

Garden Good Guys – Toads

By Nanette Londeree

The saying goes that beauty is in the eye of the beholder. If you've seen a toad ambling around your garden, most likely, beauty isn't the first thing that comes to your mind. Many think these bumpy, jumpy, lumpy-looking creatures are just plain ugly. Yet they're incredibly beneficial creatures - a toad or two in any garden is a real blessing. So maybe it's time to take another look at these little critters and reassess your opinion of their humble beauty.

All toads are frogs, but not all frogs are toads. Both belong to the order Anura; the true toad is part of the family *Bufo*idae. Some physical differences between the two groups are their skin - frogs have smooth, slick skin, while toads have warty-looking, bumpy skin (by the way, you can't get warts by touching a toad!). Toads can handle dry conditions better than frogs and they have short hind legs they use for walking and hopping rather than the long legs frogs use for leaping.

Toads are cold-blooded amphibians with stubby brown or olive-brown bodies, changing color somewhat to match their surroundings - camouflage that makes them less obvious to predators and you. The swollen bumps on their heads are paratoid (or poison) glands that secrete [bufotoxins](#). If caught, a toad can puff itself up with air, urinate, and produce the bufotoxins, rendering it distasteful to the predator. Neither the [toxin](#) nor the urine is harmful to humans (unless ingested).

Mainly nocturnal, toads hide during the day and emerge around dusk to feed on mosquitoes, insects and insect larvae, caterpillars, spiders, centipedes, millipedes, snails and slugs. Alas, they also do occasionally munch garden good guys like ladybugs and earthworms. The average toad will eat 50-100 insects every night - that's 10,000 to 20,000 insects throughout a gardening season!

Most toads live on land, away from the water, but, like frogs, they return to water to lay eggs. Each female lays thousands of eggs at a time that hatch into tadpoles. The tadpoles live exclusively in water and breathe through gills instead of lungs like an adult. Depending on the species, it can take a few weeks to a year or more for the tadpoles to grow up and go through the process of metamorphosis, changing from a tadpole to a toad. In our Mediterranean climate where rains are seasonal, tadpoles have to grow up quickly; they will die if their temporary ponds dry up first.

Given a suitable environment, a toad can have a life span of 4-15 years. In order to attract and keep toads in your garden, provide a safe place for them to hide - one that's in a shady place, a bit humid and out of the wind. You can build a toad residence by digging a shallow depression in the soil and covering it with a board or a terra cotta flowerpot that is half buried in the dirt so the toad can burrow (they can burrow into the ground to escape the heat of summer and freezing conditions in the winter.) Don't forget to leave a door! A birdbath at ground level provides just the right amount of water for your toads' daily needs (they don't drink the water, but rather sit in it and absorb it through their skin). Add a low voltage light, not more than 3 feet off the ground and when it's on at night, it will attract insects that the toad can dine on, right at his front door! Remember to minimize pesticide or other toxic chemical use in the garden, as toads absorb moisture and the potentially harmful chemicals through their skin.

If you really want them to settle in and raise a family in your garden, consider adding a water garden or small pond. Once they move in, they will stay for years, so the small effort required to attract them will pay off many times over.

Now, take another look at this fella – isn't he a real beauty?

