What can you do?

The best way to support the eastern spadefoot toad it to support organizations like WWPP that help protect this species. The spadefoot rarely come out from underground, but don't touch it if you see one; some people have allergic reactions to touching them, including becoming itchy and sneezy. Instead, take a photo and report it to Wilton Wildlife Preserve & Park.



### **Opportunities to Get Involved**

At Wilton Wildlife Preserve & Park, we work with our landowning partners to ensure proper management and restoration of these species' ecosystems and welcome volunteers to help our efforts! Contact us using the information below if you are interested in these volunteer opportunities.

80 Scout Road, Wilton, NY 12831 518-450-0321 Website: www.wiltonpreserve.org Email: info@wiltonpreserve.org Our mission is to conserve ecological systems and natural settings, while providing opportunities for environmental education and outdoor recreation. Sources:

NYS Department of Environmental Conservation, Animal Diversity Web, New York Natural Heritage Program Photos courtesy of our volunteers

# The Eastern Spadefoot Toad

Scaphiopus holbrooki



Wilton Wildlife Preserve & Park is the northern most inland location for a population of eastern spadefoot toads. At WWPP, we work with our partners to provide a safe and stable habitat for this species in order to help their populations thrive. For more information on the eastern spadefoot toad or other species residing at the Preserve & Park. visit www.wiltonpreserve.org

### Description

The eastern spadefoot toad gets its name from the dark colored, spade-like protrusions on each of their hind feet that are used for digging in the sand. They are 1.5 to 3 inches in size and are typically black, brown, or olive colored with a grey or white belly; their skin is also covered in small bumps. There are two distinct lines that extend from their large, protruding eyes and down their backs, forming an hourglass shape. The spadefoot eats a variety of insects including arachnids, termites, and worms.



The spadefoot is found in the eastern United States; its range extends eastward from Alabama and northward from Florida into New York. This species is typically absent from high elevation areas. The eastern spadefoot toad was found at Wilton Wildlife Preserve & Park in 2001 which is its northern most inland location. In New York, the spadefoot is a statedesignated species of special concern.



## Habitat

Eastern spadefoot toads live in areas with loose, sandy soil; their populations also tend to be found in areas with moderate temperatures and steady rainfall. They use the spades on their hind legs to dig themselves burrows that are 7-30cm deep. These burrows are found in a range of landscapes including grasslands, swamps, and farmlands. Their burrows are filled with leaf litter for protection and warmth. The eastern spadefoot toad breeds in temporary still water areas such as puddles or ditches.

# Life Cycle

The eastern spadefoot toad reaches sexual maturity at 17 months. Breeding occurs 1-3 times per year and is stimulated by heavy rain. Male spadefoots will float atop small bodies of water and call for females. The eggs are deposited in the water, and clutch sizes vary from 800-4500 eggs. These eggs hatch within two weeks and become terrestrial in 2-8 weeks. The eastern spadefoot toad's lifespan is 5 to 9 years.

# Why are they a species of concern?

Habitat loss is one reason that the eastern spadefoot toad has become a species of special concern in the state of New York. This species requires certain habitats including vernal pools and upland locations that have little legal protection and are being destroyed due to development. Land development also leads to fragmentation; this combined with habitat loss has led to population decline in spadefoot populations located in New York. The eastern spadefoot toad is vulnerable to pesticides and

alterations in water chemistry due to agricultural practices. The spadefoot is also considered highly vulnerable to changes caused by global climate change. This species is also affected by ranavirus; this is one of the only viruses that is known to infect amphibians and reptiles.

