

## Frog Conservation

Catching frogs is a fascinating childhood past time, but frog conservation is no child's play. In fact, there is increasing alarm among scientists that many frog and other amphibian populations are in serious trouble. There are both simple and elaborate projects you can undertake to enhance habitat for frogs on your property. Getting started now will help you play a vital role in amphibian conservation and ensure that our native frog species live long into the future.

### Leapers, Climbers, Walkers, and Swimmers

There are close to 100 different species of frogs in North America, so what species you have on your property will depend on where you are. In general, there are several main groups that you are likely to see in most places; water frogs/true frogs, toads, chorus and cricket frogs and spadefoots.

### That Miraculous Transformation

Frogs are amphibians, a word of Greek origin that means *two lives*. Most adult frogs live in damp places in woods near streams or ponds. But when mating season comes, usually in the spring, they migrate to ponds, wetlands, and seasonal pools to lay their eggs. The eggs hatch into tadpoles, a completely aquatic stage that breathes with gills and eats algae. Depending on the species, they remain in the tadpole stage for as long as a year before they develop legs and lungs and move onto land as adults.

Eggs, tadpoles and adult frogs are a crucial component of many ecological communities. A vital link in the food chain, they serve as food for aquatic insects, fish, mammals and birds. But carnivorous adult frogs do their share of eating too, feeding on mosquitoes, flies and aquatic invertebrates. Some frogs even eat small fish, amphibians, reptiles, birds and rodents. One recent study found that a healthy frog population was removing over 50,000 insects per acre per year from one area under study.



*A green frog nestled in a rock crevice on the side of a stream.*



*Frogs come in an amazing variety of shapes and colors.*

### Moisture is Essential

Like all amphibians, frogs need moisture to survive. Instead of drinking water, frogs absorb water through their skin. Though many species are found in watery environments such as ponds and wetlands, many adult frogs live in woodlands or grassy areas and return to ponds only to breed each year. To stay moist, frogs seek damp hiding places, such as under leaves, rocks, logs or debris piles.

### Canaries in a Global Coal Mine

Because of their complex life cycle and moist, permeable skin, frogs are exposed to both water and land pollution during their lives. Likewise, their unshelled eggs are directly exposed to soil, water and sunlight. Because they never travel far, staying in fairly confined regions throughout their lives, frogs and other amphibians are good indicators of local environmental conditions. Because of their sensitivity to pollution, frogs have been likened to the canary in the coal mine that bodes of environmental ill.

### Getting Started

You can do many things to encourage frogs on your property and in your local community. The simple actions you take when repeated many times over by landowners throughout North America can have a significant positive impact. And an abundance of frogs on your property will be strong evidence that you are taking good care of both land and water.

### Think Like a Frog

To create good habitats for frogs and other amphibians, it may help to consider their perspective: What would you look for if you were a frog? Moist hiding places, shallow pools, lots of plant cover, and insects for eating top the list. These conditions can be easily created on most properties and you can tailor-make your frog habitat to suit your site.

When enhancing habitat for frogs there are three primary things to do:

- Make sure there are good habitats for adult frogs;
- Provide breeding sites in the spring;
- Maintain safe corridors between woods and ponds
- If there are no fish in a pond, do not add any to reduce predation on eggs and tadpoles.

Here is what you can do right in your backyard:

- Create hiding places for toads by building small rock piles, log piles and brush piles close to shrubbery or in gardens.
- Make a toad abode by sinking a clay flower pot into the soil in garden or landscape beds. The pot should lie on its side with an opening facing north, and be partially filled with soil.
- Construct a shallow backyard pool, without fish.
- Remember that frogs rely on good water quality, both on and off your property. Always keep septic systems in good working order, repair your car quickly if you detect leaking oil, and properly dispose of hazardous household wastes.

