

# PACIFIC TREEFROG

*(Pseudacris regilla)*

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*Pacific Treefrog Photos by Kelly McAllister*

## **FACTS ABOUT Pacific Treefrogs**

The Pacific Treefrog (*Pseudacris regilla*) is the smallest and most commonly seen and heard frog in Oregon. It has several common names Northern Pacific treefrog, Northwest chorus frog and Pacific chorus frog.

Adult treefrogs measure two inches in length and vary in color from a bronze brown to a light lime green. They have two distinctive features: a dark stripe across each eye and rounded toe pads. Males also have a dark throat patch. This frog stays moist because glands in its skin secrete a waxy coating. The chorus or call of the male treefrog is a loud, two-part *kreck-ek*, or *a rabbit*. It is often repeated many times in an effort to attract females for breeding. This calling stimulates other males to join in, and large concentrations of these frogs can be heard from far away. Male treefrogs call mainly in the evening and at night, although they also call sporadically during the day at the height of the breeding season. Male frogs may call any time of year (when they are not courting or hibernating) from dry upland sites. This is heard as a single-note croak (“*Krr-r-r-ek*”) and typically occurs when air humidity is high. This type of call is believed to be a type of territorial call.

## **Benefits of Treefrogs**

Treefrogs and many other native frogs and toads in Oregon are on the decline and need our help. Frogs are an important component of a healthy ecosystem. They eat insects and slugs around ponds, streams, homes and gardens, and they are sources of prey for other wildlife. You can help by managing your property in a frog-friendly manner.

- Avoid using pesticides and herbicides. Amphibians have highly permeable skin that can absorb toxic chemicals. They can be poisoned directly or indirectly through their food, such as slugs and snails. Moss-

killers and roof treatment chemicals can also be toxic, and often such runoff is directly channeled into wetlands via pipes or sewer outflows.

- Control nonnative plants such as reed canary grass that degrade the quality of wetland and upland habitats. Use hand control and mechanical methods to control small patches of invasive vegetation.
- Remove nonnative predators such as the American bullfrog and common snapping turtle, which are both classified as Nonnative Prohibited Wildlife species and are on ODFW’s list of 10 Most Unwanted Invasive Species.
- Never release a bullfrog or other non-native wildlife into the wild—it’s unlawful. If you are an educator, find a copy of *Wildlife in the Classroom* in the invasive species section of ODFW’s Web site.
- When designing a backyard pond, locate it away from bedrooms yours and your neighbors—spring can bring a short-lived but noisy chorus of male treefrogs.

## **Habitat**

Treefrogs live in wetlands, meadows, woodlands and brushy areas. They breed in shallow ponds, slow moving streams, seasonal pools, watering tanks and roadside ditches. Breeding sites are used only a few weeks or months of the year. Treefrogs spend the rest of the year in surrounding upland areas. In fact, it is not uncommon to find treefrogs several hundred yards from water. During dry periods and in arid areas, adult treefrogs are active only at night, spending the day in water or shaded vegetation, rocks or log crevices, rodent burrows or other protected places.



Twelve native species of frogs and toads live in Oregon. Many of them are classified as Oregon State Sensitive species and listed in the Oregon Conservation Strategy as species in need of help—that means they have small or declining populations. Worldwide, frogs are in trouble and many are on the road to extinction. Habitat loss, pollution, pesticides, climate change, infectious diseases, the pet trade and invasive species are all causing problems for frogs. To learn more, visit the Living with Wildlife Section of the Oregon Department of Fish and Wildlife website.

## Food and Feeding Habits

Toe pads on treefrogs' front and hind toes enable them to climb in search of food—beetles, flies, spiders, ants and other invertebrates. Adult treefrogs catch their prey with long, elastic-like, sticky-ended tongues. Treefrog tadpoles eat algae and decaying vegetation and scavenge on dead earthworms, fish and insects.

## Reproduction and Life Cycle

Depending on location, treefrogs move into aquatic breeding sites from February to July. Male treefrogs move first and vocalize in early spring through early summer to attract females. They chorus while floating at the surface or sitting partially submerged in shallow water. Females lay 400 to 750 eggs, which are externally fertilized by the male. Individual egg masses contain 10 to 75 eggs, measure one to two inches across (usually about half the size of a tennis ball) and are surrounded by a special jelly that swells up on contact with water. Egg masses are attached to sticks or emergent aquatic vegetation just below the surface, and often become camouflaged with algae and sediment. Eggs hatch more quickly in warmer water in three to five weeks. The tiny hatchlings soon turn into tadpoles with short, round bodies and eyes that bulge out at the sides of their heads. In eight to 10 weeks, metamorphosis is complete when the tadpoles change into 1/2-inch long, air-breathing juvenile frogs that climb onto land and eventually return to water to breed. Treefrog populations can fluctuate dramatically from year-to-year; frogs may not breed at all if the rainy period of the year is too short.

Like many other species of amphibians that produce large numbers of eggs, most treefrogs die at the egg or tadpole stage. Treefrog eggs are eaten by caddisfly larvae and fish. Fungus and frost also kill some eggs. Tadpoles are eaten by dragonfly larvae, diving beetles, fish, long-toed salamander larvae, bullfrogs, garter snakes and birds (herons, ducks, and jays). On land and at the water's edge, raccoons, foxes, coyotes, river otters, skunks, snakes, hawks and owls eat adult treefrogs. Unnatural factors also take their toll on treefrogs: cats, children, lawn mowers and vehicles add to treefrog mortality. The loss of wetlands, the clearing of adjacent upland areas, and pesticides negatively affect treefrogs. Treefrogs that do reach adulthood live an average of two years in the wild.

## Preventing Conflicts

The most common complaint about treefrogs is that they are noisy. While many people enjoy them as the first sounds of spring, some find the chorus of male treefrogs annoying. If ear-plugs don't work for you, the best solution is to eliminate the reason treefrogs are attracted to your yard. In other words, make modifications to whatever the frogs are using to make the area less attractive to the frogs. For example, empty or seal off unused swimming pools and drain water from pool covers. Remove other cover such as flower pots and wood piles.

While there is no fence that will keep treefrogs out of your yard, you may be able to keep frogs out of a small pond by covering it with fine mesh that has holes smaller than the frogs themselves. You can also add fish or a pump to circulate pond water and create turbulence. Many frogs will not breed in pond with fish. Note: Due to concerns about nonnative invasive species, no fish should ever be added to a pond that is connected to a natural waterbody, a stream or wetland. Repellents and scare devices do not work on frogs and no poisons should ever be added to the water.

## Attracting Treefrogs

For those who love treefrogs, there are a number of things that you can do to attract frogs to your property.

- *Protect existing natural areas.* Woodlands, wetlands, meadows, stream corridors and shorelines attract frogs and other wildlife.
- *Protect buffer areas next to streams, lakes or ponds.* Vegetated buffers protect the ecological functions and value of the breeding habitat and provide needed upland habitat.
- *Protect movement paths between uplands and breeding sites.* If you have a roadway through your property, install amphibian crossing structures, such as small tunnels under it. Amphibian movements can also be guided by means of large logs, brush piles and other ground material that retains moisture and provides cover.
- *Leave a portion of your grass unmowed,* especially in areas that adjoin a wet area, forest edge or any area that is being used by amphibians. If you must mow in these areas, scout the area for amphibians and mow at slower speeds to give them time to move out of the way. Set the mower blades as high as possible, or use a weed-whacker and leave grass six inches high. Be particularly mindful during breeding and juvenile dispersal periods.



**The “rib-it” call of male Pacific treefrogs is often heard on movie soundtracks.**

- *Preserve leaf litter under trees and shrubs.* Such material provides cover and moisture; it also attracts organisms that amphibians eat.
- *Retain stumps, logs, root wads, rock piles and other debris that provide a cool, moist habitat for amphibians.* Such habitat features provide much needed cover. All these can be strategically located as “stepping stones” across exposed areas, or to bridge gaps between breeding ponds and woods. To be effective in exposed areas, keep the structures within 15 feet of each other.
- *Build a pond.* Treefrogs will breed in almost any type or size of pond. Water depth should preferably be deeper than 12 inches with shallow water along the edges. The pond should have slow or no water flow and offer both sun and shade. Plant native emergent vegetation to provide attachment sites for egg masses. Small branches with thin stems placed can also serve as egg masses attachment sites. Place rocks, big logs, downed wood and plants near your pond to provide shelter. Do not put fish in the pond as they will eat frog eggs and tadpoles.
- *Fence large ponds* to prevent livestock access and protect water quality. A diverse plant community will provide cover for amphibians, egg mass attachment sites and habitat for their prey.

### Species Status and Wildlife Laws

- The Pacific treefrog is native to Oregon and is classified as Nongame Wildlife (OAR 635-044). It is unlawful “to purchase, sell or exchange or offer to purchase, sell or exchange” treefrogs (ORS 498.022). It is also unlawful to move or relocate treefrogs without a permit from ODFW. By the same token, anyone who wants to capture frogs (or their larvae) for educational or scientific purposes must first obtain a Wildlife Scientific Taking Permit from a local ODFW office (ORS 497.298, OAR 635-043).

### Oregon statutes and administrative rules that apply to treefrogs are:

- OAR 635-044: The Pacific treefrog is classified as Nongame Wildlife
- ORS 498.022: It is unlawful to purchase, sell or exchange or offer to purchase, sell or exchange any wildlife
- ORS 497.298 and OAR 635-043: Any person desiring to take wildlife for educational or scientific purposes must first obtain a Wildlife Scientific Taking Permit from an ODFW office.

## MORE INFORMATION

### Oregon Department of Fish and Wildlife

ODFW: Amphibian Species of Oregon  
 ODFW: Facts for Kids: Frogs are cool (PDF)  
 ODFW: Living With Wildlife  
 ODFW: Invasive Species: American Bullfrog Fact Sheet  
 ODFW: Invasive Species: Common Snapping Turtle Fact Sheet  
 ODFW: Wildlife in the Classroom (PDF)

### Other information

[Oregon State University Extension: Attract Reptiles and Amphibians to Your Yard \(PDF\)](#)

[University of Oregon: Amphibians and Reptiles of Oregon](#)  
 Corkran, Charlotte C. and Chris Thoms. *Amphibians of Oregon, Washington, and British Columbia: A Field Identification Guide.* Vancouver, BC, and Redmond, WA: Lone Pine, 1996.

Link, Russell. *Landscaping for Wildlife in the Pacific Northwest.* Seattle: University of Washington Press and the Washington Department of Fish and Wildlife, 1999.

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