

# Cool Facts - Frogs & Toads



There are more than 2,700 species of frogs and toads in the world. The largest is the Goliath frog from Africa, which is over a foot long and weighs five pounds. The smallest comes from Cuba and is only  $\frac{1}{2}$  inch long. There are 25 species and subspecies of frogs and toads living in Missouri - 12 are common in the Kansas City Area. The biggest frog is the 6 inch bullfrog, whose call sounds like '*jug-o-rum*'; the smallest is the cricket frog (just  $\frac{3}{4}$  inch long) which makes a metallic '*gick, gick, gick*' sound.

All frogs and toads are amphibians. Missouri toads and frogs return to a body of water to reproduce, generally in the spring. Flooded fields, ditches, or small woodland ponds are favorites - though large puddles are even used. The eggs hatch and the babies start life as tadpoles, living in water, breathing through gills like fish and eating aquatic plants. After a few weeks, their hind legs form and enlarge. At the same time, their tails begin to shrink. Soon front legs appear, the gills are lost and the tadpole begins to use his new lungs. By the end of the summer the froglets and toadlets are eating insects, small spiders and worms.



What's the difference between frogs and toads? Toads have dry warty skin, shorter hind legs, hop rather than jump and generally live on land. Frogs have smooth wet skin, teeth, long hind legs so they jump rather than hop and live in or near water. Female toads lay eggs in long parallel strings; depending on the species, female frogs lay their eggs singly, in clumps or as a film on the water surface.

Males of all frog and toad species can sing - even underwater. Because he closes his mouth and nostrils when he moves air rapidly back and forth over his vocal cords, he doesn't need to breathe when he calls. Many *anurans* (which is another word for frogs and toads) have enlarged or expandable vocal sacs to help their calls resonate.



## Myth or Fact?

***Frogs and toads have to shut their eyes to swallow.***

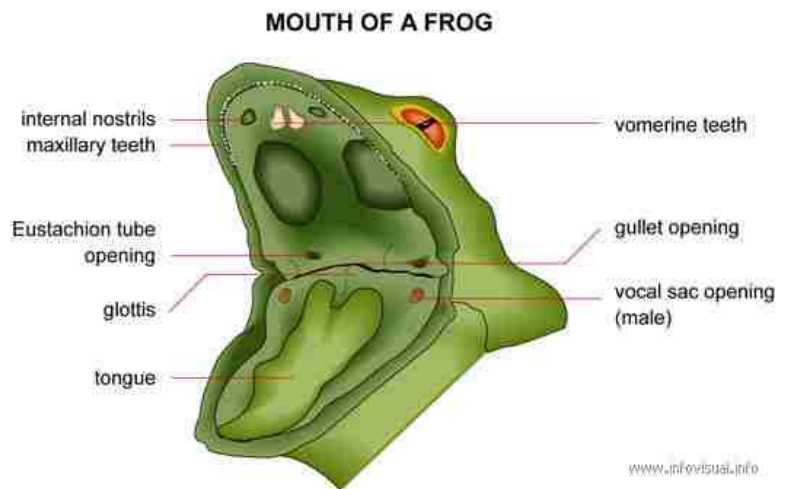
**TRUE.** The blinking motion pushes the frog's (or toad's) eyes down into the upper part of his mouth and forces the food down his throat.

***Touching frogs or toads will give you warts.***

**FALSE.** Warts in humans are caused by a virus. The "warts" on a toad or frog are a natural skin structure.

***Frogs have teeth.***

**TRUE.** They have a ridge of very small cone teeth around the upper edge of the jaw and may also have teeth on the roof of the mouth. The teeth are used to hold prey.



***Frogs make antifreeze.***

**TRUE.** Frogs are cold-blooded and hibernate to survive our winters. They don't lower their metabolism like most hibernators. Instead, a high concentration of glucose in the frog's vital organs prevents freezing. A partially frozen frog will stop breathing and appear quite dead. When it warms up, its frozen portions will thaw and its heart and lungs resume activity. There is such a thing as the living dead!

***Toads can poison predators.***

**TRUE.** Toads defend themselves by producing toxic or unpleasant-tasting skin secretions from the parotoid glands behind their ears which are released when they are grabbed; even their eggs and tadpoles taste nasty. Missouri's frogs produce similar, weaker secretions. The toxins are harmless to humans.