

AMPHIBIANS - FROGS

Family - Hylidae

C.Lane 2006

Litoria caerulea - Green Tree Frog

Litoria is a tree frog or arboreal genus. They typically, as in this species have easily seen pads on all fingers and toes perfectly adapted for climbing, even on smooth surfaces. They are not always green especially if they have just come out of aestivation, the "hibernation" state they enter if conditions are too dry. They may range from almost black through dark to light grey to bright green (see photos) Frogs are most easily identified by their calls -

Identification and Distribution

Litoria caerulea, was the first frog reported from Australia. A specimen was collected by Joseph Banks, and was in the Hunterian Museum at the Royal College of Surgeons in London entail destroyed in the blitz during WW2.

It has a wide distribution, it is in all the North-eastern half of Australia; from near the Victoria border across to the Kimberly's in W.A. It is also in south New Guinea. It is the species commonly encountered in bathrooms and toilets of houses in north Australia and is the most easily seen frog and seems to ignore the presence of humans unless disturbed.

Large, variable in colour. On Maggie light green, dark green, olive, brown and grey have been seen (see photos) *Litoria caerulea* is the largest native frog on the island and colour in individuals may vary between seasons and conditions. They can also have white spots on the back and sides. The back of their thigh can appear dull pinkish or reddish brown. They have a white stripe along the hind edge of the lower leg and the outer edge of the fifth toe. Underside or ventral area is white.

Their skin is smooth above (dorsal area), coarsely granular on sides and below (ventral area). They have a glandular ridge above their eardrum, which is easily seen. Their fingers one third webbed and their toes are three quarters webbed. Both fingers and toes have large pads.

L. caerulea is probably distributed all over Magnetic Island. It is definitely in all the bay areas and at West Point and has also been seen or heard right up Gustav Creek and to foothills bounding Horseshoe Bay and Arcadia. In any group of tadpoles, it will generally be the largest.

The largest specimens are around 125mm snout to vent length, but here, the average has observed are about 100mm. The largest observed specimens have been in Horseshoe Bay.

L. caerulea has been kept for up to 23 years in captivity and size of many specimens on Magnetic Island indicates there is a great many of mature age.

L. caerulea is thought to have a strong "homing" instinct and will return to home base if moved.

Habitat

This frog will be found anywhere it can conserve moisture and if no moisture is around it will aestivate or sleep until conditions improve. The large, fat brownish (below left) is thought to have just emerged from this dry weather aestivation and what seems to be rolls of fat are, rather folds of skin that have remained while body fat was utilized during this time. *L. caerulea* is sometimes heard even during dry spells calling from holes in trees etc. but the call is always short. They will usually hide up in trees or bushes during the day and while they have been known to actively sunbake at times they are primarily nocturnal.

Individuals can be repeatedly seen in the same spots, and this species is believed to have a territory or home area which it seldom leaves.

In breeding season they will gravitate to creeks and lagoons and will often start to call even during the day if rain is approaching. They can also be seen on roads at night during rain, should be avoided by drivers and not be confused with cane toads which also use roads to forage.

They can be found in open forest, dunefield woodland, paperbark woodland and urban habitats; also eucalypt woodlands and grassland and vine thicket areas. They can be found long distances from water and right down to the littoral zone.

Behaviour and Breeding

Males can be heard calling almost any where on the island at the beginning of the rainy season. Their call is really loud and is often amplified when they are in drainage pipes etc. Males will move to the side of creeks or lagoons or even puddles and will call solo and often set up an alternate call system with neighbouring males. Amplexus (sex) occurs in water when a female becomes available and about 200-2000 eggs will be laid and fertilized on the surface of still waters. After 24hrs eggs will fall to the bottom before hatching. Only about 2% of frogs make it to adult hood. Lizards and insects have been observed eating spawn before it hatches. Small frogs are prey for many species including lizards, snakes, quolls. Species that eat frogs are susceptible to cane toad poisoning.

Tadpoles are large and quickly grow to a body length of about 10cm they are elongated and mottled grey in colour (cane toad tadpoles are black and laid in strings). After back legs appear, front legs will soon follow and a complete metamorphosis of shape follows quickly. From this point the tail will disappear and the frog will leave the water for good within 24hrs.

Diet

Primarily an insectivore with a wide flexible dietary range, Its food can include grasshoppers beetles mosquitos, flies, moths etc. It has been known to also eat other frogs.

It is an omnivore as a tadpole when its diet includes algae, mosquito larvae and drowned insects. It will also eat tadpoles of other species if food levels are low. Adults will eat tadpoles of other species and perhaps its own,.

Predators

Known predators include most snakes, cane toads, the northern spotted quoll and many birds such as kookaburras, owls etc.

References

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