











Frogs, frogs and more frogs!



Sydney has a wide variety of habitats that suit a diverse range of frogs. Although our city region has nearly all been disturbed or greatly altered by humans, there are still many species of frogs that can be found in and around the city limits, the Liverpool Local Government Area included.

Why is the decline of the frog a concern?

Frogs are a valuable part of our natural environment. Both frogs and tadpoles play a significant role in the food chain of many ecosystems and do a fantastic job of helping to control insect pest populations. Tadpoles also act as natural nutrient filters and can help to control levels of algae in our waterways.

Why are frogs good to have around?

Changes in the abundance and diversity of these animals can be used as a measuring tool to determine water quality. Frogs are:

- Great indicators of a healthy environment
- Vital in the food web, helping to control many species of pests and provide food for other animals such as birds.
- Lots of fun to keep!

Threats to the frog

For many years people have made changes to the natural environment. Pressures on frog populations in our environment have resulted from these modifications. For example, clearance of habitat, stormwater and drainage works, and the introduction of non-native invasive plant and animal species.

Pollution

Frogs spend part of their lifecycle in water and their moist skins are especially sensitive to pollution.

Gambusia

Exotic fish, such as trout, carp, goldfish and plague minnow eat native frog eggs and tadpoles. The plague minnow (Gambusia holbrookii), is a small fish sometimes called the mosquito fish. They were originally introduced to control mosquitoes, however they have not been successful in doing so.

Cane toads

Cane toads were introduced to Queensland from South America in 1935 in an unsuccessful attempt to control cane beetles, a pest of the sugar cane industry. In Australia, cane toads have no natural enemies. Their toxin can kill most native animals, including frogs, therefore posing a significant risk to our native fauna. Inhabiting a wide variety of areas, both urban and disturbed areas, cane toads can breed quickly, therefore allowing them to colonise and dominate an area easily.

Chytrid-Fungus

One of the prime causes of Australia's frog declines is the newly discovered fungal disease. Chytrid fungi are typically found in the water or soil, and is found to attack a fibrous protein called keratin, which in frogs forms a resistant layer in their skin. When frogs are infected by chytrid fungus, this layer is damaged.

Frogs use their skin to breathe and drink, so any damage to their skin can lead to the eventual death of the frog. However, the actual mechanism by which chytrid kills frogs is still unknown. Signs of a sick frog may be:

- · Discoloured skin
- Outside layers of skin may be peeling off
- Lack of appetite, sluggish
- Not protecting itself, the frog may be sitting out in the open
- Have its legs spread away from itself, instead of tucked close to its body.

YOU can help prevent the spread of chytrid fungus by:

- Being aware of the problem and seeking up to date information
- NOT transferring frogs, tadpoles or frog eggs between different sites
- NOT transferring other aquatic plants, animals, mud or other materials between different sites
- Keeping any frogs or tadpoles you have, at home or releasing them back to EXACTLY where they were collected from
- · Using effective hygiene practices when handling frogs.

How can YOU help the frog's survival?

- Preventing chemicals such as petrol, insecticides, detergents and fertilisers from entering waterways
- Reducing water run-off and preventing rubbish, silt and garden waste from getting into stormwater drains
- Constructing and maintaining sediment traps near waterways, especially when disturbing surface vegetation cover
- Avoid wearing insect repellents and other lotions if you go swimming in areas where frogs live
- Do not stock garden ponds or dams with exotic fish
- Contact your local National Parks and Wildlife office to find out more information, or contact the

Frog Watch Helpline on 0419 249 728.

Creating a frog-friendly garden

Many frog populations are declining as their habitats are destroyed by human activities. This means people and frogs are coming into contact more often, so we need to be able to co-exist. By creating suitable habitats for frogs we may help more common and possibly threatened frogs survive.

Frog-friendly yards may provide pathways for frogs to move across the urban landscape. When creating a habitat for frogs make sure you provide:

- Lots of plants, especially natives
- Plenty of ground cover
- Rocks
- Logs
- Leaf litter
- · Moisture.

Want to know more?

For further information on frogs in the wild, various frog species, how to maintain a frog friendly garden, and what you can do to help the plight of the frog, please check out the following websites or contact your local council:

Websites:

www.frogs.org.au www.fats.org.au www.frogsaustralia.net.au www.nationalparks.nsw.gov.au

Frog Watch Helpline: 0419 249 728 Liverpool City Council: 1300 362 170

All proceeds from the purchase of the images go to the Amphibian Research Centre. For more information visit www.frogs.org.au











Native frog species

SOUTH WEST SYDNEY



Green and Golden Bell Frog

Litoria aurea

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Description: Beautiful in colour, you will easily notice its bright emerald green body which may appear to have brown and gold blotches. This frog became quite an icon during the Sydney 2000 Olympics as a significant population was found at the Homebush Bay site, and is now monitored by the Australian Museum.

Size: 55 - 100mm

Location: Found along Eastern NSW, this frog occurs in large, open-water swamps or ponds surrounded by dense vegetation.



Peron's Tree Frog

Litoria peronii

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Description: Quite large, this tree frog is grey-brown with darker mottling. Very small green specks can be seen if you look closely. With big silvery eyes, a fine network of dark visible veins and large finger and toe discs, it is one distinct common frog. With a loud laughing call, similar to a cackle, it can be easily identified.

Size: Up to 90mm

Location: Still considered fairly common, it can be found in gardens close to bushland around Sydney, as well as in more rural suburbs with large dams.



Green Tree Frog

Litoria caerulea

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Description: Quite large, this frog is green with big toe discs. You may hear its loud, low-pitched call echoing through the toilet or down pipes, where it can often be found living.

Size: 110mm

Location: Still commonly found in the Sydney outskirts, it is less common in suburban areas.



Common Eastern Froglet

Crinia signifera

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Description: This small frog varies in appearance. It can be dark brown rusty red, grey, yellow or dark brown and may have darker stripes or smaller markings that may be seen on its back.

Size: Up to 30mm

Location: One of the two most common species found in many Sydney suburbs, this frog likes any pond, creek dam or swamp.



Bleating Tree Frog

Litoria dentata

Photo courtesy of Sonya Szczur

<u>Description</u>: A small brown tree frog, you will notice a broad darker brown band down its back. With a very loud high-pitched bleating call, it can be found in suburban gardens near bush and farmland.

Size: Up to 45mm

Location: Found within the Liverpool LGA and further west.



Eastern Dwarf Tree Frog

Litoria fallax

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<u>Description</u>: A very small green tree frog, it has a white stripe along the side of its head. It can be difficult to see at first, as it likes to sit on tall reeds, where it is well camouflaged.

Size: Up to 32mm

<u>Location</u>: Found commonly in suburban gardens with ponds and in water plants all around Sydney.



Eastern Banjo Frog

Limnodynastes dumerilii

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Description: This large frog, brown eyed and brown in colour can be found burrowing. With a yellow throat it can be easily identified and has yellow-brown patches along its sides and a raised thick yellow stripe on both sides of its head. On the top of each leg is a raised gland. You may hear their distinct call resembling a twang of a banjo with an echo.

Size: Up to 100mm

Location: Not so common, they can be found near dams and creeks in bushland where they can breed.



Spotted Marsh Frog Limnodynastes tasmaniensis

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Description: Easily identified, this frog has a pale grey back with a number of darker patches and often seen with a cream stripe down the centre of the back.

Size: Up to 47mm

Location: Common across eastern Australia, within the Sydney region they are found on the Cumberland Plain areas, which includes the Liverpool region.



Striped Marsh Frog

Limnodynastes peroni

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<u>Description</u>: Medium in size, this dark brown striped frog can be heard by its characteristic "pock" noise, sometimes referred to as the tennis ball from

Size: Up to 70mm

Location: This species will readily move into backyard frog ponds.



Verreaux's Tree Frog

Litoria verreauxi

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<u>Description</u>: A bit of a clumsy climber, this small frog is light brown with a dark brown band down the back and a dark stripe at the side of its head. You may notice the red colouring on the inside of its hind legs, and black spots on its groin.

Size: Up to 32mm

Location: This frog can be found in dams and ponds to the north, south and west of Sydney, and can still be found in suburban gardens.











