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FROGpond

Building a frog pond is an easy and fun project for the whole family, so hop to it.

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In recent years the plight of many frog species in Australia has become well known. Urban sprawl, changing environmental conditions, pollution and introduced predators are having a massive impact on these most sensitive of creatures. Scientists have suggested that dwindling frog populations serve as a barometer indicating much bigger environmental issues. Several species have already disappeared and many more are on the endangered list. By building a frog pond in your backyard you can help protect this important link in the ecological chain. It is also a great project to involve the whole family as children delight in watching the metamorphosis of the frog's life cycle from eggs to tadpole to adult frogs. The pond can make an attractive addition to your landscaping and frogs will bring delightful music to your garden. As the pond develops and matures, so will the micro-ecology of your garden, providing further wonderment and learning experiences for your children. A frog pond is not a difficult project and with a little careful planning and preparation it will serve as a low-maintenance visual feature as much as an environmentally responsible incubator of life. As an added bonus, the frogs will help control insect populations, keeping the population of flies and mosquitoes around your home in check. So what are you waiting for? Hop to it and build a frog pond.

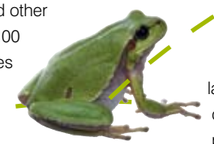
STEP 1: CHOOSING A LOCATION

You may not be able to meet all the following criteria but these considerations are important in selecting the best location for your pond. Choose a spot where there is enough room to adequately contain a pond about 1.5m wide and still allow for the expansion and growth of the surrounding garden. The soil should also be deep enough for you excavate to about 300 to 400mm. Ideally, the pond should be in semi-shade or dappled light. At least one third of the pond should receive direct sunlight to help with the growth of plants and especially algae. Algae is an essential ingredient in a healthy frog and tadpole environment. You'll get maximum enjoyment from the pond if it can be seen from your living space, but remember that frogs can be noisy so it's best to position it not too close to your house or your neighbours'. Your pond should not be located directly under a tree; some trees contain toxins that will contaminate your pond. You should also try to avoid areas where fruit bats congregate, as guano will also contaminate the water with excessive nutrients. A location near a compost heap is good, as the frogs will benefit from the additional insect life attracted to the decomposing vegetable matter.

If possible, try to isolate your pond from cats and dogs and most importantly remember that frog ponds are deep enough for a child to drown in. If it can't be located behind a pool fence, a layer of welded steel mesh should be installed just below the water line for safety's sake.

STEP 2: BUILDING THE POND

Before the first shovel even hits the turf, check for underground wires, pipes and other services. Call Dial Before You Dig on 1100 for a free survey of underground services before any excavation work begins, large or small. There are many ways of making a waterproof reservoir that will function as a frog pond. From recycling an old bath or laundry tub, a child's pool or plastic tubs at one end of the scale to a fully custom-made brick or concrete structure at the other. If you do make a masonry pond you will need to adequately waterproof it. Ask at your local Mitre 10 store for advice on waterproof coatings. By far the quickest and easiest way is to use a precast plastic or fibreglass pond shell. These are available from Mitre 10 garden centres and are simply set into the ground. A more economical option and possibly the best, as you can fully customise it to suit your space and ideas, is to use a rubber pond liner. To make your pond with a pond liner, you will first need to carefully dig out the pond shape required. Your pond should have a depth of at least 500mm but the hole will have to be 50mm deeper than the finished pond. The pond should be spoon shaped with gently sloping sides. This allows easy access for the frogs and tadpoles turning into frogs to get in and out of the pond. If using an old bathtub or another object, you should create a ramp. When digging out your pond you can make the job a little easier by using the waste soil from the base of the pond to form an embankment around the perimeter of the pond. This will also prevent storm water from flowing into the pond from the garden, possibly bringing in fertiliser and pesticides. Spread a 50mm layer of clean river sand over the surface of the hole, providing a soft layer for the pond liner and protecting it from sharp stones and other protuberances that may cause a puncture. Lay the liner out in the hole and half fill it with water to hold it down whilst you continue working around the edges. Pin the edges of the liner down with bush rocks and sections of hollow log; create some little banks of sand in between. The aim is to create a lot of shelter and hiding places to protect the frogs from predators, so try to get some larger rocks to jut out over the water's edge and layer some down below the water line. Inside the pond you should also place a couple of rocks and a piece of hollow log or water pipe for the tadpoles to hide in. A filter is not absolutely necessary but the gentle circulation it creates will help keep mosquito wrigglers at bay. Place a fine gauze filter, such as a piece of flyscreen, across the inlet of the filter to prevent tadpoles from being sucked into it.



STEP 3: PLANTING

Plant selection is an important element of your pond design. Choose native plants, preferably ones that are indigenous to your area as this will help create a microenvironment that is suited to the local species of frog. Check with your local council for advice on indigenous plant varieties or enquire at your local Mitre 10 garden centre about the varieties available. Ferns and tall grasses should be grown right up to the pond edge; these will create more natural overhangs and hiding places for frogs to rest and sing for a mate during breeding season. Foliage that falls into the water and rots is a natural food source for tadpoles. Aquatic plants such as water lilies or sacred lotus can be placed in the pond, once again these will provide shelter for tadpoles as well as spawning locations for the adult frogs. Aquatic plants are available in pots that you submerse into the pond, place the base of the pot on the bottom of the pond or up on bricks where the pond is too deep. Further back from the edge of the pond, a greater variety of plants can be cultivated including small trees and shrubs. Help keep the whole area moist with a protective blanket of leaf mulch or compost, avoiding pine bark mulch, as it may be too acidic.

STEP 4: FILLING THE POND

If you have a source of rainwater such as a tank, use this water to fill the pond. Tap water is okay but it will take at least a week for chlorine and other chemicals to evaporate off.

STEP 5: LIFE IN THE POND

If you build it they will come. That is if you have successfully made an environment that is conducive to frog life they will start to populate your pond naturally. It may take a little while depending on the breeding cycle, but even in the suburbs of big cities the frogs will make their way to the safe comfortable home you have made them. Don't be tempted to collect your own frogs or tadpoles from bushland and creeks. Not only is this illegal, but you may inadvertently be spreading disease or introducing species of frog that do not belong in your area. There will be a much greater sense of satisfaction