

How to Make a Frog Pond

Caring for frogs in your backyard is a great way to connect with the unique natural world that exists just outside your door. A healthy frog population is impossible without a healthy ecosystem and vice versa. By caring for frogs, you are also looking after their environment and every living thing in it. You are also helping to keep the local insect pest populations under control – frogs just love to eat insects.



Before You Start

Australia is home to over 200 species of frog, all with unique habitats. It's tempting to go searching for tadpoles to bring back home, however most states of Australia including Victoria have laws that prohibit the removal or collection of tadpoles and frogs. Even moving them a few hundred metres could affect their local gene pool, or overrun an existing frog population.

This Fact File will help you create conditions to encourage local frogs to visit and thrive. Once you've built the pond, just sit back and wait for the locals to hop by and croak 'thanks'!

Points to Consider:

1. Place
Be aware that males will make a lot of noise during the breeding season. While many people love the weird and wonderful sounds of frogs, others may not enjoy being woken at night.
2. Time
Aim to create your frog pond outside of the breeding season to avoid disturbing frogs that may already be using the site. The three most common frogs in Victoria (the Pobblebonk, Spotted Marsh, and Striped Marsh frogs) all begin their breeding season in August, so June and July are ideal.

Building Your Pond

1. Water
Shape your pond with a gradual slope progressing through three levels: deep water, shallow water (or bog zone), and damp area. Avoid steep drops as many species will drown without an easy exit from the water. Line your pond with a product approved to hold human drinking water (others are toxic to frogs). You will need to bury the liner completely in sand to avoid damage from sunlight.

fact file

The Junior Ranger Way

Know before you go, respect parks and wildlife and leave no trace along your way, that's the Junior Ranger Way!

2. Plants

Visit a local nursery to find plants that are native to your area and are non-toxic.

Frogs need heavy vegetation in shallow water and the bog zone to use as a refuge from predators while they bask in the sunlight. Partial shade is essential to create warmer and cooler areas for tadpoles to find a comfortable temperature. Sunlight is also important to allow algae and other plants to grow that are necessary for the tadpole diet.

3. Important Extras

Place rocks and logs (hollow or with loose bark) in the deep area, as well as out of the water to provide moist shaded hiding spaces. Some should also be placed a distance from the water (even in a neighbour's yard). Frogs commonly wander outside of the breeding season which ensures a varied diet. In the right conditions, all the adjoining backyards in your street could support an entire frog population.

Avoid:

- Cats and foxes, which could decimate frog numbers.
- Fish, as well as turtles and waterbirds. While they might be part of your natural ecosystem, eliminating these animals will give your tadpoles a better chance of surviving.
- Floating plants, such as duckweed (Lemna) and water fern (Azolla) as they will cover the water surface and block oxygen absorption.
- Pesticides, herbicides and fertilizers in your entire garden as the run off could be toxic to your new hopping friends.

Lastly, a note on survival

It is natural for frog populations to fluctuate from season to season, depending on the conditions. This is entirely natural, and while it may be frustrating to hit a season with only a small number of recruits (tadpoles who survive to adulthood), rest assured that when the conditions are right, you could have a tadpole boom in your backyard!

You've built the pond... now the fun starts!

The frog pond that you build will be central to the breeding and survival of local frogs.

Males ready to mate will stay near your pond and use a call unique to their species to attract a female. Once they have paired up, female frogs lay thousands of eggs which are then fertilized by the male. The mass of eggs is called 'frogspawn' and needs to stay moist (thanks to your frog pond!). The high number of eggs is part of the 'survival plan' of frogs – with so many eggs it doesn't matter if some get eaten, a lot will still survive to hatch into tadpoles.

Once they hatch, tadpoles will spend all their time in your pond and feed mostly on algae. Lots of tadpoles get eaten too, by fish, beetles and even birds. Usually, though, there are enough tadpoles for some to survive to the next stage of development, called metamorphosis.

After about a week darting around your pond, tadpoles begin to develop into adults. Legs grow first, then the tadpoles lose their gills and develop lungs. Eyes change from 'side-on' to 'facing forwards' and intestines shorten as tadpoles move from a plant-based to an insect-based diet. Last of all – the tail! It doesn't drop off, though. Instead it is reabsorbed by the frog's amazing new body.

Once the frog is fully developed, it is finally able to leave the water for the first time. But it's not 'bye bye frog pond' for good – most species stay close to a water source and return to breed where they were born.