

# Kimberley Toad Buster's News Letters



The aim of this website is to document the Kimberley Toad Busters fight to stop the cane toad crossing into Western Australia and to provide the Western Australian Community some understanding of the enormous efforts (and contributions) that can be made by unpaid volunteers!



Prepared by Lee Scott-Virtue, President & Founder of KTB Kimberley Toad Busters.



## KIMBERLEY TOAD BUSTERS NEWSLETTER No. 35

September 2nd 2010



The Cane Toad is a *Key Threatening Process* to the Australian Nation

Declared by the Federal Government 12 April 2005

### KTB Newsletter

This 35th Kimberley Toad Busters' Newsletter is produced by Kimberley Specialists In Research Inc in conjunction with Kimberley Toad Busters Inc. Kimberley Specialists, a founding member of the Kimberley Toad Busters, continues to support the campaign against the cane toad by supporting [www.canetoads.com.au](http://www.canetoads.com.au), raising funds and supporting cane toad scientific research. KTBs are a tax deductible entity. Please see our website for our direct donation facility or how to sponsor one of our research projects.

**IF EVERYONE WAS A TOADBUSTER  
THE TOADS WOULD BE BUSTED!**

“The Kimberley community group KTB is highly engaged in biodiversity conservation and have provided an unprecedented response to the threat of cane toads. This has included more than 1 million volunteer hours from 5,000 volunteers to dispose of more than 500,000 adult cane toads and countless juveniles, over the last five years in the Northern Territory”. Ruth Duncan. KTB Environmental Scientist.

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## 1: KTB. Awards and Achievements in a nut shell for 2010.

**National Recognition:** KTB have been announced as **finalists in the 2010 Banksia Awards Land and Biodiversity- Preserving our Ecosystem.**

**International Recognition:** The KTB Environmental Cane Toad Forum and "what's in your backyard?" program have been **recognised on the International Year of Biodiversity Schedule of events calendar.** These are the first and only Australian events to be awarded by the United Nations for this status!

**International Recognition:** KTB announced as **winners of the United Nations 2010 Australasian Community involvement award**

Facilitated, organised and ran a major **three day Environmental Forum** that heard over fifty speakers talk on issues from cane toads to fire. DVD's of the papers presented now available.

**Sponsored and facilitated several research scientists** on projects looking for a biological solution to the cane toad problem as well as scientific projects associated with cane toad research.

**Produced a school cane toad educational package now available on DVD.** Several Kimberley Schools have now endorsed and are using this program.

Visited over **thirty Indigenous Communities and schools** across the Kimberley presenting the cane toad educational school package.

Produced **500 easy to identify full colour I.D.Cards on our Kimberley native biodiversity.** Now available on DVD, the KTB website and in hard copy on request.

**Launched the KTB community driven "What's in your Backyard?"** program empowering community to record and monitor native wildlife.

**Launched the KTB "Iconic Species" monitoring and recording program** enabling community members to monitor and record their favourite native animal.

Toad busted an average of **140 people per week, 26 days per month, 12 months of the year.**

Now busted in excess of **1,000,000 adult toads.**

Now busted countless **billions of eggs, tadpoles and metamorphs.**

## 2: Thank you STTF.

A note of thanks to the Perth based group Stop the Toad who organise for people to travel up to the Kimberley once a year for 3-4 weeks.

KTB welcomes the assistance of STTF in removing toads in areas of large toad numbers behind the front lines during the 3-4 weeks they organise their annual „muster“. This complements the Kimberley Toad Busters program of year round (on a daily basis) reconnaissance and removal of explorer toads from the front line movements. Having STTF (and other like minded groups visiting the Kimberley) undertaking these annual musters allows KTB to focus (for a brief period unfortunately) on the colonising frontline toads and to ensure that the breeding that has occurred from the most recent rains has been properly dealt with.

Removal of these explorer toads mitigates the toad impact on biodiversity. Due to KTB year round effort of removing explorer toads (and subsequent breeding) the Ord irrigation channels and the Ord River in and around the township of Kununurra has only seen very small numbers of toads over the past 12 months.

Critical in any over-all control of cane toads is the ability to impact on the breeding cycle. By being in the field 12 months of the year KTB are the only community volunteer organisation that can respond to breeding outbreaks when they happen. Unfortunately by the time visitor groups such as STTF have arrived to run their annual musters most of the female toads have already laid their eggs and metamorphs have left the breeding sites. Due to unexpected frequent rain during the dry season breeding has taken place several times literally doubling the time KTB volunteers had to spend in the field during the months of April to September. This also means that many of the areas denoted to be „significant“ (such as Lake Argyle and Point Springs) not only now have toads but have also been subjected to several cycles of breeding. Toad fencing unfortunately is no barrier where toads have already established themselves and breeding has taken place. The only strategy that works is to literally physically net eggs and tadpoles and spray early metamorph activity before they move away from the breeding sites. Short term fencing however is still useful in these areas to help pull out as many adult toads as possible.

### 3: Toad Busting Myths.

A recent discovery of a cane toad found swimming in the middle of Lake Argyle by local fisherman finally debunked the myth that cane toads cannot swim very far and the theory that Islands would be a safe haven for native biodiversity (Lake Argyle is up to 15 times larger than Sydney Harbour). This toad would have had to swim several kilometres to get to the point it was found, making even the most remote islands in Lake Argyle no longer safe from the toad. Other myths that KTBs have debunked over the past almost 6 years of toad busting and recording cane toad behaviour are:

that toads only move around 30 km per year (unchecked toads are in fact travelling up to 85 km and in one corridor travelling to WA toads covered almost 130km)

that toad breeding has between a 5% to 10% survival rate (KTB are observing a tadpole and metamorph survival rate of at least 75%)

that toads require water for survival (KTB have pulled healthy toads out of burrows and cracking clays up to a metre deep 7 months into the dry)

that toads are not good climbers (KTB have found adult toads hibernating up to 2 metres inside hollow tree's beside dry water holes and metamorphs on the plateaus of vertical rock faces)

### 4: KTB Concerns.

Toads have finally made it into the Kimberley, one of the last „great bastions“ of native wildlife left in Australia and community efforts and field results by the Kimberley Toad Busters are still largely being down played with government increasingly taking the position that community toad busting efforts (and research and observations) are not working. The Federal Governments Threat Abatement Plan released by the [Federal Minister for Environment Peter Garrett](#) <http://www.environment.gov.au/biodiversity/invasive/ferals/cane-toads/index.html> goes to the extent of stating community group action has achieved nothing and that scientific research into a biological solution is a waste of money. The TAP basically confirms that government organisations and some scientists continue to ignore community expertise and knowledge.

In light of the recent proposed TAP and the shocking discovery by scientists that many of the mammal species being impacted by the cane toad are on the brink of extinction anyway (read press release below) brings home to KTB why we are doing what we are doing. For those of us who do think it is worthwhile trying to keep toad numbers under control and taking some of the pressure off our native animals are already aware of how fragile the Kimberley already is. Most of us have had more than twenty years to observe that the current burning practices carried out by government bodies throughout the North of Australia and particularly here in the Kimberley has been destructive and wrong. That the cane toad is basically the „icing on the cake“ for most of our native mammals and other species.

KTB will never give up on its efforts to keep toad numbers under control, or in the fight to find some form of biological or other“ solution needed. KTB will also continue to „educate“ and get community people recording and monitoring native biodiversity in an effort to record accurately the full impact of toads.

The research article providing the information for the Press Release below can be found on [www.nature.org/australia](http://www.nature.org/australia) [www.australiawildlife.org](http://www.australiawildlife.org) or [www.wildaustralia.org.au](http://www.wildaustralia.org.au)

## 5: 20 years left: mammals plunge into extinction

Ben Cubby ENVIRONMENT EDITOR  
September 2, 2010



Into oblivion . . . some of the disappearing native mammals: (clockwise from above) burrowing bettong, a possum, northern brown bandicoot and northern quoll.

AT DUSK, the dry savannah of the Kimberley was once alive with the scuttling and foraging of the burrowing bettong, a marsupial whose "countless numbers" were marvelled at by early surveyors.

Along with many species of quolls, bandicoots, possums and marsupial rats, the bettongs had thrived for millions of years in northern Australia, surviving ice ages, surging sea levels and human hunters.

But many of these natives are unlikely to survive another decade or two, according to a new report which reveals an abrupt, stunning plunge towards mass extinction in the past few years.

At the 136 sites across northern Australia that have been repeatedly surveyed since 2001, the mammal populations have dropped by an average of 75 per cent. The number of sites classified as "empty" of mammal activity rose from 13 per cent in 1996 to 55 per cent in 2009.

"Twenty years ago we would go out and it would be a bonanza of native animals," a Charles Darwin University researcher, John Woinarski, said. "Now we hardly catch anything - it's silent."

Evidence of encroaching extinction on individual species had been accumulating for decades, but researchers were not necessarily aware that so many species across Australia's north were seeing the same steep declines, Professor Woinarski said.

The report, *Into Oblivion: The disappearing native mammals of northern Australia*, produced for the environment group The Nature Conservancy, collates many lines of evidence into one of the most comprehensive wildlife surveys undertaken in the region.

As well as years of direct observation, researchers visited Aborigines in Queensland, Western Australia and the Northern Territory with stuffed specimens of various native mammals and tapped local knowledge.

"There used to be caution about the rate of the decline - it could have simply been cyclical - but it has been corroborated and we have a high level of confidence in it," Professor Woinarski said.

Among the native species expected to reach the brink of extinction in the coming decade are the northern brown bandicoot, the northern quoll and the brush-tailed rabbit-rat.

On the present trajectories of decline, they will have vanished before 2030.

The burrowing bettong has become extinct on the mainland but has been reintroduced from small populations that survived on islands.



The causes of the population decline varied from case to case, the report said, but they include changes in the size and frequency of fires in northern Australia, predation by feral cats, and the relentless advance of cane toads.

"What's happened is that indigenous people used to burn the country in a mosaic pattern early in the fire season, which provided the food and habitat for these mammals," James Fitzsimons, the director of conservation at The Nature Conservancy, said.

"As people have become displaced the fire regime has changed, and now you get really large fires at the height of the fire season."

The federal government, which was sent a copy of the report yesterday, said the species decline in northern Australia is "well known and of serious concern".

It said northern Australia had been identified as a priority for funding under its Caring for our Country program, which oversees work to eradicate invasive species including cane toads.

"The task is a challenging one, compounded by the fact that even in places where there are significant areas of intact habitat, species loss has been recorded," a spokesman for the Environment Minister, Peter Garrett, said.

## 6: A Public Statement by KTB.

Kimberley Toad Busters **do not** agree that there is little we can do to control toads invading the Kimberley. We do not agree that toad busting by the KTB community group is not working. **We acknowledge** that fencing is only one of a number of control methods that can be used in the fight against the cane toad and should not be seen as the panacea for the protection of our wildlife or in controlling toads. The Kimberley is over 415,000 square kilometres in size, has wet season flooding and massive dry season burning making fencing of any sort difficult to maintain. Reducing toad population numbers and controlling the breeding needs to be ongoing and all methods of control need to be in place.

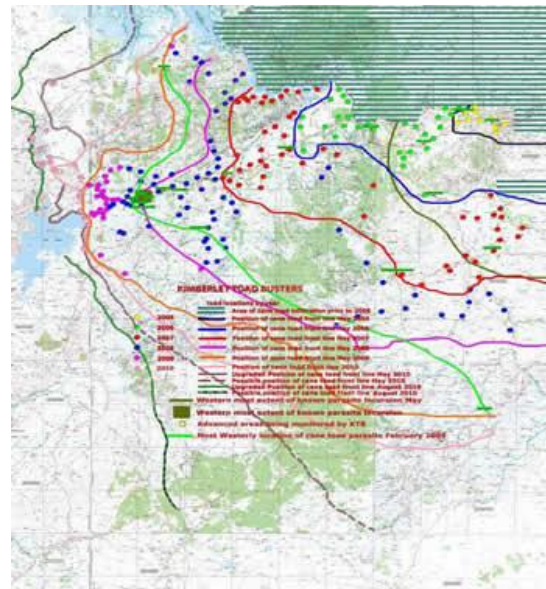
KTB do not agree that the Great Sandy Desert will stop the toad from travelling further south. If the rabbit worked out how to cross the Nullarbor, and toads eventually managed to cross salt swamp zones from Queensland into the NT it will only be a matter of time before toads work out how to move south. The toads will simply use each rain event to move and then „wait“ in watering points for cattle (and other station animals), as well as natural waterholes for the „next wet“ to move forward. KTB also believe that the threat of „hitch-hikers“ getting to Perth and other parts of the state has also increased significantly now toads have reached Kununurra and the Ord Irrigation area.

KTB know that **we cannot** (at this point and until we have a biological solution) stop the forward movement of the cane toad but we **do know** we can slow them down (through on-going/12 months of the year/community effort) and that **we can** reduce population numbers by impacting the breeding cycle. We **do know** that reducing toad numbers does mitigate their impact on our native biodiversity. More animals at greatest threat to the toad can survive if we can keep numbers of toads colonising an area down to minimal numbers.

Community toad busting is all about buying time for our native wildlife while researchers continue to look for a biological solution. As a direct result of the Kimberley Toad Busters community efforts over 1.000.000 adult toads (as well as countless billions of eggs, tadpoles and metamorphs) have been taken out of the system. Over 6,500 people (Indigenous and non Indigenous children and adults) have put in over 2 million hours of volunteer time toad busting and recording and monitoring native wildlife. This is the legacy of Kimberley Toad Busters and KTB will continue to do all it can to reduce population numbers of toads invading the Kimberley and everything they can to mitigate the toads impact on native wildlife.



7: KTB Field Map showing the movement of toads in the past five and a half years.



### 8: The various methods used by KTB in the fight against the cane toad!

1. hand collection
2. traps with lights
3. cane toad calling stations
4. removal of tadpoles by using scoop nets
5. removal of tadpoles by using draw nets
6. removal of tadpoles by suction
7. using crushed up tadpoles to send out alarm pheromone so other tadpoles head to edges of water and die
8. removal of metamorphs from water by vacuum (Leaf Blowers using the Venturi effect)
9. removal of metamorphs from around waterholes by spraying dettol/water mix
10. community biodiversity surveying (What's in your Backyard?"program)
11. research into impact of cane toads on food competition
12. research into the lungworm parasite
13. reconnaissance and mapping of cane toad movements
14. community education through visits to schools and Indigenous communities
15. directional fencing (feeding toads into pits and traps)
16. use of media to disseminate information "newsprint, radio, TV"

17. reconnaissance of areas prior to the arrival of the cane toad
18. interactive web site with average 4000 hits per day
19. provide toads to researchers
20. provide general assistance to various researchers

## 9: WAYS TO MAKE YOUR BACKYARD UNFRIENDLY TO CANE TOADS

1. Limit water sources. Lift water bowls off the ground, ponds should have steep sides with no recess.
2. Limit food sources. Keep outside light use to a minimum as toads are attracted by the insects.
3. Look for cane toads once or twice a week. Toads are most active at night and can often be heard calling. During the day toads can be found in moist places like garden debris, under matting, logs and burrows.

### How YOU can CONTROL CANE TOADS in your BACKYARD

To effectively control cane toads there are two things we all need to do: 1) One or two evenings a week walk around your backyard to look for cane toads and collect by hand; and 2) During the day check any surface water for signs of cane toad eggs, tadpoles or metamorphs. Contact KIMBERLEY TOAD BUSTERS if you find any signs of cane toad breeding in WA.

After five years, Kimberley Toad Busters have found hand collection of cane toads and eradicating cane toad eggs, tadpoles and metamorphs has reduced cane toad numbers and slowed their rate of movement towards the Kimberley. Toad busting appears to also be contributing to increased rates of the Lungworm Parasite in cane toads.

### How to 'bust' cane toads

- 1) Wear gloves.
- 2) Catch toad by grabbing around mid section behind poison glands.
- 3) Place in plastic bag or 50 cm high bucket .

### How to kill a cane toad

- 1) Contact Kimberley Toad Busters. We will collect and euthanize cane toads using carbon dioxide, toads are dissected and data collected for a number of research projects.
- 2) Place in freezer (inside a plastic bag) for 24 hours
- 3) Take toad to Kimberley Vet Centre, DEC or Shire Depot
- 4) Add 2-3 capfuls of Dettol to a plastic bag with 10-15 cane toads will kill toads within 15 minutes.

Do not hit a cane toad on the head. Cane toad toxin can be squirted into eyes causing temporary blindness, excruciating pain and a trip to hospital.

## 10: Cane toad busting update

By Ben Scott-Virtue In brief the last couple of months have been exceptionally busy with media representation increasing the number of people wishing to be involved with KTB in one way or another. This has been compounded with unseasonal rains pushing both toad movement and extensive breeding" that has needed to be arrested primarily along the Northern reaches of the irrigation channels. As Field Coordinator my main focus has been in four areas

1. Education – This has included trips to Derby, Broome and Looma community to educate within the school system about the impact of the cane toad on biodiversity. In one day in Derby alone I reached over four hundred students, with the school of the air appointment the next day reaching a further two hundred plus Station kids, managers and workers. Further Biodiversity work has been completed in Derby in part helping realise the dream of fully understanding what we have in our own backyards prior to the toad moving in.



Cane Toad and Biodiversity educational at Derby District High

2. Increasing participation in toadbusting activities. – To insure that KTB is maximising the tourist season" I have opened up my property (at no expense to KTB and we are still using the KTB depot) to travellers wishing to camp for free under the understanding that a few nights toadbusting is required over the course of each week. This has worked exceptionally well this season increasing dramatically the number of volunteer hours as well as the number of toads apprehended. Having a „crew" that all have different days off over the course of the week has also meant that we have been able to step up metamorph control during



daylight hours. This alone should help keep numbers within the irrigation area at manageable levels leading up to our oncoming wet". In another area that „field operations“ have grown, KTB now works in with the Justice department, with young offenders now able to complete community service orders toad busting. This is increasing aboriginal involvement exponentially. It has also been gratifying to note how many community members have become involved in keeping their own backyards free of toads.



Annabelle and Giovanni, a lovely Italian couple doing their bit.'



Arthur and Scott spraying out on Newry Station

3. Toad breeding control –Unfortunately, with the late and unseasonal rain the number of female cane toads still laying late has increased on last year which has meant further control work much closer to home. In town both the Sandalwood factory and Sandalwood sanctuary have had metamorph outbreaks, to the north Carlton hill has been hit and to the East. Cockatoo Springs has also shown evidence that breeding has taken place. Ben Ward continues to encourage his family to toad bust around the community.

4. KTB's media representation – As you all are aware we have had an increased media presence culminating with Barry Haase's Liberal election campaign (KTB has hit households repeatedly in daily doses) We have repeatedly been given coverage in the local paper the Kimberley Echo, but have also had stories aired in the Broome advertiser, The West Australian, The Sydney Morning Herald and the Age. We have had articles in Landmark and Australian Traveller and six and a half minutes air-time on the Sunrise Show (channel7) with Mel and Koshe at a quarter past eight in prime time. We have also had strong representation on the Radio with regular slots on both the ABC (at a State and National level) and Warringarri. Further slots on local and „drive“ shows have been aired on 3raw (Adelaide Radio) and „drive time“ Alice Springs.

In summary, whilst we did lose Ruth Duncan our biodiversity and environmental officer (now running and owning her own zebra rock mining business), KTB has continued to grow at an exceptional rate. While it cannot be denied that there has been a hole left with Ruth's departure, fortunately KTB continues to have an exceptional volunteer base with both Dean Goodgame & Lee Scott-Virtue continuing to go above and beyond the call of duty in the general promotion and workload faced with the running of KTB. Both John Cugley and I continue to work well together and look forward to espousing KTB's message at this year's Royal Show held in Perth.

Finally, great thanks have to go to Danielle Taylor who heads up the science department at Derby High. Both Barbara and Danielle continue to involve the „wider“ Kimberley community in iconic species surveys around the Derby region. Both have come through to Kununurra on a couple of occasions this year to be active participants in toad busting activities and show that it's not just an East Kimberley community that's willing to put time and effort towards mitigating the impact of the cane toad on our environment.

For more information on any of the articles contact:

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