



# WA cane toad update



Department of Environment and Conservation



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## Wet season pushes cane toads further west

The wet season in the Kimberley has pushed cane toads further west but a below average amount of rainfall in the region during that time helped slow their advance.

Mapping undertaken by the Department of Environment and Conservation (DEC) between December 2009 and April 2010 showed that cane toads were found up to 35 kilometres west of the WA-NT border.

DEC State Cane Toad Initiative program coordinator Corrin Everitt said the DEC team and community groups had closely monitored the movement of the invasive species following the first wet season since cane toads crossed the WA-NT border last year.

"Cane toads will continue to travel greater distances until the temperature cools and until such time we are still expecting to find toads, particularly in and around the Ord Valley," she said.

"Breeding populations are still concentrated around the WA-NT border but 'explorer' toads can move several kilometres in one night during wet conditions."

Ms Everitt said cane toads thrived in wet season conditions and the lack of access to wet areas made it difficult for DEC's

cane toad team and volunteer groups to undertake effective management operations throughout that period.

"The northern monsoonal climate has a significant impact on the rate of advance of toads as it provides ideal conditions for high rates of movement and dispersal into new areas," she said.

"As the region dries out further, our surveillance work will take us into previously inaccessible areas where we will get a better idea of the distance cane toads travelled during the wet as well as their abundance in these areas."

Looking ahead, Ms Everitt said the DEC cane toad team would continue to implement measures outlined in the *State Cane Toad Strategy for Western Australia*.

"These include carrying out further biodiversity surveys in the east Kimberley to monitor the potential impact of cane toads on native wildlife and using Nifty the detector dog to inspect freight entering WA," she said.

"We will also be continuing with cane toad surveillance activities, scientific research and assisting Sydney University's PhD student Ruchira Somaweera with his three-year study of the potential impact of cane toads on freshwater crocodiles in Lake Argyle."

## Cane toads on the nose for sniffer dog

Nifty, Australia's first cane toad detector dog, is back on home turf and armed with new techniques to sniff out cane toads, after undergoing further training and experience in quarantine work off the Queensland coast.

The five-year-old Belgian Malinois spent three months at Moreton Island working with Moreton Island Protection Committee president Gary Jackson. Mr Jackson is an experienced dog trainer and the owner of Multi-National K9 where Nifty was initially trained.

DEC officer Tracey Robins said the training was essential to continue to develop Nifty's skills as a cane toad detector dog in the Kimberley.

"This experience has provided Nifty with an opportunity to refine her skills in detecting cane toads as well as developing new techniques for checking freight and transported items," Ms Robins said.

"Since returning from Moreton Island Nifty is continuing to bond well with the cane toad team, and while there is still a lot for her to learn, Nifty is making great progress."



Nifty out in the field during cane toad activities.

# Snakes tracked to monitor impact of cane toads

Radio transmitters have been fitted to 25 snakes in the east Kimberley to monitor the potential impact of cane toads on native species.

To date, the devices have been surgically implanted inside 10 olive pythons, 10 water pythons, four black-headed pythons and one king brown snake.

DEC principal research scientist Dr David Pearson said the aim of the research was to see if the results from laboratory trials, that had demonstrated the susceptibility of various reptile species to cane toads, were replicated in the wild.

“We know that cane toads have a significant impact on predatory species, including large snakes, however we don’t know how wild snakes will react when they encounter their first toad,” Dr Pearson said.

“Using radio transmitters, we can closely follow individual snakes during the arrival of toads to see if they will ignore the toads or if they will be tempted to try one.

“Cane toads are toxic to most native predators so if they attempt to eat a large toad, death is likely.”

The research was part of a wider program that identified species at risk of population declines due to toads.

“In conjunction with a research group from the University of Sydney which is led by Professor Rick Shine and Dr Jonathon Webb, we have examined a range of potentially affected species including mammals, lizards, snakes and even threatened land snails which toads may eat,” Dr Pearson said.

Several snakes were currently being tracked near Lake Argyle.

“These snakes will provide data on their survival now toads have invaded these areas, as well as giving us useful insights into the ecology of these little-studied tropical predators,” he said.



One of the olive pythons being tracked by DEC officers.

“Toads arrived in our Lake Argyle study area several weeks ago and we are locating the snakes regularly. So far, none of the snakes has been lost to toads, but the temptation to try a toad will no doubt increase as toad numbers grow.”

Dr Pearson, together with DEC technical officer Bill Stewart and the University of Sydney researchers, was also planning to attach radio transmitters to blue tongue lizards and two species of goannas in an experiment to ‘teach’ predators to avoid toads.

“Using a bait of toad pieces with a nausea-inducing chemical, it is hoped that the first experience of a native predator with something tasting like a toad will be unpleasant but not lethal,” he said.

“This could then teach them not to attack toads, providing us with the possibility of training at least some native species to survive the toad invasion.”

## National Threat Abatement Plan

Public comment is being sought on a draft *Threat abatement plan (TAP) for the biological effects, including lethal toxic ingestion, caused by cane toads*. The document was released by Federal Environment Protection Minister Peter Garrett in March and the consultation period ends on Wednesday 16 June 2010.

The draft plan aims to reduce the impact of cane toads on populations of priority native species and ecological communities, and communicate information about cane toads and their impacts on the Australian environment.

To view the draft plan visit [www.environment.gov.au/canetoads](http://www.environment.gov.au/canetoads).

## Forum puts the spotlight on cane toads

DEC’s State Cane Toad Initiative program coordinator Corrin Everitt was among 40 speakers presenting at the ‘Caring for the Kimberley Environmental Forum’ which was held in March.

The three-day event was hosted by the Kimberley Toad Busters. It included a variety of speakers from research scientists, community experts and government agency staff.

An estimated 400 participants discussed a range of topics such as cane toad control, fire management and other environmental issues in the Kimberley.

## Report a cane toad sighting

Everyone needs to be on the lookout for cane toads. Information you provide will help DEC document and manage the invasive species in WA.

If you see a cane toad, call 1800 084 881 or note the location and fill in an online form by visiting [www.dec.wa.gov.au/canetoads](http://www.dec.wa.gov.au/canetoads).



# Exciting fauna discoveries during east Kimberley biodiversity surveys

DEC has recommenced its biodiversity surveys in the east Kimberley to map the various species found in the area and to determine species at risk from cane toads.

Kimberley regional manager Daryl Moncrieff said the surveys had already uncovered some exciting finds.

“One of the highlights of the surveys this year has been the discovery of a ningbing antechinus, a small carnivorous marsupial, that was found outside its known distribution area,” he said.

“The fact that it was captured in the Pincombe Range was very exciting as these animals are usually extremely difficult to find.

“This information has been provided to the WA Museum to assist them with their research on the species and it will also be used to guide our future management of the marsupial in the region.”

He said the DEC team had also caught a number of planigales, which were native mammals similar in size to a small mouse.

“This was also a terrific discovery for us because locating so many planigales in one survey is very rare. This information has also been entered into our management database,” Mr Moncrieff said.

Another significant discovery was the sighting of a Children’s python that was captured in a funnel trap on the Pincombe Range.

“We noted its measurements and location before releasing it.

These details help us understand the number of different species that reside in the region that may become vulnerable to cane toads,” Mr Moncrieff said.

The surveys began in 2009 to improve knowledge of the biodiversity values of the east Kimberley, primarily in relation to vertebrate fauna and to help determine the impact of cane toads on native fauna in the region.

There were also several other noteworthy discoveries made during last year’s surveys. DEC officers located a chameleon dragon on Mt Zimmerman and then fitted it with a radio transmitter to track its movements and learn more about its use of the landscape. This was only the third known specimen of this species that had been located in the region.

“This was another excellent discovery as it’s often very difficult to locate these creatures in the wild,” Mr Moncrieff said.

Genetic samples taken from short-eared rock wallabies last year also continued to be analysed.

“These samples are being examined by Sally Potter from the University of Adelaide and preliminary results indicate high levels of differentiation between populations suggesting long periods of isolation from each other,” he said.

The surveys are being carried out on seven sites within Miriuwung Gajerrong reserves and four sites within Lake Argyle reserves, and have helped DEC prepare the first fauna lists for the reserves.



Ranger Douglas Gerrard, Miriuwung Gajerrong Ranger Andy Reid and Survey Leader Lauren Brown in the Pinecombe Range.

For more information contact the DEC cane toad team on 9168 4200 or email [corrin.everitt@dec.wa.gov.au](mailto:corrin.everitt@dec.wa.gov.au).