

Frogs and Your Garden

Overview

Frogs are well known as an indicator species. They are sensitive to their environment, so healthy frog numbers indicate a healthy environment. Conversely, falling frog numbers may be an early indication of a problem that will eventually affect other species as well, including humans!

Frogs in your garden bring many benefits. Aside from indicating that your garden is clean and unpolluted, frogs help control numbers of insects and other invertebrates.

And many people love their calls.

Shelter

Most people know that frogs are usually heard in and around water. They lay their eggs in water, and the baby frogs (tadpoles) spend the first part of their life restricted to the water. What is not so well known is that many frogs spend their non-breeding life away from water bodies.

If you want to attract breeding frogs to your garden, you will need water their tadpoles can thrive in.

But you can still attract frogs to your garden by providing habitat they can use the rest of the year. So if having a frog pond is impractical for you, don't despair. You'll miss out on the tadpoles, but you don't need to forego the frogs.

A Frog Pond

(Can we use the diagram in the Plant Bayside book, or something like it?)

Your frog pond should be located in a quiet, sheltered area, but not one that is completely in shade. Aim for about 70% shade and 30% sun.

Try to position it away from your neighbour's bedroom window. Breeding frogs call loudly, and some find this annoying.

A damp area is good, so consider the lowest part of your garden if your garden slopes. Natural clean rain run off is best for keeping the area damp and your pond topped up. However make sure run off from areas that may have fertiliser, pesticide or herbicide will not reach your pond.

Check that nearby trees do not have toxic leaves that might fall in the water.

Avoid excessive leaf fall by not placing the pond under a deciduous tree.

You have a wide range of choices when it comes to materials from which to build your pond, but do avoid plastics such as pool liners which are treated to be UV resistant and anti-fungal. Anything certified as suitable for holding drinking water is ideal for frogs.

Ensure the sides of the pond slope gently and are not slippery, so it is easy for the tiny frogs to climb out without any risk of drowning.

Don't edge the pond with stone slabs or similar: a journey across hot rock in the open is not the safest route to land for newly transformed frogs.

Plant in and around your pond, and place rocks, logs or other shelter such as PVC piping or holed bricks to provide safe, damp places for the frogs to hide. In parts, the planting should be dense, providing cover and shade. Encourage leaf litter.

Avoid plants that float on the water: if overgrown, these can suffocate tadpoles.

Avoid fish, or your tadpoles will end up being breakfast. And a pond pump is likely to turn your tadpoles into mince.

Do allow your pond to dry out a little during summer. Some frogs prefer temporary water, and are not attracted to permanent water. Sculpting your pond so it has a shallow area that dries out every summer, while another part remains wet, will help.

Do not handle or transfer frogs or tadpoles from elsewhere. Aside from the legal issues, doing this is bad for the natural frog population for a number of reasons, including the risk of spreading disease and affecting genetic diversity.

Protect your pond surrounds from dogs, cats and foxes. Cats in particular have been known to kill dozens of frogs in one night.

Ideally your pond should be filled directly by rainwater. If you need to fill it yourself using tap water, you should first let the tap water stand for 5 days to reduce the chlorine level. If tadpoles are present when topping up, make sure the new water is trickled in. The new water probably has higher oxygen levels, and this can harm the tadpoles if introduced suddenly.

Frog Hide-away

The perfect frog hide-away is similar to a pond, but without the actual pond. Frogs will inhabit these areas outside the breeding season.

You want a moist shady quiet area. Ideally the hide-away should to be damp all year round.

It should be heavily planted with ground cover, grasses and small shrubs. Deep leaf litter is good. Chunky leaf and wood-based mulch is also good.

Include shelter such as logs (ones with holes and loose bark are particularly good) and rocks. Non-natural shelter such as PVC pipes and terracotta bowls (especially broken and half buried to form small caves) are also suitable.

Unlike a pond, you may have plenty of frogs in the hide-away and not know it. When not breeding, frogs seldom call. They will be quietly staying out of sight., enjoying the comfort and security of your hide-away.

Recommended Plants

Deeper Water (Pond)

Water Millfoil *Myriophyllum crispatum*

Nardoo *Marsilea drummondii*

Shallow Water (Pond)

Common Sedge *Carex tereticaulis*

Tassel Sedge *Carex fascicularis*

Wet Areas (Pond edges, wetter hide-aways)

Marsh Club-sedge *Bolboschoenus medianus*

Swamp Stonecrop *Crassula helmsii*

Knobby Club-sedge *Ficinia nodosa*

Rushes *Juncus spp*

Long Purple-flag *Patersonia occidentalis*

Surrounds (Pond surrounds, hide-aways)

Spiny-headed Mat-rush *Lomandra longifolia*

Flax-lilies *Dianella spp*

Multi-flowered Mat-rush *Lomandra multiflora*

Kidney-weed *Dichondra repens*

Native Violet *Viola hederacea*

Angled Lobelia *Lobelia alata*

Food

Frogs' primary food is insects. A good frog habitat is also a good home for insects. That's a major reason frogs like that habitat. So there's no need to specifically provide food for your frogs once you've provided suitable habitat.

If you feel the need to feed your tadpoles, a little washed and boiled lettuce can be supplied now and again. But don't overdo it: they do need insects and algae as well.

Threats in Bayside

Chemicals

Frogs drink and breathe through their skin, so they easily absorb chemicals in their environment. This makes them vulnerable to fertilisers, pesticides, herbicides and detergents that enter our waterways.

help by:

- reducing your usage of these chemicals
- ensuring these chemicals do not enter any stormwater drains: for example, wash your car on grass, where the detergent run off won't go down a drain
- do not handle frogs: any oils or other chemicals on your hands may be absorbed by their skin

Environmental Encroachment and Degradation

The locations in Bayside where frogs can breed are few, and decreasing. The main issues are:

- draining for other uses
- encroachment of concrete and buildings, increasing chemical runoff and reducing privacy
- increased noise, making it more difficult for females to hear and find males
- deepening for water storage, making them unsuitable for tadpoles

help by:

- promoting ponds and wetlands in your area (both private and public)

Cats, Dogs, Foxes

Australian frogs have little defence against animals introduced by man. It is not uncommon for a cat to eat a dozen or more frogs in one night.

help by:

- keeping cats indoors at night
- excluding dogs, cats and foxes from your frog habitat
- keeping dogs on lead when near frog habitat

Further Information

<https://www.bayfonw.org.au/g4ws/frogs>