

LEARNING DESTINATION: WILDFLOWERS

The Friends were well represented at the launch of the Children's University Western Australia Partnership in Albany on October 12th 2020.

On 30th July, Friends signed a partnership agreement to become a Learning Destination with the Children's University Australasia (CUA). Initially, children will utilise "Wildflower Faces", a colouring-in book by our member Jane Thompson, accurately depicting 92 of our native wildflower species. Later they may create an activity based around the fauna video that is on the Friends' website.

CUA project officer Alex Gerrard has made FFRNP "live" on the CUA Portal. The CUA Portal can only be accessed by their members (mostly schools), but a post on the Children's University Western Australia Partnership Facebook page offers an overview.

Both the CUA website and their Facebook page offer links to www.fitzgeraldfriends.org.au and the Friends' Facebook page, respectively.

Here is an overview of our Learning Destination:

Activities: Wildflower Faces

In the plant world, flowers have a surname and first name like we do but these are called 'genus' and 'species'. Plant names are written with their surname (genus) first and are always written in *italics*.

Complete this colour & learn introduction to the natural world of Monjebup wildflowers and you'll discover an array of plants that you never knew existed!

About this Learning Destination

Are you curious about the natural world and eager to learn more about the amazing plants that grow in the beautiful southern region of Western Australia?

The Fitzgerald River National Park is home to some of Australia's most diverse plant and wildlife species; by taking part in this activity created by the Friends of the Fitzgerald River National Park, you'll uncover a spectacular botanical world.

by Bill Thompson



Children's University project officer Alex Gerrard with Wildflower Faces author Jane Thompson at the launch of the Children's University Western Australia Partnership.



Children's University Australasia
[...] engages children and young
people in beyond school learning,
increases educational attainment
and achievement, and
encourages and rewards
participants for taking
responsibility for their own
learning [...] and provides many
opportunities to engage parents
and communities particularly in
the education of young people
[...] between the ages of 5 and
[...] 18 [...].

Source: www.cuaustralasia.com

NARPULUNGUP NEWS NOVEMBER 2020, VOLUME 2

INTRODUCING A NEW GENERATION TO THE BOTANICAL WONDERS OF THE FITZGERALD BIOSPHERE

Thanks to funding by the Wildflower Society of Western Australia's Mary Bremner Grant, Friends of the FRNP have implemented Wildflower Discovery Sessions with primary schools in Wellstead, South Stirling, Bremer Bay, Ongerup, Gairdner, Jerramungup, and Manypeaks.

Regional botanist Sylvia Leighton was appointed as facilitator for the Wildflower Discovery Sessions.

The sessions varied slightly, depending on numbers and ages of students and duration granted by school. Most sessions were approximately three hours' duration and involved students from pre-primary to year 6. Sylvia was exceptional at adapting to each situation and delivering the content and activities at an appropriate level to the range of abilities, skills and attention span of the students.

All sessions included

- a power point presentation introducing the Fitzgerald Biosphere and its unique flora.
- a wildflower walk in the bush including the school, information on the plants' growth habits, reproduction, unique features, colours, textures, seeds, flowers and for growth, prerequisites conservation and care of the environment.
- Sylvia has a picking license and students were able to choose one flower each to take back to the

classroom for closer study. The children were shown how to use magnifying glasses for a close-up look at parts of the flowers.

- When possible, the students sat in a circle and passed on their flower, so many different flowers could be viewed. This initiated a lot of discussion and rapt attention.
- The students were also able to view various flowers through two microscopes that Sylvia brought to the sessions. One child commented that, "at last she could be a real scientist!"
- All of the students were given a copy of Jane Thompson's Wildflower Faces colouring-in book.
- The students loved to find and begin colouring the picture of the wildflower that they picked.

Some sessions had extras

- A surprise visit from Jane Thompson in her "Allo Kid" Allocasuarina costume, which brought great excitement and interest. She has assisted with colouring techniques and tips. She has also helped the students with drawing skills for wildflower faces.
- A spoonful of honey, collected from hives on Sylvia's bush property, for each student to taste.

The sessions have been a lot of fun and inspired students and teachers to pursue further wildflower activities.

They have sparked interest and enthusiasm for the diversity of plants and their conservation in our local environment.

by Delys Harland



"At last a real scientist!"

The Friends would like to thank the Wildflower Society of Western Australia for their generous support through the Mary Bremner Grant.

This grant has enabled us to offer the Wildflower Discovery Sessions in primary schools within the Fitzgerald Biosphere Region, to print Jane Thompson's Wildflower Faces books and to purchase 30 magnifying glasses, which will be held by the Friends for future projects.

Plate 1: Unburnt mallee-heath (last burnt 1990) showing a dense shrub understorey.



Plate 2: Burnt in 2012 and 1990 fires. No regeneration of obligate seeder shrub species, eight years after fire.



Plate 3: Allocasuarina campestris - Calothamnus quadrifidus thicket on quartzite outcrop, last burnt in 1990.



Plate 4: The adjacent area burnt in 1990 and 2012, is dominated by *Goodenia scapigera*, a disturbance opportunist. A few 'tree-form' *C. quadrifidus* in centre background occur, but no *Allocasuarina* seedlings are present.

PLANT RECOVERY AFTER 2012 ROAD ELEVEN PRESCRIBED BURN

BY GILLIAN CRAIG

In May 2012, a prescribed burn along the edge of Road Eleven, 22 km south of Ravensthorpe in the Fitzgerald Biosphere region, burnt a finger of approximately 350 ha of mallee heath vegetation into an area already burnt 22 years previously (1990). In autumn 2020, a walk through the 8 yo vegetation found that there was no regeneration of obligate seeders, Melaleuca marginata, cucullata, Hakea commutata, H. verrucosa and Grevillea pectinata, which had previously characterised the shrub layer, evidenced by their dead remains (Plates 1 & 2).

Preliminary analysis of five sets of paired quadrats (10 m x 10 m) measuring cover of species, confirmed this observation (Fig 1). The quadrats extended over a 3 km distance along the flank of the 2012 fire. A few seedlings of Melaleuca marginata and M. cucullata were found near subtle drainage lines or in shaded areas beneath mallees, however the majority of mid- and upper-slopes had no regeneration of these species. No Hakea seedlings were seen anywhere in the 2012 burn, although it was a common component pre-2012 fire, evidenced by their burnt remains.

Large swathes of the post-fire area is now characterised by resprouter species, principally *Eucalyptus flocktoniae*, *E. calycogona* and *E. phenax*, *Melaleuca hamata* and *Eremophila densifolia*.

Another vegetation type, typical of rocky outcrops, occurs about 2 km

north of Road Eleven. Two adjacent areas showed differences in plant growth. With only one burn (1990), a thicket of *Allocasuarina campestris* and *Calothamnus quadrifidus* was present (Plate 3). However, the twice burnt area (1990 and 2012) shows no *A. campestris* seedlings and only few 'treeform' *C. quadrifidus*, and is now characterised by the disturbance opportunist *Goodenia scapigera* (Plate 4).

Potential reasons for lack of recruitment include:

- inadequate seed reserves in 22 year old plants;
- grazing by wallabies and kangaroos;
- rainfall post-fire washed away seed or seedlings (114 mm rain in March 2013);
- a severe weather event, such as hail, high temperatures or frost;
- seedlings germinated, but then died in late spring (there was typical rainfall Jun-Aug, but low in Sep-Oct 2012), only seedlings in deeper soils near drainage lines germinated and survived;
- combination of above.

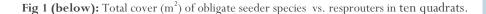
The Department of Biodiversity, Conservation and Attractions (DBCA) has a strategy of introducing fire into "cells" within the Fitzgerald Biosphere region when vegetation is 30 years or more old. The Road Eleven site is within the ALB_014 cell and planned to have up to 70% of its 14,115 ha burnt. More than half of this cell was burnt in 1990. The implications for the ALB_014

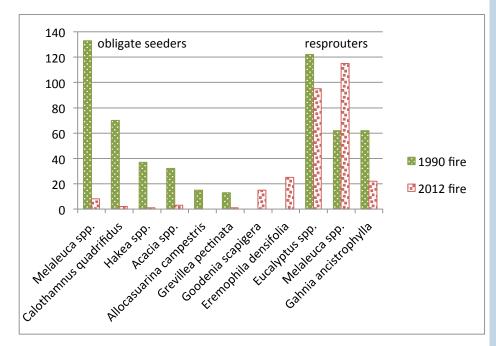
NOVEMBER 2020, VOLUME 2

proposed burn are:

- it cannot be assumed that prescribed burning is good for "biodiversity maintenance", as proposed by DBCA;
- most of ALB_014 is characterised by obligate seeder shrub and mallet species which are at risk from inappropriate fire regimes;
- last three years are the driest on record for this region – plants are stressed and would have reduced amount of seed set.

In conclusion, it is apparent that current prescribed burning practices are occurring at fire-return intervals that are too short for regeneration of obligate seeder species. Further research currently being undertaken at this site by DBCA scientists to try to understand and inform fire management practices in these fire-sensitive vegetation communities.





WILDFLOWER FACES

Jane Thompson's Wildflower Faces colouring-in book is available for purchase by contacting admin@fitzgeraldfriends.org.au. For a sample page please refer to our website.

MEMBERSHIPS

The Friends of the Fitzgerald River National Park are actively encouraging people to join and help to see the National Heritage listed Fitzgerald River National Park protected and managed on the basis of sound ecological knowledge. Become a member by visiting our website www.fitzgeraldfriends.org.au and completing the membership form, or by contacting admin@fitzgeraldfriends.org.au. Membership is free, and donations are appreciated.



TWERTUP OPEN DAY

On Sunday 4th October, 24 long-standing, recent and hopefully yet-to-be members attended the open day at the Twertup Field Studies Centre.

On arrival, people were keen to tour the new building and all remarked on the excellent facilities. It was then time for a cuppa and a chat with others.

As the day was cool and sometimes drizzly, the wood stoves supplied a wonderful cozy and warm atmosphere.

Most people braved the changeable weather and walked the trails to the closer-by measas before having lunch and enjoying more socialising.

The three children amongst the group were busy exploring the colourful rocks and doing crayon leaf rubbings, which quickly got turned into paper planes.

Staff from two regional schools used the opportunity to explore the Field Studies Centre's amenities for school camps.

Two people became members and most vowed they would be back.

The Friends would like to take this opportunity to thank all the tireless volunteers again who contributed to the Twertup rebuild, and who are contributing to its upkeep. Without Twertup, and without your hard work, the world would be a much poorer place.

WINTER SOLSTICE MEMBERS' WEEKEND 19TH-21ST JUNE

KAY AND DAVID LEHMAN'S STORY

As new member of the Friends of FRNP, we planned to attend the winter gathering at Twertup Hut where we had a friendly welcome. We had visited Twertup once before, finding the gate open and were delighted to find the beautiful building and impressive herbarium.

Having visited FRNP for many years mostly camping at Point Ann, exploring its botanical diversity, fishing and doing Birdlife surveys, we wanted to get more involved in this iconic biosphere park.

We were keen to join the planned walk on the Saturday: a cross- country venture to the ridge east of the valley of the Twertup River. With other members, including a cacophony of botanists, we headed into the wild, first on a clear track, then an indistinct track into the bush. This walk was diligently and enthusiastically led by Libby Sandiford with map and GPS on hand steering the

group through dense mallet woodland with abundant fallen timber from the 2008 fire. Gorgeous stands of trees and impressive views back to the Twertup Hut across the valley from the top of the breakaway were our reward on a mild blue-skied day. An epic day out but not for the faint-hearted.

It was great to meet like-minded members and realizing through conversation we had many mutual friends.

Dinner by the fire and drinking shared mead with the group was a treat after our 14.6 km six hour cross country trek. A clear, starry night was followed by a cold and clear dawn with the Twertup valley filled with morning fog [Editor's note: see title picture!] and an extensive covering of ice over the camps. We look forward to meeting again and contributing to projects in the Park.





DIBBLER MONITORING

Thank you!

Huge thanks to Andy Chapman for voluntarily carrying out dibbler monitoring in the FRNP on behalf of the Friends for many years! Many Friends have enjoyed accompanying Andy on his dibbler forays, helping to carry traps and record data. The dibbler is a very important species to the Fitz, as they occur nowhere else (apart from translocations) on mainland Australia. Friends are waiting to hear whether DBCA will continue with this important monitoring after Andy's retirement. In the meantime, Friends is committed to continuing to raise community awareness of this iconic species.





Snapshot of a park in pain - FFRNP Twertup winter solstice weekend 2020 Sandy plain opposite turnoff to West Mt Barren, extensive deaths Banksia baxteri, (100s/?1000s of plants) some deaths other banksias photos 19/6/2020 Spongelite mesa – Dorrie - Twertup Many deaths Banksia lehmanniana since 2020 AGM, perhaps as little as 20% regenerated after 2008 fire, now ?40-50% dying, photos 19/6/2020 30 dead Banksia media, area to ?1/2 km south west of Twertup, 3 live plants photos 21/6/2020, none dead AGM 2020 Banksia cirsioides Pt Anne, many still hanging in - just, some dead 21/6/2020 (BOM records indicate April 1 2018 to May 31 2020 = lowest rainfall deficiency on record for FRNP & surrounds)

AGM - SAVE THE DAY!

The Friends' next AGM will take place on 13th March 2021 at Twertup. We will send out more information closer to the date.



Jane "Allo Kid" Thompson at a school Wildflower Discovery Session

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Friends of Fitzgerald River National Park Attn. The Editor Narpulungup News PO Box 199 Ravensthorpe WA 6346