

Cane toads

A heartfelt cry from the Kununurra Community to the Nation.

We will Stop the Cane Toads getting into WA!



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!

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KIMBERLEY SPECIALISTS
Caring for the Kimberley



*We need to stop burning the
Kimberley
We must stop the Cane Toad*

2003 winner of the
Bird-Captions
Regional
Achievement Award.

2003 recipient of
the Bronwyn Gold
Blyth
award.

2004 finalist in the
category of
the WA State
Toad Busters Awards.

KIMBERLEY TOAD BUSTERS NEWSLETTER No.24

05/02/2008

By Sandy Boulter (Volunteer Cane Toad Educator and Coordinator of the Perth based Friends of the Kimberley Toad Busters) and Lee Scott-Virtue (President and Volunteer Field Coordinator for the Kimberley Toad Busters)



WWW.CANE TOADS.COM.AU

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

Declared by the Federal Government 12 April 2005

This Newsletter is produced by Kimberley Specialists In Research Inc in conjunction with Kimberley Toad Buster Inc. Kimberley Specialists, a founding member of the Kimberley Toad Busters, continues to support the campaign against the cane toad by raising funds. KSR and KTB are tax deductible entities.

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

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WE NEED A NATIONAL CANE TOAD THREAT ABATEMENT PLAN!

WE NEED A WA GOVERNMENT ENDORSED CANE TOAD MANAGEMENT PLAN FOR THE KIMBERLEY!

KTB 2008 DVD Released:

Contact Sandy on mobile 0427 508 582 or email us for a copy

WHO SAID THIS? *“Cane toad late stage tadpoles are not poisonous, so it is untrue to say that cane toads are poisonous in all stages of their life cycle.”*

“Who managed to lose their car keys in a billabong and how did the toadbusters get out of that one???”

“Why does a cane toad invasion cause an initial large jump in frog numbers?”

Read on to find out....

"It is important to recognise that the pristine terrestrial and aquatic habitat systems of the Kimberley are already under threat. Current land-care and resource management policies undertaken by land and resource managers have had a detrimental impact on Kimberley bio diversity. Most of our plant and animal biodiversity is in a fragile state. The impact of the cane toad, if allowed to happen, literally will destroy one of the last unique biodiversity wilderness frontiers in Australia ,” Lee Scott-Virtue, Kimberley Specialists.

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KTB Honour Box: Dean Goodgame



Dean Goodgame has been in this KTB campaign from the beginning when as member of Kimberley Specialists in Research he, with Lee started the Kununurra based toadbusting campaign. He started and continues to build the KTB website for Kimberley Specialists in Research. Dean’s expertise as an electrician and web designer have been critically important ingredients of this campaign ,as have been his outback, camping and survival skills, and his remarkable handyman and mechanical expertise. From the first toadbusts at the Victoria River



Roadhouse to establishing the first KTB base in Kununurra and the second KTB base at Nicholson Station, Dean has been there for us all.

Previous KTB Honour Box Recipients:

Sharon McLachlan, Del Collins, Trevor Dutoit

CANE TOAD AND PARASITE FRONT LINES

Jordy Groffen presented his KTB/Delft University parasite project to the Darwin Vertebrate Pests Post Conference Forum on cane toads.

Jordy acknowledged that without the unique and intimate knowledge of the colonising front lines held by the KTBs, and the design of his project by Lee Scott-Virtue, his project would not have been possible.

Lee was aware, but surprised, that it had been hypothesised by cane toad research scientists that cane toads infected with the lungworm parasite were at least 20 years behind the front line cane toads. KTBs have been finding sick and wasted cane toads near the front lines since they started toadbusting in September 2005. Parasite infection offered one explanation for these field observations. Jordy Groffen expressed interest in undertaking the research and his results are now published for all to use.



Jordy sampled toads from 54 different locations just behind the westerly moving front line cane toads of which:

- 19 were from the frontline from this year,
- 23 from the frontline from last year, and
- 11 From the frontline of 2 years or older.

To date Jordy has found that:

- The most westerly point of parasite frontline is Dingo Springs and the most southerly point is at Top Springs; and
- Parasites are not less than 2 years behind front line, and
- Whereas in Queensland it has been found that 80% of the toads are parasite infected (*Dr. Barton*), parasite densities varied between his sampled sites.



Jordy has set up an experiment to see if he can deliberately infect cane toads with parasites and has obtained a permit from the WA government to sample WA frogs for parasites, to discover similarities or differences between parasites that infect WA frogs and those that infect the westerly colonising cane toads.

The left or more westerly heavy red line shows the most recent KTB reconnaissance of front line cane toads moving west, which has now merged into six primary front line corridors. This reconnaissance information is passed onto DEC for their assistance.

The right or more easterly red line shows the frontline of parasite infected cane toads based on Jordy's sampling.

WHY PARASITE RESEARCH IS IMPORTANT

There is a big debate amongst cane toad and frog research scientists about whether or not the parasites we are finding in front line cane toads came from South America with the cane toad, or caught the parasite in Australia, and if so was it caught from our native frogs? This debate is an important one if parasites are to be considered safe to use to control and weaken front line colonising cane toads. From Alex Hyatt of CSIRO at the Darwin Conference and Mike Tyler from Adelaide University since the Darwin conference, we know that the original 103 cane toads imported from Hawaii (they had come from South America to Hawaii) into Queensland were not released in Australia, it was their progeny that were released as metamorphlings because of the concern that the imported adults might have unwelcome but undiagnosed disease(s). We have been further informed that the metamorphlings could not have caught parasites from the breeding cane toads.

Lyll Grieve Cane Toad Science

Lyll Grieve's abstract for the Darwin Conference was not accepted this time. Lyll's work is critically important unique research, which is showing the impact of colonising cane toads on small Kimberley reptiles and makes field observations important for biodiversity baseline data.

THE IMPACT OF THE CANE TOAD (*BUFO MARINUS*) ON THE SMALL REPTILE FAUNA OF THE KIMBERLEY REGION

Lyll Grieve, Macquarie University

46 Powell St Blaxland, NSW 2774.

This study is a Masters project conducted through Macquarie University Sydney, with the assistance of Kimberley Specialists in Research Inc and the Kimberley Toad Busters Inc volunteers. The project aims to determine the impacts, which *Bufo marinus* may have on the small reptile fauna of the Kimberley region, focusing on the Western Australian border region and the frontline toad migration. Using a presence/absence study design of trapping and sampling, a species composition and abundance investigation is underway in areas inhabited by toads, and similar habitats toads have not yet reached. Gut contents of Cane Toads are being analysed in order to infer what composition of prey items are consumed. This research may indicate a combination of competition and predation effects on the fauna of the same habitat and size range. The results of this study will help understand the interactions and impacts this invasive species will have on the Kimberley reptile communities. In conjunction with the research into the impacts of the Cane Toad, trapping and visual observations of various localities within the region are underway to further understand the seasonal variations, distributions and species inventories of remote Kimberley ecosystems .

Trip Reports by Dave Woods

These reports show how some of our reconnaissance and weekend toadbusting works, the amazing efforts of our sturdy and hardy regulars, and visitors and tourists alike, sometimes who first meet on a toadbus and why finding one toad can be as good as finding hundreds!!

Date: 1 st- 3 rd May 2008

Team: Jordy Groffen, Rick Van Roon, Lyall Grieve and Dave Woods



The purpose of this trip was to get Lyall and Jordy into Victoria River Downs Station to carry out their respective research. Lyall was setting up traps at Kidman Springs to study the impact the cane toads have had on the small reptiles in this area. Jordy was checking several locations in this area for presence of cane toads infected by the lungworm parasites. At Jasper Gorge Jordy found that 20% of sampled toads were infected. At Rubber Bush Turkeys Nest, Jordy found no infected toads in this area. As this area had a very large population of toads it is possible that Jordy's small sample size may have simply missed finding infected toads in this area. At Andersons Crossing Jordy found 5% of sampled toads were infected. Limestone Creek showed a 20% infection rate. At Mawks' Lagoon, 15% of sampled toads were infected; and at Kidman Springs 15% of toads were parasite infected.

Date: 3 rd May 2008

Team: Tim Leary, Karen Jensen and Ty Schnarrs

Tim and team first busted the Bullo River Driveway turkeys nest dam and caught forty four toads, sixteen of which were female. They caught 44 toads at Tin Shed Dam, eleven of which were female. It is most important that we keep working these areas in the western section of the frontline.



Date: 4 th- 5 th May 2008

Team: John Cugley

The purpose of this trip was to get into Moriarty Creek and Glenara Creek on Newry station to check for any evidence of toads. No evidence of toads or breeding in this area or in Glenara Creek, where John observed healthy numbers of reptiles. Setting traps to monitor this area will be the next step here as we need to keep a close eye on this area, which is just ahead of the toad frontline in the highway corridor.

Date: 5 th- 8 th May 2008

Team: Jordy Groffen and Rick van Roon

Jordy and Rick continued Jordy's project checking for levels of cane toad lungworm parasite infection on Coolibah and Fitzroy Stations between Timber Creek and Victoria River Roadhouse. At Brownies Dam, they caught sixty four toads, fourteen of which were female. They also picked up twenty nine juveniles. Jordy dissected fifteen toads from Brownies and found that 20% were infected with the lung worm parasite. At

Timber Creek Bridge twenty one toads were picked up, twelve of which were female. They also found twelve juveniles in this area. No lung parasites were found in this area. At Dingo Springs Creek they only found only six toads, of which six were infected (20%). At Coolibah Homestead forty eight toads were caught, twenty six were female. Jordy and Rick also picked up a further ninety five juveniles. The lungworm infection rate at this site was 60%.

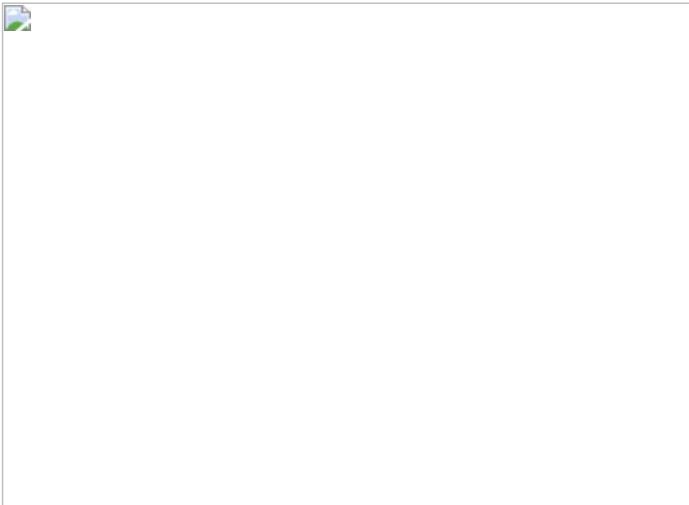
On the Coolibah Crocodile Farm, thirty three mature toads a further sixty five juveniles were caught. From the fifteen toads dissected Jordy found that 66% of toads were infected with the lungworm parasite. A total of one hundred and seventy three mature toads were caught on this field trip.



Photo: Extract of cane toad lung tissue showing little black lungworm parasites from Groffen autopsy

Date: 13 th- 19 th May 2008

Team: Jordy Groffen and Rick van Roon



Photo

Toadbusters see some pretty wonderful places out toadbusting, even if lost car keys stay lost!

Jordy and Rick were out in the field again, this time checking areas behind the frontline for toads infected by the lung parasite. They started at Moolooloo Station on the Buchanan Highway. They found low numbers of toads at Water Bag Creek, catching only seven toads, two of which were female. 20% of these toads were infected. At Wilson Creek further to the east along the highway sixteen toads were taken, seven of which were female. No lung parasites were found in this area. Coolibah Creek was next, where only two toads were found and neither was lung worm infected. At Top Springs eighteen toads were caught in the roadhouse area, six of which were female. Only one toad was lungworm infected toad. Eighteen toads were picked up at Mataranka of which six were female, and 60% of these toads were lungworm infected. At Edith Falls twenty toads were caught, of which six were female, and 60% of toads were lungworm infected.

Jordy also managed to loose the car keys whilst swimming which meant they needed to get towed into Katherine to get new keys made up. At Katherine Gorge fifteen toads were caught of which eight were female and 66.6% were lungworm infected.

Date: 13 th- 19 th May 2008

Team: Wally Bearsby and Pat La

Wally had traveled from down south to join us toad busting for a couple of weeks. He based himself at as joined by Pat on the third night. Pat had also travelled up here from the southwest. They busted the scrapes area to begin with and over three nights got a total of one hundred and twenty two toads, sixty nine of which were female. Seventeen juveniles were also caught. The next two nights they busted King Billabong catching a total of two hundred and ninety four toads. One hundred and eighty two were female. Only two juveniles were picked up on the 19 th of May from this area.

After coming into town and getting more supplies on the 20th of May they headed back out to keep on busting King Billabong. Over the next three nights they caught another five hundred and forty three toads, three hundred and forty six of which were female. They also picked up six hundred and eighty four juveniles from this area. Their grand total was nine hundred and sixty five mature toads, and seven hundred and four juveniles. Four toads were found to be carrying leeches from King Billabong. Pat and Wally made a great team and this proves how effective a small group can be out in the field. Their efforts were greatly appreciated. King Billabong will require ongoing work over this dry season.

Date: 19 th- 20 th May 2008

Team: Lee Scott Virtue, Sharon Mc Lachlan, Dave Woods Kylie Hill (Work Readiness), Paul Mavromartis (Work Readiness), Xavier(Win TV), Danielle Parry(ABC NT), Maryanne Winton, Trixie Winton, Dave Pethrick, Crystal Pethrick, Faith Pethrick, Joel Pethrick, Chantelle Lawson and David Ward

KTB coordinator Dave Woods along with Paul and Kyle who were students from the Kununurra District High School's Work Readiness program and the Win TV crew met Indigenous Cane Toad leader Maryanne Winton to toadbust on Bullo River Station.



Photo of rocket frog Litoria Nasuta from

<http://www.westernwildlife.com.au/frogs/nasuta.htm>



Photo from Adam Britton

Cane toads are only 10 kms from the rare pygmy crocodile population on Bullo River Station

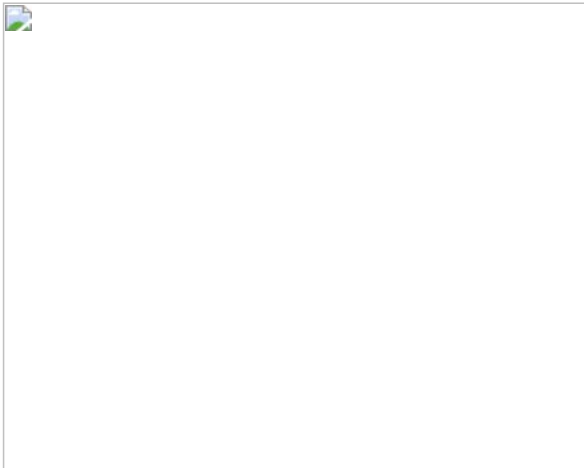
We spent the afternoon doing reconnaissance around homestead Creek, and TV interviews. Franz, the station owner, told us that the staff had been hearing lots of toads calling mainly from Homestead Creek area. The rest of the team then joined the bust and caught two hundred and sixty five toads of which one hundred and forty three were female, and a further one hundred and fifteen juveniles. Lee noted that there were lots of Rocket frogs in Homestead Creek.

The team saw twelve Keel back snakes and one python. They also found one dead Night Heron and one dead small Heron probably from cane toad metamorph or juvenile ingestion. This area will require more busting over the coming months.

Date: 24 th May 2008

Team: Jordy Groffen and Tim Leary

Jordy and Tim headed out into the Saddle Creek dam and turkeys nest to check in daylight for any recent signs of breeding at these locations. They found none. That night they busted these two areas finding thirty two toads at the dam, fourteen of which were female. They also picked up twenty four juveniles. At Saddle Creek turkeys nest dam only one mature male was found and three juveniles. This was great news, because it showed that numbers had significantly dropped at this location, since the last time we busted there. Jordy and Tim then went back out to the highway to check Fish Ck. They checked downstream and found that the water had gone leaving a dry creek bed. There was only one pool left which is next to the road. From this roadside pool they caught twelve mature toads, five of which were female. They also picked up five juveniles. Their last destination for the night was Tin Shed Dam where they found only three toads, one female. It appears there has been a steady decline of toads at this location as a result of the KTB toadbusting efforts, which is great to see. We will continue to keep pressure on this area to ensure toad numbers are kept to minimum over this dry season.



Date: 31 st May - 1st June 2008

Team Bob and Norma Wainright, Barbara Buchanan and Jordy Groffen

Marks Dam on Auvergne Station was the destination for this team. Barbara had flown into Kununurra that afternoon and was her first toad bust. Two hundred and seventy seven toads were busted at this location, of which one hundred and nine were female, and we caught two hundred and thirty three juveniles. Jordy checked a sample group of toads for parasites but didn't find any.

One extra large female was found measuring in at a whopping **17.5** centimetres!

This location will need further busting over the coming months.

Date: 31 st May 2008

Team: Tim Leary, Karen Jensen, Ty Schnarrs

Tim's team busted the Southern end of Bullo Rivers driveway. They did a fantastic job picking up one hundred and forty three mature toads, of which ninety six were female. They also caught twenty nine juveniles. Tim and his team will be returning regularly to this location over the coming months. His dedication to Kimberley Toad Busters and saving our wildlife is admirable.



Victoria River District Helicopter Reconnaissance Trip 6th June



Team: Jordy Groffen, Dave Woods

The purpose of this trip was to check the upper reaches of the Wickham River, Broad Arrow Ck and the Humbert River for signs of toads. This area is in Gregory National Park so a permit was obtained and permission granted by Kate Schmitt from NT Parks and Wildlife. Kate is the senior ranger for this area for Gregory National Park and is based at Timber Creek. Our first destination was on the Wickham River near Midnight Creek junction. It took over an hour to reach this area and after finding suitable toad habitat, we put the helicopters down. We found no evidence of toads.

We then flew to upper Broad Arrow Creek and landed on the southern arm. This was good toad habitat but again no evidence of toads. Then onto the upper reaches of the Humbert River and again no sign of toads

This trip was three and a half hours and great distances were covered. As we found no evidence of toads in these three locations, it makes it hard to define exactly where the toad frontline is in this area. To access this area on the ground is very difficult as there are very few tracks and it is an extremely remote part of the national park. Even quad bikes would be of little use, as it is very rugged terrain. The only realistic option to help us get a more accurate idea on where the toad frontline is in Gregory National Park is helicopters to check further downstream on each of these systems.

This is expensive and may even require a separate trip on each waterway stopping in multiple locations. Thank you to Kate Schmitt from NTPWS, for granting us permission to carry out this trip with such short notice.

BUNTINE HIGHWAY Reconnaissance Trip Top Springs to Wave Hill and Mt Sanford to Wave Hill 4th -6th June 2008

Team: Dave Woods and Jordy Groffen

Jordy and I arrived at Top Springs just before sunset on Wednesday afternoon. I fuelled up, spoke to people at the roadhouse and left them brochures and bookmarks for the tourists passing through. On our way to Wave Hill we checked all rivers and creeks and our findings are as follows;

- • Armstrong River: **Toads Present**
- • Montejinni Creek: **Toads Present**
- • Lonely Springs Ck: **Toads Present**
- • Cullanjacky Creek: **Toads Present**
- • Townsend Ck: **Toads Present**
- • King Ck: **Toads Present**
- • Munday Creek: **Toads Present**
- • Camfield River: **Toads Present**
- • 15 km South of Camfield River: road toad
- • Kelly Ck: **No toads**
- • Gordon Ck: **No Toads**
- • Victoria River: **No Toads**
- • Wave Hill: **No Toads**

Jordy Took a sample group of toads from each location and found no evidence of parasites in toads from these sites. The next day we drove north from Wave Hill to Mount Sanford Homestead and along the way we GPS'd all waterholes and turkey nests. At night-time we did the drive in reverse and checked all locations for any evidence of toads. Our findings are as follows:

- • Mount Sanford: Toads Present
- • Gibbie Ck: Toads Present

- Turkeys Nest 4 kilometres south of Gibbie Ck: Toads Present
- Fever Ck: No Toads
- No 15 Bore: No Toads
- Poison Ck: No Toads
- Blackgin Yard Turkeys Nest: No Toads
- Blackgin Turkeys Nest: No Toads
- Stevens Ck: No Toads
- Blackgin Waterhole: No Toads.

LAKE EYRE BASIN COMMUNITY ADVISORY GROUP

Lake Eyre Basin Community Advisory Committee
 Landsborough Highway, P.O. Box 519, Longreach, QLD 4730
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 email: vol.norris@environment.gov.au
 web: <http://www.lebmf.gov.au>

The KTBs have made further contact with the Lake Eyre Basin Community Advisory Group through their networking at the Darwin Vertebrate Pests Conference. Below is an excerpt from their recent minutes, which they have kindly sent for use in this KTB newsletter. The distribution map for cane toads coming through Longreach was previously kindly provided by Dr David Peacock and published in our last newsletter. Please do not hesitate to contact them through the above contact details for any information about the group's work, especially on cane toads.

“Cane Toads and Redclaw Crayfish in the Lake Eyre Basin — A Community Survey

.....Canetoads

The CAC has previously discussed the possibility of a community survey in the basin to determine the current distribution of Cane Toads; They referred the matter to the LEB Scientific Advisory Panel (SAP) for its 16th meeting in March 2007. The SAP discussed the matter and agreed that they see Cane Toads as a threat to larger water holes, and asked the CAC what would be required for the Basin community to help identify the spread of Cane Toads. The LEB Community Advisory Committee (CAC) and the South Australian arid lands (SAAL) NRM board discussed LEB Cane Toads at their joint meeting in Coober Pedy, SA, on 18 July 2007. Dr David Peacock from the SA Dept Water, Land and Biodiversity Conservation presented a preliminary proposal at that meeting for Australian Research Council funding for Cane Toad research, with a view to seeking supporting funds:

'Toads in the desert: assessing and combating the invasion of Australia's inland river systems by Cane Toads - preliminary ideas for an ARC Linkage Project Proposal' (Rick Shine and David Peacock)

The CAC resolved to keep Cane Toads on the agenda for future meetings, and discussed the matter again at its 15th meeting (Teleconference, 21 August 2007). They resolved that a community monitoring project for Cane Toads in the LEB would be practicable and useful in collaboration with the Regional NRM Groups, regardless of whether the larger ARC linkage grant application proceeds."

Vol has updated us on these minutes as follows:

"As of June 2008 a project is being carried out to obtain a rapid estimate of the distribution of Cane Toads in the Queensland Lake Eyre Basin, and if possible the time it has taken for the Canetoads to reach their current distribution, utilising information sought from landholders in the Basin. The project, designed to augment the currently anecdotal and patchy information about Cane Toad distribution in the LEB, is a community survey of riparian landholders via telephone, email and postal contact. The project will produce a leaflet designed specifically for the LEB, to raise awareness of Cane Toads as a potential threat to native fauna and ecosystems, and to introduce people to the survey subject. The project is being conducted by Dr Mike Tyler of the University of Adelaide."

VERTEBRATE PESTS CONFERENCE DARWIN



KTB's Jordy Groffen, Dave Woods, Sandy Boulter and Sarah Brett at Darwin Canetoad Forum

KTB reports from 14th Australian Vertebrate Pest Conference Darwin 10-13 June 2008

There was a post conference cane toad forum of scientists and community groups. The forum resolution included that:

- 1) A nationally coordinated approach is required;
- 2) Field workers and scientists need to have a forum/office in which to collaborate (sharing of information and experiments);
- 3) A cane toad threat assessment is required;
- 4) Product assessment' within three years based on identified objectives is required;
- 5) A national plan for reduction and control of
- 6) A national plan should comprise a multiple research activity approach; and
- 7) Increased funding is needed

CANE TOADS ARE AGENTS OF DECLINE

Sandy Boulter

New Facts and Lots of Feral Species

"Cane toad late stage tadpoles are not poisonous, so it is untrue to say that cane toads are poisonous in all stages of their life cycle", Robert Capon from the Institute for Molecular Bioscience, The University of Queensland in presenting his paper, "Cane Toad Chemical Ecology: What We Thought We Knew, What We Know Now and What We Should Know".

And from an urban perspective, *"It is estimated that there are 1.3 million households with cane toads in Australia,"* David Dall presenting his paper, "A Spray Formulation For Humane Lethal Control Of Cane Toads."

These were two of the interesting observations made to the 14 th Australian Vertebrate Pest Conference Darwin 10- 13 June 2008. VPCs are held every three years and this one was organised in conjunction with the University of Canberra based Invasive Animals Cooperative Research Centre and the NT Department of Natural Resources, Environment and the Arts.

Feral foxes, starlings, wild dogs, mallard ducks, mice, goats, camels, pigs, rats, rabbits, cats, fish, bell minors, deer and cane toads were all discussed and these were just some of the vertebrate pests in Oz! We heard about invasive monkeys in Puerto Rico, possums and stoats in New Zealand, and brown tree snakes in Guam. We heard how feral species are **agents of decline**.

Dealing with Feral Species We heard about many approaches including management and control, population suppression, eradication, monitoring techniques, commercial harvesting of pest species, genetic control, oral toxicants, humane disposal challenges, community campaigns, economic impacts, biological control, baits, trapping, odour repellants, contraception, vaccines, toxins, radio tracking, parasites and much more...

Exciting New Research Grinds to Halt With Lack Of Further Funding

One of the more interesting cane toad research papers was presented to the conference by Robert Capon and Andrew Hayes.

(Following a request from Andrew Hayes, the KTBs collected and sent 500 frozen cane toads back to Queensland from the western colonising front earlier this year.) Rob has been working with Mike Tyler in South Australia on chemistry based research into the bufo toxin that has shown that the bufo toxin:

- is complex with over 90 toxins identified so far;
- contains cardio toxic steroids confirming that it is the impact on the predators' heart that kills;
- cane toad egg toxin is different from adult cane toad toxin and in the change from one to the other the late stage tadpole has no toxin and that,
- cane toads do not appear to use a sex pheromone, but
- cane toads do deploy an alarm pheromone that accelerates metamorphosis leading to smaller less viable, but more toxic metamorphosis.

The potential for this research has a lot of us excited at the prospects for developing effective control and management of cane toads on the ground but sadly the **funding for this incomplete research dries up in six weeks!** We look for some government leadership in finding further funding for this important research.

KTB Presentations on Volunteering and Cane Toad Science

KTBs two papers presented to the Cane Toad held as an adjunct to the conference were well received and the KTB's 2008 DVD was given out to each of the participants in this forum.

Our papers were by:

Sandy Boulter: **Volunteering for the Kimberley Toad Busters Inc**

Jordy Groffen: **Lungworm in Cane Toads Close To The Front Line**

Sarah Brett gave an *ex tempore* review of cane toad euthanasia options, which identified a number of problems around this issue.

Copies of the KTB presentations and our 2008 toad busting DVD can be obtained on disc by sending a stamped addressed CD post package to Friends of the Kimberley Toad Busters Inc, 90 Murchison Street, Shenton Park, WA 6008.

Elements of Successful Campaigns

It seems that all the community feral species campaigns are more likely to be successful when there is :

- Strong Community Group with strong flexible structure so that group does not fail when people come and go
- Community ownership and support of the campaign
- Group activities are social and a place for learning
- Agency Commitment to the campaign
- Good partnerships
- Indigenous partnerships in remote areas
- Good measurability of successes.



KTB collects cane toad eggs which are laid in strings at the water's edge and can be pulled out like fishing line within first 12 hours of being deposited. Mature female can lay up to 35,000 eggs at a time, twice a year.

Barriers to Successful Campaigns

Barriers to success in a feral species campaign were so well identified by Guy Ballard in his paper, “What’s Stopping Effective Wild Dog Management in North East NSW?” that he might have well been describing the KTB experience. Step nine in Sandy’s presentation to the conference added to Ballards experiences and together they show how lack of government leadership can severely and adversely impact on the potential outcomes from community groups.

Conference REPORT BY SARAH BRETT

...Both Jordie and Sandy presented papers, Jordy updating everyone on KTB's lungworm parasite project research, and Sandy on the achievements of the KTB Community volunteers. Both papers were very informative and well received, and Jordie did especially well considering English is not his first language. Well done both of you for being such impressive ambassadors for KTB.

There was a wealth of information presented throughout both conferences, which was an excellent mode for networking with scientists, government agencies and others working in the field of cane toad research. The updates on the studies being done on the chemicals and toxins produced by the toads were particularly interesting, and I think gives us the best hope of finding something with which to either attract, or kill and affect tadpoles in waterholes. The fact that the funding for this research runs out in 6 weeks is very worrying. Professor Rick Shine, who is well known for his long-term research on toads, presented an overview of his studies to date. He explained his theories behind introducing young toads to a population that has not met toads before before, “teacher toads”, as they have shown in the lab that some creatures DO learn to avoid toads if they have eaten a small toad in the first instance. This is because small toads have less toxin in them, and may not always kill a creature that eats it.



Photo: Cane Toad Tadpoles, our Kimberley native tadpoles are not black



Photo KTB Toadbuster holds cane toad tadpole metamorph