



Toads are Terrific!

By Dawn Pettinelli, UConn Home & Garden Education Center

What gardener does not have to struggle with uninvited 4-legged critters in our yards and gardens. The rabbit is eating the beans, the chipmunk steals every ripening strawberry, the cutest deer is munching on your prize hosta, and the woodchuck is not choosy about which crops to pilfer – they seem to like all of them. One 4-legged visitor that is both welcomed and encouraged is the American toad (*Anaxyrus americanus*).

There are probably few New Englanders not familiar with the common American toad. Most are 2 to 4 ½ inches in length and tan, brown, reddish brown or even olive brown in color with a pattern of warty spots on their backs. Their bellies are white to yellowish with grey or black spots.

While there are about 300 known species of toads, only 2 reside in Connecticut, the American and Fowler's toad. The Fowler's toad is found mainly along coastal and low-lying areas in Connecticut and along the East coast. The American toad is found from eastern Canada down to most southeastern states, except Florida and west to Minnesota.



American Toad. Photo by dmp2007

These 4-legged creatures feed mostly on insects including beetles and ants, as well as spiders, slugs, earthworms and other invertebrates. They have sticky tongues that capture their prey and

may feed on hundreds of insects each day. Toads flourish in areas with plenty of moisture and abundant insects. They are typically nocturnal. During hot summer days, they find a cool place to shelter, perhaps under a log, stone, porch, or 'Toad Abode' you've added to your garden. Often, they will return to the same cooling spot each day.

Toads live in a variety of terrestrial habitats ranging from hardwood to conifer forests, fields and pastures and even residential areas as they tolerate human activity to a greater extent than some creatures. Sites with sandy or loamy soils are preferred as toads burrow down below the frost line during periods of cold weather.

They also require some proximity to shallow bodies of water that are free of fish whether these be vernal pools, roadside ditches or the margins of ponds or lakes. Toads breed from March through July depending on what part of the country they inhabit. Once they emerge from hibernation, males make their way to water bodies and mostly at night, call or trill to attract females. Typically, American toads show some degree of breeding site fidelity, returning to the same wet spot most years.

Females can lay 2,000 to 20,000 eggs in double gelatinous strands that attach to wetland vegetation or sometimes lay on the bottom in shallow water. Males fertilize the eggs, which hatch 3 to 12 days later. Tadpoles are omnivorous and feed on vegetative matter in the water as well as dead fish or other deceased aquatic creatures. Very few tadpoles manage to survive long enough to become toads. They are preyed on by diving beetles, water bugs, crayfish, and birds.

Tadpoles develop for 2 months or so before they metamorphose into toads. In Connecticut, this usually occurs from mid-June through early August. They generally will leave their aquatic environment within a day or so of acquiring their front legs. Metamorphosis is typically fully completed in 6 days.

Contaminants in the water such as pesticides, fertilizers, and heavy metals, like lead, can have both lethal and sublethal effects on juveniles. Often limb deformities are noticed in toads in habitats with high levels of pollutants.

Adult toads live 1 to 5 years in the wild while in captivity there is a record of one living 39 years. While toads have warts, they cannot give them to you. They do have several defense mechanisms to try to protect themselves from predators which include several species of snakes, birds and some mammals. Because of their coloration, they may be able to camouflage themselves just by crouching down and remaining still. Sometimes when eyed by a snake, they will inflate their bodies and extend their limbs to make themselves look larger. When threatened, they also can produce a toxin in the glands behind their eye that may irritate or discourage predators.

We should encourage toads in our gardens as they consume many insect pests. Leave some old logs, rocks or even cracked flowerpots in the garden for toads to hide under during the hot days of summer. Keep pesticide use to a minimum. Watch out for them when mowing or weed whacking.

If you have questions about wildlife or on any home or garden topic, contact the UConn Home & Garden Education Center, toll-free in CT, at (877) 486-6271, visit us at [www.ladybug.uconn.edu](http://www.ladybug.uconn.edu) or call your local Cooperative Extension Center.