

Glove box guide frogs of the ACT region

An easy to use field guide to
assist in the identification
of selected frogs
of the ACT and
surrounding
areas



Identifying frogs

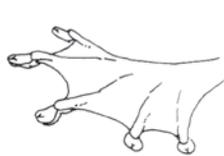
Frogs can be difficult to identify simply using skin markings, colour and other body features. For example, two individuals from a single species, such as the Common Eastern Froglet, may have completely different markings, suggesting they are two different species. Frog calls are one of the most reliable identification methods. Frog calls are unique for a species, so each of the different species from our region can be identified from their call alone. Remember that calls are typically made during a species breeding season, and males do most of the calling. There are a number of sources for frog calls in the ACT and region in the **Additional Resources** Section of this guide.



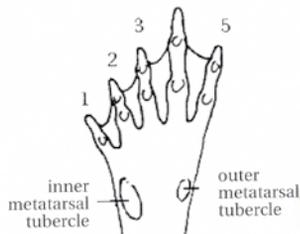
partial webbing

full webbing

no webbing



toe pads



underside of foot

All frog feet diagrams by Marty Robinson

Common Eastern Froglet

Crinia signifera

ADULTS: Short (2.5 to 3cm in length), highly variable in markings from mottled to striped, olive green to pale brown. Black and white marbling on belly. Sometimes warty with no webbing between toes.

CALL: Like a child's toy clicker. Frequently repeated 'crick, crick, crick, crick...'. Its peak breeding season is during winter and early spring, but may be heard at all times of the year.

HABITAT: Rivers, creeks, swamps, farm dams, lakes and in woodlands and cleared paddocks adjacent to these areas. Also common in urban environments.

DISTRIBUTION: Widespread and common.

Common Eastern Froglet
Crinia signifera



Why have frogs declined?

A range of factors have contributed to recent frog declines, including: habitat degradation, severe droughts and disease. It is now known that many of the declines from relatively pristine and healthy environments are due to disease caused by the amphibian chytrid fungus. This pathogen infects the frog's skin, causing mortality in susceptible species.

Green and Golden Bell Frog

Litoria aurea

ADULTS: Very large (to 12cm in length) and olive to bright green and may sometimes have gold/brown patches. A large tympanum (ear) is clearly visible and feet are webbed with distinct, rounded toe pads.

CALL: Somewhat like a motorcycle revving. A longish drawn out call followed by several guttural grunts. Calls are made from September to January.

HABITAT: Semi-aquatic spending most of its time in the water or amongst emergent vegetation.

DISTRIBUTION: Rare. This species has severely declined within our region over the last two decades. Endangered in NSW.



Green and Golden Bell Frogs
Litoria aurea

Peron's Tree Frog (Maniacal Cackle Frog)

Litoria peronii

ADULTS: Mid-sized (up to 5cm in length) with bright yellow and black mottling behind the legs. Feet have partial webbing with large, round toe pads and a cross-shaped marking through the pupil.

CALL: Long, humorous, drawn-out descending cackle, becoming louder. Calls are made from September to December.

HABITAT: Found in rivers and creeks, also in swamps, on farm dams, lakes and in woodlands adjacent to these areas. Often found sheltering in tree hollows, dead timber and under loose bark.

DISTRIBUTION: Widespread but not common.

Peron's Tree Frog
(Maniacal Cackle Frog)
Litoria peronii



How do toe-pads stick?

- Tree frogs have specially adapted toe-pads which enable them to climb vertical, and often smooth surfaces. The toes don't stick by suction, but by friction and a process called capillarity. The toe surface comprises a network of granulated cells with fluid between them (like a tiny network of canyons). The small cells grip irregularities on the climbing surface and the fluid helps the toe to stick to the surface using capillary action.

Pobblebonk (Eastern Banjo Frog)

Limnodynastes dumerelii

ADULTS: Very large (up to 8.5cm in length), round and plump with an obvious white cheek-stripe. A small round bump, or blister is apparent on rear limb. Partial or very little webbing between toes.

CALL: Well recognised series of guttural, 'plonk' or 'bonk', repeated at intervals. Calls from September to January.

HABITAT: Rivers and creeks, also in swamps, on farm dams, and in urban gardens. Mainly occur in low-lying areas with a cover of tussock grasses. Often found sheltering in tree hollows, dead timber and in burrows in the ground.

DISTRIBUTION: Widespread in moderate numbers.



Pobblebonk
(Eastern Banjo Frog)
Limnodynastes dumerelii

Plains Froglet

Crinia parinsignifera

ADULTS: Short (2.5 to 3cm in length), highly variable in colour and markings from dark green to dark brown. Grainy, grey belly. Sometimes warty with no webbing between toes.

CALL: Short, but drawn out 'reeeeeeet'. Calls from August to November.

HABITAT: Rivers, creeks, swamps, farm dams, lakes and in woodlands and cleared paddocks adjacent to these areas. Often preferring more open country.

DISTRIBUTION: Widespread and common.



Plains Froglet
Crinia parinsignifera

Smooth Toadlet

Uperoleia laevigata

ADULTS: Small (up to 3cm in length), brown to olive with blotches. Misnamed, because the skin is quite warty or granulated on the back. A bright orange patch behind each knee with unwebbed toes.

CALL: A creaky, repeated call, like a cork being drawn from a wine bottle, 'wwhhrrkk', 'wwhhrrkk', 'wwhhrrkk'.

HABITAT: Dry forest, woodland and grassed areas, including rocky outcrops which are flooded after rain.

DISTRIBUTION: Reasonably common in the Canberra area.



Smooth Toadlet
Uperoleia laevigata

Springtime frog chorus

Springtime is usually the time when frog calls become apparent. It is generally the males that do most of the calling, as a way of attracting females. Males also call to advertise their territory to other competing males.

Breathe through the skin?

Frogs breathe through their skin as well as their lungs! Dissolved oxygen (available through water) is able to pass through a frog's skin directly to its blood. As such, frogs are very sensitive to chemicals in water. Chemicals such as paints, engine coolant, pesticides and herbicides that enter stormwater drains can have deadly consequences for frogs.

Spotted Burrowing Frog

Neobatrachus sudelli

ADULTS: A very plump little fellow (up to 4cm in length) with short legs, warty and variously blotched. The small lump on the foot (see diagram – metatarsal tubercle) is always black in ACT region. Pupils are vertical. Toes are webbed.

CALL: A short series of soft, high-pitched popping calls gradually increasing in pitch. Generally call after extensive rains in mid to late spring.

HABITAT: Swamps and farm dams. Spend most of their lives in the soil, by burrowing using a hardened claw on the back foot. Emerge after heavy summer rains.

DISTRIBUTION: Poorly documented, though locally common in wet years.



Spotted Burrowing Frog
Neobatrachus sudelli

↳ Born to dig...

↳ Burrowing frogs have specially adapted feet (a toe-pad called a metatarsal tubercle) that enable them to dig into soil. Burrowing frogs spend most of their lives buried underground and usually emerge after heavy rains to start breeding.



Spotted Marsh Frog (Spotted Grass Frog)

Limnodynastes tasmaniensis

ADULTS: Mid-sized (up to 5cm in length), typical frog shape with only one stripe along the back (may be absent) and blotches of darker colour on a lighter background. No webbing between the toes.

CALL: Like a toy machine-gun. A very short 'uk, uk, uk'. Calls from September to March.

HABITAT: Breeds in swamps, farm dams and slow moving or pool sections of creeks. Commonly found sheltering in cracks in clay beds of water bodies, beneath fallen timber and at the base of tussock grasses in areas adjacent to water bodies.

DISTRIBUTION: Widespread and relatively common.



Spotted Marsh Frog (Spotted Grass Frog)
Limnodynastes tasmaniensis

Striped Marsh Frog (Brown-striped Frog)

Limnodynastes peronii

ADULTS: Large (up to 7cm in length), typical frog shape with a brown stripe along the back and a pair of side strips on each side. No webbing between the toes.

CALL: Reminiscent of the Australian Open, like the sound of a tennis ball being hit, 'toc', 'toc', 'toc'. Calls from November to March.

HABITAT: May be found in rivers and creeks, also in swamps and farm dams. Commonly occur in low-lying areas with a cover of tussock grasses.

DISTRIBUTION: Uncommon in the Molonglo River, as the species is at the western edge of its limit.



Striped Marsh Frog
(Brown-striped Frog)
Limnodynastes peronii

Whistling Tree Frog

Litoria verreauxii verreauxii

ADULTS: Small (up to 3cm in length), lighter coloured with an obvious stripe on each side of the spine. Black spots visible in the groin region. Toes are partially-webbed.

CALL: Like someone calling up a dog, a quick series of, 'cree... cree...cree...cree...cree...cree'.

HABITAT: Typically breed in farm dams and pooled sections of creeks, but may also use smaller water bodies such as road side ditches. Often found sheltering in moist areas in grasslands, woodland and forest.

DISTRIBUTION: Widespread in agricultural areas.



Whistling Tree Frog
Litoria verreauxii verreauxii

A free service...

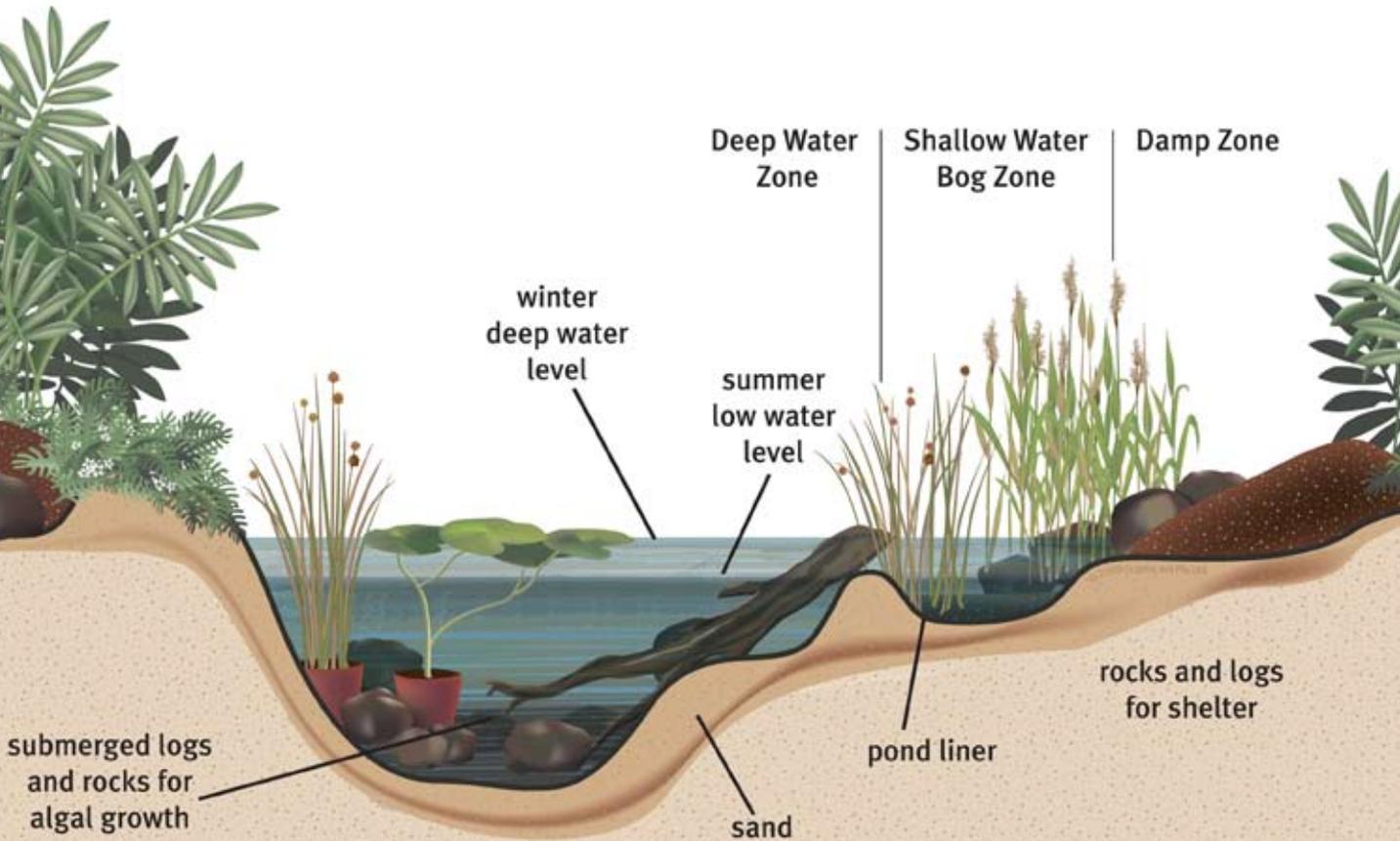
Frogs provide a valuable service by reducing mosquitoes and other pest insects. Tadpoles also increase water quality by consuming large quantities of nutrients that would otherwise contribute to algal and bacteria growth. A population of frogs can also act as a sentinel. The presence or absence of frogs from a waterway can be a good indicator of the quality of the water.

what is a good frog habitat?



A source of food, shelter and a breeding place are the basic requirements for supporting frog populations. Though often associated with water during breeding, many frog species can survive without being close to permanent water. Cool, damp areas such as large logs, rock and patches of undisturbed native grasses provide important non-breeding shelter. Some species also shelter in cracks in the soil, or in deserted invertebrate burrows.

Tadpoles can grow fast and can often become stranded in drying pools; a decrease in water level can often trigger metamorphosis (change) into a frog. Predation of tadpoles by introduced fish plays a large part in limiting frog populations. Mosquito Fish and Trout consume large numbers of tadpoles and should be kept out of frog friendly habitat.



Additional Resources

Internet

Frogwatch is a community frog monitoring program that involves volunteers to monitor frogs and protect their habitats. It is based in the ACT and region, with over 140 monitoring sites. Volunteers attend training on identification and monitoring of frogs, and protection of frog habitat before conducting frog monitoring. www.ginninderralandcare.org.au/category.php?id=19

Frog calls of the Australian National Botanic Gardens contains downloadable files of common frogs recorded at the gardens. www.anbg.gov.au/anbg/frogs

Frogs Australia Network is an Australia-wide group which aims to increase knowledge and awareness of frogs and their conservation. The network links people with an interest in frogs. This website is a great source of information on frog distribution across Australia and also has a collection of frogs calls to help in their identification. www.frogsaustralia.net.au

Amphibian Research Centre is dedicated to the research and conservation of Australia's frogs, offering wide ranging expertise on frogs. www.frogs.org.au

Publications and CD's

A field guide to frogs of Australia, (1998), M. Robinson, Reed New Holland, Sydney.

Creating a frog friendly habitat in your backyard, school ground or rural property: a resource for communities in the ACT and region. Ginninderra Catchment Group. 2007. Canberra ACT.

Frog calls of the ACT and south-east N SW, CD-ROM, Ginninderra Catchment Group. 2007. Canberra ACT.

Reptiles and Frogs of the Australian Capital Territory. Bennett, R. 1997. National Parks Association of the ACT, Woden.

Wet & Wild: a field guide to the freshwater animals of the Southern Tablelands and high country of the ACT and N SW.

M. Lintermans & W. Osborne, 2002, Environment ACT, Canberra.

References

Census of Australian Vertebrate Species. <http://www.environment.gov.au/biodiversity/abrs/online-resources/fauna/cavs/index.html> Viewed 11 February 2009. Australian Biological Resources Study, Canberra.

Lintermans, M. & Osborne, W., (2002), *Wet & Wild: a field guide to the freshwater animals of the Southern Tablelands and high country of the ACT and NSW*, Environment ACT, Canberra.

Robinson, M., (1998), *A field guide to frogs of Australia*, Reed New Holland, Sydney.

Acknowledgements

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Australian Government



Shown on front cover and right:

Peron's Tree Frog (Maniacal Cackle Frog)
Litoria peronii



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