

The Cane Toad

(Rhinella Marina)



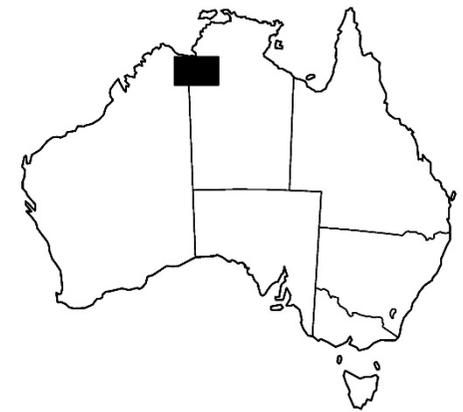
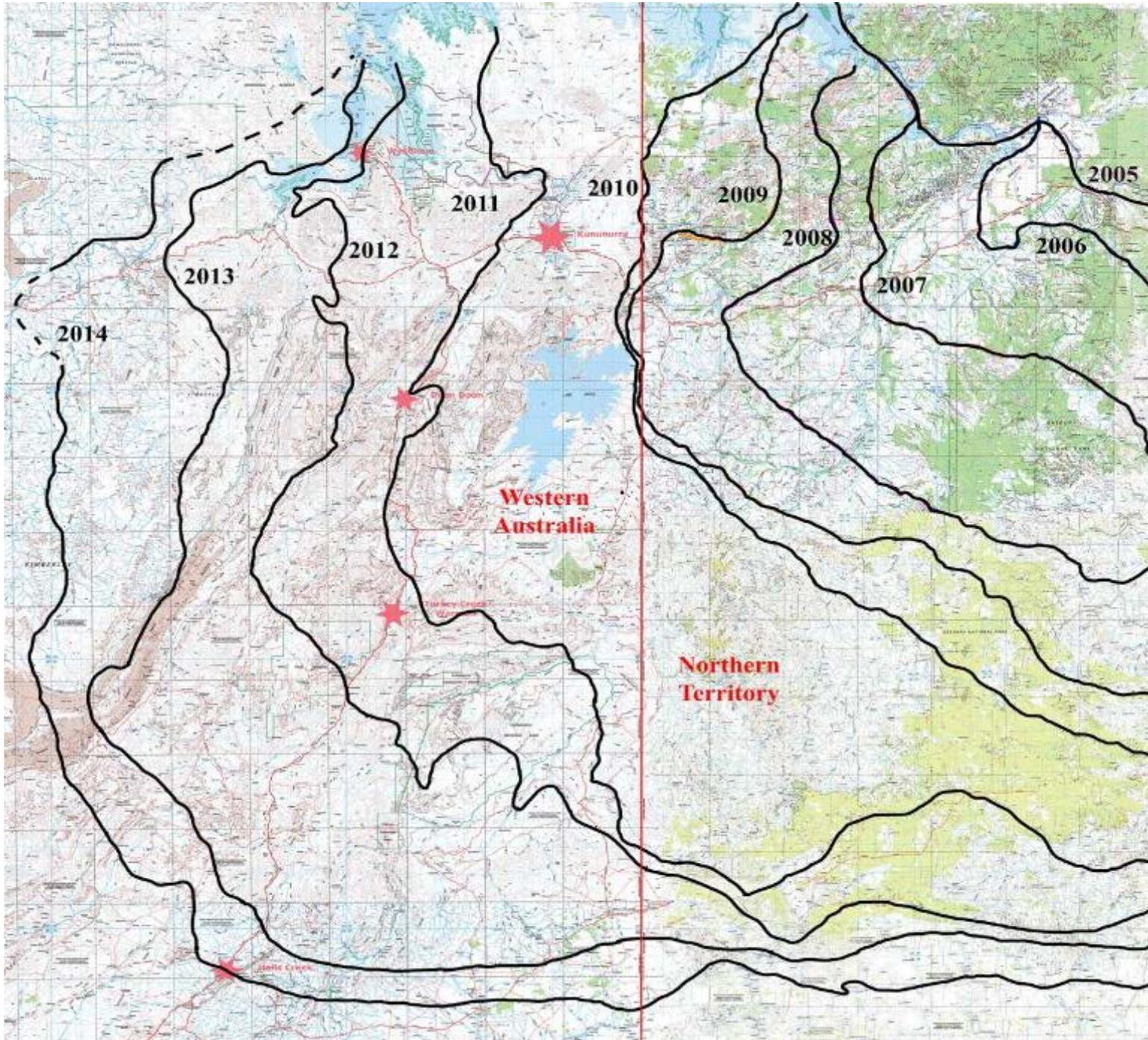


Where did they come from?



Their natural range is in middle and South America (Blue), and have been introduced to more than 50 different countries and Islands (red)

Where are they now?

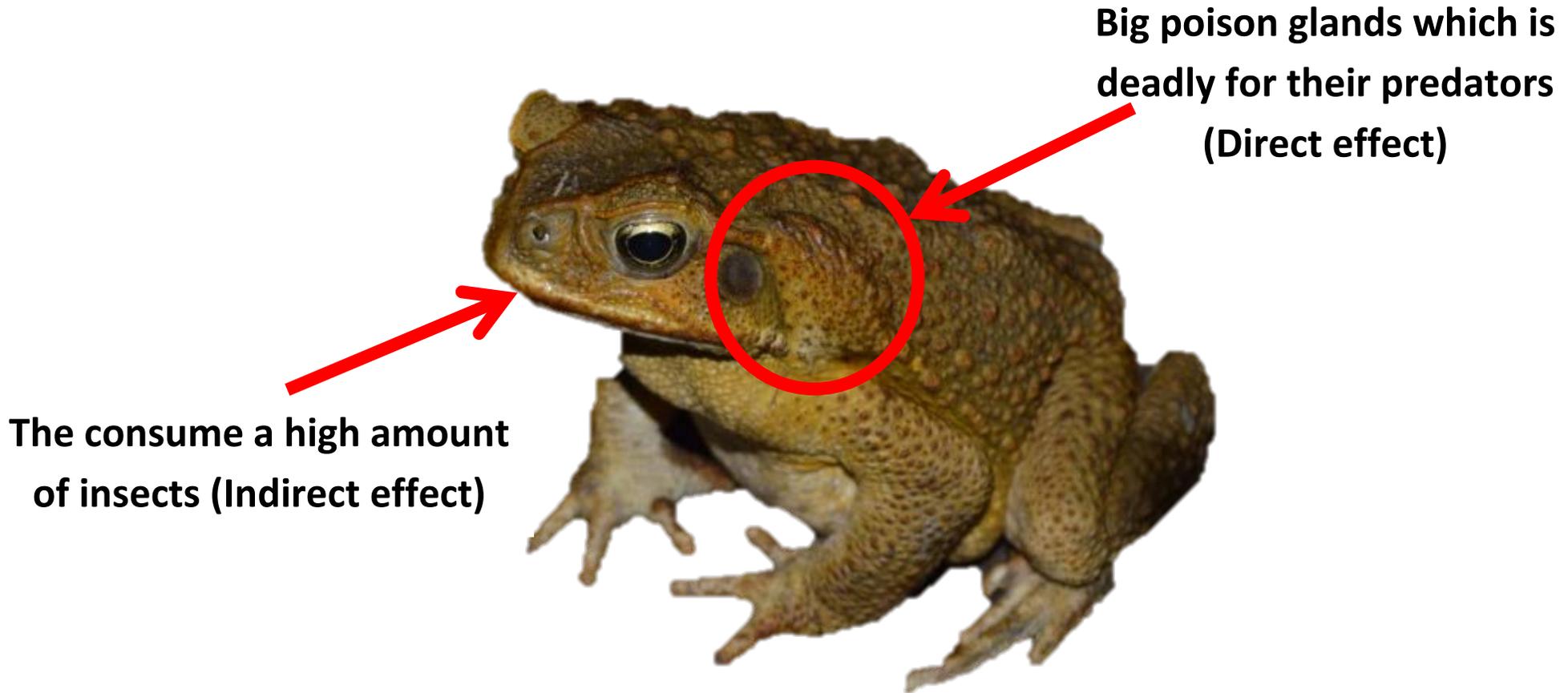


Why were they introduced into Australia?

In 1935, 103 cane toads were introduced in Australia. The cane toad was introduced in an attempt to eliminate two native beetle species, the greyback beetle and the frenchi beetle which were pests in the sugar cane plantations on the east coast in Queensland.

However, these two beetles' species were a strong flying species. Cane toad can do a lot but can't fly and so this turned out to be one of the biggest ecological mistakes made in Australian history and in 2013 was defined as the worst political action taken in Australia.

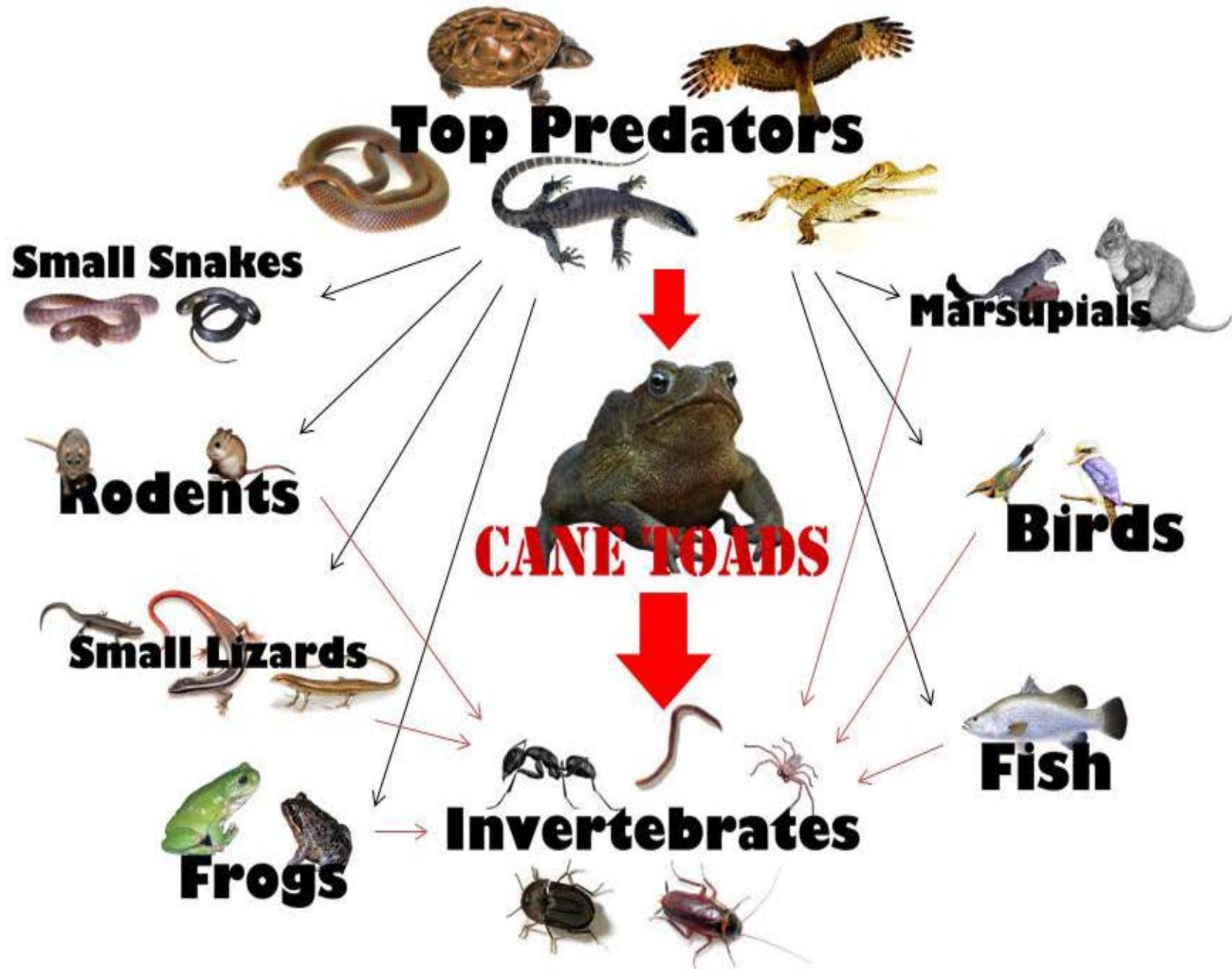
Why are they dangerous?



Direct impact

Native predators often die after consuming toads, and it is this direct poisoning that is the biggest impact that cane toads have on the native wildlife

The second big direct impact is for the smaller wildlife, insect but also frogs, small snakes and other native fauna are eaten by cane toads in big numbers



21 cm

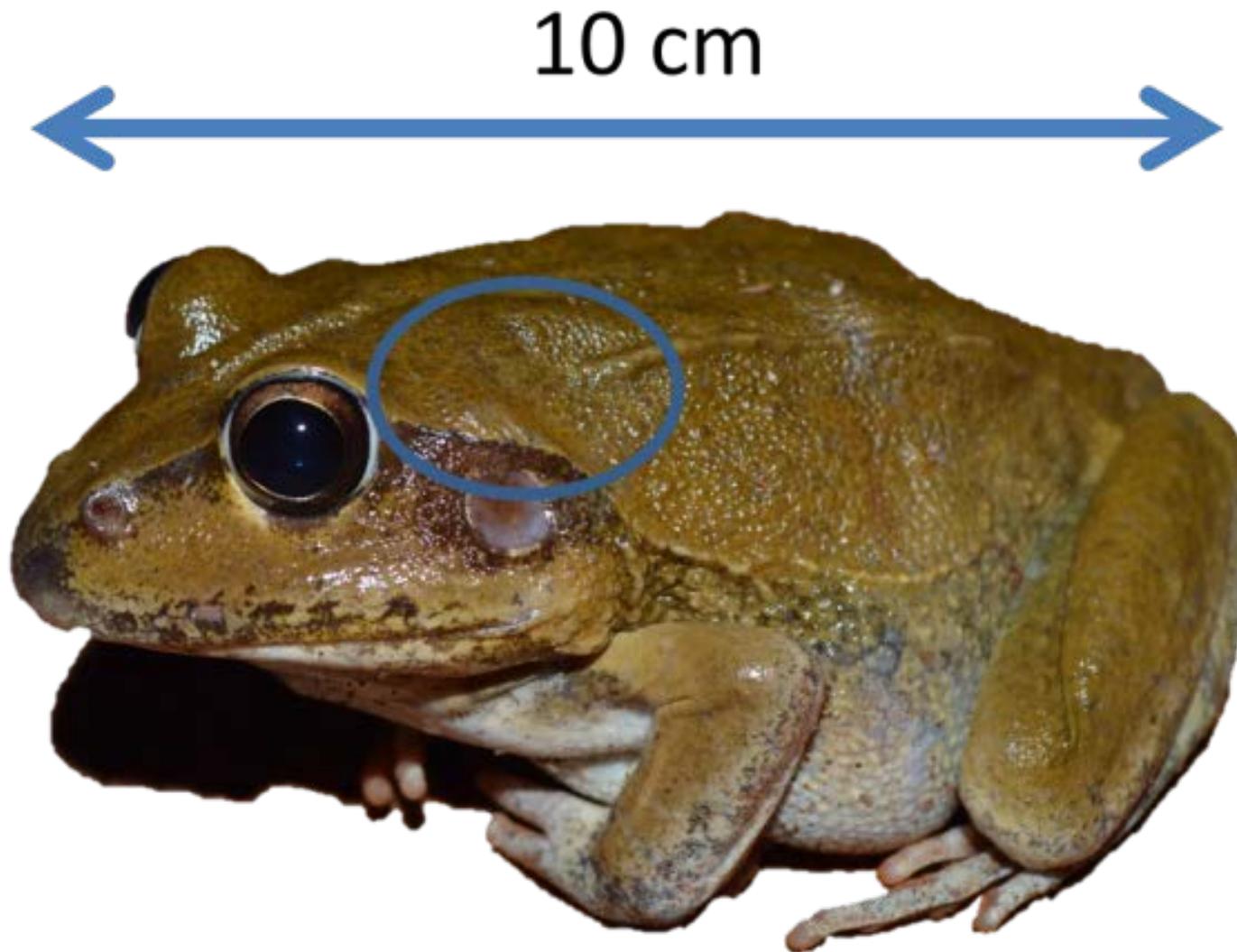


Cane toads sit (most of the time) in an up-right position and can grow up to 21cm Snout Vent Length and have very distinctive poison glands.

Native frogs

versus

Cane toads



A giant frog, which is most often mistaken for a toad, grows up to maximum 10 cm Snout Vent Length, sits quite low to the ground and has no poison glands



A frontal photo of a cane toad where you can see the angry look and the distinctive bony ridge in the shape of an M



A frontal of a giant frog, with a smooth skin and round eyes that looks remarkably like the famous Kermit the frog.



This green tree frog like other tree frogs have discs on their fingers so they can stick on wall and other objects



Cane toads don't have discs on their fingers and therefore they can't stick to walls or other objects. So when it is high on a wall you can be pretty sure it is a frog.



Frogs come in a lot of different colours, some easier to distinguish from cane toads than others. This Ornated frog shows that is can be difficult to identify just by his colour. The skin of frogs is slimy and soft.



The colours of cane toads differ from light yellow to dark brown. Often the juvenile cane toad is harder to distinguish from a native frog. The skin of a cane toad is dry and rough. The back of a male feels like sandpaper.

Another big difference between Native frogs and cane toads is the locomotion. Where frogs jump away and are hard to catch, cane toads often just sit there. But when they move they hop instead of jump!

If you are not a 100% sure, look for other signs to be sure it is a cane toad or not! Or send KTB a photo.

Observations of Species Effected by the Cane Toad

Species	Effect	Evidence
Birds		
Black tipped Kite	Numbers appear to be going up	Anecdotal evidence by KTB and many farmers. Learns very quickly to tip toad over.
Brolga	Numbers appear to be going down	Anecdotal evidence of dead Brolga around waterholes when toads first arrive and start breeding. Mainly towards the end of the dry season when waterholes have begun drying up
Crows	Numbers going up	Anecdotal evidence.
Kookaburra	Numbers may be going down	Anecdotal evidence by KTB and farmers (NT). Isolated instances in areas when large numbers of toads hit a new area. Some evidence that they learn to flip the toad over.
Rainbow Bee Eater	Numbers going down	Anecdotal evidence by KTB and many farmers. Indirect impact. Toads occupying nesting burrows and metamorphs eating native Bee.

Magpie Geese	Numbers do not appear to be going down	Anecdotal evidence by KTB and many farmers. Probably accidental intake of toad tadpoles.
Pelican	Numbers going down	Anecdotal evidence of parent pelicans around Lake Argyle feeding their young cane toad tadpoles, which causes the young to die. Some Pelicans observed to die after feeding along the waters edges.
Wedge Tailed Eagle	Numbers appear to be going up	Anecdotal evidence of increased numbers in toad infested areas after initial invasion of cane toads. Indication of increased dead animals for food. Needs to be monitored.
Insects		
Lavender (Stink) Beetle	Numbers possibly going down	Anecdotal evidence by KTB. Dissected from cane toad stomach contents. Toads also appear to die if ingesting large numbers of the beetle.

Lady Bird Beetle	Numbers possibly going down	Anecdotal evidence by KTB. Toads witnessed eating the beetle and found in stomach contents.
Dung beetle	Numbers going down	Anecdotal evidence by KTB and many farmers. Dung in major toad infected areas dry and compact on the surface with no evidence of dung beetle activity.
Native Bee	Numbers appear to be going down	Anecdotal evidence by KTB and Indigenous people. Major source of food for cane toad metamorph. Less honey bag activity.
Bombardier beetle	Numbers going down	Anecdotal evidence by KTB. Found in large numbers in stomach contents of toads. Evidence that the toad is also impacted when eating large amounts similar to the impact of Lavender beetles. General insect activity Numbers going down Anecdotal evidence by KTB. Insect activity in cane toad infected areas compared to areas not yet invaded by cane toads.

Centipede	Numbers appear to be going down	Anecdotal evidence by KTB. Stomach contents of toads and observation of toads eating centipedes.
Scorpion	More research needed but number appear to be going down	Anecdotal evidence by KTB. Stomach contents of toads and observation of toads eating Scorpions.
Reptiles and Amphibians		
Frilled necked Lizard	Numbers going down	Anecdotal evidence by KTB, local people and farmers in NT and WA
Gilbert's dragon	Numbers going up	Anecdotal evidence by KTB and local people ("What's in your Backyard?" project) showing the first go down after cane toads hit an area. Than go up due lack of predator
Freshwater crocodile	Numbers going down	Toad parts in stomach and anecdotal evidence
Merten's water monitor	Numbers going down	Anecdotal evidence by KTB

Yellow spotted monitor	Numbers going down	Anecdotal evidence by KTB
Tree monitor	Numbers going up	Anecdotal evidence by KTB (Keep River, Marella gorge)
Freshwater Turtle	Numbers going down	Anecdotal evidence by KTB and Aboriginal communities. In small Billabongs in the NT hundreds of dead turtles were recorded after the big wave of cane toads invaded the area and started breeding.
Giant burrowing frog	Number going down	Anecdotal evidence by KTB and Aboriginal communities. Indirect impact. Food competition
Saltwater crocodile	Numbers going up	Anecdotal evidence by KTB and Crocodile farmers. Indirect impact. Increase in egg numbers in the wild after major predators of the eggs have been knocked out by cane toads.
Blind snake	Numbers possibly going down	Anecdotal evidence by KTB. Dissected remains in toad stomach contents.

King Brown	Numbers going down	Dissected, toad parts in stomach and anecdotal evidence
Children's Python	Numbers appear to be going up	Small reptile research done by KTB and anecdotal evidence
Black Headed Python	Numbers appear to be going up	Anecdotal evidence by KTB and many farmers who have observed the change (NT)
Olive Python	Numbers going down	Dissected, toad parts in stomach and anecdotal evidence
Whip snake	Numbers appear to be going up	Anecdotal evidence by KTB and many farmers who have observed the change (NT)
Western Brown	Numbers appear to be going up	Anecdotal evidence by KTB and many farmers
Keelback snake	Numbers going up	Anecdotal evidence by KTB and many farmers. KTB recorded a major increase

Indirect impact

Cane toads are in big numbers and one toad can eat 200 food items per night, this is far more than most native frog species. Cane toads are opportunistic feeders, and will try to eat anything that fits in their mouth and sometimes bigger

This can cause food competition, especially in the dry season with other invertebrate eating animals like small Marsupials, birds, frogs and lizards

Another indirect impact can be that the top predator is taken out of the system by the cane toad and may lead to a positive effect of some species?