TOAD BUSTER Nth

NEWS

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A project of FrogWatch (Nth)
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Yes We Can Stop the impact of Toads- and we must!!

EDITORIAL

As the cane toad invasion continues to advance across the NT and moves towards WA the manual control options have shown that whilst it is possible to remove cane toads from an area re invasion is going to happen unless the toads are removed from the entire region.

Fencing has the potential to play a major role in manual control, both in terms of dramatically increasing the effectiveness of the initial removal of toads, (trials show fences can halve the time required and reduce the people hours needed to clear a location of toads by about seven times)

Fences have significant potential to also reduce the rate of reinvasion of toads into an area. Whether this will enable us to develop cane toad management strategies that really work remains to be seen but it looks more promising than any other strategy.

Ross Alford, the scientist who has done more work on cane toads than anyone else in Australia has published a report indicating

> "*, far from the situation often suggested in the popular media that "nothing kills cane toads," they actually experience extremely high mortality rates, which only need to be increased slightly to halt their spread or even reduce their populations*.

His analysis indicates that control is more feasible than previously thought if we can increase the mortality, as survival rates are already very low.

A combination of traps, hand collection and fencing may just give us the edge we need. Remember scientists are indicating that we only need to reduce toad numbers a little more to push their numbers backwards.

NEW RESEARCH FOCUS?

A new approach to the control of cane toads needs to be investigated urgently as none of the research to date appears to hold any significant prospects for success.

Genetic studies are revealing the reasons why some animals are able to eat cane toads and survive the toxins. (see article on snakes on page 3)

The mechanisms for this protection appear to be related to a particular cellular structure and some scientists believe that genetic engineering may be able to introduce this gene into native species, enabling them to eat cane toads.

As an example a goanna species in the Philippines is able to eat bufonid species. This process needs to be evaluated, as it may be a solution to protect predators and also remove cane toads. Goannas and quolls, immune to the toxin may well wipe out cane toads. The would definitely help to control toad numbers and after control work the population of toads would not recover with really efficient native predators working against them.

A big advantage of this strategy would also be the role of the native predators such as Panoptes would be back in the ecosystems.

Culturally indigenous people would again have goannas and other species of cultural significance and significant food value.

Whilst genetics can be controversial we are already able to use the techniques to move genes between closely related species. It would seem to be an area that is worthy of further investigation. A Panoptes with the ability to eat toads is not some mythical monster it is a goanna we used to see every day with a modified sodium pump structure in some cells.

It is too risky to introduce a super predator from somewhere else, as we

do not know what other impacts that may have. But to give one of our predators the ability to eat toads is a different story.

NEW WORKER

Many of you will know Erin Britton as she has been a volunteer with FrogWatch for some time and has worked on several of our research projects.

She will be assisting co-ordinators Graeme Sawyer and Ian Morris in organising the work of FrogWatch and the volunteers who make up the effort against toads.

For further details contact Graeme on 0411881378 or email info@frogwatch.org.au.

SNAKES AND TOADS

Some species of snakes such as Keelbacks (see picture below) and Slaty greys are able to eat cane toads. The snakes evolved in the countries to the north of Australia.

This is further support for the need to research the possibilities of introducing this genetic adaptation into some of our native predators.

WHAT THE!!!

This picture shows a toad eating a keelback snake, something we had suspected for some time but had confirmed on a recent trip to the Ringwood Research area. It was quite a surprise to say the least.

Sine the picture was published in the NT News we have heard of some other instances of people seeing this.

This highlights the big danger of lots of toads in an area; anything small enough to fit in their mouth would appear to be at risk. This impact of toads is obviously very large because of the sheer numbers of toads but has not been researched to our knowledge.

FROG SURVEYS

FrogWatch has been doing some surveys of native frogs in wetlands across the rural area and are interested in finding people who can help us to collect data regularly.

Contact Graeme (0411881378) or Erin 0438043938 if you are interested. The process is fairly easy but needs to be repeated at regular intervals. It involves recording calls and looking at frogs as well. We can provide all the training and equipment.

DARWIN FORUM

Frogwatch participated in the recent Cane Toad forum (June 13th) focusing on research into control methods held in Darwin as part of the 14th Australasian Vertebrate Pest Conference.

Aside from Frogwatch a large number of people were present including university-based researchers, CSIRO personnel, staff from various environmental protection agencies and representatives from community organisations.

A number of presentations were made, summarising the latest results and current research efforts looking at control methods for the invasive cane toad problem. Frogwatch presented a paper outlining the progress of manual control methods being trialled at Ringwood Station.

The forum also involved a facilitated discussion into the current and future prospects for cane toad control and what aspects future research should focus on. Their appeared to be universal agreement that as funding for these activities is not infinite, a combined national strategy needs to be decided upon and implemented if we are to make any headway into stopping the spread and impact of this invasive species.

We will keep you posted on progress and any reports that emerge from the forum. Sadly nothing to date has emerged.

UPCOMING TOADBUSTS

It's toadBusting time, and FrogWatch is planning a series of Busts over the next few months, our aim is to have Zero Toads in the Darwin and Palmerston areas by the time the rains return. This is the central element of our cane toad control strategies and the work done in the next few weeks is critical to stopping toads overrunning Darwin.

Date	Meeting Point	Coverage
Wednesday 17th September	Meet at carpark to Yankee pools, next to the Airport Resort Hotel on Sir Norman Brearley Dve at 7.15 pm	Rapid Creek Corridor, Marrara golf course, airport area.
Friday 19th September	Sanctuary Lakes, Lakeview Dve Palmerston. 7.15 pm	Sanctuary lakes, Gunn and Farrar and nearby Drains
Sunday 21st September 7.30pm	Lee Point carpark Lee Point Road 7.15 pm	Lee Point area
Wednesday 24th September	Casuarina Coastal Reserve Meet at the PowerWater pumping station on Rocklands Drive 7.15 pm	Coastal Reserve and Hospital areas
Friday 26th September	Garden's Golf Links car park Gardens Road Darwin 7.15 pm	Botanic Gardens, Garden's Golf Course. Mindil, Vestey's Beach area and East point.
Wed 1st October	Meet near Anglicare, Nemarluk Drive 7.15 pm	Ludmilla Creek area Richardson Park and East Point.

Friday 3rd October	Meet at area near Patterson Street/ Vanderlin Drive Intersection 7.15 pm	Leanyer / Lee Point and Malak regions
Wednesday 8th October	Hidden Valley Speedway just near the main entrance gate	Hidden Valley and Berrimah areas.
Friday 10th October	Meet at gate into Holmes Jungle, 7.15 pm	Holmes Jungle Nature Park.
Wednesday 15th October	Casuarina Coastal Reserve Meet at the PowerWater pumping station on Rocklands Drive 7.15 pm	Coastal Reserve and Hospital areas.
Friday 17th October	Meet in Car Park at Marlow's Lagoon at 7.15 pm 7.15 pm	Marlow's Lagoon / Palmerston Golf Course
Wednesday 22nd October	Meet at gate at end of Muir Road Pinelands 7.15 pm	PineLands
Friday 24th October	Garden's Golf Links car park Gardens Road Darwin 7.15 pm	Botanic Gardens, Garden's Golf Course. Mindil, Vestey's Beach area and East point.
Wednesday 29th October	Meet at Power Water pumping station on Rocklands Drive 7.15 pm	Casuarina Coastal reserve Hospital
Friday 31st October	Meet at area near Patterson Street/ Vanderlin Drive Intersection 7.15 pm	Leanyer / Lee Point and Malak regions

SPONSOR A CANE TOAD TRAP

FrogWatch is continuing its appeal to the community and businesses to help fund part of our strategy to stop cane toads overrunning Darwin. We are seeking people and businesses to sponsor cane toad traps and sections of deflection fences to shut off the major corridors cane toads are using to move into areas across the Greater Darwin region. Call 1800243564 or 0411881378 for more details, or email info@frogwatch.org.au.

Darwin is not being overrun by cane toads, as many predicted - with only small numbers of cane toads managing to get through into the Darwin area so far.

Unfortunately even a small number is enough to cause significant damage to our wildlife and ecosystems, especially to animals like quolls and goannas and, in time, green tree frogs and other native animals through displacement. Darwin is the only capital city that has animals like goannas. Our wildlife is a part of our lifestyle and a big part of the spirit of the Territory. We do not want to see cane toads destroy it.

We are confident we can reduce the numbers of cane toads even further by using deflection fences and traps. Our trials, see picture below, have shown that fences and traps combined can block toad movement and increase the effectiveness of the traps.

Picture – Sponsored trap on the Deflection fence at Hidden Valley.

Our plan is to get a series of deflection barriers and traplines set up to protect Darwin's wildlife and lifestyle. To do it we need support in terms of funds and help to install and manage the traplines.

In return, you get your details on the FrogWatch website as a sponsor on the section of the site that shows the numbers of cane toads caught in your trap.

This project is a great way for your business or social club to make a real contribution to keeping Darwin a Zero Toad Zone.

I recognition of your Sponsorship we provide you with a certificate and we will acknowledge you through our website (about 30 000 visits per month) and our newsletter (1200 people). We will also provide a website where the ongoing capture data for your sponsored trap will show and the capture data will be updated regularly. You will be able to link this to your own website if you wish to. As the traps are checked, capture data will be recorded on the website and the tally showing your impact will be there for all to see.

FrogWatch Nth is a not for profit organization focused on raising environmental awareness, especially about issues relating to frogs. FrogWatch has been active in the Northern Territory and the Kimberley region of WA for over 10 years and has developed a very strong public profile across a wide spectrum of the community.

A secure SuperTrap, complete solar system, lights, a controller, batteries, water systems and anchor stake cost 650.00 each You can sponsor a complete trap or join with others to co-sponsor a trap. Sponsorship is $600.00 per trap.