

## *Wild Things in Your Woodlands*

### American Toad (*Anaxyrus americanus*)



The American toad is a chunky, brown, warty frog, with dry skin and black spots on its back, and a white belly with black markings. Each of the largest black spots on its back contains one or two large warts, and there are additional large warts on the rear legs between the knee and the ankle. Adults usually measure from 2-4 inches and mainly are seen hopping about on land, except during the breeding season when they enter shallow bodies of water. Males generally are smaller than females and have a dark throat and hardened, dark pads on their thumbs for grasping females. The American toad first reproduces at an age of two to three years. Individual toads can survive for 10 years or longer in the wild.

Common and widespread, the American toad occurs throughout New York State, except on Long Island. Toads are active from mid-March through October. They are most active and moving about in the rain or on moist nights. Breeding adults begin to show up at bodies of water after the first warm rains, often migrating by the hundreds to their breeding sites. The peak of the breeding season is usually around mid-April. At this time, males can be heard and seen calling day and night. Males call to attract females, usually while sitting in shallow water or at the edge of the pond. The call of the male is a long, musical, high trilling “bu-rr-r-r-r” that lasts up to 30 seconds. Occasionally, you may encounter a ball of males in the water, all entangled and holding tightly to each other, with a lone female somewhere in the mix.

Like most North American toads, female American toads lay long strings of eggs. The eggs, often numbering from 2,000 to 10,000, usually are in two strings sitting at the bottom of the breeding pool. Eggs hatch quickly, usually developing within two to 14 days. The larval tadpoles, small and black, often swim in large groups feeding on algae and plankton for 35 to 70 days, until July or early August when they transform into miniature versions of adult toads and leave the water.

On land, toads hunt and catch a variety of prey. They are considered to be beneficial to humans because they eat many things, including insects, centipedes, and slugs, that are considered pests. They use a quick flick of their tongues to catch insects and other prey, and they use their front feet to stuff the bigger items into their mouths. They are voracious feeders and can easily be observed feeding, especially when they station themselves near outdoor lights on a summer night.

American toads are abundant, widespread, and tolerant of a wide array of environments. They can be found in almost any moist shady area on land, from the most remote country areas to yards in crowded cities. Their choice of aquatic breeding sites is

equally broad, ranging from still areas of rivers, to ponds, ditches, and ruts in dirt roads and parking areas. During dry days, they usually remain under cover, slightly burrowed into soil, or under a rock or other cover object. They frequently hop around in the open at night and during rainy days. Thousands of toads are killed each year while crossing roads during spring migrations or during the summer months as newly emerging juveniles.

Toads are an important component of many ecosystems, functioning both as predator and prey. The American toad has enlarged paratoid glands, which look like very large warts on the head, directly behind each eye. These glands contain steroidal chemicals that can affect the blood and heart of unwise predators, causing illness or death in some mammals. To avoid sickness, some clever mammals (like skunks and raccoons) avoid the milky secretions and eat only the legs and the bellies of toads. Some snakes, fish, and birds eat toads without any ill effect. People can touch toads safely but the secretions can be irritating to your eyes or mouth.

To manage habitat for toads, maintain or create cover items such as rocks and logs in both open and forested areas. Preserve shallow pools of water, and prevent pollution of streams, ponds and wetlands on your land.

Adapted from “Hands-On Herpetology: Exploring Ecology and Conservation” by R. L. Schneider, M. E. Krasny, and S. J. Morreale.

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