

## Toad Spawn, Tadpoles & Juveniles

It is important to recognise cane toad spawn (eggs), tadpoles and juveniles as the early stages of development are when cane toads are most easily controlled.



Cane toads deposit their eggs in long strands of clear jelly. The black eggs form a dotted line within these strands. No native Australian frog produces spawn like this.

Toads prefer to breed in areas of still, shallow open water around dams, ponds, flooded paddocks and drainage ditches. Strands of eggs are laid in shallow water, often wrapped around grass stems and submerged twigs and branches.



Toad tadpoles are small (less than 3 cm in length), dark-bodied and commonly found swarming in still, shallow open water (e.g., around the margins of ponds and dams).

Young cane toads are active by day and night, and large numbers may be seen hopping around the margins of dams, ponds and flooded paddocks in full sunlight.



## Controlling Cane Toads in Australia

Cane Toads were introduced (from Brazil) to Queensland in 1935, in an unsuccessful program to control the cane beetle, which was damaging the sugar industry at the time. The toad rapidly adapted to local conditions.



Its resilience and robustness allowed it to spread throughout QLD and into NSW, the NT, and now WA.

Cane Toads have prominent, paired glands behind their eyes, extending along the back of their heads. These so-called parotoid glands secrete toxins which are potent enough to kill most predators that ingest, or even just mouth them. As a result, the Cane Toad's spread across Australia has seen a decline in populations of our carnivorous native wildlife, such as quolls, some birds, blue-tongued lizards, snakes and even crocodiles. Despite this, no extinctions have yet been linked directly to the Cane Toad.

Regardless, the cane toad does not belong here. Though complete eradication of toads is unlikely, control measures can significantly reduce the number of toads occurring locally. This is simply done by scooping spawn and tadpoles from the water. The easiest and most humane method for controlling juveniles and adults is by bagging them and placing in the fridge for several hours, before transferring to the freezer for several days. The toad is unable to perceive pain as the brain cools and freezes at the same rate as the body<sup>1</sup>.

<sup>1</sup>Shine. R, Amiel. J, Munn. A.J, Stewart. M, Vyssotski. A.L, and Lesku. J.A (2015) Is "cooling then freezing" a humane way to kill amphibians and reptiles? Biology Open (2015) 00, 1-4



## Your guide to identifying Cane Toads



Campaign idea by FroggingAround.com  
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## The Cane Toad (*Rhinella marina*)

Some native frog species may be confused with juvenile or adult toads. To avoid accidentally killing native species, **make sure your 'toad' has ALL of the features shown below**, so you can 'be toadally sure' if you have a cane toad or not.

Prominent 'M' shaped ridge on the front of face, between the eyes.



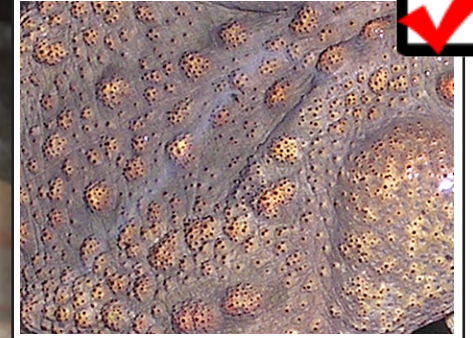
Large 'brow' over the eye



Large parotoid gland (the large glands on either side of the head).



Warty back and limbs with a dry, leathery appearance.



Black/grey and white mottling on the under belly.



No colour or flecking/patches in thighs or behind the legs.



No finger disks or toe pads



Juvenile cane toads (less than 5 cm in length) may be readily confused with native frog species, making positive identification difficult. Identification of juvenile animals less than 5 cm in length is therefore best left to experts. Toads greater than 5 cm in length can, however, be distinguished from native species based on the characters shown above.