## SOME FACTS AbOUT FROGS!

Froos are amphibians. They spend part of theirlife in the vater and pat of theirlife out of the water


## WANT MORE

 INFORMATION?There are many helpful websites where you can listen to frog calls and find out more information.

The Frogs Australia Network www.frogsaustralia.net.au and the Amphibian Research Centre www.frogs.org.au are two excellent resources.

Thankyou to all the people who generously contributed images and feedback for this brochure illearite

Whilst all due care has been given to ensure the contents
of this brochure are accurate, no legal responsibility is accepted for any errors or omissions.


Cover image Peron's Tree Frog
by Evan Pickett


MAKING YOUR GARDEN FROG-FRIENDLY

## FROGS OF THE ILLAWARRA

This brochure is designed to help you identify different species of frogs that live in your local area and give you some ideas about how you can make your garden frog-friendly. More than thirty frog species have been identified in the Illawarra region. This brochure showcases sixteen species found in the Wollongong, Shellharbour and Kiama Council areas of the Illawarra, from Helensburgh in the north to Gerroa in the south.

## HOW TO IDENTIFY FROGS

All the frog species found in the Illawarra fall into one of two family groups. One family are the tree dwellers (Hylidae), which have special pads on their fingers and toes that allow them to climb and live in the trees. The other family is known as ground frogs (Myobatrachidae). They normally don't climb and don't have pads on their fingers and toes.


The colour of a frog's skin can vary widely between individuals of a certain species. A number of frogs can even change their colour depending on the temperature, time of day or just how they're feeling!

One of the most accurate ways to correctly identify a frog is by its call. See our website recommendations on the back of this brochure where you can listen to different frog calls.

## CREATING A FROG <br> FRIENDLY YARD

Providing refuge for frogs, particularly in areas where natural settings have been degraded, is an important action that will help ensure common frog species don't become threatened.

Here are some tips to creating a frog friendly habitat in your yard:

## LOCATION

- A north facing sunny location with partial shade provided by trees or small plants in or near the pond is ideal
- Place the pond away from large trees that drop a lot of leaves
- Frogs can be noisy so locate the pond away from bedrooms and neighbours
- Keep your compost heap in the same area to attract insects for the frogs to eat


## COLLECTING FROGS AND TADPOLES

Frogs are often on the move on rainy nights and within a short period of time they'll find a new frog pond and may even use it to spawn in. So please wait for the frogs to find your ponds, and do not take frogs or tadpoles from other places and move them to your yard. A disease caused by Chytrid fungus which is fatal to frogs, is now a major problem in NSW, and moving frogs may help spread this disease.

Frogs also have very specific habitat requirements and even though some species of frogs may seem widespread on a distribution map, they may only live where a specific soil and vegetation type occur together. If a frog is moved to an unsuitable habitat it may soon die. Legislation in NSW protects frogs and tadpoles by making it against the law to collect or move them without a licence.

Green \& Golden Bell Frog Image: Evan Pickett

## DESIGN

- Consider the safety of small children - make sure the depth does not exceed 30 cm . Wire grills (available from building suppliers) can also be used for additional safety
- Provide gently sloping sides for frogs to easily get in and out
- Provide shelter with native plants and scattered rocks and branches


## OTHER TIPS

- Many fish species will happily feed on frog's eggs and tadpoles so it's best not to introduce fish into your frog pond
- Avoid using chemicals as frogs are very sensitive to chemicals


## frogs sifilliacarta

## Hylidae (Tree Frogs)

Hylids have adhesive finger and toe pads and webbing between their fingers and toes. This allows them to grip onto vegetation and be tree dwellers. Australian Hylids are opportunistic feeders, eating a wide variety of insects. Breeding times are determined by the weather and all species of this family lay their eggs in water.

Bleaing Tree frog


Litoria dentata - A small to medium ( $30-60 \mathrm{~mm}$ ) brown tree frog with a broad darker brown band down the back. The backs of the legs, armpits and groin are usually lemon yellow. The upper part of the iris of the eye is red. Mainly found near farmland or bushland.

Image: Evan Pickett


Litoria aurea - A large ( $55-100 \mathrm{~mm}$ ) tree frog with colour ranging from brown, dull olive to bright emerald green on the back with large brown or golden blotches. A dark streak runs from the snout over the eye. The backs of the thighs are bright blue or blue-green. Surprisingly this frog is often found in industrial areas Surprisingly this frog is often found in industria areas
and likes to bask in the sun.


Green Tree Frog


Litoria caerulea - A well known favourite but unfortunately now rare in this area. Large ( 80 110 mm ) green frog with big toe pads and sometimes a few white spots. Males like to inhabit places where their call will acoustically echo, e.g. pipes.

Image: Evan Pickett

## Verreax's Tree frog



Litoria verreauxi - A small ( 30 mm ) frog with varying colour patterns ranging from fawn, brown to red brown on the back with darker flecks. A dark broad
band starts between the eyes, running down the back and divided by a pale stripe. A clumsy climber but strong swimmer. Happy around coastal swamps and lagoons.

Esfiterl Davaf Tree frog


Litoria fallax - A very small (less than 30 mm ) green tree frog with a white strip along the side of its head. Frequently changes colour to brown. It is often found camouflaged on tall reeds near suburban ponds, farm dams or even plant nurseries with ponds.
$\qquad$


Litoria jervisiensis - A medium ( 60 mm ) brown tree frog with a dark stripe on the side of its head. The backs of the thighs and armpits are all red - orange. Likes large bodies of permanent water with tall thick reeds.

Image: Evan Pickett
Peron's Jree Frog


Litoria peroni - Quite a large (up to 75 mm ) grey brown tree frog usually with some darker mottling and tiny emerald green specks. The groin and armpits have strong black and yellow mottling. It can change colour from very pale to dark grey-brown and has large silvery eyes with diamond shaped pupils. Likes permanent water bodies.

Leaf Green Tree Frog


Litoria nudidigita - A small $(25-40 \mathrm{~mm})$ frog with colouring ranging from bright emerald green to dark green or dull brown with a broad mottled gold and black streak across both sides. Inhabits rocky rivers and streams. It is an excellent jumper and swimmer but is seldom found near still water.

## MYOBATRACHIDAE (GROUND FROGS)

The family of frogs known as Myobatrachids include ground dwelling and aquatic frogs that vary greatly in both form and behaviour and lack the adhesive toe disks found in the tree frog family. If they fall into your in-ground pool they won't be able to climb out. Included in this family are larger burrowing frogs, swamp dwellers and frogs that lay eggs on dry lan

Bibron's Toandet


Pseudophryne bibroni - A small ( $20-25 \mathrm{~mm}$ ) mid to dark brown ground dwelling frog with a coarsely marbled underside of black and white. On the base of each arm there is a yellow or orange patch. Prefers to walk rather than hop and is found in forests and grasslands. It lays eggs under leaf litter near water in areas that will be flooded.

Image: Evan Pickett
Eastern Banjo Frog / Pobobleoonk Bullifiog


Limnodynastes dumerilif - A large ( $50-85 \mathrm{~mm}$ ) burrowing frog. Colour ranges from grey, olive-green, dark brown to black on its back with dark marbling, blotches or flecks. The smooth belly of the frog is white or lightly mottled. Commonly seen after rain near dams, ponds and other still or slow moving water


Red (rowned Toadlet


Pseudophryne australis - A medium ( $40-50 \mathrm{~mm}$ ) frog with black or dark brown on the back and a reddish tinge or scattered red flecks. There is a red triangle on the head and the same colour running down the middle of the lower back. Often found near temporary creeks or flooded areas.

Image: Martin Schulz
Southern Barred Frog / Suttering Frog


Mixophyes balbus - This large $(60-85 \mathrm{~mm})$ frog has a Mixophyes balbus - This large $(60-85 \mathrm{~mm})$ frog has a
yellow grey colour with darker blotches. The arms and yellow grey colour with darker blotches. The arms and
legs have narrow dark bars and the upper part of the legs have narrow dark bars and the upper part of the
eye is pale blue. Restricted to very wet forests and eye is pale blue. Restricted to very wet forests and
rainforests. Hides under leaf litter beside fast flowing rainforest
streams.


Crinia signifera - A small $(20-30 \mathrm{~mm})$ ground dwelling frog. The colour patterns vary between black through shades of brown to grey. The belly is blotched black and white. This species is very widespread and found in almost all habitats. It is always associated with water.


Heleioporus australiacus - A large $(60-100 \mathrm{~mm})$ burrowing frog. Colouring is usually dark with yellow warts on the sides. Breeding males often have black warts on the sides. Breeding males otten Mave fouk
spines on the backs of their fingers. Mainly found spines ond sandy creek beds and yabby burrows.
around

Image: Evan Pickett
Striped Marsh Frog / Brown Striped Frog


Limnodynastes peronii - A large ( $45-75 \mathrm{~mm}$ ) frog. Colour ranges from pale fawn to golden brown with dark brown or black stripes along the back. Found in reeds and marshes around wetlands and other permanent water sources. Often seen hopping across the road at high speed on a wet night. Its call is "Tock...tock"

Image: Evan Pickett


Uperoleia laevigata - A small $(25-30 \mathrm{~mm})$ frog with olive - brown colouring on the back with darker blotches. Has a yellowish or light triangular patch on the head. The skin on the back has many small lumps. Lives in dry forests and grasslands that flood after heavy rain.

