Wildflower Society of Western Australia Newsletter

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Wildflower Society of Western Australia (Inc)

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WILDFLOWER SOCIETY OF WESTERN AUSTRALIA Contents

From the President

The newsletter is published quarterly in February, May, August and November by the Wildflower Society of WA (Inc). Mail: PO Box 519 Floreat 6014

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2023 State Council and AGM State Council Annual General Meeting ANPSA 2024: Gardens for Life **Branch Reports** Murdoch 8 10 Northern Suburbs 11 **Branch Contacts and Meeting Details** 12 13 13 Perth Albany Branch at a Bioblitz Empodisma Peatlands of SW 14 17 A Little Garden on the Side Priority Flora Survey 2021 to 2023 17 Searching for Uncommon Plants 17 Olearia strigosa 18 Leucopogon sp/Styphelia inopinata 23 24 25 26 27 28 29 30 Isopogon sp. Canning Reservoir Pimelea pelinos Eutaxia andocada Androcalva fragifolia Grevillea tesselata Priority Survey 2023 Wongan Hills Reserves Book York Botanic Art Prize 2023 31 32 Society Bequest: Vale Chris Pidd Birdlife WA and Society Quiz Night Native Vegetation Accounting in the Wheatbelt NRM Region 32 Tales from Alex's garden–Ruby Saltbush 35 35 Miraculous microbotrva 36 Flowering Banksia species 39

New and Re-joinning Members Vale Neil Coy 7/10/1937 to 3/05/2023

Front cover-Banksia menziesii at its most southern location on the Swan Coastal Plain. This Banksia woodland is a federal TEC. Photo Bronwen Keighery.

Inside front cover-Centre Rare flora search near Esperance. Photo Katie White. Below Albany Herbarium Garden. Photo Sandra Swain.

Back cover-Advertisement. Right Grevillea tesselata buds, flowers and fruit. Photos Jolanda Keeble. Below Grevillea tesselata shrub and Jolanda Keeble. Photo Lyn Phillips.

Inside back cover-Top left distribution map Banksia littoralis (Florabase). Top right Banksia littoralis tree. Below right Banksia littoralis shrub. Central left Banksia littoralis flowering cone and fruiting cone. Photos Bronwen Keighery.

Editing and layout for this issue: Bronwen Keighery. Proof reading: Marta Rossignoli; Alex George; and Jolanda Keeble.

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Phone: (08) 9383 7979 (24-hour) email: enquiry@wildflowersocietywa.org.au

Honor Venning Library at Perry House is open on the first Saturday of each month, except January, from 1–3pm. Members may borrow.

Website: www.wildflowersocietywa.org.au

New Membership subscriptions

With increasing costs the Management Committee has reviewed and changed the fees as detailed below.

Category	Newsletter	
	e-news	printed
Individual	\$60	\$76.50
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Overseas	\$55	\$71.50
Concession*	\$35	\$51.50
Junior	\$10	\$26.50
Affiliated Group	\$60	\$76.50

* Full-time tertiary students, and those in receipt of a means-tested Aust. Commonwealth Gov. pension.

To receive Australian Plants add \$22 to your fee. Australian Plants can only be sent as a paper copy.

Those members wishing to renew by Visa, Mastercard, save yourself postage by using our email membership form on the Society website OR Direct payment to WSWA, Bankwest BSB 306-058 a/c 4197355 with a reference with deposit: your name + type of payment (in this case: m'ship).

Please advise the WSWA Office separately if you have changed your details (e.g. address).



After Christmas and New Year was over and done with, the Society has been very busy on a number of fronts. Firstly, the Management Committee has worked feverishly with Richard Curry and his team from Northern Suburbs Branch to gain the agreement of the City of Wanneroo to re-site and enlarge the nursery which the Branch has operated at Landsdale Farm for many years. The City will provide a major contribution in the preparation of the new site. The Society has agreed to assist the Branch with funding of the construction of the new nursery. The source of the bulk of

the funding is currently still being pursued. This endeavour will provide a focus for the Society for many years if the funding applications are successful. It is expected the new nursery will take a couple years to fund and construct to commence production.

It took 3 years to gain approval from the Council and sign an agreement with them. The persistence and effort put in it is a credit to all involved. I would like to thank Robert Atkins and Richard Curry for their work in coordinating the involvement of the



A Northern Suburbs Nursery plant sale at the current Landsdale Farm School site. Photo Christine Curry.

Management Committee and the Northern Suburbs Branch.

The second item of news was the receipt of a bequest to the Society from a person who was a member of the Society and the Armadale Branch for many years. There is more information regarding the person involved further in the Newsletter.

The Finance and Development Committee and the Management Committee, but mostly the Treasurer, have been working to develop a budget for the coming year. The Society is in a good place financially, but it is a position that requires careful oversight and we are fortunate to have Robert and his able sidekick, Wendy, who do this for us so diligently.

On a wider front, it was quite a surprise to see the COP15 international agreement signed and agreeing what many of us have said for many years; that we need to retain 30% of our natural vegetation in any area to retain our biodiversity. Recently the Federal Government has introduced a policy to have 30% cover across all of Australia by 2030. With the vast inland area of Australia still 'covered' in natural vegetation it is claimed we have 22% cover at present. We need to drive the policy makers to get 30% cover in the South-West Biodiversity Hotspot by 2030. The Society recently commented on a Federal Government guideline that provides a framework to achieve that target. Now we must persuade our State Government to act to achieve that outcome and stop allowing clearing in that area which goes against the principles set out nationally and internationally.

We are heading toward the time of the year when we all assess if we can take up a role in the Society that contributes to the work of the organisation. I would encourage you all to seriously consider joining either the Management Committee or one of the sub-committees to help spread the load of the work that is required to run the Society and make it effective in the achievement of its objectives. Please contact the Hon. General Secretary, Kerry, if you would like to assist. For most sub-committees the meetings are held via Zoom so it enables our regional members to become active and put their ideas forward on what we do and how to do it.

Lastly, I would like to thank all the current members of the Management Committee and the sub-committees for the effort they have put in over the last 12 months. There has been a lot of things going on and keeping up with them has been a considerable task. Thank you all for your efforts.

Brett Loney



2023 State Council and AGM – 24 and 25 June 2023

As advised in the February 2023 issue of the Society's Newsletter the Society's 2022 State Conference and Annual General Meeting will be hosted by the Eastern Hills Branch and will be held, all being COVID-well, on Saturday 24 and Sunday 25 June 2023 at the Octagonal Hall, 52 McGlew Road, Glen Forrest.

The registration form for both days is supplied with this Newsletter as a loose sheet.

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The Saturday starts with the State Council meeting, followed by the Annual General Meeting (AGM).

All Sub-committees and Branches report to the Council, and the President and Treasurer report to the AGM. Sub-committee and Branch Reports and Items for the Agenda–in Word format–should be lodged with the Society's Honorary General Secretary by Friday 9 June 2023. Reports and Agenda items received after this date will not be included in the Conference document file. They can be sent preferably by email to enquiry@wildflowersocietywa.org.au or posted to the Wildflower Society Office PO Box 519, Floreat WA 6014.



An Eastern Hills plant sale at the Octagonal Hall, the location of the 2023 State Council and AGM. Plants are grown by individual members.

State Council

Anyone is welcome at the State Council meeting. The State Council is the forum for the presentation of the Society's activities for the past year and gives everyone an opportunity to hear about and question the work of the Management Committee, Subcommittees and Branches.

Each Branch is required to nominate two (2) voting DELEGATES to the State Council. These nominations should be sent to the Society's Honorary General Secretary prior to the commencement of State Council meeting.

Annual General Meeting

All incorporated bodies are required to meet annually. All Society members can vote at the AGM. After the President and Treasurer report on the year's activities, the Management Committee is elected. Under the Society's Bylaws Part 4: 1)

"The office of President shall not be held by the same person for more than three consecutive years and an interval of at least two years shall have elapsed before that same person can again become eligible for election as President."

(2) The Management Committee

"(a) Shall consist of the office holders of the Society and not less than six (6) nor more than twelve (12) ordinary committee members."

With our Branch structure it is most desirable that the Management Committee has at least one member from each Branch (and maybe two from some). YOUR SOCIETY NEEDS YOU to assist with its continuation and its future. Nomination forms for Management Committee positions as well as joining our Sub-committees were included with the February 2023 issue of the Newsletter and can be found on the Members website with this Newsletter, and also under Society Governance.

The deadline for nominations is 25 May 2023.

In accordance with the Model Rules and Guidance Notes: Division 3: (2) Subject to rule 37, a committee member holds office until the positions on the committee are declared vacant at the next annual general meeting.

No notices of motions have been received for the 2023 AGM.

Proxy voting

In accordance with the Model Rules and Guidance Notes Part 6, Clause 53. Proxies "(1) Subject to subrule (2), an ordinary member may appoint an individual who is an ordinary member as his or her proxy to vote and speak on his or her behalf at a general meeting.

(2) An ordinary member may be appointed the proxy for not more than 5 other members.

(3) The appointment of a proxy must be in writing and signed by the member making the appointment.

(4) The member appointing the proxy may give specific directions as to how the proxy is to vote on his or her behalf.

(5) If no instructions are given to the proxy, the proxy may vote on behalf of the member in any matter as the proxy sees fit."

A proxy form is supplied with this Newsletter as a separate form and is best lodged with the Honorary General Secretary by Friday 16 June 2023.

Kerry Smith, Honorary General Secretary



2023 Plant Identification Workshop

On Saturday **26th August from 2pm to 5pm the Society is running a Plant Identification Workshop**. Hosted by Murdoch Branch and the Plant Survey Group at the Cockburn Wetlands Centre. Contact Society Office for bookings.



ANPSA Biennial Conference 2024 – Melbourne

"Gardens for Life"

Gardens for Life: 30 September to 4 October 2024

The Australian Native Plants Society (Australia) (ANPSA) Biennial Conference is to be hosted by the Victorian Society from 30

September to 4 October 2024. The five-day conference has a broad theme of "Gardens for Life" and will cover such topics as gardens for wildlife, conservation of rare species through cultivation, gardens for beauty, for our cities and for our health. There will be two days of excursions and three days of excellent presentations and workshops.

Our committee is narrowing down a fine list of speakers and presenters. We have decided on three five-day bus tours–Wilson's Promontory and Gippsland; the Otway Coast and South West Victoria and The Grampians (Gariwerd); and the Little Desert. These will be exceptional wildflower tours with expert guides.

A regular Newsletter is being produced on the Conference (see APS Vic website, link at the end of the article). This article is based on these Newsletters (editor). Formal bookings for the Conference and Tours are expected to open in early 2024.

Venue

Just a reminder that our conference venue is the Melbourne Conference and Exhibition Centre on the Yarra River which has top facilities with ready access to public transport, hotels and Air BnB accommodation. The venue is near wonderful galleries, exhibitions and the historic port area with the Polly Woodside. We will be seeking accommodation discount deals with hotels near the centre.

Conference Day Excursions

One of the best things about our biennial conferences are the bus trips to see both wild places and gardens featuring native and indigenous flora. Lunch and morning tea and any entry fees are part of the conference package and we provide guides along the way. For the Tuesday and Thursday of the conference you will choose two day excursions from a selection of up to six excursions. Some of these are detailed below.

Australian Botanic Garden Cranbourne and Langwarrin Flora and Fauna Reserve–A guided tour of the garden and nursery from "The Friends" and Cranbourne staff will show us the Raising Rarity program and the Langwarrin Flora and Fauna Reserve has stunning orchids

and peas in Spring.

Melton Botanic Garden and the Brisbane Ranges National Park (photo right)–The Melton Botanic Garden is superb and run by volunteers. The Brisbane Ranges to the west of Melbourne are a top wildflower destination having over 430 species of plants with lots of daisies and orchids.

Anglesea heathland–A world class

wildflower area that is home to a quarter of Victoria's flora and over 100 species of





Chysocephalum apiculatum and Caesia sp. Sunbury Railway Remnant.

orchids. The tour will be accompanied by a guide to find the most interesting flora.

Chelsea Australian Garden at Olinda-the "Chelsea best in show" garden has been created in Olinda but much larger. We plan stops at Sherbrooke Forest (we may see Lyrebirds) and the beautiful established Karwarra Gardens. https://peopleandparks.org/ project/ chelsea-best-in-show-garden/

Royal Melbourne Botanic Gardens and public parks (photo left)–Rare Victorian plants and rainforest plants will feature as part of a guided tour of the Royal Melbourne Botanic Gardens. Then on to public

parks such as Royal Park that have created indigenous gardens and grasslands to restore habitat and showcase Australian plants.

We encourage you to take a look at the short promotional video on the APS Vic website https://apsvic.org.au/anpsa-biennial-conference-2024/ and register your interest.

Branch Reports



A Lord Howe Island view. Photo Bronwen Keighery

Murdoch

This year has started well for the Murdoch Branch, and a week later than usual because of the Wetlands Conference held at The Wetlands Centre Cockburn. The February meeting saw us hosting Hannah Gulliver from ReWild Perth. Their aim is to provide advice on how to improve biodiversity by planting gardens which invite local wildlife into them. Hannah is passionate about the role they are playing to encourage and empower the community to help turn gardeners into conservationists.

At our March meeting, we heard about mine site restoration work with Dr Michael Just from Curtin University's Centre for Mine Site Restoration. His talk was on overcoming barriers to the use of seed in ecological restoration. Michael talked us through

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the stages of restoration work, from planning to sourcing seed, to all the steps to actually procure viable seed, to finally seeding and begin restoration work. His research into seed development, dormancy and germination in the Rutaceae is informing the work being done to understand the secret to unlocking some of our hardest seeds. His aim is to build a databank to know what needs to be done to maximise germination ... a worthy aim indeed.

April had us being regaled by Dr Eddy Wajon about his and Donna's trip to Lord Howe Island as an add-on tour from the 2022 ANPSA Conference. Eddy described the island's geographical situation and geological formation, and then shared his images of the island and the flora and fauna that they saw during their visit. Lord Howe Island is an isolated, subtropical, forested island 600 km east of NSW. Almost half of the plant species are endemic. Eddy's photographs ranged from the ubiquitous *Atriplex cinerea* (Grey Saltbush) to *Sophora howinsula* (Lignum Vitae), a tree with lovely yellow pea flowers and *Cyathea howeana* (Bristly Tree Fern). It was interesting to see Kentia Palms, *Howea forsteriana*, growing in their natural setting on the sandy coastal soils and Belmore Palms (*H. belmoreana*) growing on volcanic soils.

Also at this meeting we presented a student from South Metropolitan TAFE with our 2022 Branch award for Excellent Results in Conservation and Ecosystem Management studies. This prize consists of a certificate, \$300 worth of botany books of their choice and a year's membership to the Wildflower Society. The recipient, Jodie Gould, was thrilled by the unexpected award and was very grateful. The Murdoch Branch has been presenting awards for 12 years, not just to TAFE students but also to Murdoch University students for botany related studies.

Thanks to the initiative and filming work of our newest committee member Danielle, we are now live streaming our guest speaker talks to our Murdoch Branch Facebook page. The March and April talks can now be viewed, or re-viewed, anytime on the online page.

Christine Polmear



Lord Howe Island Strangler Fig and Kentia Plams. Photo Bronwen Keighery.

Northern Suburbs

By now, the annual Autumn Northern Suburbs Nursery Plant Sale is well and truly over, but this doesn't mean the end of the sales story. Each year, the branch nursery propagates around 20,000 local and West Australian plants for home gardens and makes these available at a very reasonable price from the nursery at Landsdale Farm every Thursday and Saturday. The team of around 20 nursery volunteers includes quite a few younger people, who are keen to contribute not only to the propagation but also to the day-to-day management of the nursery and to developing and working on a number of special projects, such as verge planting schemes with local government councils and school garden projects. As we are all frequently told, younger people are often interested in more practical volunteering opportunities, rather than sitting on committees, and we are really pleased to be the proof of this at the Northern Suburbs Nursery.

Some of our guest speakers for this year will also bring a practical element to their stories. Dr Shelley James from the WA Herbarium introduced us to the inner workings of the Herbarium at the February meeting, taking us through the history of the WA collection, the processes involved and specimen numbers held. She also outlined the current projects and a number of intended future projects that will keep the small team of staff and larger team of volunteers very busy over coming years. In March, Northern Suburbs member, Don Poynton, took us on a journey to Rudall River and Karlamilyi National Park in the remote eastern Pilbara. Don comprehensively outlined the biogeographical features and

history of the region, including pre-European times and subsequent European exploration and took us on a photographic journey through the range of flora and geological and water features in the National Park. Alex George undertook the first flora survey in the Region in the 1970s and we were lucky enough to have Alex in the audience on the night. Alex told us a little about the gazettal of the National Park and his role in defining the final boundaries.

We will be very honoured to welcome Alex back to our branch later this year, for a presentation on William Dampier in New Holland – 1688 and 1699. Alex 'repeated' Dampier's collecting endeavour 300 years later! We also look forward this year to presentations on topics including *Eremophila*, Drosera, a visit to Lord Howe Island and 20 years of the achievements of a local Coastcare group. Should be an exciting year!

Christine Curry



Northern Suburbs plant sale. Photo Christine Curry.

Events 2023

Keep your eye on the website and Branch emails for talks and walks. **Saturday 26th August Plant Identification Workshop** (2pm to 5pm) Hosted by Murdoch Branch and the Plant Survey Group. at the Cockburn Wetlands Centre. Contact Society Office for bookings.

Branch Contacts and Meeting Details

AlbanyDept. Biodiversity, Conservation & Attractions Conf. Room, 122 Albany Hwy, Albany.3rd Tuesday 7.30 pmPO Box 937, Albany, WA 6331Secretary: Wendy Minchin 9845 1220 (albanyherb@outlook.com)

ArmadaleEnvironmental Centre Armadale Settlers Common Triton Crescent2nd Thursday 7.15 pm for 7.30 pmPO Box 937, Albany, WA 6331President:Roger Harington (Armadale.Branch@wildflowersocietywa.org.au)

Secretary: Debbie Walker (Armadale.Branch@wildflowersocietywa.org.au)

Darling Range Old Guide Hall (Paxhill), 5 Sanderson Rd, Lesmurdie President: Lynda Tomlinson 0491605839 (<u>lktom555@gmail.com</u>) Secretary: Lynda Tomlinson 0491605839 (<u>lktom555@gmail.com</u>)

Eastern Hills Octagonal Hall, 52 McGlew Rd, Glen Forrest 4th Friday 7 pm for 7.30 pm President: Penny Hussey Secretary: Janet Atkins (<u>eastern.hills.branch@wildflowersocietywa.org.au</u>)

Kulin Herbarium, Resource Centre, Johnston St, Kulin 6365 PO Box 56, Kulin WA 6365 Secretary/Treasurer: John Munro (johnmunro325@gmail.com)

Merredinm (wildflowersocietymerredin@gmail.com)

Vice-president: Mal Harper 9041 1421 (<u>malhtharper@gmail.com</u>) Secretary/Treasurer: Tracy Scott C/- PO Box 95 Nungarin WA 6490

Murdoch Branch Cockburn Wetlands Education Centre, Hope Rd, Bibra Lake 6163 1st Thursday 7.30 pm for 7.45 pm President: Chrstine Polmear (murdoch.branch@wildflowersocietywa.org.au)

Secretary: Kim Dravnieks (<u>murdoch.secretary@wildflowersocietywa.org.au</u>)

Northern Suburbs Henderson Centre, Groat St, North Beach 4th Tuesday 7.30 pm PO Box 25, Greenwood WA 6024 President: Richard Curry 0408 923 610 (<u>randccurry@gmail.com</u>) Secretary: Christine Curry 0430 013 364 (<u>randccurry@gmail.com</u>)

Perth The Palms Community Centre, Nicholson Rd Reserve, Subiaco 2nd Tuesday 7.30 pm for 8 pm C/- PO Box 34, Melville WA 6956 President: Glenn Cook (perth.branch@wildflowersocietywa.org.au) Secretary: Graham Zemunik (perth.branch@wildflowersocietywa.org.au)

South West Capes PO Box 784, Dunsborough WA 628 President: Kay Lehman (<u>kaywinny@bigpond.net.au</u>) Secretary: Richard Clark 0427 385 551 (<u>samolus@westnet.com.au</u>)

York President: Eric Ayling (<u>ayfo@wn.com.au</u>) Secretary: Ken Graham (<u>yorkwswa@gmail.com</u>)



Perth

Our General Meetings for the past year have been at two different venues: the Subiaco Community Centre until October and then the Palms Community Centre from November, after the City of Subiaco relocated some of their facilities due to fire at their Council Offices. Attendances at our General Meetings have not suffered as a result of the shift in locations, but we will be moving our meetings back to our traditional venue (Subiaco Community Centre) as soon as it becomes available again. Last year we continued on with our rather general theme

of emerging research. At our AGM last April our invited guest Simon Wilde gave us an update on the evidence surrounding the formation and evolution of the Earth's continental crusts, which of course has direct links to our flora. Topics for the remainder of 2022 were more directly focussed on our part of the world, including understanding and improving mine-site restoration (Fiamma Riviera), programmes that enhance the survival of our threatened flora (David Coates), the Southwest's slime moulds (Karina Knight), resolving phylogenetic relationships using genomics (Ben Anderson), implications on flora diversity due to changing pollination success (Mark Brundrett), soils and landscape evolution (Matthias Leopold), as well as an overview of Perth's special bushland reserves (in October).

This year, our theme is on urban bushland, and we began the year with two highly relevant talks about bushland fires, from research at Kings Park (Ben Miller), and fire responses and seed germination (Joe Fontaine).

Preceding the presentations by our invited guests, our short focus presentations, which were given by Committee members, included an overview (by Kerry Smith) of last year's State Conference, a glimpse into inappropriate bushland plantings (Mark Brundrett), digitising DBCA's slide collection (Kerry Smith), the Zooniverse citizen science platform and botanical projects (Glenn Cook), as well as video insights into orchid pollination (Mark Brundrett).

In December the Perth Branch hosted our annual combined Perth-Northern Suburbs Christmas Party at Perry House. It was well attended and was preceded by presentations to David Pike and Judith Harvey in recognition of their 2022 ANPSA awards in the Amateur and Professional categories. This year we will hand on the hosting baton to the Northern Suburbs Branch.

We held our AGM in early April. There were only minor changes to the committee with Glenn Cook (photo above left) becoming President and Graham Zeminuk stepping down as President but staying on as Secretary, a role that can be done in an online capacity. Graham relocated to the Northern Territory early this year to take up a position as a botanist with the Northern Territory Government, but is keen to remain involved with the Perth Branch. Nina McLaren continues as Treasurer, whilst the general committee remains unchanged with Kerry Smith, Jolanda Keeble, and Mark Brundrett. As always, new Committee members are more than welcome. We thank all the current committee for their contributions and flexibility, and also extend our thanks for the continuing assistance provided by former committee members Brian Moyle for assistance with correspondence,

Bronwen Keighery, through whom we hire the hall at a discount, and Greg Keighery who always is a willing lead for walks through our biodiverse bushland.

We are also planning several bushland walks for later this year, so stay tuned. Graham Zemunik and Glenn Cook



Gathering for the Bioblitz. Photo Heather Anderson.

Albany Branch and Walpole Nornalup National Park Association Bioblitz

Some of our members have been privileged to join the Walpole Nornalup National Park Association (WNNPA) for the Bioblitz they have held in the spring of 2021 and 2022 as well as a mini blitz in December, March, and this coming June (2023).

This last spring 150 people attended putting 2507 observations on iNaturalist resulting in nearly 400 species being identified (photos RHS central spread). We were able to join different groups each day with experts in many fields including botany, mycology, arachnology, herpetology, ornithology and even a night trip hearing and recording the sounds of bats.

The WNNPA are extremely excited to have secured funding (as part of a much larger project) to run the bioblitz for the next 5 years.

The funding from the Ian Potter

Foundation is for a collaborative project with UWA, ECU, DBCA, WA Museum and traditional custodians. The project focuses on the Walpole Wilderness and will aim to accelerate our understanding of peatlands and their optimal management so they will be protected for future generations. WNNPA members will be assisting with the fieldwork, mapping and sample collection continuing the work they started for the nomination of peatlands as a federally listed Threatened Ecological Community as outlined below.

Empodisma Peatlands of Southwestern Australia

Each year on behalf of the federal Threatened Species Scientific Committee, the federal Department of Climate Change, Energy, the Environment and Water (DCCEEW) invites public nominations for items that merit listing as threatened under national environment law. The WNNP nominated the *Empodisma* Peatlands of Southwestern Australia for listing as a threatened ecological community(TEC) and the Committee

prioritised the community for assessment in 2019. The Proposed Conservation Status is Endangered. All the research, conservation advice and recommendations are now complete. You can view the whole document at *Empodisma* Peatlands of Southwestern Australia-DCCEEW. We are eagerly awaiting the results expected at the end of April. **Heather Anderson**

A Little Garden on the Side



The garden today (see also inside front cover). Photo Sandra Swain

As a change from the eye strain of herbarium work, the Albany Branch members sometimes break loose and plant a few plants. Right next to the building where we work is a small native garden, 145 square metres, according to Coralie Hortin's notes, bounded on one side by the building wall and on the other by a driveway used daily by a good number of DBCA vehicles.

This garden was started by the branch back in 2004. The records say first the ground was sprayed for remnant kikuyu by the City. Then after spreading blood and bone all over, it was rotary hoed. Pat Johns marked out a curved path through the patch, giving us a north and south side but all on the north side of the building. Then members all suggested favourites and a shopping list was made (opposite page top left). At last it was planting time.

Looking back at the list, there is a stranger there, four *Dryandra* are listed. Things have changed! Also there are now *Eucalyptus* in the garden where none appear on the first list. A *Eucalyptus sepulcralis* was planted on the building side of the path in 2005. That appears to be still there. In the front and highly visible is another *Eucalyptus sepulcralis* (left photo above, a younger tree can be seen on page 16) weeping gracefully over several groundcovers. Originally it was to be a grove of three. Further along toward the middle of the driveway side is a *Eucalyptus preissiana* that blooms beautifully every year. This

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HERBARIUM GARDEN PLANTS. MAY 2005 Seeds blowled Mayzahios ACACIA drummondii vat elegatit ACACIA tralliformis ADENANTHOS cuntil CHONITENA CORTATION ADENANTHEIS seriors AGROSTOCRINUM scale Hovea punglus ANIGOZANTHOS hybrids AUSTROSTIPA gooffree BAUMEA june BEALFORTIA documa BEALFORTIA sparsa CAREX fascicularie DIASPASIS filifolia thriving, Bpril '06 DRYANDRA baster DRYANDRA Sormona DRVANDRA sonthocerps DRYANDRA man **EVANDRA** artistata DIADEN GREVILLI'A fasciculata HAKEA caeculata HAKEA tuberculate HEMIANDRA DURING HIBBERTIA cone E997 1877 IDIDT RTLA pressularizifo HYPOCALYMMA angustifol INCHENALS TIA formos MEEDOLDINA scariosa ORTHROSANTHUS have PATERSONIA occidental WAEVOLA strata Billmy ditte SGREWA Succomis Havis Markers TEMPLETONIA retuin THYSANOTUS multiflore VERTICORDIA plumose HIBBERTIA curningham AMPIERA linearis DERYPTOMENE hybrid ANTHOSIA retundifuli

year it had a major prune after a storm broke branches.

The other tall plants that give the garden structure are a wall of *Adenanthos sericeus* on the building side of the path and a *Hakea petiolaris* on the roadside. This is visible from our office and gives much viewing pleasure. With our warmer climate we appreciate the cooling effect of a few tall plants as we walk through the garden!

One of the features of the garden are some large boulder type rocks. One of them carries the plaque dedicated to Eileen Croxford. She was the founder of the herbarium and of the branch. Another rock carries a plaque to Doreen Davidson, an early member of the Albany Branch. Around the rocks are generally *Patersonia occidentalis* and *Anigozanthos hybrids*. Doreen was one of two who donated *Templetonia retusa*, one of which is still there.

At the end of the first year there is a note that there were 15 deaths of plants. There is also some discussion of how hot and dry the summer was. There is a lot of discussion of

watering regimes. Coralie's notes say the plants would be named and their history of growth recorded, so each year there is a plaintive note saying how many plants died during that summer. Trying to be good scientists they dug up many of the plants that died and examined them and a frequent comment is twisted roots. Unfortunately records end in 2016.

In the first years there was also some seed planted, particularly *Calothamnus quadrifidus* and *Chorizema* (see notes on list above)

A three metre high trellis went in during June 2008 at the western



New zerre Ler of track load pine balk multin L. - R. Judy Marine Ceratia Holton, Kara Baka, Nin Janut H Pak Eriotka ell.

Coping with heat. Laying pine bark mulch in November 2006.





end of the garden. This narrow border is where the strongest winds come in. Our well known past local photographer, Ed Smidt, was the lucky one to shoulder the crowbar and get to dig the post holes through the bitumen. Judy Morris purchased a Billardiera erubescens from Zanthorrea Nursery to cover it. Another trellis exists

now but the instalment date is not recorded. It parallels the building and has a *Clematis pubescens* climbing it (and a few nearby plants as well).

The year 2008 was also the year a compost bin was tried. The worms did fine on their diet of sheep and cow manure, urea, and weeds. Weeds did not include the feral Gladioli found during 2008 that were binned in plastic bags in the rubbish bin! When the compost was used in February of 2009, Pat and Ruth were pleased with the results.

In 2010 the Albany Branch was asked if they wanted to create and maintain the gardens at the front of the office along Albany Hwy and also the back strip that starts just inside the Moir Street gate. They took this on willingly and after preparations done by DBCA they mulched and planted two additional gardens.

Keeping up with the weeds and the watering over summer in these two new gardens was hard work but they achieved some beautiful results. One amusing discovery was a plant grown so large it had to be removed. Why so large? It had grown over a tap with the tap stuck in the on position. The *Banksia* next to it was nearly as happy as the culprit tree. By 2015 the gardens were a riot of colour and set off the premises graciously. Sadly the group has had to give up care of these two gardens.

The Little Bit at the Side Garden though is still maintained. The current group have a busy bee about once a year. Pat Bracknell does weekly maintenance. Pat replants when there is a space and chooses largely by colour and availability. Pruning and weeding are still the top jobs. Keeping the soil taking in water is also a steady maintenance job. Some things have been shaded out and some have spread generously.

There are fewer plants in the garden now but some of the originals are still there. A *Poa poiformis* planted in the first plantings is there, and presumably the same plant grown bigger. Peter Stewart's table and bench are still there and during Covid were a godsend. His bird bath is still in the garden though moved to a more bird friendly location tucked in flowers behind Eileen's rock. The compost bin is gone.

Of the people in the old photo I have included with this article, Pat is the only one still in the group and minding the garden. When she reflects back on the twenty years the

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garden has been in existence, she is very practical and says, "it looks nice." Then she adds, "DBCA staff say it is nice to walk through. Maybe they think they are in the bush and happy." Certainly all of us choose to follow the little path through our patch when going to and from the buildings up at the top.

Sandra Swain

Priority Flora Survey Project 2021 to 2023

In March 2021, Jolanda Keeble was engaged by the Wildflower Society of WA to coordinate Priority Flora Surveys in collaboration with the Species and Communities Branch of the Department of Biodiversity, Conservation and Attractions (DBCA). This project is a scaled-down version of the Rare Flora Search and Rescue project (2016-2018) that was managed by WWF in conjunction with the Society and DBCA.

DBCA maintains a list Threatened and Priority flora species. Species targeted for these surveys are mostly those listed as Priority 1 or 2. These plants are known from a few locations and need adequate survey to determine their conservation status. The basic principle of the surveys will be to become familiar with the species we are looking for, then search for the species in suitable habitats. Surveys take place over the target species flowering time each year during a day trip or over a weekend. Standard DBCA reporting forms are used together with GPS mapping.

Surveys were done in 2021, 2022 and are planned for 2023. The reports for the 2022 searches follow.

Searching for Uncommon Plants

The following reports illustrate the techniques used to find uncommon plants. Each starts with the preparation of a factsheet based on the plant's description, a perusal of herbarium records and contacting anyone who knows the plant. Organise your trip when the plant should be flowering. The 2022 searches began in February and finished in December. Ensure you have good maps. With access to geographic information data (aerial images, roads etc) and associated software DBCA staff put together excellent supporting maps.



Olearia strigosa P3 (February)

A Factsheet for *Olearia strigosa* was prepared to assist volunteers with identification in the field. The species was originally recorded in the Yarloop and Busselton and Dunsborough areas. Eight records are known to exist, the earliest dating back to 1839 and 1860. Six collections were made between 1939 and 2004. The goal for this survey was to establish if the species still occurs in the same areas/locations (if known) and get an understanding of its habitat.

The survey was planned to occur over 3 days,

one day in the Yarloop area, one day around Busselton and one day around Dunsborough.



Andrew Webb from DBCA provided maps of the locations to be surveyed and was the survey leader (left).

Volunteers arrived at a central meeting place each day and were either allocated areas to survey or went all to the same location. Surveys were carried out by walking randomly or by walking in a linear line through the area at approximately 10m distance from other people. The group was at Yarloop on Friday 28 February with

9 volunteers contributing 36.75 person hours; at the Whicher State Forest near Busselton on Saturday 29 February with 10 volunteers contributing 32.5 person hours; and near Dunsborough on Sunday 30 February at Carbunup Reserve and Marri Reserve with 8 volunteers contributing 20.5 person hours. The total person hours was 89.75.

In Yarloop five populations were found in area 1, mostly with 1 to 5 plants, and one with 5 to 10 plants. Area 2 had a large population of up to 50 plants and one plant on its own. No plants were found in areas 3 and 4.

In the Whicher State Forest area south of Busselton 12 plants were found in two populations: 10 plants in the area around Sues Road and two in the area around Goulden Road. In addition to the *Olearia* new populations of *Daviesia elongata* subsp. *elongata* (T), *Lasiopetalum laxiflorum* (P3) and *Acacia semitrullata* (P4) were located by the survey.

In Carbunup Reserve along the Bussell Highway one population of 11 plants was found and in Marri Reserve in Dunsborough two populations were found of which one with one plant and one with eight plants.

Conclusion

The volunteers were successful in locating the species in the survey areas. From resurveying the existing sites (Yarloop, Whicher State Forest and Carbunup Reserve) it seems the species is currently not impacted by human induced external factors (e.g. weeds, disturbance). The biggest threats to this species (and other threatened and priority species found in the survey areas) would be the removal of habitat and inappropriate fire regimes. Several collections of the populations were made and will be submitted to the WA Herbarium with the data collection sheets. We recommended that there be no change in Conservation status.

Leucopogon sp. Port Gregory P1 Styphelia inopinata P1 (June)

A Factsheet for *Leucopogon* sp. Port Gregory and *Styphelia inopinata* was prepared by Robin Simkin for the Geraldton Herbarium group to assist volunteers with identification in the field (photos opposite).

Leucopogon sp. Port Gregory is known from four locations in the Port Gregory area, of plants collected respectively between 1984 and 2000 (Reference: WA Herbarium's online resource Florabase, accessed in November 2022). *Styphelia inopinata* is known from five locations, of which four on a private property east of Kalbarri National Park, and one in the Port Gregory area. Plants were collected between 2007 and 2014 (Reference: WA Herbarium's online resource Florabase, accessed in November 2022).

Both species were known to occur on the ironstone shales (Kockatea Shales). Both were known from a private property on Yallabatharra Rd, each at another location and two



Above: Olearia strigosa plant and flower. Right above: Leucopogon sp. Port Gregory; right middle Styphelia inopinata. Below: Society and Geraldton Herbarium participants.



Pimelea pelinos survey Scaddan Road survey tracks

2





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other locations were to be investigated.

On both Saturday 18 and Sunday 19 June the survey was carried out by walking transect lines in the selected bushland areas, with survey participants forming a line with approximately 1 to 2m distance from each other. On Saturday the morning survey was carried out on top of a breakaway and in the afternoon on the flats below the breakaway. On Sunday 3 locations were surveyed. The Saturday survey was carried out with 8 volunteers for 27.2 person hours and on Sunday with 5 volunteers for 18.5 person hours. Robin Simkin and Jolanda Keeble were the leaders for these surveys.

Within the survey area on Yallabatharra Road both target species were found. It was estimated that between 250 and 600 *Leucopogon* sp. Port Gregory plants and 7 to 15 *Styphelia inopinata* plants in the survey area. There was only a slight overlap where both species occurred together.

Two areas along Yerina Springs Road were surveyed for *Leucopogon* sp. Port Gregory. In the first area 50 to 100 *Leucopogon* plants were found as well as a new population of a Priority 2 *Enekbatus* sp. In the second area volunteers estimated the number of *Leucopogon* plants between 500 and 1000.

In the third survey area on the corner of Swamp Road and Rob Road, volunteers counted the presence of 21 to 50 plants in 45 minutes of random walk.

Conclusion

The *Leucopogon* sp. Port Gregory appears to be well represented in the area and has been found in all areas surveyed. It is likely that other suitable habitats in the Shire will support this species. All areas surveyed are on private property as there are no Nature Reserves currently gazetted on the Kockatea Shales so there is no certainty this species will be protected.

The *Styphelia inopinata* was only observed on the Saturday survey and not seen in any of the areas surveyed on the Sunday. It appears to be much more restricted in distribution. Further surveys in suitable habitats may be required to confirm if this is the case. This species is also only known from private land.

Based on the results from these surveys it is recommended not to change the status of

the two species until further surveys have been conducted.

Isopogon sp. Canning Reservoir P1 (July)

A Factsheet for *Isopogon* sp. Canning Reservoir was prepared to assist volunteers with identification in the field. This species has 8 voucher specimens in the WA Herbarium of plants collected between 1970 and 2014 from two localities (along the Brookton Highway/East Canning River branch and in the Boddington/Dwellingup area).

The goals for this survey were to:

- familiarise with the known population in the Canning River floodplain; and
- survey other potential areas around the Brookton Highway and Dwellingup area.

The survey occurred on 17 July 2021 and 15 July 2022 coinciding with the species flowering time. *Isopogon* sp. Canning Reservoir grows in wetlands and flowers in winter. As both 2021 and 2022 had reasonable winter rainfall survey was curtailed because of the

wet roads and Phytophthora risk and in the survey areas.

Marnie Mallié, Flora Conservation Officer for DBCA–Perth Hills District provided information on areas to be surveyed for the target species, and was the leader for the 2022 survey. Jolanda was the leader for the 2021 survey. Volunteers would drive to these locations and walk transects through the selected wetland areas. Surveyed areas would be recorded on maps and any new population information submitted to the DBCA.

In 2021 11 volunteers attended for a total of 66 person hours. *Isopogon* sp. Canning Reservoir was found in full flower at the known location (Population 1) in the Canning River East Branch area. Two other locations were surveyed *Isopogon* sp. Canning Reservoir was not found.

In 2022 two Wildflower Society volunteers and two DBCA Flora Conservation Officers went back to Population 1 to resurvey the population and additional areas in this seasonally wetland area. Total survey effort was 16 person hours. Eighteen mature and nine juvenile plants were recorded. No other areas were surveyed due to heavy rainfall in this month.

Conclusion

For two years Wildflower Society volunteers have surveyed for *Isopogon* sp. Canning Reservoir. Due to heavy rainfall in both years, the survey effort in the wetland areas of the Dwellingup State Forest was cancelled. As it is easier to recognise and find this species when it is in flower, no effort has been undertaken to survey in other months. If surveyors are not familiar with the plant, a survey outside of the plants flowering period would be very time consuming and might not be accurate. After curtailing both year's survey sessions it is recommended volunteers do not spend any further survey effort on this species.



Pimelea pelinos P1 (July)

A Factsheet for *Pimelea pelinos* was prepared by the DBCA to assist volunteers with identification in the field. The species was originally recorded along saline lakes north of Esperance and south of Lake Grace. Eleven location records exist in the WA Herbarium's online resource Florabase, of plants collected between 1984 and 2002.

The goals for this survey were to:

establish if the species still occurs along

Scaddan Road;

- find the population near Lake Tay; and
- locate new populations at other suitable salt lakes in the area, including in DBCA managed Nature Reserves.

Emma Adams, Conservation Officer DBCA–Esperance District, provided information for the locations to be surveyed. Katie White from the Society and the Esperance Wildflower Society was the survey leader. Volunteers arrived at a central meeting place in Esperance before travelling to the survey areas. Surveys were carried out by walking randomly around the margins of selected salt lakes.

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Due to weather and COVID restrictions, the surveys were carried out on Saturday 23 July with three volunteers who surveyed five areas for 10.5 person hours. Three survey areas were along Scaddan Road salt lakes, one survey area was located along the bank of Beaufort River near Dempster Road in a natural area south of Mount Ridley Nature Reserve, and one survey area was along a salt lake inside Mount Ridley Nature Reserve, also along Dempster Road.

Conclusion

The survey confirmed the presence of 56 mature *Pimelea pelinos* plants at the known location. Of these 36 plants were male, 13 plants were female and 7 were not flowering (sex unknown). *Pimelea pelinos* was not found in the other locations surveyed. There are many locations of apparently similar habitat in the area surveyed that could potentially have individuals or populations of Pimelea pelinos. Due to inclement weather and COVID restrictions, the survey of the area was incomplete. We recommended that further surveys in similar habitat around Lake Grace and Esperance will confirm if the status of this species should be changed to Threatened.



Eutaxia andocada P1 (September)

The species was previously known as *Eutaxia* sp. Peak Eleanora and *E. alternifolia* Chappill and C.F. Wilkins ms. A Factsheet for *Eutaxia andocada* was prepared by DBCA Flora Conservation Officer Emma Adams to assist volunteers with identification in the field. This species is only known from the vicinity of Peak Charles, Peak Eleanora and Salmon Gums. Four location records exist in the WA Herbarium of plants collected between 1984 and 2000.

The goals for this survey were to record and GPS plants, map the population boundary and record an associated species list at the following locations:

- re-locate population on Holt Rd;
- re-locate population at Peak Charles; and
- assess both locations for population near Peak Eleanora and Southern Cross (these locations were not clear).

The survey was to be over 2 days, on Saturday 3 and Sunday 4 September. The weather was so bad that the second day of the survey was cancelled. Emma Adams, Conservation Officer from DBCA–Esperance District, provided information for the locations to be surveyed. Katie White from the Society and the Esperance Wildflower Society acted as the leader for the surveys. Volunteers arrived at a central meeting place in Esperance before travelling to the survey areas.

The survey was carried out by walking the roadside vegetation area near the recorded population. The *Eutaxia andocada* population at Peak Charles was relocated with just three mature plants found by six volunteers in 30 person hours. No juveniles or seedlings were found. The total area surveyed was 22,000 square metres. During this search new populations of five other priority taxa were located–*Adenanthos ileticos* P4, *Eremophila succinea* P3, *Bossiaea flexuosa* P3 and *Halgania* sp. Peak Eleanor P3. Details have been submitted to the Species and Communities Branch of the DBCA.

Conclusion

Due to inclement weather and COVID restrictions, the survey of the known areas was incomplete. In 2021 a plant was seen at Salmon Gums. However, a return visit to the site was unable to relocate this plant. Further surveys of the known recorded locations are needed to assess the status of this species.



Androcalva fragifolia P1 (November)

A Factsheet for *Androcalva fragifolia* was prepared to assist volunteers with identification in the field. This species has 14 specimens in the WA Herbarium of plants collected between 2007 and 2018 and is only known from the York area, Julimar State Forest, Wongan Hills and Bindoon. It is postulated that this species might be responding to disturbance and/or fire and could be more widespread than known.

The goals for this survey were to:

- re-locate the population in Elphin Nature Reserve which was burned in 2007, surveyed in 2008 and 2016; and
- survey other potential areas east and north of Wongan Hills township with differing time frames since last disturbance.

The survey occurred over 2 days, on Monday 21 and Tuesday 22 November. Bree Phillips, Flora Conservation Officer from DBCA–Wheatbelt Region, provided information for the locations to be surveyed. Bree Phillips and Jolanda Keeble were the survey leaders. Volunteers arrived at a central meeting place in Wongan Hills before travelling to the survey areas. The surveys were carried out by walking linear transects through the vegetation.

Five volunteers spent an hour in Elphin Nature Reserve on 21 November 2022. Over the 5 person hours *Androcalva fragifolia* was not found.

Eight volunteers then surveyed Manmanning Nature Reserve on the same day (photos page 22, Jolanda Keeble). Over the 32 person hours of survey a population of >100 *Androcalva fragifolia* plants was found in this Nature Reserve with an estimated 75% in flower and 25% non-flowering (juveniles). Some of the flowering plants were also setting seed. No dead plants were encountered. The population was found in an area of approximately 4,400 square metres on the western side of the reserve. The part of the Nature Reserve where the new population was found was burned in 2022, less than a year ago indicating that the species is fire-responsive.

The following day the Conservation Park north of Wongan Hills township was surveyed by six volunteers (24 person hours) but no *Androcalva fragifolia* plants were found. However, two new locations of *Stylidium coroniforme* (T) were found.

Conclusion

Androcalva fragifolia was not found in the known location in Elphin NR which was disturbed and burned 15 years ago and last observed as being present six years ago. This indicates the species requires disturbance to germinate. However it was not found in the two-year-old disturbed and partially burned area in the Conservation Park, it being noted that the relief and soils of the locations in Elphin and Manmanning Nature Reserves

were different from those in the Conservation Park. Based upon the observations it is recommended that the target species be delisted to a Priority 3 species as the species does not appear to be under imminent threat and is known from several locations.



Grevillea tesselata P1 (December)

A Factsheet for *Grevillea tesselata* was prepared by Jolanda Keeble to assist volunteers with identification in the field. This species has four specimens in the WA Herbarium of plants collected between 2006 and 2013 from one locality as it is only known from the Yelbeni area in the Shire of Trayning.

The goals for this survey were to: • re-locate the population in Yelbeni; and • survey other potential areas around Yelbeni and Wyalkatchem.

The *Grevillea tesselata* survey occurred over 2 days, Monday 19 and Tuesday 20 December (see photos back cover). Bree Phillips, Flora Conservation Officer from DBCA–Wheatbelt Region, provided information for the locations to be surveyed. She postulated that the target species might occur on the boundary of a vegetation-soil intersection area based on the current population location. Bree and Jolanda were the survey leaders. Volunteers arrived at a central meeting place in Wyalkatchem before travelling to the survey areas. The surveys were carried out by walking randomly or in linear transects through the selected reserves and by slowly driving along local roads around the known population.

Four volunteers attended the two day search for *Grevillea tesselata* for a total of 43.5 person hours. *Grevillea tesselata* was found in full flower at the known location along the Nungarin-Wyalkatchem Road (14 plants counted) and the O'Meara-Perks Road (2 plants counted). A new population was found in a local Shire Reserve (the old Yelbeni golf course area) along Goldfields Road (east of Shertzinger Road) where 6 plants were observed, one along the northern roadside and 5 south of the road. All plants were in flower and some were setting fruit.

The target species was not found in the following Nature Reserves: Folly Nature Reserve on Davies Road (drive and random walk); Elashgin Nature Reserve on Maitland and Cox Roads (drive); Korrelocking Nature Reserve on Goldfields and Tyler Roads (linear walk and drive); Wyalkatchem Nature Reserve on Wyalkatchem-Koorda and Goldfields Roads (drive and walk); Gabwotting Nature Reserve on Goldfields Road (drive and random walk); and Elliot Nature Reserve on Elsegood and McNee Roads (drive and random walk). It was also not found in the following locations: Korrelocking Townsite Reserves (linear walk); Yelbeni Townsite Reserves (linear walk); Remnant vegetation along McNee Road, north of Goldfields Road (drive); and on any of the roadsides driven along during the survey.

On the Monday the driving survey covered an area of 80 km and on the Tuesday the drive covered 56 km.

Conclusion

Although the walks in the different reserves didn't cover the whole of the reserve areas, the survey volunteers were confident that the areas walked through and driven along

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were not the right habitat for the target species based on the soil and vegetation types observed at the known and observed populations during the survey. It was tentatively suggested that *Melaleuca pauperiflora* might be an indicator species however the new population was found in degraded *Eucalyptus loxophleba* woodland, in brown sandy soil where this *Melaleuca* was not present. The survey did find other locations with *M. pauperiflora* but not the target species at these locations.

Peter M. Olde (Telopea 25: 316 (October 2022)) states that

"the species should be considered for listing as Critically Endangered due to its extremely limited distribution and number of individuals. *Grevillea tesselata* was discovered in December 2006 and is confined to a single population fragmented within a relatively short length of disturbed road verge. A few plants have regenerated beside the disused, rail-line running parallel to the road. The population consists of less than 50 individual plants and is clearly threatened at the species level."

Based upon the results of the survey, there are now two known populations, still consisting of less than 50 individual plants. It was noted that there are no new recruits observed in the populations and it might be that this species relies on some kind of disturbance to regenerate. The species' distribution still remains very restricted. It was recommended that *Grevillea tesselata* be considered for listing as Critically Endangered due to its extremely limited distribution and number of individuals.

Many thanks go to all those volunteers who have participated in the 2022 survey program.



Priority Survey 2023

We are now in to the third year of this project. These surveys are a great way for Society members to get out into the bushland, learn more about our flora including some of our most threatened species, help ensure the protection of species by working to have them elevated from Priority to Threatened, and have a good time with other members.

The 2023 program has just been released. This year we plan to carry out 8 flora surveys in 4 WA regions: Geraldton, Northern Wheatbelt, Albany and Esperance.

The intent of these surveys is to try to shift the status of the species either to Threatened or to a different priority level.

The species and dates selected for this year are:

- Pimelea pelinos (P1) along salt lakes north of Esperance on Sun 18 June;
- Grevillea gillingarra (photo above) in Gillingarra NR (N Bindoon) on 22 July;
- Conospermum galeatum (T) in the Charles Gardner NR on 11/12 September
- Ptilotus chortophytus (P1) in the Northampton/Port Gregory area in October;
- *Hibbertia porongurupensis* (P4) and *Drosera lasiantha* (P2), Porongurup NP, on 21/22 October; and

• *Ozothamnus vespertinus* (P1) in the Port Gregory area in November. For surveys in the Port Gregory area exact dates have not been set. If you register your interest in these surveys I will let you know as soon as they are available. If you have not been sent it and would like to find out more or want to register your interest, please email Jolanda Keeble at <u>rare.flora.surveys@widlfowersocietywa.org.au</u>.

Jolanda Keeble and Bronwen Keighery



Book on the Flora of the Wongan Hills Reserves

Well, it has been a full year since I started on this project and I have thoroughly enjoyed every bit of it, from the monthly surveys, to the collecting, drying and identifying plants. I am happy to be able to give you an update as to where I am with this project.

My list of plants to look for is a total of 866 species of which I have found 633 (around 70%). This total

also includes weeds and introduced species. I find it more interesting to know that I have found 58 plant species that were not recorded in the reserves, of which are 9 introduced/weed species. I have also found 9 threatened and 33 priority species, of which two are new records–*Dicrastylis reticulata* (see photo above) and *Stylidium rubricalyx* (see photo right) and some have new locations.



The plant list currently records 58 orchid species in the Wongan Hills area. Of these, four species were not recorded on the Department of Biodiversity, Conservation and Attractions (DBCA) Florabase website, i.e. new records for Wongan Hills. In total I have found 40 orchid species so I will be on the lookout for others this year.

With the help of Wildflower Society and local bush care volunteers, and the DBCA, I carried out a thorough survey for one priority species, *Androcalva fragifolia* (P1) but have been unable to find it in the Wongan Hills reserves (see page 26-27 and photos back cover). It is likely only flowering after a recent fire has gone through a bushland but also needs a specific soil type/aspect as it did not pop up in the Wongan Wildflower Walk area which was recently burnt.

I have put 72 of my flora and fauna observations on the iNaturalist Australia website as a record but also to confirm the ID of them. They are in the public domain so you can look them up if you are interested in this. There are currently 456 species recorded for the Wongan Hills area on iNaturalist, the most recent one a beautiful scorpion a local found on his property.

This year I will be back every month to look for the species not currently found/ photographed to make it a more complete list. Hope to see you around sometime this year. Jolanda Keeble

York Botanic Art Prize 2023

Australia's only contemporary botanic art prize (logo from 2021 left).

The York Botanic Art Prize announced Professor Josh Byrne as its Patron. Respected as an academic, environmental scientist, landscape designer and sustainability advocate, he is also wellknown nationally as a presenter on the ABC TV program Gardening Australia.

Established in 2020 with support from the Wildflower Society of WA Mary Bremner Award, the York Botanic Art Prize is a

much anticipated biennial event in the Australian art prize calendar. Held in the historic Wheatbelt town of York, in the Ballardong region of Western Australia it has a prize pool of \$12,000 and attracts entries from artists Australia-wide.

In 2023, entries will be accepted from international artists for the first time. Artists are invited to respond specifically to native West Australian flora; and to work in any medium, expanding the field of what botanic art can be.

Founder of the York Botanic Art Prize, Jenny Garroun said,

"Professor Byrne was the natural choice as Patron for the Prize, because of his passion for Western Australian flora and his deep and abiding commitment to sustainability."

Professor Byrne said.

" I'm delighted to be patron for the York Botanic Art Prize which aims to showcase artistic engagement with Western Australia's incredible native flora, and draw attention to the issues and opportunities for its protection and regeneration."

The York Botanic Art Prize will open for entry by Expression of Interest on 13 May and close on 17 July 2023. The exhibition of finalists and the Winner will be announced at the opening at Gallery 152, 152 Avon Terrace in York WA on 26 November 2023 and run through to 31 January 2024.

To mark the close of the prize there will be a two-day Symposium; where artists, scientists and the public come together in conversation and collaboration. Gathering leading academics, cultural leaders and innovators from the field to present on the theme, 'Where science meets art to heal country'.

The Symposium and York Botanic Art exhibition, expand the engagement between Indigenous Australians, artists, scientists and the public bringing them together to share knowledge and insight with the aim of developing the understanding needed to protect, restore and heal our natural environment. The inaugural York Botanic Symposium will be held on 27 and 28 January 2024.

Organisations and individuals who wish to support the York Botanic Art Prize can donate through the Australian Cultural Fund campaign here. All donations made through the Australian Cultural Fund are tax deductible.

More information: www.gallery152.com.au. Tracy Routledge 0412 223 221 or tracy@ trpr.com.au

Based on a press release from Tracy Routledge.

Society Bequest

The Society was humbled to recieve a significant bequest from Chris Pidd's estate. While not known to many current members of the Society, Chris had many roles in years past at the Branch and Society level. A small article appeared in last year's August Newsletter. Below is an expanded article.

Vale Chris Pidd

Armadale Branch and Society member Christopher Lane PIDD was born in Brighton, England on 17th February 1932 and passed away in May 2022 at his unit in Gosnells; he had just recently reached 90 years of age.

He was an only child and the family emigrated to Melbourne in the early 1930s where Chris' father became a rector in the Anglican Church. Chris completed his education at Caulfield Grammar School. After school, Chris joined the Australian Taxation Office as a clerk where he worked for over forty years until his retirement.

In the 1950s the family moved to Perth where his father became rector at Christchurch Claremont. Later the family moved back to Melbourne where his father became a rector in a Melbourne church. After his parents' death, Chris returned to Perth and moved to Croyden Road, Rolevstone

into a home previously owned by Chris' parents.

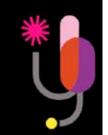
Chris never learnt to drive a car, but it never stopped him from going anywhere. He was very skilled in moving around the metropolitan area using buses and trains. This enabled Chris to keep up his interests and support for the West Coast Eagles football team. He used a bus or train to go food shopping and other shopping. Chris liked to go on what he called "joy riding" on a bus or train. He would hop on any bus or train and enjoyed seeing where it took him and wherever he ended up.

Olympic games were of interest to Chris. He was able to attend the games in Moscow in 1980 and Sydney in 2000. Chris wanted to experience a white Christmas, so he travelled overseas to gain this experience. He was a great world traveller having visited America, England, Europe, Russia, New Zealand and there were probably other countries as well. He had travelled on a few cruise ships and enjoyed the journey. This was his "global joy riding".

Chris contributed to the functioning of the Armadale Branch of the Wildflower Society over many years. He contacted and organised our guest speakers over the years from 1998 through to 2011. Mostly over this period, he also provided this information to the local newspapers for inclusion in the 'Coming Events' pages (a hit-and-miss method of advertising our talks). Chris was the branch treasurer from 2002 to 2011 where he kept a good eve on the branch's cheque account and term deposits and preparation of the books for auditing.

Chris also served on the Wildflower Society's management committee for many years





in the capacity of treasurer and recording the meetings' minutes. He was awarded Life Membership of the Society in 2002.

Chris was very independent – in addition to regularly travelling overseas, he attended the biennial Australian Native Plants Society (ANSPA) conferences around Australia. When living in Melbourne, he travelled to Tasmania to protest against the damming of Lake Pedder. He was arrested, along with many others, and spent the night in jail before being released.

His wife Veronica (Ronnie) passed away in May 2010. Kim Sarti and Dorothy Goodman (sister-in-law)



Birdlife WA and Society Quiz Night 11 May 2023

What a happy evening it was and thank you so much to those wildflower folk who got a table together—it was a sell out! One of the pics is of the table organized by Colma Keating (photo Colma and her group below). The Society and Birdlife contributed the questions with a lot of the background intellectual work done by the

Quizmaster Brendan Kinsella. There were some lovely donated prizes not only for the winning table, but for a raffle and some other quirky competitions that were held during the event; the donations were much loved such that there were none left at the end of the night.

The date did clash with other Society events this year and in chatting with Birdlife folk after the event, we plan to hold another next year – so please stay tuned – and we will try and avoid clashes. **Kerry Smith**



Native Vegetation Accounting in the Wheatbelt NRM Region

The Wheatbelt Regional NRM Strategy highlights that the majority of the Wheatbelt falls below the target of 30 % native vegetation cover required to maintain an ecologically viable landscape (Table 1).

Wildflower Society of WA Newsletter, May 2023

Sub-region	% Remaining Bushland
Avon Arc	11
Central Wheatbelt	6
Eastern Wheatbelt	17
Southern Wheatbelt	20
Great Western Woodlands	99

Table 1. Summary of the area of remnant bushland by sub-region in the Wheatbelt NRM region.

As part of our commitment to the Regional NRM Strategy, Wheatbelt NRM annually attempts to quantify changes in native vegetation area to track the progress of indicators against the targets laid out in the strategy.

We do this by compiling data from several sources including the area of approved clearing permits supplied by the Department of Water and Environmental Regulation (DWER) to quantify our annual loss of native remnant area.

For example, between 2019 and 2022, 514 ha of native vegetation has been approved for clearance. Fifty percent of this area (257 ha) was approved for the purpose

of road construction or maintenance (Figure 1). We know that a great proportion of the remnant vegetation in the Wheatbelt NRM region exists as linear bands in road reserves. This basic example of natural capital accounting shines a light on an obvious land-use

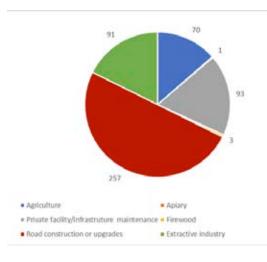


A remnant of York Gum woodland on a farm in the Wheatbelt. One of the areas of woodland being docmented and compared for a WNRM and the Society project in 2020 and 2022. A report on the project is planned for a later Newsletter this year. Photo above and Everlastings bar pages 32 and 34 Anne Rick.

conflict between maintaining road infrastructure and protecting the rare, threatened and dwindling remnant assets that are crucial to maintaining a vibrant, diverse, beautiful and productive Wheatbelt community.

Currently is it very difficult to accurately assess whether as a community we are adequately compensating for the loss of native vegetation through our NRM interventions. Barriers to collating this data include the following.

Figure 1. The area of approved clearing permits from 2019-2022 by purpose. Data supplied by the Department of Water and Environmental Regulation (DWER).



 Revegetation data is not centralised.

• Public datasets such as the CPS are not user friendly making the process of data collation laborious.

• Privately funded investments in revegetation are not accounted for.

• Remotely sensed estimates of vegetation extent are not produced at a scale useful to accurately detect linear or small, fragmented vegetation patches common to the wheatbelt.

Developments in national natural capital accounting and enduser guided plans will hopefully help to overcome the barriers to tracking our progress.

Finally, some food for

thought, could autonomous cars play an important role in the future of conservation in the wheatbelt by reducing the need to clear roadside vegetation?

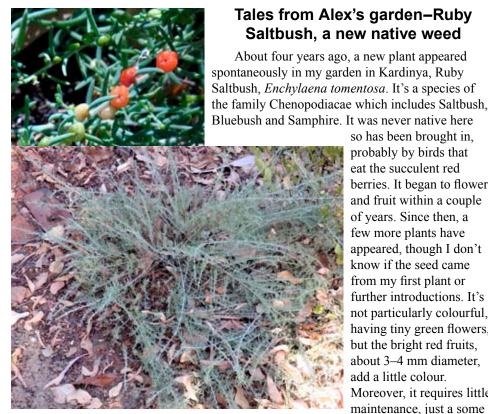
Links:

Wheatbelt NRM Inc. Regional NRM Strategy Department of Water and Environmental Regulation Clearing Permits System Department of Water and Environmental Regulation Clearing Statistics CSIRO Natural capital accounting in Australia's primary industries. WABSI Biodiversity Knowledge Priorities EEA Environmental-Economic Accounting

From WNRM eNews 373, November 2022



Wildflower Society of WA Newsletter, May 2023



so has been brought in, probably by birds that eat the succulent red berries. It began to flower and fruit within a couple of years. Since then, a few more plants have appeared, though I don't know if the seed came from my first plant or further introductions. It's not particularly colourful, having tiny green flowers, but the bright red fruits, about 3-4 mm diameter. add a little colour.

Moreover, it requires little maintenance, just a some pruning if it starts to grow

over nearby plants. My first plant is still an attractive, vigorous foliage plant.

Ruby Saltbush is a common native species, occurring throughout W.A. as well as in drier parts of the N.T. and S.A., usually in somewhat saline areas. In Perth Plants (2016), Russell Barrett and Eng Pin Tay suggested that plants in Bold Park may have been introduced there



Miraculous microbotrya

In 2018 I obtained a seedling of Manna Wattle, Acacia *microbotrya*, from a nursery. I've wanted one for some time, as it's an attractive small tree with the advantage of flowering in autumn, a lean time among our wildflowers. I planted it on my top verge as a street tree. It grew well for two years until 2020 when, at about 60 cm tall, its top half was broken off by workmen digging a trench for a gas line. Although small, it recovered and grew vigorously, producing a few flowers in 2022. By early 2023 it had reached 3 metres and was budding up nicely until, over the night of 5/6 February, someone sawed half-way through the stem (about 25 mm diameter). When I went out

in the morning it was lying across the footpath. With its previous recovery in mind, I thought that there might be sufficient connection in the uncut side where, despite the bending, the bark appeared to be still in a reasonable state. So I put in two stout stakes, stood it up and tied the trunk securely, then bound over the damaged part with plastic masking tape ... and waited (photo right). I decided not to water it. Lo and behold, despite the hot, dry days, the foliage did not even appear to wilt. A fortnight later the crown still appeared healthy. By mid-March new shoots were growing from the trunk below the cut point.

Clearly, my Manna Wattle is a survivor. It appears that this year's buds will go on to flower and maybe, if it is self-fertile, to produce seeds. I will have to leave it

staked for some years, maybe always since it may not be able to heal such a drastic cut sufficiently well to be self-supporting. And I hope that whoever took a saw to it does not repeat it. I might add that the tree is well back from the footpath so in no way is a problem for pedestrians.

Alex George



Flowering Banksia species

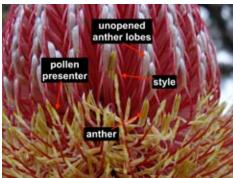
Currently three tree Banksia species–*B. littoralis*, *B. menziesii* and *B. prionotes*, are flowering in the Southwest. Two of these are described below. These are excellent in the garden and roadside as long as you watch the phosphate on *B. menziesii*.

Banksia menziesii

Small tree or shrub, flowers February to August

Banksia menziesii flowering cones present a variety of colours (photo left and inside back cover): before the buds begin to open the cone is grey-pink (hairy outside of

flowers); as the red style pushes through the tube the cone is red-grey, and finally when all flowers are open red and yellow (the yellow from the pollen). The red upward curving style reaches just beyond the perianth ending in the straight pollen presenter capped in orange-yellow pollen (photo right). All yellow and bronze coloured flowering cones appear in some populations. **continued page 38**





Specialists in Nature Tours since 1986 (Small groups of 6 – 12 passengers)

13-Day Kimberley Wonders — Easy Camping Tour

Kununurra to Broome, 28 July - 9 August 2023 - Maximum 12 passengers

Join us in the Kimberley region of Western Australia; one of the most remote and unspoiled wilderness areas in the world. We explore Purnululu (Bungle Bungles) National Park, the Gibb River Road, Parry Lagoons (great for wetland bird watching), Drysdale River Station and Silent Grove. There is also an optional full-day visit to the Mitchell Plateau to view Mitchell Falls.

14-Day Western Wanderer — Easy Camping Tour

Broome to Perth, 19 August - 1 September 2023 - Maximum 12 passengers

Head north of Perth for seabirds, marine-life, coral reefs and ancient inland gorges. Highlights include a flight over the Abrolhos Islands, exploration of the Shark Bay World Heritage area including Monkey Mia, free time in Coral Bay to explore the Ningaloo Reef, camping at 80-mile beach, and two days exploring the wonders of Karijini National Park.

9-Day Golden Outback — Camping Tour

Perth to Perth, 9 - 17 September 2023 — Maximum 6 passengers + 4 tag-alongs Follow the Golden Pipeline, built by C.Y.O'Connor in 1903 (still the longest freshwater pipeline in the world) out to old gold mining towns, Coolgardie and Kalgoorlie. Visit Lake Ballard and discover the 51 mesmerising on-lake art sculptures, before journeying to the Helena & Aurora Range; a striking banded ironstone formation located in WA's Great Western Woodlands.

9-Day Mid West Wildflowers — Accommodated Tour

Perth to Perth, 13 - 21 September 2023 — Maximum 12 passengers

This tour has been designed to show you the magnificent diversity and abundance of flowering plants north of Perth. Following the winter rains, WA wildflowers burst into bloom and transform the rugged golden outback landscape into a brightly coloured wonderland. The accompanying Naturalist will help you locate, identify and learn about the incredible wildflowers.

15-Day West Australian Outback — Camping Tour

Perth to Perth, 30 September - 14 October 2023 — Maximum 6 passengers Travel outback tracks built by Len Beadell (the 'last real Australian explorer') through the Great Victoria Desert, before reaching the Eyre Bird Observatory, home to many rare species of birds.

7-Day Lord Howe Island — Accommodated Tour

Lord Howe Island, 30 September - 6 October 2023 - Maximum 16 passengers

Lord Howe Island is World Heritage listed due to its astounding natural values. The beautiful landscape is dominated by twin peaks Mt Gower and Mt Lidgbird, while tall rainforests, thronging seabird colonies and lively coral reefs exist below. Your guide, Ian Hutton, the island's resident expert, will show you in seven days what would take weeks to discover on your own.

10-Day Wildflowers of the Southern Forests — Accommodated Tour

Perth to Perth, 28 October - 6 November 2023 - Maximum 12 passengers

Visit the South West of WA, the only global biodiversity hotspot in Australia, with the benefits of an expert Naturalist to guide you. This region has the highest concentration of rare and endangered species on the continent, and wildflowers bloom from September to November.

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Wildflower Society of WA Newsletter, May 2023



'Hi-Vallee', Badgingarra WA 6521

E-mail: hivallee@westnet.com.au



The fruiting cones (photo left, five follicles) can have up to 25 follicles and and the dried dead flowers are dropped. *Banksia menziesii* is typically a small tree (photo front cover). The leaves have regular short teeth and blunt ends (photo below left). In the north of its range it can be a shrub (map below). The bark is thick and grey-brown. Trees shoot from under the thick bark after fire. If fire burns the top of a young plant it can regrow from the

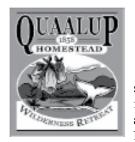
a young plant it can regrow from the lignotuber.

Wild food – flowers provide pollen and nectar for birds and insects; Carnaby's Black Cockatoos use their

Quaalup Homestead 1858

sharp beaks to eat the seeds from the woody fruit and insect caterpillars from the woody stems.

Growing note – Phosphorous sensitive, plant in parks without lawns. Select tree or shrub form. **continued page 40**



Wilderness Retreat

Your perfect place to stay in the Fitzgerald River National Park

With over 1800 plant species, including some rare or endemic species like the Qualup Bell and *Hakea victoria*, abundant birdlife, famous Point Ann beach with its Southern Right Whale Nursery and the beautiful scenery of heathland and mountain ranges, this National Park is really worth a visit.

On our 40 acres of native bushland surrounded by the National Park we offer:

- cosy s/c ensuite accommodation (2 pers units, 2 bedroom chalet, 3 bedroom cabin)
- nature camping area (for caravans or tents)
- botanically signposted nature walk with stunning views
- kayak/canoe hire to explore the beautiful Gairdner River
- heritage listed Homestead from 1858, open for visitors as Guest Lounge and Cafe

The Retreat runs its own environmentally friendly solar power system.

Bookings and more information: Ph: 08 9837 4124 Website: <u>www.whalesandwildflowers.com.au</u>



We welcome these new and re-joining members from 1 January – 29 March 2023 to the Society and thank them for their support.

> NAME SUBURB/TOWN Laura Cruza Merredin **Fiona Falconer** Coorow Chloe Flaherty Duncraig Sarah Gosling Wemblev Joel Gritter Armadale Callum Haines Glen Forrest Kevin Hall Karrinyup Wendy Hudson Hilton Glen Forrest Jenny Kerr Elizabeth King Willeton Jessica Mell Wandi Kylie Mell Byford Gina Mellon Albany Frans Mollemans Hawaii USA Kirke Montgomery Margaret River Diana Nottle Leeming Abigail Parker Lower King Georgina Patoir Roleystone Megan Pollock Subiaco Tanya Richardson Embleton Max Richmond Darch Simon Robinson Nedlands Anthony Sharp Yallingup Isobel Steer Boulder Kerry Stewart Geographe Marilena Stimpfl South Guildford Luke Summers Malaga Caroline Telfer Darkan Danika Thomson Wanneroo Cameron Thorn Cannington Silvia Volesky Beldon Jill Woodhouse Carine

Kerry Smith





Banksia littoralis

Small tree, March to July

Banksia littoralis has golden yellow cones at the ends of the branches (photos). The flowering branches are typically shorter than the surrounding branches and the flowers are hidden in the foliage (photo left). Cones open from the top down (photos below right and opposite). Initially the pollen presenters are covered in pollen. As the pollen

ages the hooked pollen presenter is visible and the stigma is receptive to pollen from other

plants (photos). Young fruit have protruding follicles. The follicles open on the tree (photo opposite).

Banksia littoralis is typically a small tree (photo opposite) but may grow to 12 m in sheltered wetland locations. It also grows as a mallee in exposed wet coastal locations (photo opposite). Leaves are deep green above and white below.

Banksia littoralis is at times confused with *Banksia seminuda* (River Banksia) that is always along drainage lines, is typically much taller and has whorled leaves. Both species have white backs to their leaves, a characteristic that distinguishes them in the bush.

Wild food – flowers provide pollen and nectar for birds and insects; Carnaby's Black Cockatoos use their sharp

beaks to eat the seeds from the woody fruit and insect caterpillars from the woody stems.

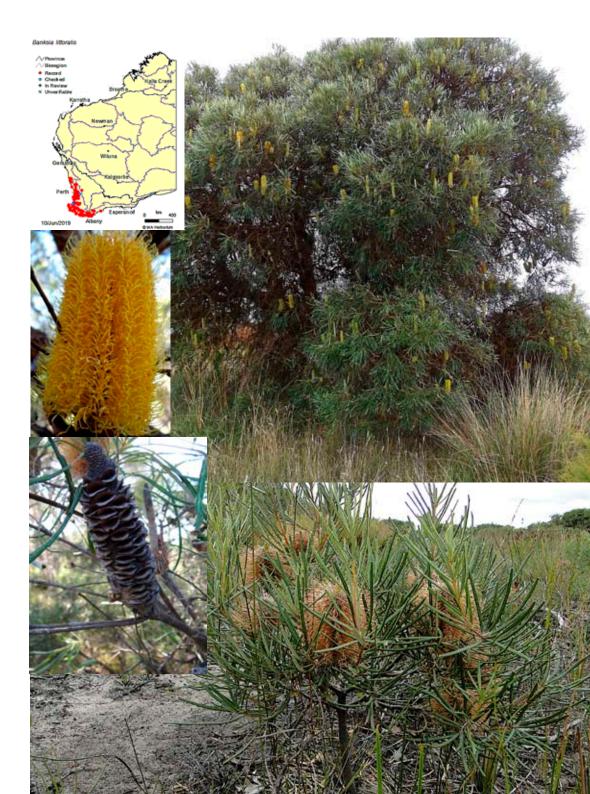
Growing note – Select tree or shrub form. Young plants need watering. **Bronwen Keighery**

Vale Neil Coy 7/10/1937 to 3/05/2023

In the 1990s Neil Coy was an very active member of the Society. Participants in the Plant Survey Program will remember him well from surveys done in the Shire of Serpentine-Jarrahdale at Brickwood and Cardup Reserves. Neil also contributed to the Newsletter doing in-depth interviews on well known people in the Society of the time. Neil had an informative pleasant writing style. His much loved wife, Ellen Gude, was active in the Society at the same time.

Editor: The information received on Phylis Robertson was enjoyed by many, please send your story about Neil Coy (Word doc with photos as separate jpgs).







Southern Wheatbelt Wander

Tour

27th - 29th October 2023 2 Nights 3 days.Depart & Return Collie Visitor Centre



Wagin, Dumbleyung, Wuddi Cultural Stories, Cambinata Yabbies, Memorabilia Collections & Tarin Rock Reserve

est explore

Contact Alison 0427 98 11 87





