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### **Cane toad sightings in Hunter Region**

Two cane toads were sighted in the New South Hunter Region town of Metford, 7km southeast of Maitland in the week of 21 January 2019. As a voracious predator of insects including honey bees, it is important that we keep a lookout for this major pest, which is active at night during the warm months of the year, to gauge the extent of its spread and potentially halt its progress through early detection and eradication. Areas in NSW already infested with cane toads are Tweed, Byron, Lismore and Ballina Local Government Areas and eastern parts of Richmond Valley, Kyogle and Clarence Valley Local Government Areas.

If you spot an animal you think may be a cane toad, carefully contain it (but don't harm it) and take photos. The two cane toads found in Metford in January 2019 were positively identified by local veterinarians. Report the sighting to the NSW Department of Primary Industries here:

[www.dpi.nsw.gov.au/biosecurity/forms/report-an-unusual-animal-sighting](http://www.dpi.nsw.gov.au/biosecurity/forms/report-an-unusual-animal-sighting)

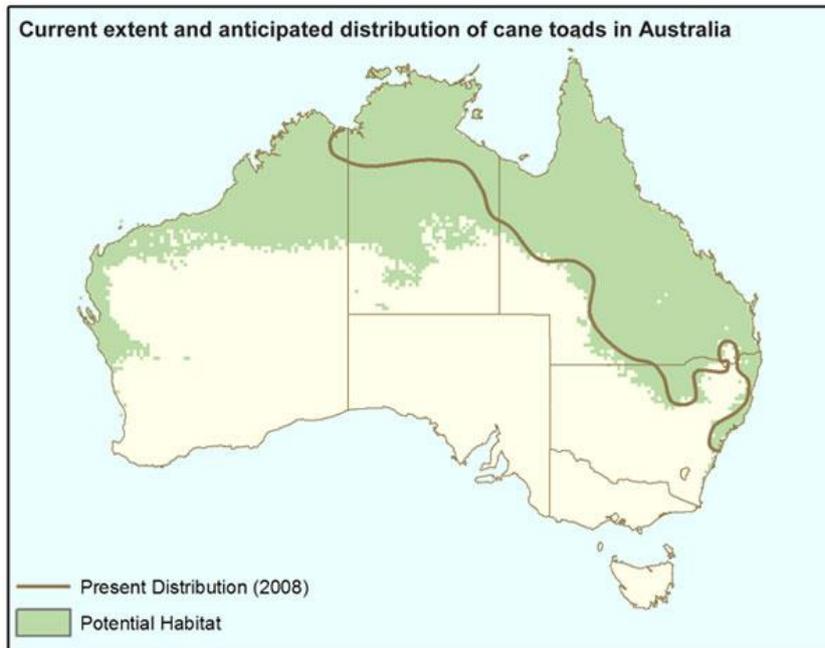


Cane toad found in Metford NSW January 2019. Photo Credit: Maitland Mercury

The cane toad was deliberately introduced to Australia in 1935 from Hawaii. The goal was for the toad to act as a biological control of French's and Greyback cane beetles plaguing sugar cane crops in Queensland. The consequences of the non-native toad's release didn't bring cane beetle numbers down as it had in Hawaii, however, for the following reasons:

- Sugar cane can reach 6 to 8 meters in height and Greyback beetles usually feed in the top of the sugar cane stalks. Toads can't fly or jump that high.
- Timing – the Greyback beetle tends to be out during the daytime and Cane toads feed at night.

- Not seasonally compatible, so are not in the same place at the same time of year.
- The Australian sugar cane fields are much dryer than those of the Cane toads' native habitat (South and Central America) and Hawaii. The toads need wet conditions to survive, so quickly moved from the sugar cane fields to moister areas.



Cane toad distribution as of 2008. Figure Credit: Kearney, M, Phillips, BL, Tracy, CR, Christian, KA, Betts, G & Porter, WP 2008, 'Modelling species distributions without using species distributions: the cane toad in Australia under current and future climates', *Ecography*, vol. 31, pp. 423–434.

Since its introduction in 1935 cane toads have expanded across northern Australia, crossing through the Northern Territory to Western Australia and down through Queensland into areas of New South Wales. According to the Australian Government, the cane toad has expanded westward from its original introduction point in Queensland at an estimated rate of 40 to 60 km per year. Beekeepers in these areas live with cane toad by either putting hives on stands (around 60cm high) or accepting losses from cane toads eating bees overnight from any hive entrance within reach.



Cane toads at a hive entrance at night. Photo credit: Renee Silvester, January 2016.

"Behavioural tactics used by invasive cane toads (*Rhinella marina*) to exploit apiaries in Australia" is an excellent study on this topic, conducted by Renee Silvester, Matthew Greenlees, Richards Shine

and Benjamin Oldroyd of University of Sydney and published in *Austral Ecology* in 2018. To quote their discussion section, the researchers found “In this study, apiaries reduced the rate of movement of toads, with toads remaining close to this point source of food at night and over a period of weeks. [...]Commercial beehives not only attract cane toads, but also induce sedentary behaviour.” An even better argument for hive stands or better yet keeping cane toad out of your area and ensuring you’re not spreading it! For more, read Silvester’s full article here:

[onlinelibrary.wiley.com/doi/pdf/10.1111/aec.12668](https://onlinelibrary.wiley.com/doi/pdf/10.1111/aec.12668)

**Additional online reading:**

NSW DPI cane toad facts and resources:

[www.dpi.nsw.gov.au/animals-and-livestock/nia/new-incursions/cane-toad](http://www.dpi.nsw.gov.au/animals-and-livestock/nia/new-incursions/cane-toad)

Biological Control Gone Bad! Story of the Cane Toad:

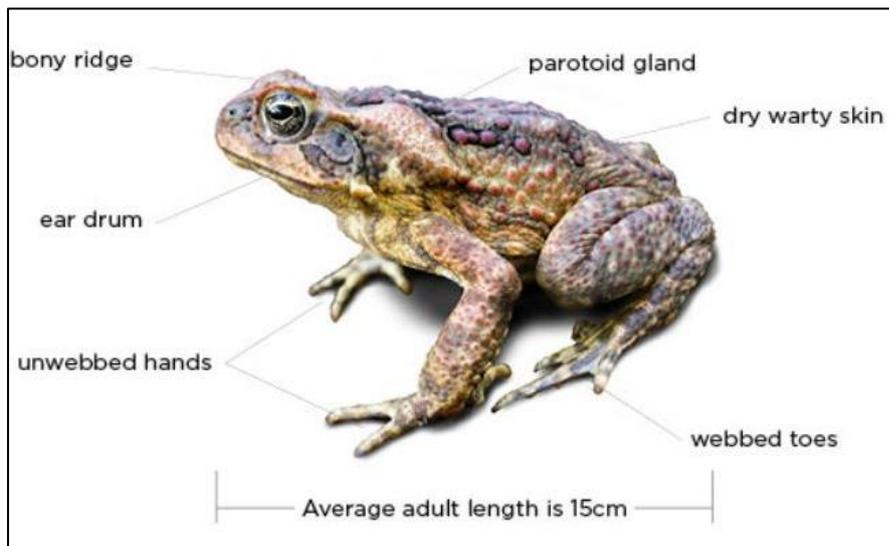
[gen.uga.edu/documents/pest/Biological%20Control%20Gone%20Bad.pdf](http://gen.uga.edu/documents/pest/Biological%20Control%20Gone%20Bad.pdf)

Maitland Mercury 22/01/19 article:

[www.maitlandmercury.com.au/story/5864148/cane-toad-kills-metford-familys-pet/](http://www.maitlandmercury.com.au/story/5864148/cane-toad-kills-metford-familys-pet/)

Remember, if you see this toad outside its established area, catch it and report it here:

[www.dpi.nsw.gov.au/biosecurity/forms/report-an-unusual-animal-sighting](http://www.dpi.nsw.gov.au/biosecurity/forms/report-an-unusual-animal-sighting)



Cane toad identifying features. Source: Office of Environment and Heritage