



March 2024

Alice Springs Field Naturalists Club Newsletter



Central Rock Rat (*Zyzomys pedunculatus*) – a part of the Alice Springs Desert Park conservation program. Photo: Suzanne Lollback

Meetings are held on the second Wednesday of the month
(except December and January) at 7:00pm
at the Olive Pink Botanic Garden.

CONTENTS

Meetings, trips, and contacts	p. 2
A history of buffel grass (<i>Cenchrus ciliaris</i>) in Australia	
Presentation report by Jill Kleiner	p. 3
Reptiles on the move - Marg Friedel	p. 6
Art Residency Central Craft with Jodie Goldring	p. 6
Pitchi Richi Sanctuary Alice Springs – Rhondra Tomlinson	p. 7
Frill-neck Lizard – Jenny Purdie	p. 8
Behind the scenes tour of Alice Springs Desert Park's conservation/breeding projects	p. 9

Postal Address:
P.O. Box 8663
Alice Springs, NT 0871

Web site:
www.alicefieldnaturalists.org.au

Email:
contact@alicefieldnaturalists.org.au

[Follow us on Facebook!](#)

The next newsletter will be published on 1 April 2024.
We appreciate all contributions, articles and photos both local and from elsewhere.
Please have them to Lisa McLean lisamclean@outlook.com by **20 March 2024**.

ALICE SPRINGS FIELD NATURALISTS CLUB

Wednesday 13 March – 7.00pm. Sam Hussey - Contemporary use of traditional Arrernte medicines.

Sunday 24 March – A morning field trip to see Arumbera Range fossils – Leader Pete McDonald. Details to come.

Wednesday 10 April – 7.00pm. Angus Newey will speak about raptors, falcons, and other birds of prey.

AUSTRALIAN PLANTS SOCIETY – ALICE SPRINGS

apsalicesprings@yahoo.com.au

Wednesday 7 March – 7.00pm. Annual General Meeting. Followed by a presentation by Suzanne Bitar on vegetation on a reserve at Apollo Bay.

Saturday 9th March – 8.30am-10.30am. Planting Seeds for Wildlife, Olive Pink Botanic Garden. Please register as numbers may be limited, here is the link: <https://fb.me/e/1TE4v0VPy> , Or email lfw@lowecol.com.au

Alice Springs Field Naturalists Club

Committee Members

President	Marg Friedel	0417 849 743
Vice-President	to be appointed	
Secretary	Lisa McLean	0412 642 987
Treasurer	Neil Woolcock	0428 521 598
Property Officer	to be appointed	

General Members

Wendy Mactaggart	0434 495 903
Peter McDonald	0427 177 450
Jill Brew	0437 223 203

Public Officer

Anne Pye	0438 388 012
----------	--------------

Other Club Responsibilities:

Newsletter – Lisa McLean
Facebook Organiser – Meg Mooney moon3@iinet.net.au
Website controller – position vacant

Positions Vacant

The Club is looking to appoint a Vice-President and a Property Officer. If you would like to contribute your time and join the enthusiastic group who keep things rolling, please get in touch with Marg Friedel.

Thank you

Thanks to all contributors this month: Marg Friedel, Jessie Longmuir, Rhondda Tomlinson, Jenny Purdie, Jill Kleiner, Meg Mooney, Suzanne Lollback.



Beetles – an update from Bill Low

Keen readers will remember this photo from last month of these beetles Jane Bannister found floating in the rain gauge in her garden. Bill Low has let us know that he mis-named the family name for Jewel Beetles. Jewel beetles are family *Buprestidae*.

The family is equally as large as the Leaf Beetle family, the *Chrysomelids*, Jewel beetle larvae are wood borers and the adults are very short lived. Leaf beetle larvae, as the name implies, are mainly leaf eaters and have a shorter life cycle, while the adults may live longer.

Thanks Bill, and to others who also spotted the error.

A history of buffel grass (*Cenchrus ciliaris*) in Australia

February speaker night – Marg Friedel

Report by Jill Kleiner

Marg Friedel, President, gave us a comprehensive and fascinating overview of the unexpectedly diverse ways that buffel grass (*Cenchrus ciliaris*) entered and then spread across almost the entire continent of Australia.

As generally understood, buffel grass's entry was originally coincident with the introduction of imported camels for haulage use mainly in the remote inland. As a long term Centralian I was not surprised but what was surprising was the timing, the multi-entry points/ports mainly along the western and southern coastline. This did not seem to explain to a me, a native Tasmanian, how one of the first ports to receive camels was Hobart, in 1840, already established as a stable British base. Maybe a navigation error or ignorance. [MF: No, some camels were imported as novelties and put on show in public places, sometimes speculatively, in the hope of finding buyers. Some of the earliest imports came from the Canary Islands, a port for ships travelling from England to Australia.]

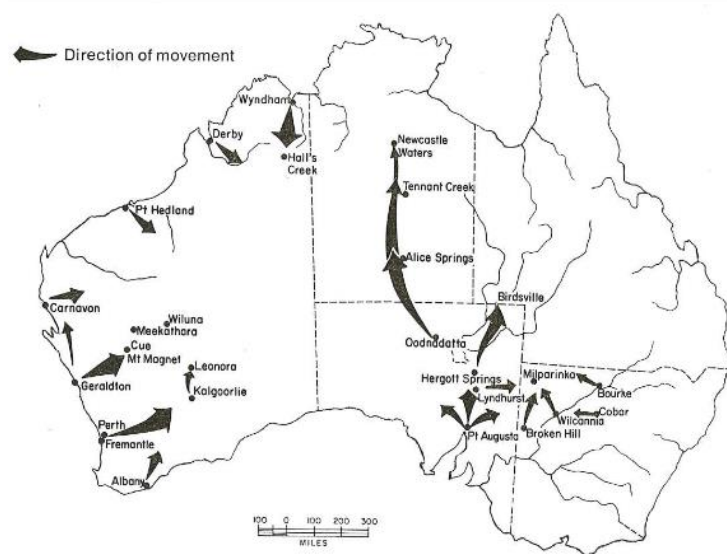


Old camel saddle (Photo: Bob Winkworth)

Over the principal 25 year period of importation from the 1880s, camels arrived along with trained working cameleers from mainly Afghanistan and NW India. Commonly, the cameleers provided of their own saddlery. As Marg reported, this included the seeds of Central Asian plants that were used to stuff the saddles – not just *C. ciliaris* but up to seven different plant species.

So, the buffel story began here.

The spread of camel travel, along establishing routes through desert country, is well indicated on the maps. The haulage of provisions and materials to small, remote sites of developing infrastructure established major routes. Seed was also carried by the cameleers to grow at appropriate camp sites for camel feed. One photo taken by Marg shows a single track of *C. ciliaris* across a spinifex plain, spread by modern-day camels from a 1930s campsite of prospector Michael Terry at remote Nicker Creek in the Western Desert.

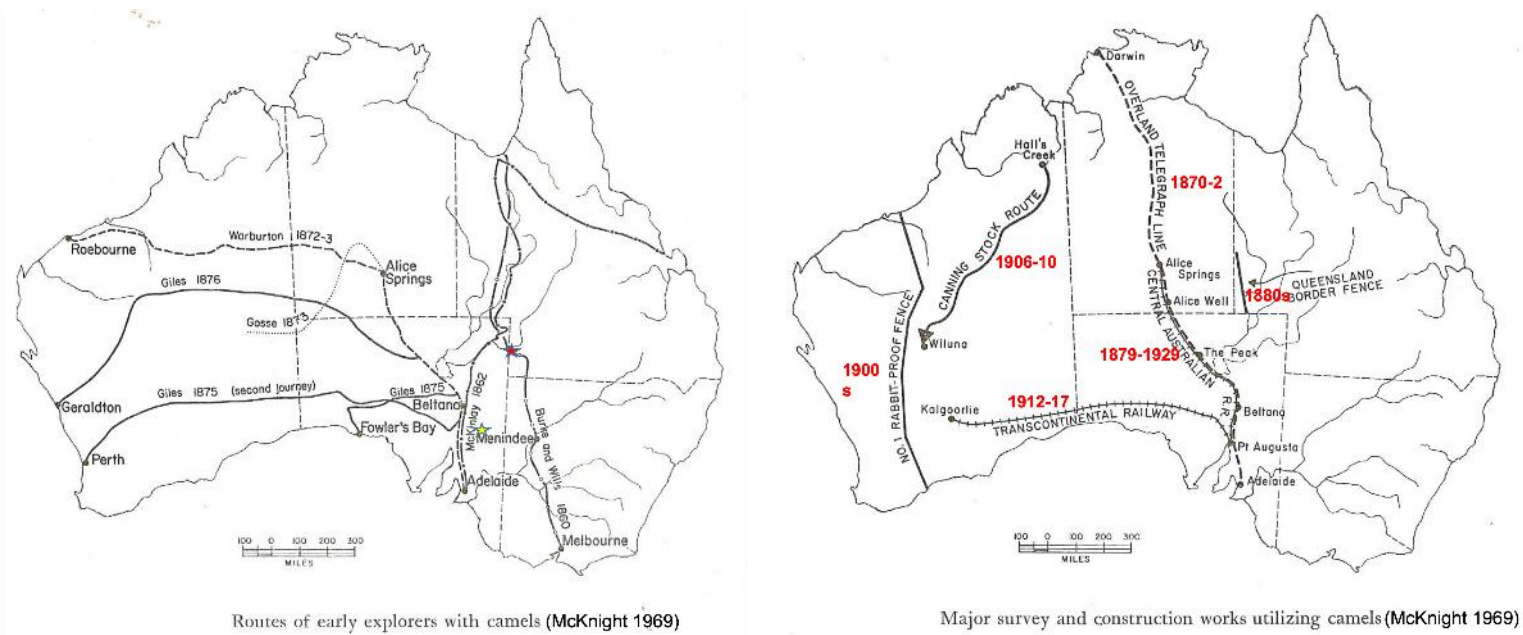


Camel freight cartage (McKnight 1969)

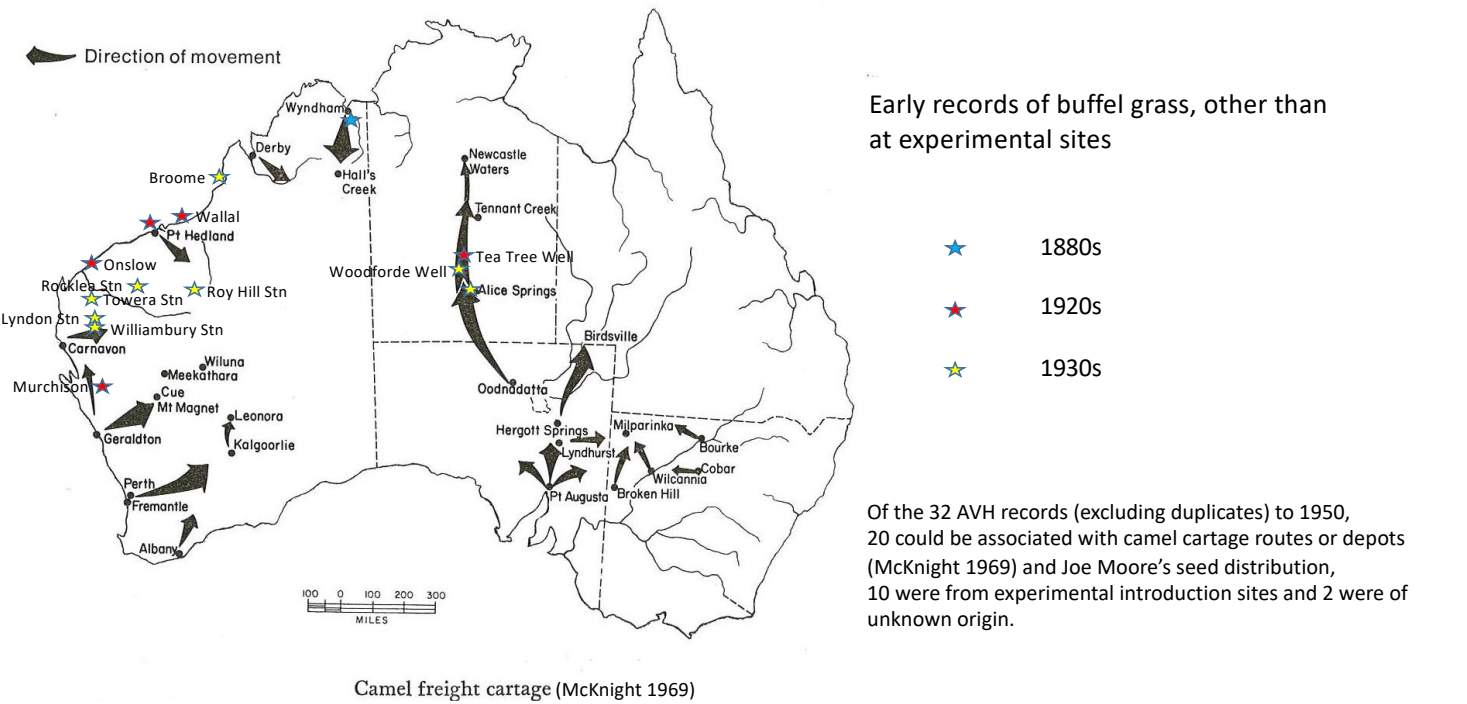


Camel pad with buffel grass, spread from prospector Michael Terry's 1930s camp, Nicker Creek, Western Desert, WA (Photo: Marg Friedel)

Burke and Wills were the first British explorers in 1860 to have used camels in their attempt to reach the continental north from Melbourne. Eyre and others used camels in early long treks in the west. The Telegraph Line northwards across the continent supported from now South Australia, transcontinental rail line construction and multiple mining enterprises, all made use of camels.



Map at left: Two camels lost by Wills and McDonough 1860 (red star), turned up on Dr Brown’s Station in SA (yellow star)



When the stuffing in the camel saddles became too worn, it was discarded and replaced with local species. As a result, early records of buffel grass are associated with travel routes, Ghan towns and camps. The very first herbarium record of buffel grass in Australia is from 1887, on the route from Wyndham port to the Hall’s Creek mines, on the banks of the Ord River.

Probably the largest shipment of camels ever made to Australia was in 1907 and it landed at Port Hedland. Joe Moore, an enterprising storekeeper, noted how readily buffel grass grew around the town. He encouraged the local children to collect the seed and he distributed it to local pastoral properties. This variant eventually became the commercial variety ‘WA’.

The 1920s saw the end of the great camel importation, probably 10,000 to 20,000 overall.

What was of great interest was Marg's tracing of the historic political decisions and consequent actions that enhanced the spread of buffel grass throughout desert Australia.



'Gayndah' cultivar in central Australia (Photo: Marg Friedel)

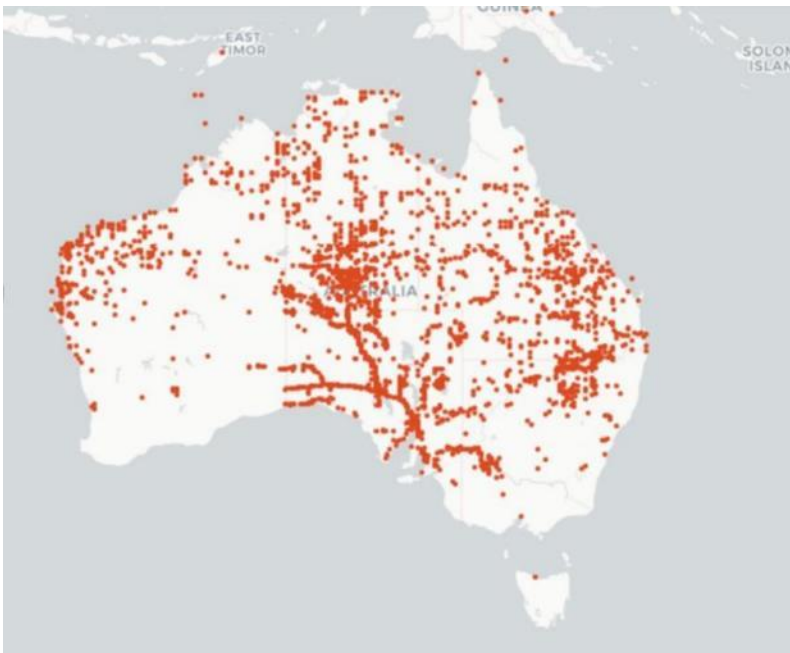
The Western Australian Department of Agriculture took up Joe Moore's initiative with enthusiasm and from 1928 buffel grass seed was distributed to other pastoral properties and to interstate agricultural agencies and botanical gardens. For example, in that year, seed was sent from Port Hedland to Rockhampton for agricultural trials. Informal distribution amongst landholders followed.

In the 1930s, experimental sowings were made in many Queensland districts, after importation of seed from numerous countries. Schools were encouraged to establish 'hobby plots', giving rise to new commercial varieties, for example 'Gayndah'. At least seven varieties, mostly originating in Africa, were developed in Queensland and distributed commercially. New South Wales imported the 'Molopo' cultivar from South Africa. Marg found only one lone scientific voice from the 1930s, that suggested any possible risk from this process.

It was important to understand the context of decisions made about 'resource enhancement'. After World War II, UNESCO promoted improved productivity of arid lands at an international level. Political forces in Australia drove the development of remote and isolated northern Australia, for fear of 'uninhabited' land being claimed by foreigners. 'Unproductive' spinifex and mulga country was to be made 'productive' and science would have the answers. One answer was buffel grass.

In the Northern Territory, buffel grass was used to repair damaged conservation land and public land, as well as to improve pastoral production. Its use was unquestioned until after exceptional rainfall in the 1970s, which caused its unanticipated spread across the landscape. Frank McEllister, senior horticulturalist at the Arid Zone Research Institute, was cited from the floor as observing 'positive competition with commercial plants on trial at the AZRI'. Again, from the floor, it was noted that the current lack of outbreaks of ruby dock (*Acetosa vesicaria*, another camel import) can be attributed to suppression by buffel grass.

By the late 1980s and into the 1990s, its potential to transform landscapes and alter fire regimes was well recognised. But contention still surrounds its management in the 2020s; strategies vary across different jurisdictions.



Buffel grass records in Australian herbaria: 23,635 to January 2024. To 1950, there were just 32 records (Source: The Australasian Virtual Herbarium)

For more information on invasive plants originating from camel harness or, in the case of date palms (*Phoenix dactylifera*), brought by the cameleers, see <https://www.publish.csiro.au/BT/pdf/BT20030>.

Reference:

McKnight TL (1969) 'The Camel in Australia.' (Melbourne University Press: Melbourne, Vic., Australia).

Reptiles on the move

Marg Friedel

Summer weather means reptiles are out and busy. Every day my back and front yard has a new hole or two dug by the resident long nosed dragons (*Gowidon longirostris*), and I hear or sometimes see them dash off at my approach. Other, bigger cousins are also exploring their territory, apparently unconcerned by nearby humans with their phone cameras. In early February Barbara Kimber videoed a young perentie (*Varanus giganteus*) cruising past her back door and, a few days later, I enjoyed watching an adult sand goanna (*Varanus gouldii*) pottering around on a verandah at Flynn Lodge.



Perentie (*Varanus giganteus*)



Sand goanna (*Varanus gouldii*)

Wikipedia tells us the perentie is one of the largest living monitor lizards on earth. It is important to many Aboriginal cultures totemically as well as for bush tucker. Its fat was used for medicinal and ceremonial purposes. The specific name for the sand goanna, *gouldii*, is assumed to be a Latinised form of the surname of ornithologist John Gould, an associate of the describing author John Edward Gray. In Pitjantjatjara and other central Australian languages it is called "Tingka".

Art Residency Central Craft – Jodie Goldring



Artist Jodie Goldring is coming to Alice Springs for a one-month Art Residency at Central Craft from June 21. Jodie's residency will involve chatting with plant people about their relationships to specific plants (gathering plant stories) and then creatively translating them into fibre artworks using sculptural basketry techniques. Jodie works with photos, text and drawings to go alongside the weaving trials that will build into a body of work. She is wanting it to be an inclusive project so domestic gardens, community gardens, and also the broader parks and landscapes around Alice will be welcome.

If you're interested, please contact Jodie via her website <https://jodiegoldring.com.au/> Jodie may very well come along to activities during June/July, so you may also catch up with her then.

Pitchi Richi Sanctuary Alice Springs

Rhonda Tomlinson



William Ricketts' sculptures in 1969

As a child growing up in the suburbs of Sydney Alice Springs fascinated me and I guess like so many of my age saw the film, "A Town like Alice". In the early 1960's at high school a man came to our school and talked to us about the inland rivers and aquifers of the so called "Dead Centre". This talk really inspired me to want to visit this amazing land.

1969 I was working for the South Australian Railways and an opportunity arose for a friend and me to go by express bus to Alice Springs and join a tour for about a week. We did the usual tourist sights, and I was so taken by all we saw and then on the way back into town we stopped at Pitchi Richi. I fell in love with this magical place that so deeply moved me. The sculptures by William Ricketts had almost a spiritual ambience especially in the afternoon parkland tree setting and also the natural setting of the other displays of local significance. I knew I had to return.

Work and life experiences led me in other directions, and it was not till 1998 that I headed to Darwin for work. Passing through Alice Springs on the bus I thought back to the time I visited Pitchi Richi.

2001 I was sent to Alice Springs for work as they were short staffed in the office. I enquired about visiting Pitchi Richi and was shocked to be told it was closed and could not be visited.

2003 Elsa Corbet nominated Pitchi Richi for heritage listing. This was the first built tourist attraction in Alice Springs and in 1960's was one of the top 4 must see tourist attractions in Alice Springs.

2004 I moved to Alice Springs for work and at this time joined the Alice Springs Field Naturalists.



Elsa Corbett about to receive her Life Membership of the ASFNC from President Bob Read, 13th October 2007.
Connie Spencer and Haydee Adel looking on.



The presentation of Life Membership to Elsa Corbet by President Bob Read, restaged!

2005 Elsa Corbet invited the Field Naturalists to an end of year breakfast at Pitchi Richi. She took us on a tour of the grounds and told us of the work her husband had done and about William Ricketts. Elsa was in the process of hand writing the various plaques on the displays.

2007 Heritage Alice Springs and Alice Springs Field Naturalists put a lot of time into tackling the buffel grass problem and made the Sanctuary presentable for Elsa to have an open day. Over 500 people attended and \$1,000 was raised. This year Elsa was also made a life member of the Alice Springs Field Naturalists which gave us another day at the Sanctuary.

23rd October 2007 Domenico Pecorari from Heritage Alice Springs wrote to the Minister Delia Lawrie MLA saying, "I write to express my profound disbelief to hear that the Heritage Advisory Council had decided to not recommend the Pitchi Richi Sanctuary for heritage listing on the Northern Territory Register of Heritage Places.

There have been many attempts to restore the Sanctuary and refurbish the displays, house and sculptures but without success.

2009 Apparently Pitchi Richi was finally Heritage listed and is only available now for special public events and for groups by appointment.

2024 To me this is so sad as to restore the work of William Ricketts must be now almost impossible.

Editor's note: See article by Rhondra about Pitchi Richi and Elsa Corbett's presentation in November 2007

https://alicefieldnaturalists.org.au/07_11.pdf

FRILL-NECK LIZARD *Chlamydosaurus kingii*

By Jenny Purdie (Katherine)

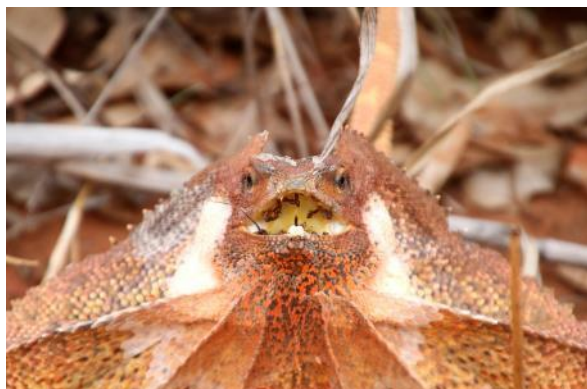


Frill-necks are arboreal and occur across northern Australia in tropical woodlands. They feed mainly on insects, especially ants. They breed during the late Dry & early Wet seasons with the female laying up to 20 eggs in a shallow cavity which she has dug; she can lay multiple clutches per season; incubation is 2-4 months.

Recently Steve called out to me to bring the camera and pointed out a small lizard on the trunk of a young eucalypt tree. When I downloaded the photo, I went through my book on Australian reptiles but couldn't find a match. I had noticed a frill lay back on its neck and wondered if it was a baby frill-neck; I Googled baby frill-neck and there it was - a totally different color from the adults. It is quite likely that the top photo was one of the parents as they were both in the same area.



A beautiful frill necked lizard in full frill *Chlamydosaurus kingii*



An adult *Chlamydosaurus kingii* with ants in its mouth. A photo Jenny took some years ago.



The baby frill-neck

Visit to the Alice Springs Desert Park mammal breeding area

Meg Mooney

After our trip to the Alice Springs Desert Park in February, I decided to write poems from the point of view of each of the animal species mammal keeper Aimee Blundell talked to us about. These animals are all nocturnal and so we only actually saw the Central Rock-rats, which Aimee fed while we were there.

Aimee gave us a great introduction to these animals. The poems include some of what she told us, some things I already knew and a bit from Wikipedia. Aimee checked all this and gave me some more information on mulgaras.

Central rock-rat

We came from the West MacDonnell Ranges
in dry years our relatives
hang out on high rocky ridges
where it's a bit wetter
and there are our favourite seeds
and not so many cats
in wet years we spread out
and breed a lot

but we're listed as critically endangered
because we haven't been found
outside the West MacDonnells
for a long time
thirty years ago scientists
thought we were extinct

we have the large eyes
of nocturnal animals
and tails that are thick at the base
a fat store for lean times

this is the second year our group
has been living in these see-through boxes
with plastic pipes between them
the Desert Park staff open up a pipe
when they want us to mate
with the rat in the neighbouring box
that can be scary –
our females sometimes attack
smaller males, and the males
can be feisty too

a month ago some of us had babies
and they're nearly half-grown now
the Desert Park started a breeding program
with some of our ancestors
nearly thirty years ago, with mixed success
they began a new program after they collected us
some of our offspring from last year
got to go out to the Newhaven Wildlife Sanctuary
and get dropped on the range by helicopter



An adult Central Rock Rat (*Zyzomys pedunculatus*). Photo: Suzanne Lollback



Mammal keeper Aimee talking to people in one of the rock-rat breeding rooms. Photo: Jessie Longmuir

Brush-tailed mulgara

We came from the wide plains
and red sandhills of Newhaven
a few years ago

Aimee calls us pocket-sized
Tasmanian devils
her fingers have felt our bite force –
stronger per kilo than a lion!

we're about the same size as rock-rats
and like to flatten our bodies on the ground
to sunbake outside our burrows in winter

we're very intelligent
can learn to go on scales
to be weighed

so we need lots of activities –
places to hide, sandboxes, rock piles
buried blood or insects to dig up
changes in our environment

the Desert Park has bred us inside
which resulted in more males
and is going to try outside cages this year

Red-tailed phascogale

Our ancestors were brought here
23 years ago, from southwest Western Australia –
our great-great-great-great-great etc. grandparents
lived in the wild there, but had disappeared
from everywhere else in Australia

our bodies are small rat-sized
but with long furry tails
we eat meat and live in trees
so here they have branches
in our cages and feed us
mice and crickets and mealworms

the Desert Park mob
developed our first captive breeding program
once a year every adult female
gets to mate with all the adult males
but her brood of pups only have one father –
the other males didn't do something right
or maybe the female was already pregnant
when it was their turn

our males decline after they mate –
stress-related diseases –
so the Desert Park euthanises them
it's kinder
(I'm not making this up
apparently happens in some small marsupials
including antechinus)

within 7 years our 18 ancestors
had hundreds of descendants
it must be at least a thousand now!



A young Central Rock Rat (*Zyomys pedunculatus*).
Photo: Suzanne Lollback



The Zoology workshop.
Photo: Jessie Longmuir



Dinner time for the central rock-rat. Photo: Jessie Longmuir