

Training wild goannas not to eat cane toads

Written by Kandy Curran



Yellow-spotted floodplain monitor (*Varanus panoptes*) are imperiled with the invasive cane toad expansion in Western Australia *Roebuck Bay Working Group Inc.*

Within minutes of starting her fascinating science presentation in Broome, Ecologist Georgia Ward-Fear transported her audience to a remote floodplain of the Forrest River in the East Kimberley.

Using films, photos and a lively presentation style, Georgia had the audience alongside, waiting in the long grass for a Yellow-spotted floodplain monitor (*Varanus panoptes*) to appear, so the Balangarra Rangers she works with, could dash out and capture the reptile - known locally as 'Gundulla', then feed it a 'teacher toad'.

With the West Kimberley one of the last 'mega diverse' places in tropical Australia to be invaded by cane toads, the audience of more than 70, were keen to hear what researchers are doing to reduce the cane toad's devastating impacts on the wildlife in the region.

What is particularly alarming about these Amazonian toads (*Bufo marinus*), is their rate of adaptation to the Australian environment, including recent physiological changes that have enabled faster travel across northern Australia, and a high fecundity. Did you know that females can lay up to 60,000 eggs per year?

The aim of Georgia's research is to aid the survival of goannas as the cane toads move with alarming speed westward into the Kimberley. Trialling a new technique called 'conditioned taste aversion therapy', the goannas are exposed to small doses of toad toxin (young teacher toads of a certain size) just before the real cane toad invasion reaches an area. These small toads will make the goannas sick, but won't kill them. The good news is that the training is working, with the goannas remembering their bad experience and avoiding the large toads that could kill them.

When asked why she had singled out wild goannas for taste aversion training, Georgia indicated the importance of these goannas as apex predators in keeping local ecosystems stable, have sensory tongues and are intelligent which helps with their training. Moreover, the wild goannas are culturally important.

"Time is running out for our wildlife, so the question should not be 'what is the cost of trying?' rather, 'what is the cost of doing nothing?' ", Georgia Ward-Fear said.

The presentation, *Taste aversion research on the cane toad frontline*, was delivered as part of the Roebuck Bay Working Groups' popular **Science on the Broome Coast series**, on July 20 at the University of Notre Dame.

This innovative Science on the Broome Coast series is hosted by the Roebuck Bay Working Group and Yawuru Land and Sea Unit and sponsored by Inspiring Australia, The University of Notre Dame, Western Australian Marine Science Institution, Rangelands NRM through the Federal Government Landcare Program and the Department of Parks and Wildlife.

The next presentation in the series is coming up on September 21 'How are estuarine crocodiles doing' - See the [2016 Science on Broome Coast](#) program for more details.