

Narpulungup News

May 2016 Volume 2



Citizen Science at Jerdacuttup AGM weekend

The Friends AGM at Jerdacuttup in March this year provided the perfect opportunity for those of us who live on the western side of the park to head east and explore new territory. More than 40 people attended events throughout the weekend. Once the official proceedings (the AGM) were completed on Saturday afternoon we variously socialised and explored - in our case this meant a quick coastal foray to Mason Bay.

With dinner eaten and night closing in around us we sat on the verandah and listened to long-term Jerdacuttup residents Chenda Goldfinch, and Ann and Derek Williams describe what life was like in the area when they first arrived in the 1960s. They cleared their farms from virgin bush and established the community, including the Jerdacuttup Hall in which we were staying.

It was a particular treat to have Chenda recount the story of how Mrs Tabby G (their cat) became the envy of many a zoologist by catching a dibbler: until that point believed to be extinct. Later, we put our brains to work unravelling questions thought up by quiz master Steve Janicke.

On Sunday morning we spent several pleasant hours in a stand of *Eucalyptus stoatei* or Scarlet Pear Gum participating in a Citizen Science activity lead by Professor Stephen Hopper, Winthrop Professor of Biodiversity at UWA Albany. A detailed report of this part of the weekend can be found on pages 4-5 of the newsletter.



Professor Stephen Hopper demonstrating the use of refractometer to measure sucrose concentrations of nectar, East Mt Barren. Photograph courtesy Louise Lodge

Large tracts of *Banksia speciosa* – the Showy Banksia— were flowering when we arrived at the base of East Mount Barren just after lunch.

Professor Hopper whipped out a refractometer and had us all perfecting our nectar collecting techniques. There were a few quick adopters: Amber and Elsie Wright take a bow. It was mid afternoon by this stage so sucrose levels were low, at around 15%, but this didn't prevent New Holland

Honeyeaters from feasting on the banksia flowers and giving us another chance to observe their feeding patterns before the weekend wrapped up.

The Friends acknowledge a grant received from Ravensthorpe Agricultural Initiative Network (RAIN) to help defray costs. Leonie McMahon



The man behind the newsletter

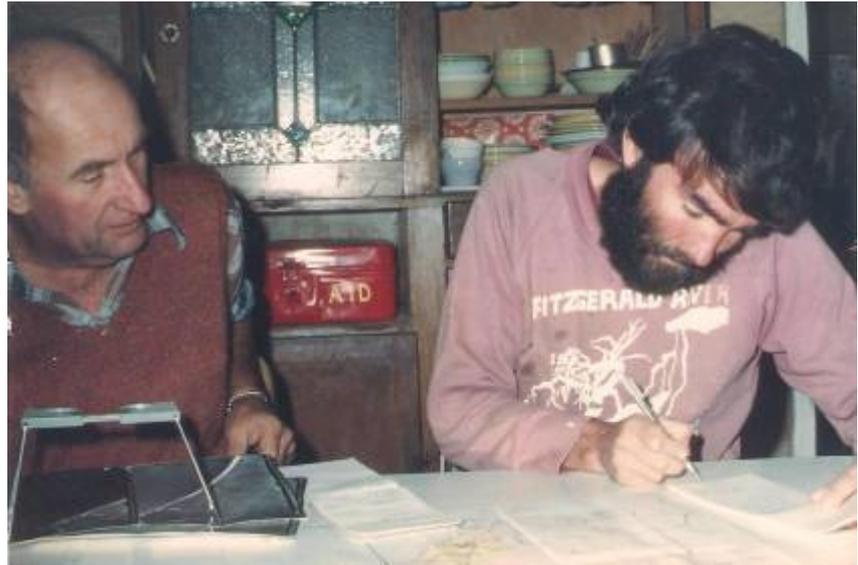
Andy Chapman has been the editor of Narpulungup News since 2009 but last year he signalled his intention to take a break and in 2016 he passed the role over to me.

In the process of handing over, I asked Andy about his association with the Friends and the park. Long time Friends members will be aware of the many ways in which Andy has contributed to the group, but more recent members may not know. Here is what I learned during our conversation.

His first taste of the Fitzgerald River area came in 1970 when a proposal by Jupiter Minerals to mine the Fitzgerald Valley for brown coal prompted a biological survey in which Andy, as a science undergraduate at the University of Western Australia, participated. Whilst they didn't find much in their Elliot traps on that first visit, the Fitz, nonetheless, left an indelible impression on him. Upon returning to Perth and qualifying as a biologist, Andy worked throughout regional Western Australia, from the Wheatbelt to remote wilderness areas in the Kimberley: thus very early in his career he was exposed to both the most and the least man impacted environments in WA. At the time he was struck by how far you had to travel from a town to find an untouched landscape.

Over the next few years, whilst working for the WA Museum, he would visit the Fitzgerald River in his own time. He says an epiphany during that period was the realisation that the Fitzgerald River area was an exception to what he was seeing elsewhere: wilderness in close proximity to human activity.

"All these years later", he says



Ken Newbey and Andy Chapman planning a biological survey in the Twertup Field Studies kitchen, July 1985. Photograph courtesy Brenda Newbey.

"it still strikes me now that such an amazing place exists 30 to 40 km from four towns, and sometimes only a stone's throw away from a farm gate."

In 1979 Andy moved to Ravens-thorpe, the drawcard being the park. The following year, in March 1980, he was one of a group of people who attended a meeting called by the late Ken Newbey, botanist, at the Fitzgerald townsite community hall. He walked away the inaugural president of the newly formed Fitzgerald River National Park Association – later to be renamed the Friends of the Fitzgerald River National Park (FFRNP).

In 1985 the FFRNP obtained funding from the Australian Heritage Commission to conduct a fauna and flora survey in the park and over the next two years Andy and Ken Newbey carried out the surveys in their respective fields.

In 1985 he had the good fortune to be the first person to ever trap a dibbler in the park and as the survey progressed he went on to trap more dibblers – seven to eight in half a dozen different locations. His involvement with dibbler recovery work is ongoing (see page 3 for recent news).

Andy describes the fauna survey as *"like lifting the lid of a faunal*

treasure chest" as 11 species of threatened fauna were located, most for the first time, in this locality.

The Fitz's floral richness was realised as early as 1847 when James Drummond's plant collection arrived in London. The then Director of Royal Botanical Garden at Kew, Sir W.J. Hooker said *"rarely had he seen so great a number of fine and remarkable species at one time from any country"*. Andy says although it was suspected, it took more than 130 years for knowledge of the region's faunal richness to catch up.

Andy has held the role of president of FFRNP three times since his first stint in 1980: he was president in 1987, again in the early 1990s and most recently from 2005 to 2008. He is currently vice president.

The Friends Committee would like to take this opportunity to thank Andy for his contribution to our organisation over more years than he probably cares to remember, and particularly in this context for his hard work and dedication as the editor of Narpulungup News since 2009. As editor from this edition onwards, I would like to thank him for his encouragement and support.

Leonie McMahon

Translocated dibblers take to island home

By Andy Chapman

Late last year the Friends accepted an invitation to be the community representative group on the Dibbler Recovery Team whose function is to capture a wide range of expertise to assist the Department of Parks and Wildlife formulate and put into practise actions to secure the conservation of this threatened marsupial whose only natural mainland occurrence now is in the Fitzgerald River National Park (FRNP).

We had a meeting with Dr Tony Friend at the Kukenarup Memorial in Cocanarup timber reserve in December to discuss the way ahead. Our role is threefold; fieldwork assistance, community awareness and fund raising via grant application.

So far Jessica Wright has attended a Recovery Team meeting in Perth on behalf of the Friends, and I have assisted Tony Friend in field work both in FRNP where dibblers have been captured for the captive breeding program at Perth Zoo and on Gunton Island, off Esperance, the site of the most recent translocation of captive bred dibblers.

Preliminary results from the island are encouraging. Twenty nine animals were released in October 2015; one of these was trapped in February 2016 and others were recorded by trail cameras which had been set since the release date. While one out of 29 might not seem many, only 37 traps were set for one night so it is actually quite a high return rate. The dibbler was a large, healthy male weighing in at 112.0 gm; it weighed 57.0 g when released in October 2015, suggesting the island habitats are to its liking.

In 2016 'Friends' propose to continue with fieldwork assistance and commence community awareness and fund raising.

Did you know...

A dibbler is a carnivorous marsupial allied to dunnarts, chuditch and wambengers. About rat-sized, their most distinctive features are a white ring around the eye, coarse bristly fur and thick pointed tail. In fact, the scientific name is *Parantechinus apicalis* which means 'hedgehog-like with a pointed tail'.



Above: My island home, the recaptured dibbler on Gunton Island. Photograph courtesy Andy Chapman.

Below: Tony (left) and his Friends at Kukenarup Memorial. Photograph courtesy Louise Lodge.



An investigation into bird pollination of *Eucalyptus stoatei* on Jerdacuttup Road

The 2016 AGM offered the opportunity to carry out some scientific field work under the guidance of Professor Stephen Hopper, who provided the following report on the day's activities.

The project involved 26 Friends and guests (eight from the Esperance Ornithological Society) divided into ten groups. Two hours (9.20-11.20 am) were spent on a warm (33 degrees by 11.30 am) cloudless and windless morning. The group quietly walked along a narrow saline creek flat up to 400 m from Jerdacuttup Rd into the *Eucalyptus stoatei* Nature Reserve on the west side of Masons Bay Rd, west of Jerdacuttup Hall. The creek-line was flanked on both sides by dense stands of *Eucalyptus stoatei* to seven metres tall, with scattered flowering plants of *Banksia media* (to three metres tall) as the other major bird-pollinated plant offering nectar. Prominent in the understorey within 20 m of the creek was youak (*Platysace deflexa*) in full flower. The latter species produces yellow tubers that were a staple carbohydrate consumed by Noongars in traditional times. Two tasks were undertaken: (1) counting the number of fresh open flowers with bright yellow stamens forming a hemispherical cap over the top of each pendulous flower of *E. stoatei*; and (2) identifying honeyeaters feeding on nectar and counting the number of flowers and trees each individual bird fed upon. This provided data that could be compared with those from a study in March 1980 which was published in: Hopper, S.D. and Moran, G. (1981), 'Bird pollination and the mating system of *Eucalyptus*



stoatei'. *Australian Journal of Botany* 29: 625-638.

<http://www.publish.csiro.au/nid/66/issue/2498.htm>

The 1980 study was in a year of excellent flowering, where it was found that, in two populations of *E. stoatei*, from two to 130 open flowers were on each tree, with averages of 33.6 and 15.8 open flowers/tree recorded. In 2016, the FFRNP recorded from zero to 66 open flowers/tree, with an average of 3.0 open flowers/tree, reflecting the dry season preceding the main summer flowering months of *E. stoatei*. Hopper and Moran (1981) observed ten species of honeyeater feeding on nectar of *E. stoatei* flowers. The FFRNP in 2016 recorded seven species feeding on nectar (Brown, New Holland, Purple-gaped and White-naped Honeyeaters, Yellow-throated Miners, Western Wattlebirds, Red Wattlebirds), plus three others - Tawny-

Crowned Honeyeaters, Silver-eyes and Purple-crowned Lorikeets in the trees but not recorded feeding on nectar. New Holland Honeyeaters were the most common and widespread species seen feeding at nectar in 1980, whereas in 2016 Brown Honeyeaters were most abundant, followed by New Holland Honeyeaters and Yellow-throated Miners. The average number of flowers visited per tree for Brown Honeyeaters was 3.2 in 1980 (4.6 in 2016). For New Holland Honeyeaters the figures were 3.3 and 3.1, for Purple-gaped Honeyeaters 5.3 and 1.0, and for Yellow-throated Miners in 2016 it was 10.5. The percentage of times movements from flower to flower involved changing trees on individual feeding bouts of birds was 18 percent in 1980, compared with 47 percent in 2016. These figures suggest that in a poor season, most nectar-

feeding activity on *E. stoatei* flowers is undertaken by smaller species such as Brown Honeyeaters and New Holland Honeyeaters, and these birds tend to feed on less flowers per tree and move among trees more frequently than larger species like Yellow-throated Miners and Wattlebirds. The larger species tend to chase away smaller species from trees with abundant flowers. The net effect is an extraordinarily high rate of movement of birds between flowers on different trees, and very high outcrossing rates are achieved in this eucalypt. These patterns are globally exceptional, and are being investigated in other bird-pollinated plants by a team of biologists based in UWA Albany and in Kings Park and Botanic Garden. The field exercise helped members of the FFRNP better understand how to observe birds and their interactions with flowers in the bush, and provided some useful new data on honeyeater interactions with flowering *E. stoatei* trees in a poor season. The group moved south to have lunch at West Beach and then

spent some time observing New Holland and Tawny-crowned Honeyeaters feeding on *Banksia speciosa* inflorescences on East Mt Barren. Measuring nectar sucrose concentrations using a hand-held sugar refractometer was also demonstrated before a mid-afternoon departure. I enjoyed the field day and would like to thank all who contributed. Steve Hopper CENRM and Plant Biology, UWA Albany



Advance notice
Sunday 14th August
Day excursion at eastern end of park lead by Andy Young.
Subject: Symbiosis between specific plants and day-flying micro-moths. More details soon.

Facing page: The fresh open flowers of *Eucalyptus stoatei*, and below left, their pendulous habit. Below right: Brown Honeyeaters were observed feeding on *E. stoatei* flowers. Photograph courtesy Rod Smith. Bottom: The group at the base of East Mt Barren. Photograph courtesy Louise Lodge.



Twertup progress report

By Gil Craig

Michael Phillips, Department of Parks and Wildlife's Senior Officer for Visitor Risk Management, visited Twertup Field Studies Centre in February to provide his assessment of issues associated with the



quarry and cliffs. He discussed appropriate signage, providing look-outs where there is an "obvious edge" and to use pathways to lead people away from the overhangs. Overall we were pleased with his pragmatic stance and that we won't need to have 'risk' signs intruding into the panoramic views. Keith Sillitoe and Anne Taylor kindly hosted a putty party in Albany to glaze the windows. Their shed and ping-pong table provided the perfect venue to lay out the windows. Eight volunteers had a production line of activities – kneading the putty, pushing it in, followed by delicate trimming and the final clean-up of fingerprints.

Drew March came all the way from Scotland to repair the door knobs, locks and window latches. While visiting his daughter Donna, he spent two weeks of his 'holiday', fixing the iron relics and polishing them to a superb finish. Thanks Drew for your patience and goodwill in getting this fiddly job done. Two Twertup working bees in April were postponed due to wet weather, leaving many jobs needing to be done, including painting, hanging of windows and doors, and the preparation of the pads for the expanded toilet sites and proposed fire-fighting tank. The working bee planned for 21-22 May went ahead [details next page]. DPaW's Albany office has made an application to have a team of five workers, as part of the Remote Regions Conservation and Parks Program, assist at Twertup. If successful, they will come in July to delineate the carpark, construct a water tank for fire-fighting purposes, maintain the Twertup track and redevelop the walk trails. If you would like to be involved in the restoration of the Twertup Field Studies Centre, please contact me on 9838 1071 or ripicasa@wn.com.au.



Twertup people: anticlockwise from top: Geraldine Janicke, Rosemary Jasper with Drew March, Steve Janicke, Keith Sillitoe, Judith and Dave Harvey, Ric Pepper. Photographs courtesy Andy Chapman, Louise Lodge, Libby Sandiford.



May working bee

By Rosey Jasper

We had a very productive and enjoyable weekend at the Twertup Field Studies Centre on the weekend of 21-22 May.

We all got to Twertup late on Friday before the wet weather and ten of us spent Saturday working on the building under cover. Some of us left mid-afternoon on Sunday but Ric Pepper, Gil Craig, Bruce Pope, Jane and Bill Thompson were able to stay on an extra day which was fantastic and meant that more of those jobs got ticked off.

The metal trim was attached around the outside of the building to finish off the corrugated iron above the stone work.

Nathan McQuoid and Libby Sandiford worked at hanging doors and installed the French doors, one internal door and the

front door: only four more doors to be hung. Various people worked on hanging windows leaving three more sets to be hung. The more dilapidated of the toilet buildings out the back was dismantled, in preparation for the new toilet building. Libby described it as a lovely weekend and said the Twertup Field Studies Centre is again becoming one of those special places - associated with both landscape and people.

Membership reminder

A gentle reminder that your annual membership to the Friends is now due.

Membership for a family is \$30, an individual is \$20 and concession is \$12.

Renewal details can be found at www.fitzgeraldfriends.org.au

We appreciate your ongoing support and look forward to seeing you at future events.

AGM raffle raises funds for Twertup

A raffle held over the AGM weekend raised \$160 which will be put towards the restoration of the Twertup Field Studies Centre.

Prizes were won by:

Rebecca Brierley ('Swanland' by Anne Brearley)

Louise Lodge ('Lifting the bonnet on Wheatbelt woodlands' by Nathan McQuoid)

Karen Roberts ('Native plants of the Ravensthorpe Region' by Gil Craig)

Ron Richards (botanical illustrations, pack of cards, by Ellen Hickman), and

Anthony Thomas (landscape art, pack of cards, by Louise Lodge).

Thank you to the authors and artists who kindly donated their books and cards.

Unique to the Fitz *Eucalyptus sepulcralis*

There are reportedly 1,748 identified plant species in the Fitzgerald River National Park, and of these, 75 are endemic to it. *Eucalyptus sepulcralis* (the weeping gum) is one such species. Known mainly from the eastern end of the park, it can be readily seen at Sepulcralis Hill on Hamersley Drive, or on the No Tree Hill walk (where the picture opposite was taken).

Named by Ferdinand Mueller in 1882, *sepulcralis* is Latin for "of or belonging to a tomb". The tree was thought by Mueller to be appropriate for planting in cemeteries on account of its weeping habit, like a willow.

Mueller was a German pharmacist who arrived in Adelaide in 1847. He immediately began botanising, collecting marine algae on the day of his arrival in South Australia. He went on to be appointed the first Government Botanist of Victoria in 1853.

It is possible that although he named *E. sepulcralis*, the specimen may have been collected by someone else.

With thanks to Gil Craig for providing the photograph and botanical information about this graceful tree with such a grave name.



Friends join Hakea track maintenance crew

By Andy Chapman



As all Friends members and others who use it respond so positively to the Hakea walk trail, the Friends Committee decided it would be an appropriate activity to contribute to its maintenance. Following some discussion with Department of Parks and Wildlife, in early April, four 'Friends' joined ranger Malcolm Grant and his team as a maintenance crew.

On day one we walked from

Whalebone hut to Quoin Head and return chipping and pruning regrowth, sampling soil and root material for dieback infection, re-coating benches and platforms, and locating monitoring points and photographing to record any change in the condition of the trail. In addition we assisted botanist Sarah Barrett to relocate rare flora species which had been originally identified during the environmental assessment of the route. Day two saw us doing much the same between the eastern end of Hamersley Beach and West Beach and day three was spent between Hamersley Inlet and Whalebone hut.

All who participated enjoyed the experience; doing straightforward tasks in such a splendid environment. One of the advantages of park volunteering is that you get to see and visit places which are often difficult to access. An added bonus was visiting Hamersley Inlet – full to the brim after the recent rains. Thanks to the park rangers and Ravensthorpe work crew as well as 'Friends' Donna Higgins, Louise Lodge, John Tucker and Andrew Chapman.



Top: The workplace. Above: On the job. Photographs courtesy Andy Chapman

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