

# all about

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## COMMON FROG

*Rana temporaria*

Common frogs are amphibians which means that they spend part of their life in water and part on land. They have smooth moist skin which they can breathe through as well as using their lungs. Frogs are hard to spot as they are well camouflaged. Individuals vary in colour, such as green, brown and yellowish, often matching their surroundings. They have very long legs with webbed toes which are well suited both for jumping on land and swimming in water. Female frogs are much larger than male frogs.

### Frog or toad?

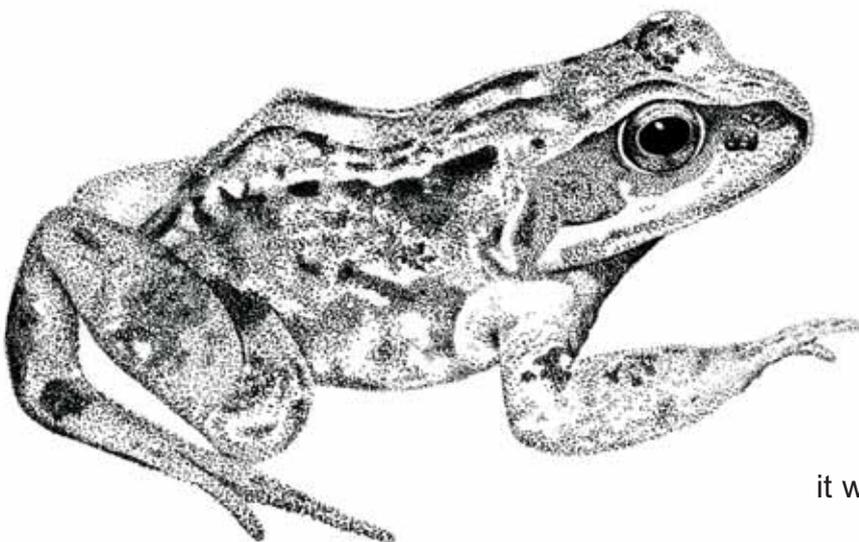
Frogs and toads are often confused, but the differences are easy to recognise. Toads have dry warty skin and shorter legs. Toads crawl, frogs hop. Only frogs have a dark patch behind their eye. Frogs lay their spawn in a clump, while toads lay a long string of spawn.

### Where do they live?

Frogs live in a variety of damp habitats ranging from grassland and woodland to high up on mountains. In spring they need to be near fresh water and use lochs, ponds, ditches and even puddles to lay their eggs.

### What do they eat?

Adult frogs eat snails, slugs, beetles, caterpillars, woodlice and other small animals. Frogs have good eyesight, and when they detect an animal, launch themselves at it, catching it with their long sticky tongue.



Young tadpoles eat mainly water plants, but once their back legs develop they become carnivores, feeding on small water animals. If food is scarce, tadpoles will eat each other!

## What eats frogs?

Adult frogs have many predators including birds of prey, crows, gulls, ducks, terns, herons, pine martens, stoats, weasels, badgers and otters. Tadpoles are eaten by birds and by larger water animals such as fish, beetles and dragonfly larvae.

## Life cycle

In spring, adult frogs often return in large numbers to the pool in which they were born, producing masses of frogspawn. The males croak to attract the females. Once the females arrive the male frogs ride on their slippery backs until it is time to lay the spawn. Special rough pads on the males' thumbs help them to hold on tight without slipping. Each female lays 1,000 or more eggs but only a few of these will develop into adults. The jelly around the eggs protects them from predators. The speed at which the tadpoles develop depends on the warmth of the water and their food supply. It usually takes about 3 months to change into a young adult. When they first hatch, the tadpoles hang on to their eggs or nearby pond weed. These young tadpoles breathe by taking in oxygen through their gills. As they grow their gills and tails gradually disappear and they develop lungs and legs. The tiny frogs leave the pond and take three years to become fully grown adults.

Frogs hibernate over the winter either in a sheltered damp spot on land or in the mud at the bottom of ponds.

## Humans and frogs

In Scotland frogs are still common unlike the south of England, where the number of frogs has fallen dramatically and where they are mainly found in garden ponds.

However the number places in which frogs can live in Scotland has been reduced. Farm ponds and ditches have been drained and filled in because new farming methods have made these unnecessary. Hedges and areas of rough grass where they could find shelter and food have been removed. Pollution has also caused problems for frogs and tadpoles. Adult frogs absorb pollution through their skins and they will also suffer if they eat insects which have traces of insecticide inside them.

Steps are being taken to protect frogs and other animals that depend on freshwater habitats. The building of new ponds and conservation of existing freshwater habitats has been encouraged by Scottish Natural Heritage and other organisations. Stricter pollution controls in recent years have helped to improve water quality.

## Finding out more

### **Frogs and Toads**

T.J.C. Beebee (Whittet Books)

### **Amphibian**

Eyewitness Guide (Dorling Kindersley)

## How you can help

Although it is fascinating to watch frogs pass through the different stages of their life cycle, please do not collect and keep frogspawn or tadpoles. Large numbers die every year after being kept in the wrong kind of container or left in unsuitable places e.g. in full sunlight on a windowsill where they may be overheated to death. By watching tadpoles in ponds you will see unaltered natural behaviour and development.

If you have a pond, or are creating a new one, make sure that it is suitable for frogs. The pond edges should be shallow to provide suitable areas for spawning, and sloping so that young frogs can get out of the water. Grow plenty of water plants for the tadpoles to hide in. Keep some areas of long grass around the pond so that the frogs have somewhere to hide. Deep water will provide a place for frogs to hibernate in (less than 60cm and they may freeze). Use hot water to melt ice in the winter so that hibernating frogs do not suffocate. Piles of stone or logs near the pond will provide an alternative place for hibernation.

If there are frogs living in your area they should find a new pond themselves. Do not move spawn or frogs from one pond to another as you may move certain plants that take over the pond, or fish which eat tadpoles and other pond animals. There is also the danger of spreading frog diseases.

## Other things you can do

You could become involved with groups of other people concerned with the future of Scotland's wildlife. Check your local newspaper or library for information about groups in your area.

Scottish Wildlife WATCH, which is part of the Scottish Wildlife Trust (SWT), is an environmental action club for young people. It produces a magazine and Scottish newsletter which include information about environmental issues and give you the chance to help wildlife by taking part in projects and surveys.

Contact: SWT, Cramond House,  
Cramond Glebe Road, Edinburgh  
EH4 6NS

The Young Herpetologists Club is concerned with both reptile and amphibian conservation. Contact them through The British Herpetological Society, c/o Zoological Society of London, Regent's Park, London NW1 4RY

A poster of a common frog is available free of charge from Scottish Natural Heritage, Publications Section, Battleby, Redgorton, Perth PH1 3EW

## Glossary

### **Hibernation**

A sleep-like state which allows an animal to survive the winter.

### **Insecticide**

A chemical that is used to kill insects.

### **Predator**

An animal that kills and eats other animals.

