

TOAD NEWS



Eleventh Edition
December 2007

A project of



frogwatch.org.au

PO Box 4508 DARWIN NT 0801

1800 243 564

With support from  Northern Territory Government

105.7 ABC
Darwin

NTAP

DARWIN

NTITV



**EDITORIAL – Vale Paul
Cowdy**



NEW RESEARCH



MYTHBUSTER



DEFLECTION FENCES



TRAP NEWS!

**Yes We
Can Stop
the
impact of
Toads-
and we
must!!**

EDITORIAL

A sad note to start this newsletter as we have lost one of our hardest workers.

Paul Cowdy, the man many of you spoke to on the end of the 1800 hotline and whom you would have met at many of our displays and toadbusts, died at the young age of 60. He was also the person who co-ordinated the newsletter production.

Paul's sudden passing caught us all by surprise, but he will continue to help with the fight as our memories of him will inspire us to keep up the effort.

Paul was a great Territorian and he joined the cane toad fight because he loved the territory so much and could not bear the thought of cane toads tearing it apart. He had the commitment to transform his thoughts into action



Pic – Paul Cowdy in action at a toadBust

NEW RESEARCH

On a more positive note, new research is showing cane toads are much more homebodies, in savannah woodlands, than previously thought and this means that control efforts will be more effective.

FrogWatch has been working on some research in 2006, funded by the Federal Envirofund, at the Ringwood research site and we have just started the preliminary analysis of all the data.

Some of the research has involved giving toads an individual number, by toe clipping, and then seeing where they turn up again during the year.

The research supports the notion that cane toads move to remnant water bodies as the dry proceeds and do not hide away until the next rains. This confirms that the strategy of attacking toads in the Dry season will work .

The research has also shown that toads are much more based at a location than just constantly moving to new areas.

In the first toe clipping exercise at the main research site we toe clipped and released 192 cane toads on Jan 30th 2007.

During the course of the year 79% of these toads were recaptured at the same location and 60% of them were caught in cane toad traps at the site.

Eight toads, toe clipped in the first session in January were caught in traps in December - 5 of them had not been seen at the site until this capture.

These results seem to indicate cane toad control will work better than many people have predicted.

A full report should be ready by our next newsletter.

MYTHBUSTER

There has been a lot of inaccurate press lately about ideas relating to cane toad control and much of it has caused doubt in people's minds about what to do or whether to even try! This newsletter section is an attempt to clarify reality from myth!

You can't control toads so do not try!

This defeatist nonsense is demonstrably wrong. There have been several projects now where cane toads have been completely removed from areas and the experience in and around Darwin has shown that toads can be minimised in urban areas - giving native wildlife some much needed breathing space. Keep on getting rid of every toad you can!! The goannas and other wildlife around Darwin are depending on you!

Adult cane toads eat baby cane toads so you should not remove adults!

FrogWatch has autopsied hundreds of cane toads and I have also been involved in the Autopsies of hundreds of toads during the great Toad Musters in 2006 and 2007 and we have not found any baby cane toads in the stomachs of adults.

We have found a number of native frogs, including 19 *Litoria inermis* in the stomach of 1 large female toad at the recent Toad Muster. In all the time I have spent working on toads I have seen evidence of an adult toad in the wild eating another cane toad on only one occasion.

Again keep on toadBusting!

Related to this last one is the claim that busting toads only increases the chance of more young toads.

Again we have seen no evidence of this and in fact our research transect counts do not support this.

Comparing results from different transects, but in similar habitat types, shows that the impact of toad control activity using cane toad traps does not lead to greater numbers of young cane toads.

Transect Location	Percent Sub 89mm Toads
Dam1 (Continuous trapping)	13.5
Dam2 No cane toad control	17.4
Dam3 No Cane toad control	30.3

In natural billabong habitat sites near a creek system the following 2 sites show the following results.

Transect Location	Percent Sub 89mm Toads
Bridge Creek Site1 (Continuous trapping Dry Season)	42.9
Bridge Creek Site2 (No Control)	45.5

ToadBusting will not stop toads because female toads do not congregate on water

Source Rick Shine Cane Toad Talk Perth 2007-10-24

The only reason I can think of for this myth is that the "study" was done during the wet season when cane toad females stay well away from the main water bodies. Later in the dry season the females move to water.

During the great Toad Musters in 2006 and 2007 there were many female toads captured. In 2006 over 48,000 toads were killed. These were made up of Males 21.1% females

33.8% and subAdults 44.9%. In 2007 42.5% of the 12000 toads captured were female.

Wasting our time?

Some helpful souls, including some scientists, appear to be suggesting that it is not worth the effort of trying to stop cane toads. We strongly disagree and believe the Darwin experience to date is a very strong case as to why we should do everything feasible to remove cane toads from our environment.

Large goannas like *Varanus panoptes* have vanished in the bush in the face of the cane toad onslaught, yet in Darwin they are still a regular sight in places like the golf courses and along the foreshore. The reason these animals are surviving is because people have stopped large numbers of toads getting to these areas and there has been no successful cane toad breeding in these areas.

That alone makes it worth doing but there are a host of other reasons as well. Frill necked lizards have been killed in high numbers in places where cane toads breed. Again we have good numbers in and around Darwin. All of our schools and parklands have these wonderful reptiles in them and they are a great part of the essence of Darwin. As I do talks in schools, all of our school students are very proud of their local frill necks. Again we can stop the impact of cane toads by keeping on with the efforts to stop toads. "Remember Don't Tolerate Toads".

Our native frogs are doing well in Darwin and in part this is due to the fact that they do not have to compete with cane toads for food or for breeding space. Again if we let toads have free reign in Darwin our native frog numbers will decline.

Scientists are reaching the conclusion that toad control is much more feasible than previously thought. Professor

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 may be more feasible than previously thought if we can increase the mortality slightly, as survival rates are already very low. Our work near Darwin is showing that it certainly is feasible. So keep up the good work.

DEFLECTION FENCES

Deflection fences are designed to enhance existing fence-lines by making them toad proof and then using traps and hand collection to catch toads along the barrier line.

We have started the erection of the deflection fences at Lee Point and Hidden Valley as a part of our "Zero Toads" project for Darwin. We want to push a bit further and see if we can actually get rid of toads and stop them, not just minimise their numbers

We are identifying other places to erect barriers as well as these two and will be seeking more donations to allow us to set up traps along these barriers.

The picture below shows a work team from correctional services helping with the erection of the first fence. Their support has been of great value to us.



PROGRESS TO DATE.

At the time of writing, we have had a fair bit of rain over the last 10 weeks in Darwin and frogs are well into breeding. There has been an upsurge in the numbers of toads reported and captured around the town. This appears to be largely due to toads starting to move around more and so they are being seen more. Numbers appear to be lower than a year ago in many places.

Recent toadBust results have been very encouraging.

Location	Nov 2007
The Chase	23
Marlow's Lagoon	4
Palmerston Golf Course	3
Rapid Creek Corridor	2
Ludmilla	3
Leanyer Swamp	12
Lee Point	5
Botanic gardens	5

These are incredibly low numbers for areas that are into their third wet season with cane toads and show that the amazing efforts of Territorians are making it very tough for cane toads.

In addition to these organised toadBusts there are many people who regularly check their local areas and get rid of toads. Some integrate it into their evening walks, others take on

specific targets and work to make sure that toads get a hard time in that area.

You may have seen one of these people - Bob Goninon - in the NT news recently with the 230 toads he caught at Lee Point in a week. Bob is an inspiration to us all as he 'busts' a dam and the Lee Point area several times a week.

Due largely to Bob's efforts, toads have been unable to take over the area and the movement of cane toads through this area into the Suburbs and the Casuarina Coastal reserve has been greatly reduced.

We have removed about 2845 toads from the Lee Point - Leanyer region since December 2006 and Bob alone has accounted for well over half that number!

BROADER SCALE CONTROLS

During the recent 2007 Great Toad Muster at Timber Creek we trialed an exclusion barrier as a means of broad scale control of toads for the first time. The results were sensational!

The strategy exploits the toad's need for moisture and involves erecting temporary fences around water points to stop toads getting to water. By denying them access to water it causes the toads to be much more vulnerable and far easier to catch. Over the course of just a few days all the toads in the area need to go to water. As they try to get through the fence they are easy to find and catch.

During the trial the two waterholes available to cane toads in the Leichart area on Auvergne Station were fenced off with specially designed fencing that blocked cane toads, but allowed native wildlife access. The fence, constructed with shade cloth

and just 50 cm high, was erected in half a day.



Picture – Volunteer helping to erect the fence.

At night the cane toads were all lined up along the fence trying to access water and they were easy to catch. Traps placed along the fence worked well and picking up toads required far fewer people than would normally be the case.

The next morning, in daylight, there was still 140 toads trying to get to the water hole and they were easily captured as well.

The strategy was very significant as it gives us a way to get that “last toad” in an area, something we could never be sure about with traditional toadBusting.

The strategy also means that we can reduce the number of people involved in cleaning the toads out of a specific location by about 75%, which means we can cover far greater areas with the volunteers that we have. The strategy also makes clearing up an area much faster with the population of toads being “crashed” in just 7 nights, but with 92% of the population being removed in the first 2 nights.

Overall we can clean up areas much more quickly with far fewer people and resources than was previously the case and the impact of other tools like traps and manual collection are also amplified by the new strategy.

The more I work on the use of fences as a part of the fight against toads the more hopeful I get that we will be able to manage the impact of cane toads reasonably well in places like national parks - at least well enough to give our wildlife a chance.



Picture - Toads along the fence at night.

TRAP NEWS

A recent email from Batchelor is a good example of the role traps can play in cane toad control. The picture below is of the night's capture.

The text of the accompanying email was

“Hi Graeme

Thought you might like to see this photo of 80 toads caught in one night at Batchelor Sewerage Ponds last Thursday. Previously this year we had a total of about 50 toads all up at the site. Interestingly the council had mown the pond surrounds the previous day and this may have stirred them up!

Happy New Year

Ron “



TELL US YOUR TOAD STORY

If you've had a weird, informative, humorous or horrible experience with toads, email your story into toadreport@frogwatch.org.au and we'll include it in our next ToadBuster News. We're constantly on the look out for toad information – one of the odd aspects of toads in Australia is that 70 years after they were foolishly introduced, there is still a lot less information, expert or otherwise, about toads and their effects on the environment, than one would expect.

Your story will add to our pool of knowledge, whether you've been squirted in the eye, observed unique toad behaviour, got toads on the run in your area, or rescued a potential toad victim, tell us your story.

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.

In 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.