

# EDITORIAL – DON'T THROW OUT THE BABIES WITH THE BATHWATER

TOWN TOADBUSTS

DARWIN, BERRY SPRINGS GAIN OWN TOAD DETENTION CENTRES

**BORDER WAR** – VOLUNTEER ONSLAUGHT SEES THOUSANDS DEAD

DOES 'BUFO MARINUS' MEAN TOADS ARE MARINE ANIMALS? – SURELY NOT!

# TOAD-ZILLA



ToadBuster volunteer, Bob Goninon, with the monster male toad found at Lee Point in March 2007



#### EDITORIAL

With the Wet Season upon us, albeit less and later, the toads are again on the move, creating anxiety among all those people who have ponds, tubs and other vessels in the back yard to accommodate native frog-breeding.

Many inquiries on the FrogWatch toll-free line are from people who have seen a toad in their yard and fear that the critters have had a quick 'amplex' and left their spawn behind.

Toad eggs are seldom laid in backyard containers. Buckets, birdbaths, dog bowls, those shell-like wading pools that you got for the toddlers and has since become an algae-rich garden feature, are possible choices for toads to breed in they are either too high off the ground (toads can't climb smooth surfaces and can't jump more than 500mm) or are just Toads prefer too small for comfort. lagoons, man made dams and ponds. Generally the males congregate at the females throughout the night, so you'll probably have heard them if they're trying to breed in your yard.

Green tree frogs, in contrast, lay just about anywhere – so when you find the labrador looking mournfully at his drinking bowl and the water surface speckled with black and white eggs in a light jelly, it's a fair bet you're the future foster parents of a few hundred natives. Toad eggs come in distinct strings of black eggs, and can be pulled from the water in a continuous line. (There is a video of this on the frogWatch website http://www.frogwatch.org.au)

A common misunderstanding is the belief that 'they must be cane toad tadpoles – because they're so big!' Cane toad tadpoles are small, totally black, short and thin tailed, poor swimmers and tend to school in shallow water.

A quick test is to look at the underside of your suspect tadpole – if its belly is coppery, silvery, semi-transparent, speckled or brownish it's a native frog tadpole! If it's black-bellied, has a diamond shaped head (due to eyes to the side) and small, even when it's developing legs, it's a toad - and should be terminated. (ie: cast it and its thousands of siblings upon dry ground.) If in doubt, call the 1800 number or check out the pictures at www.frogwatch.org.au.

# BORDER WAR VOLUNTEER ONSLAUGHT MEANS 48,374 TOADS WILL NEVER REACH WESTERN AUSTRALIA



In the final five weeks of the 2006 Dry Season, in what has become known as 'The Great Toad Muster' 126 volunteers rounded up 48,374 adult and sub-adult toads at Whirlwind Plains, on Auvergne Station.

The area is a floodplain bordered by the Victoria River to the east and north, the Victoria Highway to the south and the Baines River and Pinkerton Ranges to the west, approximately 550 km<sup>2</sup> in area.

Having established that surface water was sparse during the later stages of the Dry Season, 15 major water holes and lagoons were targeted during the Muster.

## "Subsequent visits .. did not find a single cane toad!"

The result is an absence of toads in these water bodies following first Wet Season rains and has shown that multiple ToadBusts in one area can drive local populations close to zero.

During the Muster no cane toad was sighted more than 300 metres from water and the vast majority were found within 10 metres, indicating that the environmental pressure on cane toads to move to water during the dry season is very strong and they must do this to survive the Dry Season.

Despite heavy rains on the final night of the Muster, a search of the Auvergne Lagoon area revealed no cane toads at all, showing that a significant water body can be completely cleared of cane toads.

Subsequent visits to the Lagoon, including one by staff of the WA Government's Department of Environment and Conservation in late November - with a sniffer-dog - did not find a single cane toad!

#### A FULL REPORT ON 'THE GREAT TOAD MUSTER' IS AVAILABLE AT THE STOPTHETOAD WEBSITE

www.stopthetoad.org.au

#### TOWN TOADBUSTS FIND FEW TOADS

More than 45 volunteers, including several families with children, turned out for a ToadBust of the Darwin Airport corridor in January.

Recent toad reports have included: on the airstrip, at Marrara sports fields, at Malak caravan park, NorthLakes Golf Course, the new Bunnings carpark on Bagot Road and in Karama, alongside McMillans Road.

Rapid Creek flows through the airport land, creating a natural corridor for toads to move into the suburbs of Millner, Rapid Creek, Nightcliff and – with a short hop to Ludmilla Creek – Ludmilla, Coconut Grove, Parap and Fannie Bay.

Heavy rains fell on the night, creating ideal conditions for toads on the move, but despite an enthusiastic group of volunteers just 10 toads, half on the golf course, were captured.

Toad captures in a December ToadBust of Leanyer swamp were also less than expected with 47 toads rounded up on the night. In January a second ToadBust of the Leanyer swamp took out another nine toads despite the attendance of some 60 volunteers searching for up to two hours - while a further nine were caught at Lee Point Recreation Reserve and a nearby dam on the same evening.

The low figures for urban ToadBusts contrasts starkly with the counts in rural areas. A ToadBust at the Berry Springs Wildlife Park saw 170 volunteers take out 128 toads from accessible areas of the park and a Humpty Doo Golf Course ToadBust in December saw some 30 volunteers remove 70 toads.



Caleb Speechley shows off one of his catch at the Cox Peninsula ToadBust, winning a book prize from MLA, Ted Warren for 'biggest female'.

Successive ToadBusts on the Cox Peninsula on Friday January 12, Wednesday February 7 and Friday March 16 attended by 35, 23 and 15 people respectively removed 115 toads including just six females on the first night, 90, of which 32 were female on the second round up and 37, including a surprising 25 gravid females on the third night. At Dundee Beach a group of 35 volunteers cleared 250 toads from the small beachside community. In Palmerston residents of Woodroffe, Driver, Gunn and other areas near Mitchell Creek and Marlow Lagoon regularly report toads with many reporting that they have disposed of the toads or taken them to the new drop-off Toad Detention Centre at the Archer Dump.

#### 'NIMBY' WEEK - LESS TOADS BUT NEW BREEDING SITES

ToadBusts went into full swing in March with more than 250 people turning out on different nights to round up toads.

The Wet Season unsurprisingly has brought on new breeding outbreaks. disappointingly at some key locations such as the Lee Point and Casuarina Coastal Reserves. These sites are thought to be among the last havens for the iconic goanna species, the vellow-spotted monitor. Panoptes veranus, once a common sight in the bush and backyards of the Top End, now almost certainly extinct in places where toads have established and pushed to the edge where toads are invading.

Statistics for the NIMBY Busts are on the final page of this newsletter. Interestingly some of the ToadBusts in Palmerston show lower numbers than a year ago indicating that the community action against cane toads is being effective.

#### DARWIN, BERRY SPRINGS GAIN OWN TOAD DETENTION CENTRES

The high use of the Freds Pass Toad Detention Centre – which has now seen more than 8000 live toads dropped off over the past 12 months – has blazed a trail for the installation of Detention Centres in the wake of the toad invasion.

FrogWatch co-ordinator, Graeme Sawyer, says that the Detention Centres help people who might not otherwise tackle a toad to participate in the fight against the toad.

"Many people are squeamish about disposing of toads – not wanting to put them in their freezer or club them – and the Detention Centres provide a real alternative. "A particularly interesting and positive aspect of the Centres is that we see a lot of female toads being dropped off. "That's important – because it means people are stopping breeding – a female is able to lay some 30-50,000 eggs in one sitting – and she can do that up to three times a year, so one female toad removed from the environment is hundreds of thousands of toads that will never happen."

Primary students at Berry Springs School took part in a formal launch of the Toad Detention Centre at their school on Friday, February 9.

The Detention Centres, now at Freds Pass, Berry Springs Primary School, the Archer Dump at Palmerston and Shoal Bay Recycling Centre in Darwin, are for live toads only. The Centres, equipped with insulation, water and solar driven lights, provide a comfortable habitat for the toads until collection by FrogWatch for their final journey to humane disposal and processing into 'Toad Jus' liquid fertiliser.

#### **DETENTION CENTRE STATISTICS**

Freds Pass (Installed February, 2006) 9194 Palmerston (Installed August, 2006) 504 Darwin (Installed January 2007) 102 Berry Springs (Installed February 2007) 98

#### DOES 'BUFO MARINUS' MEAN TOADS ARE MARINE ANIMALS? – SURELY NOT!

The toad invasion of the Cox Peninsula – the 'north shore' of Darwin harbour, has locals wondering if they arrive by sea. Residents have watched the toads' progress along the Cox Peninsula Road, since they arrived in Berry Springs 15 months ago. The toads moved swiftly to Pioneer Creek, about 45kms from the Wagait Beach community on the Peninsula, then to the East Charlotte River and were seen about 30kms from the community at the end of the 2005-06 Wet Season.

While it was questionable whether they were hopping along the road, or invading from Litchfield Park and Dundee to the south, they had not reached Belyuen, 25kms from Wagait before the rains stopped.

The first rains of the 2006-07 Wet saw the first toads arrive at Belyuen and in December the first confirmed sighting (a large female) on the foreshore of Wagait Beach was recorded.

Two weeks later toads arrived in numbers – the Mandorah Beachside Hotel seeing dozens turn up on the lawns along the shore line.

The Mandorah jetty and car park, well lit at night, became an established haunt for male toads on the hunt – with some being found on the beach rocks and on the boat ramp.

A beach recreational fisherman reported that he had seen 'hundreds of toads' emerging from the surf at night, hopping up the beach and into the bush, but his story was doubted by many.

On January 12 a community ToadBust of some 45 people rounded up 115 toads, nearly all male and nearly all on the foreshore.

And in late January a drainage waterway behind the sand dunes at the beach was found to be infested with male toads calling and several couplings. Some 60 toads have so far been taken out of the waterway and there are more in evidence.

One theory is that the toads are washed out of the creeks running into the harbour and taken out on the tide in plumes of relatively fresh water to be deposited along the beach.

Graeme Sawyer reports that an experiment in Fiji, when there was an attempt to clear an island of toads, saw several toads thrown into the sea to see how long they would survive

salt water. The estimate was about 40 minutes before they succumbed.

However the Cox Peninsula invasion experience has people wondering whether the Venezuelans knew what they were doing when they named the species 'Bufo Marinus'.

# NHULUNBUY, JABIRU AND OTHERS TAKE ACTION

The battle with the cane toad, commenced in earnest in Darwin rural, Darwin and Palmerston, is being taken up in other regional centres.

Batchelor residents have been fighting to keep their own clear for mor than two years. A group of concerned people are taking up the fight at Dundee Beach with the first ToadBust planned for this month.

In Nhulunbuy and Jabiru local residents are forming into ToadBusting and ToadTrapping co-operatives. Neighbours are getting together to pool money to buy several traps and install them at every third or fourth house in a street.

In Katherine residents are fighting back, having been overwhelmed in 2001-02.

# 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 after 70 years since 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 or rescued a potential toad victim, tell us your story.

Date	Location	People	Male	Female	Sub	Total
23 March	Mindil Area	28	5	1	0	6
24 March	Rapid Creek Corridor	22	4	5	0	9
24 March	Casuarina Reserve		12	4	0	16
25 March	Marlows Lagoon	24	18	1	0	19
25 March	Palm Golf Course		6	1	0	7
25 March	Palm CDU Campus		3	0	0	3
26 March	Knuckeys Lagoon	34	10	0	0	10
26 March	Leanyer		5	6	4	15
26 March	Lee Point Dam		1	1	0	2
26 March	Lee Point		27	10	0	37
27 March	Lee Point	27	21	14	0	35
28 March	Casuarina Reserve	42	9	8	3	20
29 March	East Point/Fannie Bay	34	0	1	0	1
30 March	Palmerston Golf Course	e 23	22	11	4	37
31 March	Bees Creek/Fred's pass	s 27	7	34	19	60

## NIMBY (Not In My Backyard) Week ToadBusts March 2007

TOTALS 288 people caught 150 males, 97 females and 30 sub-adults totalling 277 toads