

CELEBRATIN

ERRITORY WILDLIFE PARK

# Its our birthday, and you're invited!



Letter from the Director, Shael Martin

### A long, long time ago, back in October 1989, a young woman, new to Darwin and keen to explore the Northern Territory, heard about a new place called 'The Territory Wildlife Park'.

Having only a bicycle and no car, she convinced a fellow university student to visit the Park with her. They crippled down the highway in her friend's rusty Datsun 120Y the very next weekend. By the end of the day, this young lady had developed a deep appreciation and admiration for the Park and all its animals and beautiful bushland. This feeling has endured in various forms for 25 years.

Through the early 1990s the young lady would cart vanloads of her baby sister's friends from the northern suburbs down the highway for a fun weekend out at the Territory Wildlife Park with a swim at Berry or Howard Springs Nature Reserves on the way home.

### I've grown up with the Wildlife Park, as have thousands and thousands of Territorians

When the neighbourhood kids grew up, she'd visit with friends and visiting relatives. With the dawn of a new millennium this not-so-young lady anymore, had a family of her own, and a Territorian Pass and a visit every few weeks was just part of the family routine.

Then a couple of years ago, by accident rather than design, she was asked to fill a gap left by retirement and act as Director. It was an offer she couldn't refuse! And two years later, here I am! I still can't guite believe I am doing this job with amazing people in this amazing place.

I've grown up with the Wildlife Park, as have thousands and thousands of Territorians, who have visited as kids with family or on school camps, who have brought their friends and relatives here, who have brought their own kids, and now, even their grandchildren.

The Territory Wildlife Park is Territory Pride. It is our beautiful bush, our sea, our waterways. It is our unique, quirky and elusive wildlife - scaly, furry, prickly, and slimy. It is our amazing community of down to earth people who love what they do and where they live.

It is the way we contribute to wildlife research of global significance, the work we do with educators and film crews from around the world, the wildlife we save. It's the people who leave the Park with precious memories of holding a python, feeding a whip ray, tossing fish to a pelican or having an owl ruffle your hair as it flies silently overhead.

We have much to look forward to with a new art trail in progress, new animal encounters and refreshed exhibits, a revamped picnic ground, and more events and interesting activities! Stay tuned via our Facebook page for updates.

#### www.facebook.com/TerritoryWildlifePark

Lastly, I'd like to take this opportunity to give huge thanks to all staff past and present, to you our community and suppliers and sponsors. We wouldn't be where we are without you!

I hope you all share this pride today, on our 25th anniversary. I'm certainly bursting at the seams with it!

Regards, Shael



# The bugs are coming!

At the Territory Wildlife Park, we recognise the importance of biodiversity and are committed to preserving it through education of our guests. In order to effectively do this we need to highlight some of the lesser known creatures that have very important roles in these natural systems.

Invertebrates make up well over 90% of the world's living creatures yet they are very poorly represented in zoos and wildlife parks representing around 5% of displays worldwide. If wildlife institutions are serious about representing fauna then they need to put a much greater emphasis on invertebrates and the role they play in keeping natural systems healthy.

Way back in 1994, the Territory Wildlife Park opened our Invertebrate Display; this was a purpose-built structure

Goliath Stick Insect (Eurycnema goliath)

"Biodiversity" is simply the entire living system. A huge variety of plants and the creatures that live feed and rely on the intricate relationships that exist between them all is biodiversity. We are all familiar with the larger participants in these complex systems. Species such as Wedge-tailed Eagles, Kangaroos, Crocodiles and Sharks and these creatures are so very important but, if you think about it, without all the plants, smaller animals and invertebrates they would be no more.

### Many of them could be living in your backyard and you may not even know they are there!

Bugs, or more correctly "Invertebrates" are a lesser known but very important part of our environment. Giant insects that look like sticks, predatory Praying Mantis, colourful Cockroaches, deadly Spiders and Scorpions are just a few of the amazing members of this fascinating order of animals. Many of them could be living in your backyard and you may not even know they are there!

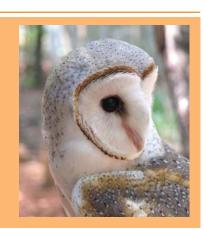
which was the first of its kind in Australia! Our guests could see up close some of the amazing invertebrates that are found up here in the Top End. Unfortunately another insect with an unsatisfiable appetite for timber, the "Top End" Termite (Mastotermies darwinensis) made the structure unsafe and our building was removed from our visitor's displays.

Recently there has been a renewed interest in once again adding invertebrates to the Territory Wildlife Park's displays. I recently attended an Invertebrate Keepers workshop at the Melbourne Museum, where all the latest techniques for the captive care of a wide variety of invertebrates was presented by experts. Since returning, some of our staff have been busy putting together

plans for several species to add for our visitors experience. Initially we are going to trial Giant Green Praying Mantis, Goliath Stick Insects and Monsoon Forest Snails. These species will be used to help us to interpret the importance of invertebrates in the health of the Monsoon Forest. They will be taken into our Monsoon Forest enclosure and our visitors may even get a chance to have one of them climb on their hand!

So next time you visit the Territory Wildlife Park keep your eyes open for some of our new additions!

We hope you enjoy our birthday! It's ow treat!





# **Tracking Sawfish**

Gliding overhead in the walkthrough tunnel exhibit, Largetooth Sawfish (Pristis pristis) have always been an impressive feature of the Territory Wildlife Park Aquarium. Now they are part of a major research project.

A marine scientist, Kate Buckley took three years from her job as head aquarist at the Territory Wildlife Park to study a PhD with the National Environmental Research Program (NERP) Marine Biodiversity Hub based at Charles Darwin University. Her project is focused on identifying the conservation benefits and ecological impacts of displaying threatened elasmobranchs (sharks and rays) in public aquaria, and in her research she has maintained close ties with the Territory Wildlife Park which has a long history of keeping and displaying captive sawfish.

Largetooth Sawfish are a good candidate for conservation research: the future of the species has been of concern. The level of trade control was recently upgraded, banning any international trade of the species. This level of control includes rhinoceros, red pandas and other species nearing extinction in the wild.

Just one aspect of Kate's research involves comparing the movements of wild sawfish with captive-released sawfish. The wild sawfish are the ones that are caught, tagged and released immediately for tracking, while the captive-released fish are those that are displayed for several months in the Territory Wildlife Park Aquarium before being tagged and released for tracking.

### Sawfish can ride the current at a pace that even a boat can struggle to keep up with!

Tagging involves attaching two separate transmitters to the sawfish. One is coded for the 22 stationary receivers moored along the Adelaide River system, tuned to pick up an individual sawfish's movements over the next few years. The other transmitter is coded for a handheld hydrophone that will be listened to non-stop for the following 72 hours by tag teams tracking in 12-hour shifts. Kate has two hydrophones handy to pick up this transmitter wherever it is signalling in the Adelaide River: a directional hydrophone that lets the tracker pin-point the exact location of the sawfish in the river, and a unidirectional hydrophone that can 'hear' the transmitter within a 400 metre radius – handy on the occasions that the tracking team loses the fish.

"Looking at the strength or loudness of the signal received by the receiver, you can work out where the signal is coming from," Kate explains how the directional hydrophone works. "The strength of the signal indicates proximity, allowing you to close in on the fish until you are virtually on top of it. This is how we are able to manually track the fish down the river, recording its whereabouts at 15 minute intervals."

"Until this project, no one has manually tracked this particular



TWP staff release a Largetooth Sawfish (Pristis pristis)

species for long. Very little is known about the ecology of juvenile Largetooth Sawfish and this tracking is providing lots of new information."

Just one discovery Kate has made during her research includes the identification of typical juvenile sawfish behaviour. It appears juvenile sawfish remain more or less stationary at high and low tides when there is little water movement, and then take off with the turn of the tide. Sawfish can ride the current at a pace that even a boat can struggle to keep up with.

So far there is good news for sawfish released after a stint on exhibit: "Sawfish released from the aquarium also show this type of behaviour, which is great news as it means that spending time in captivity may not always result in them losing behaviour patterns that they need to survive in the wild."

Kate recently presented some preliminary results of the sawfish tracking at the Joint Meeting of Ichthyologists and Herpetologists in Tennessee, USA; a global conference focused on fish and reptiles.



Can you guess **how many eyes** spiders have?

Some spiders have six eyes, some have eight!



TERRITORY WILDLIFE PARK

# Park in pictures!



Some of the Aquarium tanks can be a little tricky to clean!





A sugar glider is put under general anaesthetic while being nanochipped



Handraised joeys get a cuddle during weighing



A marine turtle from the Park is fitted with a satellite tracking device and released from Bare Sand Island as part of a research project





Relocating emus. You can now see them sharing the Rocky Ridge exhibit with wallaroos plus a rock wallaby or two!

### TERRITORY WILDLIFE PARK



A clutch of Olive Python eggs



Gizmo the barking owl is checked by the vet



Yarak the Wedge-tailed Eagle undergoes a foot check

Baby death adders are just as venomous as adults! They require very careful handling



The Park is home to rare albino carpet pythons!





This X-ray shows the leg cast of a Tiwi Masked Owl

# Wallaby Walkout!

Earlier this year staff met to discuss the high number of agile wallabies living in the Territory Wildlife Park's 13 acre Woodland Walk enclosure. The wallabies had bred over time and were now impacting on the habitat. It was agreed that the first step to improving the area should be the removal of the wallabies by way of a walkout.

What is a walkout I hear you say? A large number of people form a line to walk animals, out an opening in the enclosure fence. Successful macropod walkouts had been conducted at Monarto Zoo and Cleland Wildlife Park in the past and also at the Territory Wildlife Park itself, in a smaller compound area.



#### How do you walk out wallabies?

A walkout is not about mustering or chasing. For anyone familiar with macropods you would know that 'mustering' agile wallabies is impossible as they are too flighty and being quite capable of leaping straight over your head!

Instead, a line of people advanced slowly and quietly through the compound. There should be no stamping feet or shouting at the wallabies as this could trigger panic. Instead arms were to be held out and waved to make the line appear continuous. It was expected that wallabies would continue to move away until they were moved out of the enclosure entirely through the fence opening.

It was important that the line of walkers remain fairly straight with no one getting too far ahead. Lines of different coloured flagging tape indicated stopping points as people moved progressively through the enclosure toward the fence opening, encouraging the wallabies out. Two observers were stationed in hides just outside the open fence to monitor progress, animal behaviour / stress levels and to count wallabies leaving the compound. 2-way radio contact was maintained throughout the operation.

The first walkout was a learning experience for the organisers with only 8 wallabies encouraged out of the Woodland Walk out of a population of dozens. It seemed that despite a well organised and smoothly executed walkout, the reluctance of the wallabies to leave their familiar surroundings was so strong that they would rather double back and face a line of people than enter unknown territory. Even after a week of regularly opening the fence, the wallabies were still very reluctant to even approach the open fence much less cross it.

A second walkout was planned. This time a shade cloth wing was erected once the wallabies were pushed past a

certain point, so that those animals breaking back along that side would be funnelled out a side gate.

The addition of a side wing was a success for the second walkout. While just 4 wallabies were directly moved out of the compound, a total of 18 wallabies were funnelled down the temporary wing and out the side gate.

The wallaby walkout has provided the Territory Wildlife Park with some useful insight into agile wallaby psychology and behaviour. The general experience of the operation seemed to demonstrate just how much easier moving agile wallabies is if the animals feel they are returning to familiar (safe) territory. Observations such as these

made during the wallaby walkout have assisted in a better understanding of these animals.

As for the Woodland Walk, on June 20th the Territory Wildlife Park was given the fantastic news that a grant application to redevelop the area had been successful. The Foundation for National Parks and Wildlife awarded the Park with the grant, which will be used to transform this enclosure into an immersion experience for visitors to learn about old growth forests and small mammals decline.

Redevelopment is well underway at the moment and 2 new joeys have cleared quarantine and are expected to move into the area in the next few weeks. The new experience is expected to open around Christmas and will give TWP a dedicated macropod (wallaroo and wallaby) encounter area again after many years of limited opportunities.

Words: Sarah Hirst, Biodiversity Officer

TERRITORY WILDLIFE PARK

### Colour in these Red-collared Lorikeets!



# Word find!

There are twelve common Top End snakes hiding in the grid below! Can you find them all?

W	E	5	٣	E	R	S	L	A	D	D	E	Τ
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E	C	A	R	G	١	۲	B	E	B	T	P	١
R	S	L	A	0	B	G	0	L	A	H	۱	٩
N	C	H	١	L	0	R	E	N	5	A	D	5
B	A	N	D	E	D	E	0	Γ	D	D	١	N
R	R	L	١	V	Κ	۲	N	W	E	D	A	A
0	P	1	2	E	١	N	G	T	N	E	3	κ
W	E	S	G	0	L	D	E	N	۲	R	E	E
N	Т	١	e	E	R	C	H	١	L	E	N	Т

Answers: Olive, Whipsnake, Western Brown, Childrens, Slaty Grey, Banded, Keelback, Golden Tree, Tiger, Carpet, Death Adder, King Brown

Visit www.territorywildlifepark.com.au for a full list of activities and session times. Cox Peninsula Rd, Berry Springs • Ph 08 8988 7200

