



Toodyay Naturalists' Club Inc.

THE TNC NEWSLETTER

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wheatbelt
natural resource
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PRESIDENT'S REPORT

by Brian Foley

Well my three years as president is coming to a close; it does not seem to have been that long, and I wish to say thanks to the Committee, Vice President Desraé, Secretary Wayne and Treasurer Sharon for all their help. Without all their efforts this Club would not be what it is. It is now in its 50th year and plans are well advanced to celebrate it with all past and current members. I thank all and especially those who are no longer with us.

The year proved very successful with our meetings and excursions, along with our financial position, member numbers and participation.

Highlights for me of the year were:

- Our commitment to the environment with the litter pick-ups on Julimar Road, next to Dawn Atwell Reserve; Toodyay Show; and the ongoing development of Drummond House.
- Oral McGuire's talk on his actions to preserve and pass on his Aboriginal heritage, I am looking forward to visiting his property
- The Governments decision to stop the proposed mining of the Helena Aurora Range, a submission from the club prepared by Wayne that was wonderful and comprehensive ; I feel it went a long way in having these areas excluded from mining.

We are already planning an exciting year for 2019, and I look forward to assisting where I can in any position the members wish to nominate me for.

Again thanks to Wayne and, Vice President, Desraé

Extract from the outgoing President's Report to the Annual General Meeting



Above: Brian and Grandson Finn planting trees in the Dudley Chitty Reserve

Cover Photo: The Dowerin Rose (Eucalyptus pyriformis) complete with ants

Photo Lyn Phillips

VALE RAY PAYNTER

2018 is the year of the Toodyay Naturalists' Club 50th Anniversary! This is an incredible achievement for a community group that begun with four farmers, Miss Dawn Atwell, Mrs Ray Paynter, Mrs Hazel Hastie and Mr Albie North, talking around the Atwell kitchen table; the idea of forming a naturalists' group was originally suggested by Toodyay identity, Wally Chitty.

On 1st May of this significant year, Mrs Ray Paynter, the surviving member of the group, passed peacefully away. Ray was extremely proud of the Club that has survived and prospered over the past 50 years and has done much to carry on the conservation work that the initial group discussed around the kitchen table on the Toodyay farm of 'Woodendale'.

In 1990 Ray's leadership was rewarded with the John Tonkin Award for Individual Endeavour. Also, in that year, Ray was honoured with the naming of a tiny, delicate flowering plant she discovered in the rugged banded ironstone Yilgarn locality, *Tetratheca paynterae*.

Ray saw many name changes in the State Government conservation departments – Fisheries and Wildlife, Conservation and Land Management, Environment and Conservation, Parks and Wildlife Division of Department of Biodiversity, Conservation and Attractions (DBCA)

Ray was gifted in dealing with community leaders of shire councils, State Government conservation departments, parliamentarians and farmers, schools and the children, Main Roads Department and community members. In 1985 she was given the ministerial appointment as a member of Kings Park Board; she was on the Board for a period of 10 years.

The valuable education given by this remarkable woman to members of the Toodyay Nat's of working with community leaders is greatly appreciated.

Rest in peace.



*Left: Ray Paynter writing up notes on a specimen of *Calytrix creswellii* (photo below).*

This is from the area where the *Type Specimen* was collected by Earnest Giles in 1875 on his expedition from South Australia to Perth

The site is 87km east of the Karroun Hill Nature Reserve

(From notes by Ray)



Photos by Wayne Clarke, 1994

HONORARY LIFE MEMBERSHIP AWARDED TO GREG WARBURTON 2018

by Desraé Clarke

I wish to nominate Greg for Honorary Life Membership of the Toodyay Naturalists' Club.

Greg first attended the Club in 1999 when meetings were held in the former kindergarten premises in Hamersley Street.

His lifelong interest in natural history began when, as a young lad, he was a member of the younger set of the West Australian Naturalists' Club. I won't ask him how long ago that was!

As an adventurous young man he travelled, alone, around Africa and at some stage he was involved with Australian outback natural history safaris using camels. I believe he first met Vicki at Uluru. The camel found in Australia was not the only species he travelled with as he, together with Vicki, crossed the Mongolian Gobi Desert on the Bactrian Camel. He has also used both the camel and a team of donkeys to trek in the northern areas of this state. Old man camel, Worri, lives in retired comfort on the Toodyay property!

Greg has a great interest in the historical aspect of natural history and has given a number of Club presentations encompassing that facet.

February 2013 – 'Feral Focus - Part 1 – The Camel' – Emphasis was placed on the incredible contribution gained by early explorers in the vast arid areas of Western Australia with the use of camel transport.

September 2013 – 'Battlefields and Florabunda' – In 1830 amateur botanist, Georgiana Malloy (1806-1844) moved to Augusta in our remote south west as a young married English lady; her love of wildflowers was a salve for the loneliness and sadness' she experienced.

August 2014 – 'Feral Focus - Part 2 – The Donkey' – A slightly different angle was approached on the invaluable donkey contribution to exploration. Greg emphasised that from humble religious beginnings the donkey has been used as a valuable little beast of burden. Both he and Vicki have travelled from Kununurra to Hall's Creek with a team.

March 2015 – 'Buckland to Bungalbin' – A trek, towing a strange-looking home-made cart, was made from Buckland, Shire of Northam, to Bungalbin (Helena Aurora Range), Shire of Yilgarn, passing through the Great Western Woodlands. It was destined to bring attention to a much wider community of the threat of mining this beautiful banded-ironstone area but also to give historical significance to the original 1861 trail.

March 2016 – 'Nose Lines and Leg Irons' – This presentation gave a history of early explorers in Western Australia and their connections with Toodyay. It featured the modes of transport used especially that of the camel.

Greg's contribution to natural history, in all forms, does not stay only with the Nat's Club. He has been a fore-runner in the fight against litter, involved in revegetation of de-graded areas both within and outside the shire boundaries, working to have walk trails within the Shire for an appreciation of nature and is a member of allied groups of natural history interest.

With the above overview I would like to nominate Greg Warburton as an Honorary Life Member of the Toodyay Naturalists' Club.

(see page 7 for photograph)

Lofty Ambitions - the Peregrine Falcon

Part Two

by Michael Colvin

The following is the second part of Michael Calvin's article in the Land for Wildlife Newsletter, December 2017 Issue 21; kind permission to reprint was given from Western Wildlife .

'The concept of an association of raptor rehabilitators with the required skills and means to train and free exercise fly suitable raptor candidates was developed in 2012. It was high on our priority list to share and disseminate information and knowledge, to provide assistance to one another as required, to contribute to education by engaging with the general public via school visits and attendance at agricultural shows, and to commit to supporting and/or carrying out our own scientific studies into release outcomes. Put simply, the aim was to 'raise the bar' with regard to all aspects of raptor rehabilitation but particularly those which include training and free exercise flying prior to release. More than that, we developed systems and protocols which include a Code of Ethics, Aims and Goals, a mentoring and apprentice training module for the less experienced, and a commitment to be transparent and accountable through our 'raptor reporting forms'. Each bird to be trained is selected upon strict criteria in order to ensure as far as is humanly possible that the particular bird can benefit from being free exercise flown more than from 'conventional' methods, and during the process the raptor is made clearly identifiable by means of an ID tag with contact information to assist rapid and safe recovery in the event of premature loss.

Free exercise flying a raptor for rehabilitation and release provides many advantages. It builds the elite speed, altitude tolerance and endurance they will require if they are to survive. Peregrines, hobbies and goshawks are obvious examples that use dynamic aerial skills, fitness and dexterity during almost every chase and capture of their natural quarry. Peregrines have been recorded at speeds of up to 350kmh in their vertical dive or hunting 'stoop!' The methods allow us to gradually build this fitness without any boundaries, in a relatively stress-free way for the raptor and to carefully monitor the fitness progression and any opportunistic attacks they may make on passing quarry. The practitioners get a much deeper understanding of the psyche and requirements of each individual raptor during the whole process.

There are some less obvious benefits too – occasionally the methods help us to identify those that are not suitable for release. An example is a male peregrine that I flew some years ago. His initial training and progression seemed to be normal but after a few weeks it became obvious that the progression wasn't continuing on the upward trajectory that would be expected. He seemed reluctant or incapable of sustaining powered flight up to a kite-suspended lure to heights of any more than about 100 metres, when 3-400 metres should be easily achievable in a short amount of time. Everything else seemed normal with the bird; all his vital signs indicated that there was nothing wrong. Still no further progress was gained so I took him to the vet who found old and previously undiagnosed damage to a shoulder joint and the prognosis was that he was unlikely to ever recover sufficiently. Conventional aviary-based rehabilitation methods could never have identified this underlying problem, potentially leading to release as 'fit', only to have succumbed to starvation through being unable to successfully hunt and feed himself.

Another less obvious advantage is that by flying in certain areas it quickly becomes clear whether it's the territory of resident birds of the same species, and therefore an unsuitable final release site. Release into these areas usually results in the raptor being smartly being driven offor worse! Then of course there is the social aspect of our group who are friendly, welcoming and ready at a moment's notice to do whatever it takes to help out in any particular case.

RRAWA is now going from strength to strength and building a history of rehabilitation and successful release, including one-post release study using radio-telemetry to check the release outcome for at least the short term, in the case of a female peregrine falcon. In the future we hope to progress to longer-term GPS tracking, subject to the issue of appropriate licensing from the Department of Biodiversity, Conservation and Attractions. As post-release tracking technology becomes more readily available and affordable, hopefully more rehabilitators will be able to learn about post-release survival and refine their methods.

For more information about the work of RRAWA or if you would like to join or support us, find us at www.rrawa.com and feel free to get in touch. If you have land that may be made available for any of our members to occasionally free exercise the birds we work with, or your local primary school or country show is interested in us attending with a few of our display birds, you now know where to find us. Thanks for reading!' Michael Colvin is a falconer with many years experience and a founding member of RRAWA. He may be contacted on 0434 495 620

BEVERLEY NATURALISTS' CLUB EXCURSION

by Robert and Beth Boase

On Saturday 16th of June a group of Toodyay Naturalists' Club members travelled to Beverley and joined with members from the River Conservation Society of York, Avon Environment Society and the Avon Branch-WA Wildflower Society as guests of the Beverley Naturalists' Club. This invitation was mainly to view its Fire Mitigation Plan which is part of the plan to provide continuity down the Avon River through the shires of Beverley, York, Northam and Toodyay.

We met at the town oval amenities building for a very welcome morning tea where Beverley Nats member, Phyllis Facey, outlined the plan for the day. An introduction was given to Tyron McMahon, the Bushfire Risk Management Officer from DFES (Department of Fire and Emergency Services), and John Hansen, Bushfire Risk Management Planning Coordinator, who is employed by the four shires along the Avon River with support from DFES.

Phyllis has been working with these two gentlemen to develop a suitable plan to reduce the risk of fire from bushland to adjacent residential areas with minimal impact on the main bushland areas. Phyllis has worked tirelessly in the past to prevent DFES burning the whole of bushland reserves and she even went as far as chaining herself to a tree to prevent an area being lit up! Thanks to Phyllis a compromise has been formed between the DFES former practice of indiscriminate burning and those people trying to protect the natural environment.

We were transported by bus to various sites to view how the compromised plan has been implemented as well as some other interesting bush areas. Our first stop was the Brooking Street Reserve which is only small and is tucked in between small residential blocks and part of the cemetery. Phyllis, John and Tyron guided our walk around the reserve. They explained their method of cool burning the edges of the reserve adjacent to houses and how Phyllis had marked out significant habitat trees on the boundary she wanted left untouched.

Despite being not long after the end of a very dry autumn the vegetation in the reserve was very healthy and about 30 species of plants were recorded which was very good considering almost none were yet in flower. There were some orchid leaves noticed, some being White Bunny Orchids (*Eriochilus dilatatus*) and Sun Orchids (*Thelymitra sp.*). A few plant species were also observed starting to regenerate in the area that was burnt during the cooler months last year.

The tour continued on to where we observed an area devastated by a wildfire, with very little regeneration. Then we moved on to where the Fire Mitigation Services were busy creating a fire break near housing. They were using a machine mulching fallen timber, grass and inflammable understorey and will follow up later spraying with herbicides for any grasses that emerge. This was all being done around Swamp Sheoaks (*Casuarina obesa*) which were left untouched.

We then proceeded to the Salmon Gum Site ('Phyllis's Reserve') which is a threatened ecological community near the airstrip. There is low fire risk in this area but a couple of the big problems are the dumping of rubbish and the disturbance by motorbikes and their riders even though the area is fenced.

Back at the sports building we had a delicious lunch of 'bring and share' food and took time to look at photos on display courtesy of the Beverley Nats Group showing the variety of flowering plants seen throughout the year.

It was then on to the town side of the river to see what is being done there. Here we viewed where the outer edge of the bush had been parkland cleared and mulched forming a buffer between the town and the main bushland along the river. John explained that opening this area up would allow access for fire trucks if a fire did occur as well as better access for weed spraying.

Other areas visited included revegetated land between the school and the river which has been planted and looked after by the school students. Also an elderly local resident, Isobel, maintains an adjacent area by removing weeds which was mainly Love Grass. We finished the day with afternoon tea before everyone went on their way.

Many thanks to Phyllis and her group, as well as Tyron and John, for a very informative and interesting day.

BROOKING STREET RESERVE

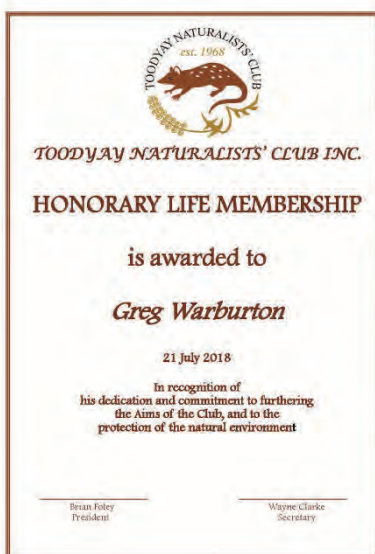


Top: Beverley and Toodyay Naturalists' Club members gathered in the Brooking Street Reserve in Beverley. Far right is TNC member and Bushfire Risk Management Planning Coordinator, John Hansen, explaining the process used to protect the Reserve. *Photo Desraé Clarke*

Right: Outgoing TNC President Brian Foley presenting Greg Warburton with his Honorary Life Membership Award.

The Award citation can be found on Page 4. Congratulations are extended to Greg on this great honour. *Photo Sharon Richards*

HONORARY LIFE MEMBERSHIP



‘The Mind that Shines’

The Life of Georgiana Molloy

An overview of Bernice Barry’s book by Desrae Clarke

On Saturday 26th May 2018 Volunteering WA, sponsored by Lotterywest and Hope Farm, supported the Avon Branch -Wildflower Society of WA and the York Society to have as author/guest speaker, Bernice Barry. Bernice gave a presentation on her publication of the life of Georgiana Molloy entitled, ‘*Georgiana Molloy - The Mind that Shines*’; the first printing was 2015.

Bernice was introduced by botanical history enthusiast and renowned botanist of over 50 years with the Western Australian Herbarium, Honorary Life Member and Patron of the Toodyay Naturalists’ Club, Dr Neville Marchant AM.

Over a ten-year period Bernice thoroughly researched Georgiana’s life as a young, gentlewoman in Scotland and, following her marriage to Captain John Molloy 6th August 1829, to become a pioneer in southern Western Australia. Georgiana’s upbringing was centred on beauty, health, exercise and education, the latter confined to the circles of the learned giving her enjoyment and pleasure of the poets of the day such as Robert Burns and Coleridge.

The descriptions advertised of the south western areas of New Holland with its boundless lands of fertile soils, and a ‘convict-free’ settlement, were widely advertised in the United Kingdom and appealed to the newly-weds. So, leaving family and very close friends, they began the trek from Carlisle, Scotland, to London where they waited several months for the sailing of the ship on the long sea voyage to the distant new land. It is difficult to imagine Georgiana’s thoughts on arrival in the extreme January heat of 1830 to be met by flies and housed in a tent.

Her appreciation of environment and landscape, the English wildflowers and her love of gardening preceded life to the new colony. On arrival in Augusta she described the beautiful profusion of colours of the myriad of native plants by, ‘thinking at times you are in a fairyland’.

As his new position of resident magistrate John Molloy was frequently away for very long periods with Georgiana experiencing the loneliness of living in the bush without the conveniences of her former life of the well-to-do. She had the heart-rending loss of her first child, a still-born daughter, the drowning in a well of her very young son and, with little free time from her lack of domestic help and coping with menial chores, to interact with her hard-working pioneering neighbours.

Georgiana began seed collections and pressing the beautiful native plants to send to James Mangles in England for him to forward to Sir James Hooker, and other collectors; this became Georgiana’s all-enveloping passion and a salve for her sadness and loneliness.

Bernice’s writings are ‘story-like’. Her small wanderings of research experiences and surprise findings popped in here and there make for interesting and easy reading. Much English social history is included. It was a period of a great influx of immigrants, especially from Ireland, with the advent of the Great Potato Famine. Industrialisation, centred mainly on the rise of cotton mills, and the resultant aftermath of the Napoleonic and Peninsular Wars, all took an immense toll on the population.

The descriptions of Georgiana’s method of plant collection for Mangles, especially the preparation of the flowers, the difficulties she experienced with lack of materials in which to pack her precious work and the heart-breaking wait of many months for sea travel to England, is sympathetically described by Bernice.

Although the botanists and horticulturists of the time paid high prices for foreign seeds and plants, Georgiana received little recognition for the incredible work completed under practically insurmountable conditions. Since those times, Georgiana has had one plant named in her honour, *Boronia molloyae*.

In summary, this thoroughly-researched book is flowing and easy reading. The social aspect of life in England contrasted to that of Georgiana in her new country and the amazing contribution she made to botany makes it a ‘must read book’.

[see page 11 for a facsimile of the cover]

'Back to Country' - Oral McGuire

by Rev. Peggy Ludlow

Oral McGuire, Noongar Business and Community Leader and Managing Director of Gundi Consulting, visited the Nat's Club on the 'Big Day' but the royal wedding did not put off the members and we were in for a treat of a talk!

First, he introduced My Mob, from Quairading, York and Tammin. His musical and lyrical "Welcome to Country" remembered his loved people and especially his grandparents. This *misty place*, Toodyay, was for him a special place of pilgrimage in the heart of Ballardong country. He talked about the 14 languages of the Noongar people from Geraldton to Esperance which is the biggest geographical group of indigenous peoples in Australia.

Oral spoke movingly of the need to talk the truths of history and spoke of a peoples' spirits smashed by history. The reforms under Gough Whitlam, Australian Leader of the Australian Labour Party 1967-77 and Australian Prime Minister 1972-75, were to create a new perspective and hope for the indigenous peoples of Australia. They had persevered and survived! The achievements of these last years are extraordinary.

As he talked, we discovered that this is where this new opportunity begun and flourishes. The Noongar Land Enterprise (Cooperative) was created in February 2018 with six farms, at present, with others on the horizon across the south west of WA. It's about harnessing opportunities and economy of scale bringing Noongar peoples 'back to country'.

Oral described the attitudes that prevail as 'hysterical' against native titles leaving Noongar peoples weak when it comes to land ownership. He said that groups in the Northern areas of WA have had a stronger say in exclusive rights. Oral talked, with pictures, about sacred spaces and the Avon River corridor which links different stories - all connected to each other. Oral's land project, is to work the land sympathetically drawing together celebration, cultural connections, initiation and land management. It is the place where people can, again, connect to country.

Oral talked about the six seasons and indigenous familiarity with the climate and also the landscape they farm. Its ochre red rock outcrops would have been the currency of past times. The landholdings in the cooperative farm bees with the resultant honey branded under the Noongar label for the Chinese market. One farm produces bush tucker for high-end restaurants. All of us were encouraged to eat at the Wildflower Restaurant, Treasury Building, Perth, where the produce is used and Oral talked of where cultural tourism can link with the cooperative's endeavours.

His own farm is a special place and felt like that from the first visit where peace and a sense of well-being is evident. 2,100 acres of rugged hill country where biodiversity and healthy country are key with Oral talking of the Noongar spirit needing repair. The pictures we saw showed this re-growth and sympathetic treatment of worn and over-worked pastures now with trees planted and growing in vast numbers, interestingly, from the farthest perimeters first. Like warriors fighting for righteousness! 'We can do it' is how Oral described the process of regeneration and healing over a land which needs custodians. Before and after photographs show the newly created life and diversity of the land.

The history of Noongar people he described as being about agricultural practises and not 'hunter gatherers' as thought in the past. Slides of marked places and spiritual spaces have been discovered within the pastures and, indeed, continue to be found, since the 2010 purchase. Oral spoke of the physical marks like a triangle shape with an identifiable central spiritual space which were shown in photos. The big pools in the river course - 26 in all - are being excavated and bull rushes planted to allow the water fringes to be restored.

I loved his strong sense of the spiritual 'Our Father who sits on high', and his deep longing for restoration for Noongar people - 'Know the land, know the song.' Oral talked about the early road creation and the part indigenous people played in the making of them. Often where bends have been removed and straight roads created it is across sacred places and dangerous for men and women. Quite a thought when there are so many accidents on West Australian roads!

This year 600,000 trees will be planted on the farm with 60% of the farm now planted. Oral discussed controlled burning and the indigenous method of mosaic burns which have created the diversity of the landscape and ecology over thousands of years. This method has seen a gradual fall in wild oat growth and proliferation of native grasses. There is now a possibility of a release of native species on to the land area.

How does the project and work get funded? There are a growing number of school visits to *my place*, a sanctuary for wild life and plants, training possibilities and a connection to country to all who visit. The last Noongar dance was danced in 1922 - its time to dance again!

Thank you, Oral, for a challenging, interesting and wonderful "Welcome to Country!"

Member's Photographs



BYNOE'S GECKO (above)

The Bynoe's Gecko is found south to about Goomalling and Kellerberrin. The best place to find them is under old rubbish in the absence of nice logs. This gecko has a rather interesting reproductive strategy. In the southern part of its range it has males and females but in the desert it has only "females" which lay eggs without fertilisation. A good strategy to breed immediately after rain.

[John Dell]

Photo Lyn Phillips



Longicorn beetle (*Cerambycidae*) probably ? *Penthea* sp.

Photo: Kath Summers



Right: *Tetratheca* sp., Wandoo Circle

Photo Charmian St John

The Fox and the Chuditch

In February a resident of Morangup, who lives in the vicinity of the Avon Valley National Park, found a dead fox several metres from the body of a Chuditch. As she hadn't seen a Chuditch before she photographed it as she felt it was obviously a native creature and attempted to alert a natural history organisation and a wildlife park of the find; however, she did not receive any response from either group.

When contacted the observer was extremely pleased to hear that the Toodyay Naturalists' Club members were very interested in the discovery and may have an explanation for the odd, and unusual, find.

The Chuditch can take quite a large amount of the 1080 poison bait left for foxes, and it is also 'rather partial to the bait' according to TNC member and Wildcare Officer, Brian. The Fox, on the other hand, dies a rapid death from the substance. On this occasion it appears the Chuditch may have taken bait, the Fox had killed the Chuditch, which was partially eaten, then obviously succumbed to secondary poisoning.

The previously 'rare and endangered' Chuditch was released in the Julimar Conservation Park in 1992/93 from a Perth Zoo Breeding Programme; the Toodyay Nat's were invited to observe the exciting release.

Since that date the animals have bred up quite well and, as the male needs to find his own territory, the animals have spread quite widely having been found in a number of Julimar areas, Morangup, Irishtown and Northam tip.

GEORGIANA MOLLOY

the mind that shines

A biography of one
of Australia's first
female botanical
collectors



BERNICE BARRY

Left: A facsimile of the cover of the book by Bernice Barry.

Gratitude is extended to Pan Macmillan Publishers Pty Ltd, for permission to use the cover in the TNC newsletter

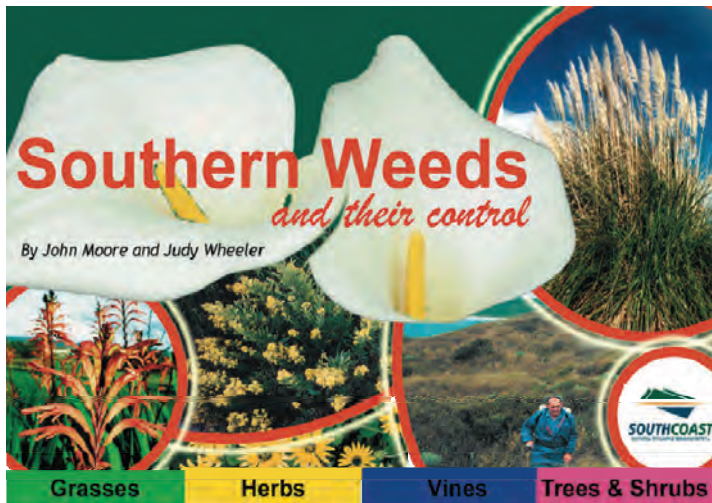
DID YOU KNOW...

... that the nomination for the **Toodyay Naturalists' Club Inc.** has made it to the Semi-Finals in the **Woolworths Community Group of the Year Award** which forms part of the 2018 Western Australian Regional Achievement and Community Awards. The Awards aim to encourage, acknowledge and reward the valuable contributions that individuals, groups and businesses are making throughout rural and regional Western Australia.

Having been selected as a Semi Finalist, our nomination will now be reviewed by a judging panel during the final stages of judging to see who the Finalists will be. Final judging will take place on Wednesday 31st August 2018.

The awards will be presented at a Gala Dinner at the Hyatt Regency in Perth on Friday 19th October 2018. If successful it will be another reason to celebrate, along with the \$2,000 prize attached.

ENVIRONMENT MATTERS



Cover illustration from the electronic version

Weed identification

Bridget Leggett

Want a practical, robust guide to local weeds that shows the whole plant as well as close ups, and has brief, clear descriptions of each weed? Then take a look at *Southern weeds and their control* by John Moore and Judy Wheeler. Now in its third edition, this book is specifically designed for field use (rather than for agricultural situations). There are four colour-coded sections: grasses, herbs, vines, and trees & shrubs.

The hard copy is printed on water resistant paper, spirally bound and is 'pocket size' – although 2.5cm thick. It can be purchased from the Department of Primary Industries and Regional Development. An electronic copy of an earlier edition is available free and open access from: <https://researchlibrary.agric.wa.gov.au/bulletins/86/> - just a caution, it's a 441 MB file!

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