







## Native or Not: How to spot the difference between native frogs and Cane toads

Article by Lexie Webster

It's certainly been a wet summer and haven't our little amphibian friends been loving it. Each downpour is accompanied by calls from nearby dams and waterways as tadpoles swarm and juveniles hop around on nearby banks or shelter in vegetation. But how do we know if this hive of activity is the work of our native frogs, or whether in fact, our dams are being taken over by those from further afield?

Leathery, warty, stout – we are all pretty familiar with what an adult Cane Toad (*Rhinella marina*) looks like. Their distinctive paratoid glands (poisonous swellings behind each shoulder) along with their upright posture and rapid, short hops are some of the features that identify these intruders. But how do we tell the difference between our native frogs and the introduced Cane Toad at other stages of their life cycle? Below are some of the Cane Toad's distinguishing features at its various life stages to help you out.

Life cycle stage	Distinguishing Cane Toad features	Cane Toad image at various life stages	Comparative typical features (but with exception) of native frogs
<b>Eggs</b>	Eggs are laid in long strings of transparent jelly, often made up of pairs of eggs. Egg strands are often wrapped around aquatic vegetation. Females can lay up to 35 000 eggs twice a year.	 Photo by Steve Wilson	Eggs are typically laid in a single mass, chain or individually in jelly or foam nests. Most Australian frogs typically lay 1000-2000 eggs per year.
<b>Tadpole</b>	Body is uniform black. Tail muscle is black with clear fins & approx 1¼ to 1½ times body length. Max total length is approx 28mm. Max body length is approx 11mm. Have a dark belly. Often in large swarms in shallow water.	 Photo by Lexie Webster	Body can be dark, light or clear, some may have mottling. Tail muscle is pale to dark brown or blotchy. Fins may be very dark or mostly clear. Tail is approx 2 times body length. Total length 25-80mm. Body length 8-32mm. Have a pale or translucent belly.
<b>Juvenile</b>	Are black or dark grey, usually with numerous small, orange dots and black bands across the limbs. Leave ponds or dams by day or night and can be active in daytime in dense clusters. Lack discs/adhesion pads on tips of toes, making them appear somewhat claw-like.	 Photo by Darryl Larsen	Are highly variable making them difficult to distinguish from cane toad juveniles. Emerge from water and disperse only at night. Often have discs/adhesion pads on toes.
<b>Adult</b>	Sit upright – almost vertically. Have toxic, swollen glands behind shoulders. Have a bony ridge running over each eye and down to nostrils. Move in short, rapid hops. Have a call like a diesel boat motor 'd-d-d-d-d-d-d...'	 Photo by Lexie Webster	Aren't as vertical in posture. Lack swollen glands behind shoulders. Lack bony ridge over eyes running down to nostrils. Move in 'Frog-like' leaps rather than short hops. Calls are variable, none like the cane toad.

So now that you know how to tell them apart, what can you do if those little critters in the dam are indeed Cane Toads?

Firstly, reduce their habitat. Cane Toads are poor jumpers so struggle to move through thick vegetation. Accordingly, they prefer dams, ponds, drains and watercourses with edges that are clear of dense vegetation. By retaining native grasses and sedges around your dam or pond you will hinder their movement and reduce their access to water and the likelihood of them successfully breeding.

Regularly check your dam or pond for toad eggs, remove any and dispose of them by either putting them in your compost bin, burying them in your garden or leaving them in the sun to dry out.

If you catch adult cane toads, the most humane method of disposal is to chill the toad to 4 degrees, then freeze and bury them.

If you're in doubt whether it's native or not, check with the Queensland Museum by providing them with a photo at: [InquiryCentre@gm.qld.gov.au](mailto:InquiryCentre@gm.qld.gov.au), along with any information that might assist them with their identification.

**References:**

Queensland Museum (2007) *Wildlife of Greater Brisbane*.

Australian Museum online factsheets -

<http://www.austmus.gov.au/factsheets/canetoad.htm>

Department of Environment, Water, Heritage and the Arts -

<http://www.environment.gov.au/biodiversity/invasive/publications/cane-toad/pubs/cane-toad.pdf>

Frogs Australia Network - <http://frogsaustralia.net.au/conservation/cane-toads.cfm> &

[http://frogsaustralia.net.au/documents/doc\\_12\\_bufo\\_native\\_eggs\\_and\\_tadpoles\\_of\\_wa.pdf](http://frogsaustralia.net.au/documents/doc_12_bufo_native_eggs_and_tadpoles_of_wa.pdf)

Kimberley Toad Busters - <http://www.canetoads.com.au/toadfrog.htm>

Queensland Museum Factsheets -

<http://www.maq.org.au/inquiry/factsheets/leaflet0030.pdf>

Wetland Care Australia Factsheets -

[http://www.wetlandcare.com.au/docs/fact\\_sheets/Cane\\_Toad\\_Fact\\_Sheet1b.pdf](http://www.wetlandcare.com.au/docs/fact_sheets/Cane_Toad_Fact_Sheet1b.pdf)