



*Toodyay Naturalists' Club Inc.*  
**THE TNC NEWSLETTER**  
*Number 21 December 2016*



*Above: Carnaby cockatoos*

*Photo: Beth Frayne*

*The Toodyay Naturalists' Club Inc.  
is grateful to the Wheatbelt NRM  
for their support in producing  
the TNC Newsletters*

**INSIDE THIS ISSUE**

President's Report	Page 2
ANN Visit to Wongamine	Page 3-4
Why, may I ask?	Page 5
Wildflowers in Dawn Atwell Reserve	Page 6-7
Scorpion Report	Page 8-9
Wildlife on our roads	Page 10
Brushtail possums	Page 11
Environment Matters	Page 12



**wheatbelt**  
natural resource  
management

# PRESIDENT'S REPORT

SEPTEMBER TO DECEMBER was very busy but exciting time.

Our September Litter Pick Up was at our new location on Julimar Road from Parkland Drive heading west. The area was not litter free but not excessive and we finished by 10:30. It really shows that we do have a culture of drinking alcohol while driving with the majority of rubbish alcohol stubbies and cans, then followed by flavoured milk cartons which does not say a lot for the liquid intake and health of our residents and visitors.

The walk through the Dawn Atwell Reserve, which is located next to our litter pick up area, had all its flowers in their glory, the orchids were on display and I would recommend this reserve to any persons in the Shire who have an interest in flora.

The Annual General Meeting provided no surprises with people putting their hands up and the persons from previous years were elected unopposed.

A general meeting continued after the AGM. One of the main topics was the proposed mining of the Helena Aurora Range. Public submissions were open for comment and Wayne prepared a wonderful and comprehensive submission; I feel it will go a long way in having these areas excluded from mining into the future, thanks Wayne.

Naturalist's from around Australia held their Biannual Conference in Perth early in the month and on Monday 3rd October, 85 plus participants had morning tea at Duidgee Park then a day excursion to Wongamine Nature Reserve and an afternoon refreshments at the CWA hall - thanks to the CWA for the catering, a very successful and friendly day.

The Reserve displayed an abundance of wildflowers which had the visitors in awe of this display so close to a capital city. Apart from the excursion the bush babies were a wonderful draw card, thanks to Robyn and Georgina.

Our Environmental Matters Tent at the Toodyay Show was again very popular, the furry baby animals, Bob the Red Tail Black Cockatoo, Naturalist Club display, Friends of the River, Shire Environmental Officer, plants and our various 'give-a-ways' were very popular. The weather was not kind to all show goers and our tent provided shelter to many.

An excursion to Ardina's property in the Goomalling Shire was rescheduled for October from June, but again the day was wet, cold and windy. A few brave members attended and briefly walked through some remnant vegetation and visited an old clay pit that now is a permanent water lake.

The Club is looking to share the building that is next to the Bendigo Bank with the Friends of the River and the Historical Society. This will allow us to have a central location in town but it is not big enough to hold our monthly meetings so these will still be at the CWA hall - we will keep you informed.

Our planning meeting was in December and we will have our programme for 2017 on our website shortly.

Please visit our website to view the programme - and don't forget to log in and make use of the sightings.

I wish all Nats' a safe, happy Christmas and New Year, and look forward to having a successful 2017.

President Brian (Foley)



# ANN VISIT TO WONGAMINE NATURE RESERVE

by Desraé Clarke

## ***Australian Naturalists' Network (ANN) Participants visit Toodyay***

***October 3rd 2016***

Although the weather had been totally 'unspring-like' since its beginning on September first, Tuesday, third of October, became a beautiful sunny day to welcome to Toodyay visitors from throughout Australia.

The network of naturalists meets in a different state of Australia second yearly and, on this occasion, the guests were accommodated at Woodman's Point. The week long program includes guest speakers and day long visits to areas of natural history.

The 90 participants arrived mid-morning by coach at Duidgee Park to be served delicious sandwiches and scones prepared by the Toodyay Country Women's Association (CWA). They were welcomed by Toodyay Naturalists' Club (TNC) president, Brian, after which we set off to visit the 212.9ha 'A' Class Nature Reserve of Wongamine situated approximately 12kms east-north-east of the town of Toodyay.

The first stop in the reserve was on the western border, Nunyle Road, for all to view a great variety of flora - the cameras were working overtime! As the reserve is made up of a number of steep-sided gullies and breakaways, together with undulating terrain, it was decided that those visitors who felt they could cope with the uneven terrain may like to traverse the area from Nunyle Road through to the lunch-time stop in Forrest Road.

The remaining participants alighted in Forrest Road and had the wonderful surprise to meet with TNC member, Georgina and her Family, plus two furry members carried in their bags - two Western Grey Kangaroo orphan joeys!!

The weather remained perfect and, following a picnic lunch, wanderings and chatting, continued till early afternoon when the coaches returned to Toodyay to the aged, but delightful, CWA hall to once again be served delicious country fare by the CWA ladies.

The Toodyay Herald was distributed to the guests plus copies of the TNC publication, *'The Avon Valley-the naturalists' view'*. Both these publications, of which the TNC is aptly proud, emphasise the importance of natural history and the environment to the general community.

Mention had also been made of the fact that community groups have participated in litter collection with ultimately the Toodyay Shire awarded the 2015 National Tidy Towns Award.

From the comments it was evident that the guests had thoroughly enjoyed their hours in the Shire of Toodyay including the delicious 'country cooking!'

The history of the 'A' Class Nature Reserve, Wongamine.

18th October 1901- original Wongamine Nature Reserve was set aside during the gold rush days as a 'Watering and Stopping Place' for travellers.

1944 the Government amended the reserve purpose to 'timber'. The tannin-rich, hardwood trees were especially suited to farm building and the tannin for the tanning of hides; the latter for many years a valuable export.

In 1974 the Toodyay Naturalists' Club (established 1968) recommended the reserve be amended to a conservation area - it had outlived its usefulness for previous purposes.

## ANN Get-together (cont)

The reserve, totally surrounded by developed farms, has size and diversity which would serve as an ecological unit capable of retaining its current range of flora and fauna.

'*The Avon Valley-the naturalists' view*', published by the Naturalists' Club in 1986, has listings of flora and fauna found in Avon Valley areas including the Wongamine.

### Origin of the name 'Wongamine'

Information from Dr Toby Metcalfe, specialist linguist in Aboriginal language - 28.09.16: *I can't find a definitive meaning for 'Wongamine' and, with most of the old Ngungar place names, we probably cannot be certain. However, the 'wonga' part of the name would almost certainly come from 'wangk' - language or speech.*

*Place names often refer to an aspect of the language or dialect. eg Ngaanya-tjarra, Pjijanta-tjarra, Mantjil-tjarra, the suffix -tjarra simply meaning 'having' or 'with'.*

*The 'mine' ending, however, is not the typical spelling of Aboriginal words and could be the Anglicisation of 'mayin'. So Wonga-mayin could have meant the dialect of the 'mayin'.*

*I'm speculating here and cannot find any meaning of 'mayin' unless it was the name of a local dialect or community.*



*Above: ANN Get-together participants checking out the flora in the Wongamine Nature Reserve*



*Above: 'ANN Get-together' participants having lunch in the Wongamine Nature Reserve*



*Left: Participants stroll through the reserve, with Greg Warburton providing background on Toodyay's reserves*

*Photos: Wayne Clarke*



# WHY? MAY I ASK

by Lyn Phyllips

Uberin road meanders happily,  
Around stark salt lakes and granite outcrops,  
A peaceful road, a gravel highway,  
Where trees, shrubs and grasses abound,  
With beauty in the spring time,  
When wild flowers are found!



Alas, peace was shattered,  
When the Twinkarri machine,  
Arrived on Remembrance Day,  
To disturb this land,  
Trashing old jam trees,  
T'was like a war zone!



Why, may I ask?  
Does man with his machine,  
Clear the road vegetation,  
From the back slope,  
Almost to the fence line,  
T'was for safety, he said!



Why, may I ask?  
Beauty reduced to rubble,  
For the sake of safety,  
Or to widen the road,  
For the farmer's machinery,  
Did someone complain?



Why, may I ask?  
Are the rules so harsh,  
A few trees encroaching,  
But the 'batter' must be clear,  
Destroying the last vestiges,  
Of Nature's Living Museum!



Why, may I ask?  
Are the small shrubs destroyed,  
Young and innocent in their prime,  
Homes for the fauna,  
Birds, reptiles and insects,  
How will they survive?



Why, may I ask?  
Is biodiversity so crucial,  
In this eco system,  
Ants, bees, wasps and butterflies,  
Are pollinators for human crops,  
On which we rely!

Why, may I ask?  
Will the pruned trees regrow,  
Perhaps the lignotubers can,  
But many are doomed,  
Branches broken and distorted,  
Open to disease!



Why, may I ask?  
Destroy a natural asset,  
Only 6% of bushland remains,  
In the Wheatbelt, our home,  
Where glorious wildflowers,  
Are a tourist destination!



Why, may I ask?  
When friends from Switzerland,  
Drive down Uberin road,  
The green corridor is gone,  
I will feel ashamed,  
Of this bare wide road!



Why, may I ask?  
Twinkarri every ten years,  
More damage is done,  
Spraying, grading, pruning,  
Until one day, the earth is bare!  
What do they care?



Why, may I ask?  
Are the rules mocking us,  
I can't pick a wild flower,  
Without permission,  
Yet Twinkarri destroys,  
Everything in its way!



Why, may I ask?  
Did my parents teach me,  
About nature conservation,  
What do I say to Fabian,  
This is the Australian way,  
We really do care!



We are the Care Takers,  
We can't own the land,  
We live and die,  
What we leave behind,  
Is our legacy,  
For future generations!

# WILD FLOWERS IN THE DAWN ATWELL RESERVE

by Sharon Richards

On a lovely sunny spring afternoon after the Annual General Meeting it was time for a stroll in the Dawn Atwell Reserve. I've been before a couple of times but not during wild flower season.

Leaving Wayne on guard at the car park Desrae, Beth and I went strolling along the fire-break which runs parallel to the Julimar Road. Using the fire break makes it an easy walk with more to see than most would imagine.

The reserve underwent a controlled burn earlier this year as part of the local fire management plan but the variety and abundance of wild flowers was inspiring. Very quickly we came across groups of *Anigozanthos humilis* (the common cats paw), with its vibrant yellow orange colouration gleaming in the sun, a close relative Mangles kangaroo paw (*Anigozanthos manglessii*) also showed its head intermittently. Frequent patches



of tiny white *Stylidium* rose against the burned ground, and there was an abundance of young *leschenaultia* promising a bumper show of the cobalt blue flowers next season.

I know that many of the Toodyay Nats' share a love of orchids and we were not disappointed. In a short walk we found an abundance of the cheerful cowslip (*Caladenia flava*), whose bright yellow faces were looking up to the sun, the delightful bee orchid (*Caladenia discoidea*), a first for me nestled very closely to a most impressive white spider orchid (*Caladenia longicauda*). We found more of these thanks to Desrae who had spotted them growing alongside the road during the litter clean up earlier in the day. A few spent *Pterostylis* added to the orchid diversity. I wonder what else we might have found if we had stepped off the path.

Not straying from the firebreak we continued to be greeted by any number of flowers - the diversity is quite impressive. Fabulous yellow *hibbertia*, at least 2 different species, low bushes of *grevillea* and *hakea* while, underneath hidden *Droseras*. On the path a single red open pea shaped flower, one of my favourites, running postman (*Kennedia prostrata*). Added to that we found smoke bush with its beautiful silver foliage. Blue was a popular colour for flowers with morning iris (*Orthrosanthus laxus*) and blue flags (*Patersonia*) and of course the tiny, but spectacular, fringe lily was weaving it's way among the lower bushes.



Cont. Page 7

## WILD FLOWERS IN THE DAWN ATWELL RESERVE.. Cont.

by Sharon Richards

On returning to the car park we realised that Wayne had company - people out looking for wildflowers. Sadly he had heard them pass comment, “apparently there were no flowers, it (the reserve) was all burnt”. I wonder where they were looking or indeed what they were expecting. One of the most fascinating things for me about many of the Australian wildflowers is that they are often quite petite and require a bit of effort to find. However, once found they do not disappoint and on a little closer examination you are rewarded by their intricate detail and beauty.

On the first day of Christmas my true love sent to me  
• a Cockatoo in a Hakea tree.

• by Beth Frayne

We had a small family group of five Carnaby’s black cockatoos (*Calyptorhynchus latirostris*) visit us in Drummond Street, Toodyay, on 9 December 2016, just after 9.30am. We had been sort of expecting them to visit the garden, because, two years ago, in November, a similar group of five found our sea urchin hakea (*Hakea petiolaris*) to their liking. The shrub is quite near the back entrance to the house.

In December 2014, I reported this first visit and a photo of one bird to Chittering Landcare, as I knew they were interested in new food sources used by these birds. Sue Metcalfe responded: “This is great information and a new species of plant! Another one to add to our list of plants that the Carnaby likes. A great shot of a young bird too. Thank you so much!”



This month’s visit, five birds also descended on the shrub, to feed on the seed capsules. When I snuck upstairs to get my camera, one flew off, but the others continued to feed quite happily, for over half an hour. The fifth bird did return to feed. Two of the birds made use of Bob’s water saucer, located on the ground, under a garden seat, shaded by our mulberry tree.

Then, they flew off to a gum tree next door, and sat there quietly during the heat of the day.



# Scorpion Report

by Bonnie Edmonds, Aged 10

SCORPIONS ARE SMALL, fragile and mostly shy creatures. They live all over Australia and several more places in our world. They may look fearsome and scary but really just ask yourself, how would you feel if you accidentally got lost in someone's home and then got killed in the next two minutes you were in it? They really are just small, harmless creatures, which doesn't mean you can't kill them it just means think about it, if you do.

Scorpions come from the same family as arachnids and like them hold a wide range of species and types. Now as I said, there are a lot of species of scorpion and too many for me to explain so I picked my favourites to tell you about...

The species I think that's generally inhabited our homes lately is called "*Lychas marmoreus*" (scientific name) and in other words, the Marbled Scorpion. It currently lives in mostly Southern Australia but is stretching further towards WA. It is found mostly in gum forests where it will make its burrow, but as I said earlier, is occasionally in homes around that area. It is a yellowish brown colour but on it, it has extended splotches of a much darker brown from the top of the back to the end of the pincer. It can grow 1.5cm to 4cm long. It can represent several similar species in other areas.

The next breed of scorpion I wanted to tell you about is called Buchar's Scorpion. The scientific name is *Lychas buchari*. It lives in both Southern Australia and Western Australia inhabiting mostly sand dunes on normal beaches and deserts. It uses its look of yellowish orange to camouflage with the sand excellently and hunts invertebrates. It can grow to 5cm long and also like the *Lychas marmoreus*, has very thin pincers. It makes small burrows in the sand dunes where it can store food and other things for its home.

Now the Salt lake Scorpion I'd like to mention too or by its scientific name *Australobuthus xerolimniorum*. This breed of scorpion hunts at night over barren salt lakes in Southern Australia eating small insects such as flies and small spiders. It can grow to about 4cm long and also digs a burrow for its home.

The Spider-Hunting Scorpion is also known scientifically as the *Isometroids vescus* and measures 2.5-5.5 centimetres in length and lives in arid inland areas of Australia. It has a brown, honey back pincer and the rest of its body is a creamy sort of apricot colour. It, like many other scorpions has thin pincers and eight legs. It doesn't dig its own burrow like other scorpions; it kills a trapdoor spider, and claims that space for itself.

Next on my list is the Desert Scorpion, also scientifically known as the *Urodacus yaschenkoi* that measures 8-11cm long and is very large and therefore quite aggressive. It lives in the deserts of Australia's interior. To protect themselves in the harsh weather conditions in the desert it digs a spiral burrow in the sandy soils approximately 1m deep. Wow!!!

And finally to end my scorpion report, the Flinders Range Scorpion. (*Urodacus elongatus*) which measures 9-12cm and is a yellowy honey brown colour. It is known to be the largest Australian scorpion species. It lives in Flinders Range gullies in shallow scrapes and under rocks. It has thick, fleshy front pincers too.

*Continued Page 9*



## Scorpion Report (cont)

The poison from a scorpion is different with every scorpion so some scorpions are more or less poisonous than each other. The poisonous liquid comes from the scorpion's **pincer** and apparently, the smaller the scorpion, the deadlier! Now some you may notice that when you look at a scorpion, you see kind of bubbles in their pincer. These are what store the poison so when a scorpion delivers a sting, one of these sacks/bubbles is emptied through the stingers end (the claw). Then the scorpions insides create another sack to fill the place over a small period of time.

Now I realise I haven't mentioned much of the scorpions' diet so I will do that now... A scorpion's diet is made up of mostly smaller insects such as crickets, small spiders, skinks etc. And that is why they can live in so many remote parts of Australia as you can generally find this type of food pretty much everywhere.

Also I did an experiment with a dead scorpion the other day and I examined it under a microscope and that was amazing! I also found out that if you put pressure on a particular part of a scorpion's front arm/leg, it would open its pincer as the nerve that operates the pincer, even when dead still works like that. Also that they have an exo-skeleton which means that their thick skeleton and delicate bones are on the outside of its body.

I have also had some **personal family** experience with a scorpion. My sister, Josie got stung by a scorpion on her foot last year at the age of 5 and with her lack of being able to cope with such pain it really overwhelmed her! But with some ice and antiseptic creams over a few days her foot eventually healed. She described the sting as a pin or sharp object once this so-called "pin" had stabbed her. After which she ran in hyperventilating tears back to our mother who asked me to go and see what she'd stepped on. Seeing the still alive scorpion perched on the carpet of my little brothers bedroom I immediately killed it, then went back to my mum to tell her. This is when my Mum rang my Dad, as she had never had any experience with a scorpion sting before but luckily, he had. This is how my mum got the ice, panadol and creams all in/on to her within minutes. I didn't know what type of scorpion it was the day it stung her but after doing this report I realised that it was most likely the common scorpion, *Lychas mamoreous*.



# WILDLIFE ON OUR ROADS

By Sue Eldridge

Wildlife crossing our roads are a hazard especially on country thoroughfares. The following suggestions may prevent hitting an animal and useful points if an animal is hit.

- Watch for *'beware of animal'* signage of those found in the area such as kangaroos, echidnas, owls, etc,
- Drop your speed of travel at sunrise, sunset and at night when many creatures, especially kangaroos, wallabies and euros, begin to move from tree coverage to graze.
- During summer months be aware of reptiles, such as Bobtails, Mountain Devils and Carpet Pythons, on the roads.

## **If an animal is hit by a vehicle**

- DO NOT stop in a dangerous location; find a safe place and switch on your hazard lights.
- APPROACH any injured wildlife with care. Kangaroos can lash out with their powerful back legs even when severely injured. Birds are able to inflict nasty bites and scratches.
- If the animal is dead and if able to do so safely, drag the carcass off the road so other animals seeking an easy meal are not endangered.
- Check for a bulge in a pouch or movement which may indicate a live young animal. Kangaroos, wallabies, possums, echidnas and quenda (bandicoots) carry their young in a pouch; quendas have a backwards-facing pouch.
- If a dead kangaroo or wallaby has a pouched joey do not lift the joey by its tail, legs or with your hands under its arms as all its weight is in the lower part of its body and picking it up in this way will break its ribs. Support the lower part of the body with one hand and use your other hand to loosely circle the joey's neck. Gently remove the joey and wrap it in a towel or a piece of clothing.
- Very young, furless joeys are fused to the mother's teat and any attempt to separate them from the teat will destroy their mouthparts. If a joey is attached to a teat, cut the teat off as far down as possible and leave it in the joey's mouth. A joey requires the same care as a premature human baby.
- Leave the joey of a smaller kangaroo, wallaby, possum or quenda in the pouch and take the dead or dying mother to a vet or wildlife rehabilitator. Please do not leave a joey to die a slow death or to be killed by other wildlife.
- When checking a pouch, note whether there is a second elongated teat indicating that the dead animal has a joey at heel; report this to the state wide **Wildcare Helpline on 9474 9055** with details of the area for a possible rescue of the youngster.
- If an animal is critically injured it should be euthanized, humanely, by shooting as soon as possible. In country areas shire rangers, police or a nearby farmer can be asked to assist.
- Depending on circumstances, the animal may be dehydrated. If you are not able to deliver the animal immediately to a qualified person, offer it tiny amounts of lukewarm water but only if the animal will self-drink.

Wherever you are in Western Australia the state wide **Wildcare Helpline on 9474 9055** can put you in touch with a wildlife rehabilitator who will be able to offer specific emergency advice. If you are in the Toodyay area and have a problem with any native animal, you can call Sue Eldridge on 9574 5407 or 0408 944 981 for more information.



# BRUSHTAIL POSSUMS

by Desraé Clarke

Occasionally, but over many years, we have come across brushtail possums either at a bird bath, sitting on the railing, climbing a tree and such like. A sensor camera was positioned on a very large fallen powderbark wandoo that had dropped across a winter creek on our property to check on what wildlife was using our property.

What beautiful surprises we enjoyed with a mum and a bub brushtail possum using the fallen tree as a highway, a play ground and possibly a vantage point to watch for the occasionally–photographed fox. The sensor camera videoed the young animal riding on mum's back when very tiny and playing when older by running around mum on the log then climbing up on to her back.



Scat from the brushtail possum was frequently found on and around a collection of three bird baths. With the hot months of summer approaching and with the accompanying lack of food such as flowers, fruit, etc, it was decided to place two feeding stations, one each end of a fixed long piece

of bush timber, between two upright powderbark wandoos that appeared to have excellent brushtail coverage. We needed to erect the feeding stations high enough between the trees to discourage kangaroos from visiting.

The sensor camera was set up again to check the viability of the feeding stations position. Carrot scrapings, shredded cabbage, apple skins and cores, pieces of orange and other delicacies are left at the feeding stations. The accompanying image demonstrates two happy little creatures that enjoy the fare and have even taken fruit from the hand.

The scratch marks on the trees are give-aways of the presence of the brushtail but we have no idea as to their home whereabouts which may be a drey, a hollow log or a tiny cave. Wherever they live they know where to find an excellent restaurant.

## *Cockatoo in a Hakea tree (cont from Page 7)*

Whilst in the tree, two of the birds sat together and the other three close by as a separate group. The pair exhibited some grooming behaviour, it seemed. Going on information on the web, the birds have the shorter bills of the Black Cockatoos. The two birds are a male (red eye ring, dark beak) and a female (dark eye, light beak). The three bird group consists of two males and one female.

Bob reported that the group descended from the tree to the hakea to feed at 4.30pm. We haven't observed them make any further visits. In general, the Cockatoos have been flying around the town site and over our garden for a number of weeks, but we had not observed them feeding until 9 December.

# ENVIRONMENT MATTERS

The eighth meeting of CARE was held in the Community Resource Centre in York on Friday 9th December. There was excellent representation from environment groups of the Avon Valley together with Department of Parks and Wildlife (DPAW), Food and Agriculture, Noongar KEEDAC, Department of Water and DFES.

The main meeting was followed by a presentation of Noongar fire regimes by Kerry Collard of KEEDAC. Kerry began with stating she was not an expert in this area but, as a Noongar woman, she is well aware of the values of fire and the many aspects of fire regimes.

A Noongar perspective on 'Karla Wongi – Fire Talk' and authored by Glen Kelly was given out to members present which has the Aboriginal reasons for the various types of fire, times of the year to burn, what to burn, how to burn and the ultimate reason of why to burn.

Glen has stated that until recent times the views of the Noongar people have not been heard or valued. But, he states, 'We are of this land and this land is of us. It has been that way for many tens of thousands of years. Our knowledge base and cultural identity is closely intertwined with the land and our people....'

Kerry showed an amusing, but very well put together, short video of the interaction that could be used by the Aboriginal peoples and the wider Australian community in the use of fire and its benefits on the landscape.

It is extremely interesting to understand the various fire uses and the reasons from the 'caring for country' perspective. Generally there are two types of fire being a cool fire, which is of low intensity and the most common type of fire, and a high intensity fire.

The cool fire is to clear thick undergrowth to promote ease of movement of the peoples and also to promote new growth on the trees and shrubbery. The vegetation in these areas requires a high germination rate which will begin to fall away after 10 to 15 years.

At this point the area will need a boost from a hot fire to restart the cycle and promote new growth from a seed bed held in the soil. It is imperative that the area doesn't have cool burns at this time as the new growth will be destroyed. A cool fire can also be used to solely promote grass regrowth. Glen states that the latter fire plan is usually on a two year rotation.

The full article of 'Karla Wongi – Fire Talk' is available, on loan, from the Editor.

*[Glen Kelly is a Noongar man and served as CEO of the South West Land and Sea Council from April 2006 till April 2015. In this capacity he was the chief negotiator of the Noongar Native Title Settlement and oversaw the authorisation by all the Noongar native title claim groups in early 2015. He has 21 years of experience in Native Title and Indigenous Land related issues and has held a number of senior positions in community organisations and within government agencies. Glen sits on a number of committees and statutory authorities at a State and Commonwealth level.]*

© The Toodyay Naturalists Club Inc This publication is copyright. Except as permitted under the Australian Copyright Act 1968 (Commonwealth) and subsequent amendments, no part of this publication may be reproduced, stored or transmitted in any form or by any means, electronic or otherwise, without the specific written permission of the copyright owner. Enquiries and additional copies may be obtained by writing to The Toodyay Naturalists Club Inc Post Office Box 328, Toodyay, 6566 Western Australia, or by visiting our website

## **THE TOODYAY NATURALISTS' CLUB INC.**

**PRESIDENT:** Brian Foley 9574 5448  
**VICE-PRESIDENT:** Desraé Clarke 9574 5574  
**SECRETARY:** Wayne Clarke 9574 5574  
**TREASURER:** Sharon Richards 9574 5723  
**PROJECT OFFICER:** Greg Warburton 9574 5445  
**ADDRESS:** Post Office Box 328, Toodyay. 6566  
**EDITOR:** Desraé Clarke

**email:** [info@toodyaynats.org.au](mailto:info@toodyaynats.org.au)



Format by Wayne Clarke

Website [www.toodyaynats.org.au](http://www.toodyaynats.org.au)