

The Murrumbidgee Naturalist



March 2023 - Issue #312

Journal of the Murrumbidgee Field Naturalists Inc.

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Objectives

To facilitate and promote the knowledge of natural history, and to encourage the preservation and protection of the Australian natural environment, especially that of the Murrumbidgee River Valley



A Rakali spotted at Fivebough Wetlands last month
Phillip Williams

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CONTRIBUTIONS

For the April 2023 issue by
Wednesday 5 April

To Rowena Whiting

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**"When one tugs at a single thing
in nature, he finds it attached to
the rest of the world." John Muir**

Murrumbidgee Field Naturalists Inc. Office Bearers and Annual Subscriptions

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MEETINGS are held on the second Thursday each month, except January, at the Henry Lawson Room, Leeton Library, Sycamore Street, Leeton at 7pm.

FIELD TRIPS NORMALLY TAKE PLACE ON THE FOLLOWING WEEKEND.

INTENDING NEW MEMBERS, GUESTS AND VISITORS WELCOME.

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Welcome to the March issue

While we can't say goodbye to Summer just yet, It is beginning to be less hot and time outdoors more enjoyable.

Our first meeting of the year was well attended with more people joining in on Zoom. Our speaker, Geoff Williams gave an excellent presentation about the Rakali, they have been spotted locally. Kathy Tenison has written a comprehensive summary of his presentation. You can also read about our two outdoor activities: Rocky Waterholes where we enjoyed a walk along the channel bank followed by refreshments and chat. Many participated in the annual Glossy Black Cockatoo count covering many of the local spots from the Cocoparras to Narrandera. Our thanks go to Graham, Nella and Virginia for organising particular arranging access to private properties.

Coming up this month, our Guest Speaker is Bronwyn Ayre who will be talking about her past work on the impact honeybees have on our native plants. She will be giving her talk at the meeting in Leeton though it will be available via Zoom. Another visit to a local wetlands is planned, McCaughey's Lagoon.

We have a call out for applications for a grant from our Environment Fund, you may know someone or a group that has a project associated with the natural environment that could benefit. See below.

Enjoy your month, **Rowena**.

Call for Applications for MFN Environment Fund Grants

The Fund was set up to provide financial assistance for projects delivering the enhancement of biodiversity, conservation or enhanced understanding of the natural environment within the region covered by the Murrumbidgee Field Naturalists Club (MFN).

Applications are now open to interested individuals or groups to apply for funding and forms can be obtained by contacting the club secretary via our email address: murrumbidgeefieldnaturalists@gmail.com

Applications close on 1st May and the Environmental Grants Committee of the club will consider all applications and notify people of the result of their respective application after the closing date.

Rakali, Water Rat or maybe Otter!



A Rakali spotted at Fivebough Wetlands last month

Phillip Williams

mature at 4 months of age. They are a top carnivorous predator and have been known to eat a waterbird but more regularly large aquatic insects, frogs, lizards and carrion. They can even kill Cane Toads. They start by chewing their belly.

Rakali do live in swamps and natural lakes but are also seen in disturbed urban environments and drains. They have traditionally done well in irrigation areas and have been known to be a bit social and go into people's houses. Rakali can be found in salt water and there is anecdotal evidence the numbers sighted in these areas is increasing.

Don't underestimate their ability to defend their territory. Rakali have been known to kill a platypus by holding it underwater.

Their fur is not as thick as a Platypus and this is why they like to come out of the water and sun themselves. They do however occasionally like to take over the Platypus burrow. The Rakali is the most common aquatic mammal and they are spread more widely across Australia than the Platypus. Years ago, they were killed to make fur coats as fashion garments.

They do need our protection and it is sad to see that there are still Opera House Yabbie nets being used which they can be caught in and rarely survive. Given they do spend a reasonable amount of time out of the water roadkill is often witnessed. Plastic in the environment also doesn't help.

Tracking and studying these little critters is not easy. Trapping and putting collars on them is a pointless exercise as they go back home, and their buddies chew them off. Time lapse photography is heading in the right direction as a method of tracking their behaviour.

Reporting the sightings of Rakali is a great method of keeping tabs on them and understanding their distribution. So, if citizen scientists can report the sightings of these little guys and gals, we will better understand the habitat they prefer. By the way Geoff did say it is very difficult to know if they are males or female.



If you do see a Rakali don't hesitate to send an email to

platypus.apc@westnet.com.au or [Record a Sighting – Atlas of Living Australia \(ala.org.au\)](https://www.recordasighting.org.au/)

The Yellow Room at Leeton Library was full on the night and many more keen participants were online via zoom for Geoff's great talk. He is a wonderful educator and spent considerable time after the talk fielding even more questions. We all really appreciated your time and expertise on Rakali Geoff. Thankyou!

Kathy Tenison (Local Landcare Coordinator Murrumbidgee Landcare)

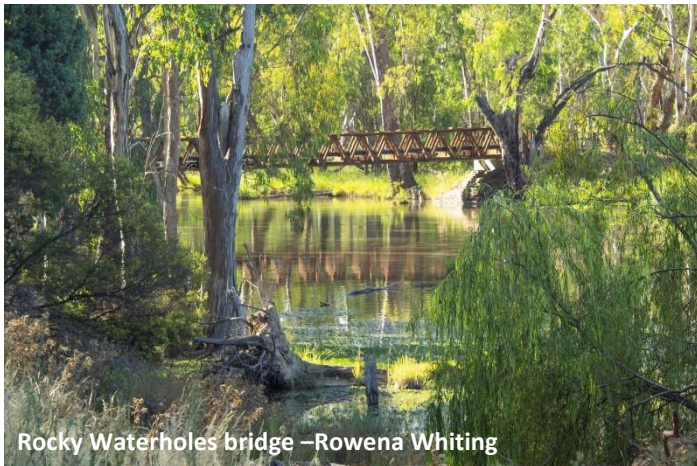
Poetry in Motion

Rocky Waterholes outing 12 February 2023

My wife Susan and I are refugees. In late 2016 we escaped the chaos and crass capitalism of Sydney for sleepy Narrandera. Hence, culturally and socially we were in a state of benign isolation, knowing almost nobody in the area.

In an outing of discovery of the local birdlife, we visited Rocky Waterholes, where we were puzzled to find neither rocks nor waterholes. And that was the moment we first encountered those three magic words; Murrumbidgee Field Naturalists. This was on a sign detailing the history of the impressive steel bridge, known as the Terry Smith bridge, joining north and south banks of the irrigation canal.

So Terry Smith, was the unwitting conduit which led to us becoming members of the MFN. This has filled our retirement years since with a level of interest and activity we would earlier not have thought possible. Isolated no more!



Rocky Waterholes bridge –Rowena Whiting

At 5pm, Sunday February 12, the group assembled at the bridge to be welcomed by a large Eastern Grey Kangaroo standing watching us a short distance away.

“What are those little birds?” someone exclaimed. It was here, right at the beginning of our walk, that the absence of Max, with his near-numinous power of bird identification, was keenly felt. As it turned out, we did manage it – they were Brown Treecreepers. (In birdwatching parlance, these elusive feathered friends were yet another of the hard-to-identify LBJs – Little Brown Jobbos).



Juvenile Nankeen Night Heron
– Eric Whiting

The day was perfect for not only an afternoon stroll, but for birdwatching, with clear, angled sunlight and soft breezes.

This revealed to perfection the glorious if nuanced blue-green palette of a pair of Dollarbirds resting on a high, bare branch. Due to the white circles on the underwings, the bird was curiously named after a foreign currency. Why not 'shilling bird'?

The scourge of willow growth in our waterways might be usually unwelcome, but not to the Nankeen Night Heron resting among them. Even though merely a juvenile, its unblinking yellow eye already expressed the inherent intelligence of this evolutionary survivor.

Then 'Zoooom – Clack!!'. We were being dive-bombed by a Noisy Friarbird. Naturally, a search for its nest began; which turned out to be not three metres above our heads. In attack comparison, it was less like the Spitfire Magpie than the Tiger Moth.

Other sightings were numerous but pretty normal, with

surprisingly few waterbirds – Grey Teal, Pacific Black Duck, Great Cormorant, White-Faced Heron and Purple Swamp Hen being a spare few. Though not in the water but over it, was the continuing entertainment of Clamorous Reed Warblers, popping up for a quick view before disappearing again.

In earlier previous walks along the south bank, we needed to be agile to avoid legions (literally) of meat ants running up our trousers. Their relative absence today was explained by Warwick Bradney (a bit of an aficionado on this area) as being due to the local authorities extermination program. The justification being



Noisy Friarbird nest–
Rowena Whiting

that their (the ants!) subterranean labyrinths were so extensive that they threatened to undermine the levy. Might this be termed 'internal erosion'?

Another lovely sighting was a Common Bronzewing Pigeon, its metallic pinion bars shimmering in the afternoon light.

'Bronzewing', such a perfect name for this elegant bird (not keen on the 'common', though).

Actually, we have a lot to thank the ornithologists of yore for, those whose valuable legacy was not only the clarity of taxonomy, but lots of the common (that word again) names of our wonderful avian community. Many names are poetic, many cheeky, and many informative. Naturalists of the 19th century were usually highly educated, hence literate. So the plenitude of beautiful and apt bird names is anything but accidental.

Then there are ordinary early folk who named birds, and these names are with us still, such as Pee Wee – pure onomatopoeia. And of course there are considerable First Nations bird names, like Kookaburra – more onomatopoeia.

In general terms, the naming of birds can be thought of in three categories - the visual, the audible and the behavioral. Of course there are many poorly named birds, especially those that suffer the ignominy of being named after people (most undeserved). One of these is the Major Mitchell Cockatoo, thankfully transitioning to Pink Cockatoo.



Purple-backed Fairy-wren –
Eric Whiting

So just using examples from our bird list from the Rocky Waterholes outing, we have the *visual* – 'bronzewing'; and the *audible* – 'clamorous'. However, this bird also introduces a fourth category, *habitat* – 'reed'. Then there's *behavioral*, like the beautifully-named 'treecreeper'; so descriptive, such assonance.

So it's not only the birds themselves, but in many instances their very names, that can be poetry in motion! In most of these cases one is compelled to ask "Could I come up with a better name?". Probably not. If you love language, you've got to love ornithology.

It's pleasing to note that there are no introduced birds on our list. It's often not realised that very few of these intruders, like Blackbirds and House Sparrows, manage to cross the urban-wilderness Rubicon. So, many of them have become a threat to both our native birds and our peace of mind only in Australia's gardens and farms.

On our return, within a minute of someone remarking that we hadn't seen a koala, one made its grunting presence known just a hundred metres away. This large male (Warwick explained again!) somehow found itself on the wrong (north) side of the canal, and for some time hasn't been able to find its way back across the bridge to its furry community on the - um - Common.

A convivial supper was enjoyed by all, and as the dusk drew down I walked up onto the bridge to muse upon the invaluable contribution Terry Smith had made to the natural history landscape of Narrandera. As if to confirm my sentiment, a pair of Straw-necked Ibis glided silently overhead, to vanish eastward into the violet gloaming.

Alan Whitehead

Bird list Rocky Waterholes 12/02/2023

Noisy Friarbird	Galah	Great Cormorant [1]
Brown Treecreeper [4]	Striped Honeyeater	Sulphur-crested Cockatoo
Whistling Kite	Grey Teal	Purple Swamp Hen
Willie Wagtail	White-plumed Honeyeater	Eastern Rosella (group)
Straw-necked Ibis	White-winged Chough	Australian Raven
Peaceful Dove	Common Bronzewing	Nankeen Night Heron
Wood Duck	White-faced Heron	Dollarbird
Reed Warbler	Kookaburra	Superb Wren
Sacred Kingfisher	Purple-backed Fairy-wren	Shrike-thrush
Pacific Black Duck	Little Friarbird	Magpie Lark
Noisy Friarbird	Yellow Rosellas (Murrumbidgee Lowry)	
Koala	Kangaroo (resting on grass then got up and ate grass)	

Leeton Glossy Black Cockatoo Count 18-02-2023

On the Saturday the 18th February we gathered at the gate to Mountain Dam and from there we headed out to our allocated dams, hoping to be in place and settled by 5:00pm. There were other counts conducted in the Narrandera and Cocopara areas over this and the following weekend

In order to protect the privacy of the Landholders that gave us access to their properties for us to conduct this count. The area that we counted in as hill area surrounding Brobenah Hall, and Colinroobie Rd. In total we surveyed 8 sites from a possible 16 to 20 Dams that are adjacent to the Glossy Back Cockatoo (GBC) feeding area

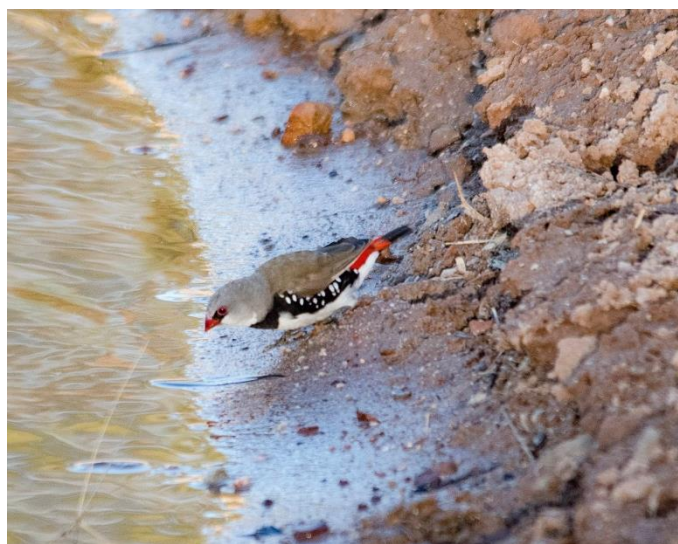
In total there were 28 GBC sighted, including last season's Juveniles as below



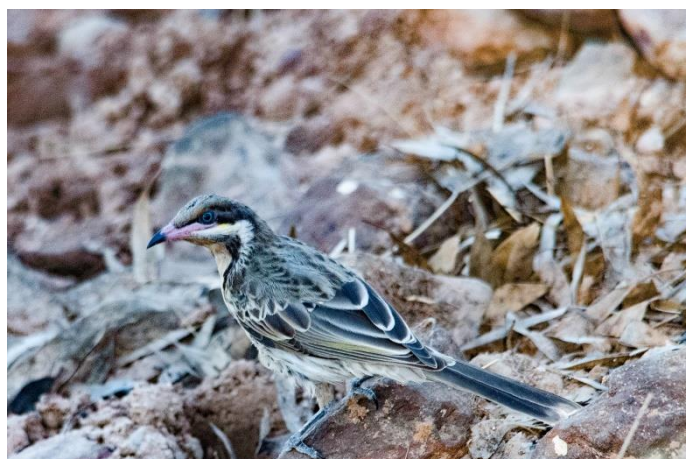
Glossy Back Cockatoos Graham Russell
Photographed at "Mountain View" dam (November 2022)

Site	Males	Females	Juveniles	Total	Time arrived
1	1	1	1	3	7:30
2	unknown	unknown	unknown	2	5:28
2	unknown	unknown	unknown	4	6:20
3	1	1	0	2	7:00
3	1	1	0	2	7:30
3	1	1		2	7:40
3	1	1	1	3	7:55
4	2	2		4	7:45
5	0	0	0	0	
6	unknown	unknown	unknown	3	7:27
7	unknown	unknown	unknown	2	7:23
7	unknown	unknown	unknown	1	7:40

There are two identified Juveniles sighted, and two groups of three that are likely to a breeding pair and the previous seasons young.



Diamond Firetail (left), Spiny-cheeked Honeyeater (below)
– Phillip Williams



As always there are many other birds and animals that will come in to drink at this time of the evening. The combined bird list from all sites is

Welcome Swallow	Sacred Kingfisher	Willie Wagtail
Australasian Gebe	Common Bronzewing	Blue-faced Honeyeater
Striped Honeyeater	Spiny-cheeked Honeyeater	Little Friarbird
Australian Magpie	Galah	White-winged Chough
Magpie Lark	Red-rumped Parrot	Australian Ringneck
Peaceful Dove	Pied Butcherbird	Australian Wood Duck
Pacific Black Duck	Crested Pigeon	Black-faced Cuckoo-shrike
White-plumed Honeyeater	Diamond Firetail	Rainbow Bee-eater

After everybody completed their count at dusk we all convened to discuss our sittings, to have a bring and share dinner. As always at a MFN event the food was excellent and there was much discussion on a variety of topics associated with our natural environs.

My thanks go to the landholders that gave us access to their properties and participants that help with the count. [As do our thanks to Dione & Graham for hosting the BBQ. Ed]

Graham Russell

Griffith Glossy Black Cockatoo count - 18/19 February 2023

This was held on a still barmy warm weekend of the 18/19 February 2023 at Binya State Forest dams.

Sue Chittick-Dalton and I sat by the Wattle Dam under the big old Eucalyptus tree waiting for our prized birds. All that came were many Bronze-winged Pigeons, a few Crested Pigeons, Magpie Larks, flocks of Mulga Parrots, and Mallee Ring-necked Parrots that flew into the trees above us then flew on without a drink. A few Spiny-cheeked Honeyeaters, a couple Singing Honeyeaters and a Black Kite soaring high. We had 4 Swamp Wallabies visiting, one enjoying a dip while drinking. The seven Grey Kangaroos were much shyer.

Meredith and Peter on Mossy Dam, had 18 bird species though no Glossy Black Cockies. Wayne on Mt. Elliot Dam, Robert on Mitchell Dam, we all had NOT seen any Glossy Black Cockatoos! Other local property owners didn't have any luck with Cockies either.

Sunday 6.20pm Nella and I sat by the Woolshed Flats Dam. A few Mallee Ringnecks, Galahs flew into the trees then disappeared. Then a pair of young Glossy Black Cockies arrived and hung about in a tree above where we were sitting. Trying to get a good photo of them through the branches was frustrating. They flew off after a while when a Nankeen Kestrel came darting through the trees and did a number of acrobatic dives. They frightened all other maybe birds for a while.

Next came were a pair of mature adults, male and female Glossy Black Cockatoos. They flew about and eventually drank their fill. They sat for a good while then moved on when another younger couple Glossy Black



Cockatoos arrived that eventually came down and drank. They moved on after sitting about in the Eucalyptus trees. Next came another couple of Glossy Black Cockatoos doing much the same as others.

In all we had a total of 8 come in between 6.45 to 8.10pm. We were well entertained and very pleased that they still came to this secluded dam.

Rodney Guest of the Rankins Springs group had only a couple of volunteers to help out. He had 6 Glossy Black Cockatoos come to his dam and no success at the other observers' dams.

Virginia Tarr photo by Nella Smith

Species List – Meredith & Peter on Moss Dam

Grey Teal (4)	Willie Wagtail	Australasian Grebe (1)
Peaceful Dove	Silvereyes	White-plumed Honeyeater
Western Gerygone	Grey Fantail	Bar-shouldered Dove
Spiny-cheeked Honeyeater	Sacred Kingfisher	White-winged Chough
Common Bronzewing	Eastern Yellow Robin	Superb Fairy-wren
Laughing Kookaburra	Red-rumped Parrot	Australian Ringneck
Swamp Wallaby	Eastern Grey Kangaroo	

Narrandera Glossy Black Cockatoo count – 25 February 2023 (postponed from 18th)

A number of dams were covered, also no cockatoos were seen, a number of other birds were recorded.

NARRANDERA LANDCARE HABITECH WORKSHOP

Our Landcare group hosted a well-attended workshop on the [Habitech](#) nest boxes produced by Habitat Innovations out of Orange. The morning started with a presentation from Carl Tippler, ecologist and co-Director of Habitat Innovations, who explained the limitations of the common plywood types. While they are readily used by gliders, birds are very reluctant to use them. At best, they are very occasionally used by birds. They are also relatively short lived. Either the wood perishes or the fixings to the tree fail.



He and fellow ecologist, co-Director and ornithologist Mick Callan pondered these problems with artificial hollows, kicked around some ideas, came up with some possible solutions, and after several years of fiddling around with different concepts, Aldi 3D printers, engaging with design engineers, holding trials, they arrived at Habitech nest boxes.

The trials involved measuring the temperatures inside natural hollows, wooden boxes and the proto-type plastic boxes. The Habitech boxes proved more thermally stable avoiding the extreme highs and lows of wooden boxes. Humidity inside the nest boxes was also measured, given bird eggs need a certain humidity to become viable chicks and again Habitech boxes measured well.

Carl and Mick developed a unique mounting system to keep their boxes in a tree longer. The tree's outer bark is removed, a mounting bracket is screwed to the tree, then the artificial hollow attaches to this bracket. The tree's bark will grow over the mounting plate making it permanently attached to the tree. With this mounting system and the plastic construction of the boxes, they should last many decades in the environment.

Hearing about the whole design to finished product process was incredibly interesting. Then Carl talked about bird ecology and the specific requirements different species need. Habitech nest boxes are modular so can be configured different ways. Different size openings can be inserted depending on the species being targeted. They can be installed horizontally or vertically, installed singularly or stacked together.

One of our members, Andrew, was in attendance and asked about the configuration needed for the Glossy Blacks which are often on his property and he's quite passionate about. Apparently, the Glossy's preferred hollow can't be replicated by the existing Habitech configurations and Habitat Innovations are currently developing one with a unique design specifically for the Glossies. (No wonder they're endangered! – specific diet, one egg a year in a good year, and an *extremely* precise hollow requirement.) The large PVC artificial hollows used successfully in W.A. don't work well here probably because of the different climate. Andrew has tried other artificial hollows but is eager to try out some of the new Habitech boxes when

they're ready. Narrandera Landcare has a focus this year on Superb Parrots and have been propagating various Acacias and Hopbushes for them. When I asked about the hollow requirements for Superbs, it turns out they're another threatened species which requires a special hollow. Their Habitech hollow has an internal tube or baffle to deter predation by other species.

After the presentation we went down to Narrandera Wetlands and watched the installation process of a nest box. It seems straightforward till you consider the heights they have to be installed at! For the lower ones you can use a ladder, but you still need two hands free to work. The higher ones require a cherry picker. The nest box installed for Dollarbirds had the cherry picker fully extended which must be around 10m.

We had 8 nest boxes in total installed at the Wetlands in a variety of configurations to suit different species and the grant we received from Riverina Local Services allowed another 4 to be installed at one of our member's property. We'll be watching these nest boxes over the coming years to hopefully see them being used.



Narrandera Landcare would like to thank Riverina Local Land Services for awarding us the grant and Kathy Tenison, our Local Landcare Coordinator, for all her work in putting the workshop and project together.

Glenn Currie, photos by Kathy Tenison

Refreshing Rivers Central Billabong Project - YACTAC



In the shade of the River Red Gums on the beautiful Billabong Creek at Jerilderie on Tues 21st Feb, a larger than usual group participated in planning the next part of this project. Land owners from various parts of the Central Billabong enthusiastically workshopped ideas for maintaining water quality into the future and to improve it where possible in order to increase locally native biodiversity. Scientific information was provided by Dr. John Conallin, a Deniliquin local land owner, and also the author of children's books that feature Catfish and the ecology of the southern Riverina systems.

Factors that affect water quality rate well in the Billabong and Yanko Creek system compared with other areas in the Murray Darling Basin. One factor that needs more planning and scientific knowledge is improving emergent vegetation – plants that have roots in the creek bed and have leaves and flower stems above the water at their full height. Turbidity levels, being the amount of clay particles floating in the

water, are generally too high for adequate light to reach the bottom where aquatic plants would begin their life cycle. The presence of Common Carp (*Cyrinus carpio*) and their habit of ‘mumbling’, being the sucking in and expelling of detritus as a feeding strategy, is the most difficult problem to solve in aiming to increase coverage of emergent vegetation for the general benefit of all native aquatic life. Algae colonise onto stable organic matter in the water, including plants, and provide food for macroinvertebrates such as shrimps. However, Carp eat algae and directly interrupt the natural food chain that sustains native fish, bird, frog and aquatic mammal populations. They also eat the macroinvertebrates!

Eel-tailed Catfish(photo right) are also bottom feeders, but their relative low numbers and their habit of living amongst emergent vegetation means that they don’t create high turbidity levels. The plants trap the clay particles that the Catfish disturb.



Despite the enormous environmental impacts of carp over the past 100 years, some parts of the Central Billabong have enough emergent vegetation to support Catfish, Cod and Yellow-belly populations. Increasing these along the creek is the challenge. A newly researched

Below and right: warrego summer-grass



virus (*Cyprinid herpesvirus*) to kill Common Carp could be a solution. Intensive scientific research since 2011 reveals it as a useful biological control, but controversy surrounds its release into the Murray-Darling Basin. Time will tell of its success and hopefully not unforeseen negative consequences

Increasing locally native riparian vegetation, being that which grows along the banks of the creek, is considered an achievable goal by the workshop group. Warrego Grass, for example, could be easily increased by volunteers and school groups planting seedlings which will become a food source for Diamond Firetails and habitat for other ground feeding birds and insects. We’ll look forward to a longer list of plants and the community activities to make it all happen.

Acknowledgement for the success of the event goes to Andrea Mitchell, Project Officer. A delicious lunch of cod, both steamed and fried, was provided by the Jerilderie Fishing Club, a local group which will benefit from the future success of the project.

Margaret Strong, Photos by Andrea Mitchell, Plants of Western NSW (Grass)

Observations



White-necked Heron with a yabbie at “Alamama”
Eric Whiting

Wallaroo at Milbrae Quarry
Glenn Currie

Both photographed at cockatoo count.



Fivebough Wetlands, Leeton, – an updated summary 30 January 2023

Description

Fivebough Wetlands is a special wetland – whether it is dried up in drought or flooded to overflowing, it is still regarded as a wetland.

It is away from the influence of the river, formed by wind erosion on an old creek line. A contour drain now intercepts the inflows except in flood situations, or when water is allowed to enter for flood mitigation or environmental reasons. It is no longer a natural wetland but is still highly significant. Some permanent water now comes in regularly from Leeton wastewater treatment plant.

There are five major management issues for people and waterbirds at Fivebough:

Infrastructure; Water; Vegetation; Livestock; Weeds & Pests.

The first thing that attracted me to Fivebough was the amazing diversity of the wetland and surrounding area, the ease of access and the numbers of birds there; the more I visited, the more I was able to see.

Fivebough is recognized worldwide as a site of special scientific interest and important bird area for a number of reasons:

- i. It supports vulnerable, critically endangered and threatened species and communities.
- ii. It is an important area of biodiversity.
- iii. It is a refuge in drought for breeding and feeding migrant birds, and also for roosting birds that feed in and around rice fields in summer.
- iv. It is important for critical life stages ie feeding and breeding for water birds.
- v. Huge numbers of birds use Fivebough. Over 50,000 water birds in total, and also significant numbers of individual species eg highest counts of Glossy Ibises and Whiskered Terns ever anywhere in Australia – around 20,000 of each.
- vi. More water bird species recorded than any other wetland I know of, in the whole of Australia, and more per hectare of wetland.
- vii. The location and ease of access make Fivebough a potential site for teaching and research in various aspects of environmental awareness and science. Opportunities for photography and other artistic or spiritual pursuits, or simply quiet contemplation. Any time of the year, and any time between dawn and dusk Fivebough is a magic place.

Conclusions

87 species of waterbirds have been recorded at Fivebough Wetlands.

37 species of water birds have been recorded breeding successfully.

28 species of wading birds (shore birds) have been recorded. 17 of these migrate across the equator twice a year and 1 from New Zealand, leaving 10 native species that largely live in Australia year round.

All the migrants are subject to international agreements with China, Japan, Republic of Korea, and others to protect migratory birds that come to Australia from their territories.

Significantly 14 species of waterbirds have been recorded at Fivebough that are vulnerable, threatened or endangered (Freckled Duck, Blue-billed Duck, Magpie Goose, Australasian Bittern, Curlew Sandpiper, Latham's Snipe, Ruddy Turnstone, Bar-tailed Godwit, Red-necked Stint, Greenshank, Sharp-tailed Sandpiper, Australian Painted Snipe, Brolga, and Black-tailed Godwit; 4 of these - Australasian Bittern, Ruddy Turnstone, Curlew Sandpiper and Australian Painted Snipe - are recognized as endangered worldwide.

Fivebough Wetlands is not only significant in the Riverina and Murray Darling Basin, but also throughout Australia, as far north as Siberia and Japan, and beyond the Arctic Circle.

Keith Hutton



The Wetlands from near the Bittern shelter – Rowena Whiting

Know your daisies Part 20 - Billy Buttons

The Billy Buttons group are distinctive with their globular heads of yellow tubular florets. Identification to species is much more difficult with the achenes, leaf shape and floret bases requiring inspection. The flowerheads are actually compound as each floret has its own subtending involucre bract.

***Calocephalus citreus*, Lemon Beauty-heads**

Perennial herb from a tufted base c15-60cm high, recorded on clay or loam soils in grassland or woodland. Stems felt-like, light grey. Leaves mostly opposite, linear to lanceolate, usually 10-20mm x 1-2mm, tomentose; upper leaves smaller, sometimes alternate. Flowerheads globose to oblong, bright golden yellow. Pappus of 4-9 hairs, ± plumose at apex and united at base into a small ring.

***Calocephalus sonderi*, Pale Beauty-heads**

Annual herb 10-50cm high, woolly, grey to silvery. Recorded in grassland or woodland on sandy to clay soils. Leaves mostly alternate, linear to lanceolate, usually 20-30mm x 1-2mm, tomentose, base cuneate and sheathing to ±decurent in smaller upper leaves. Flowerheads globose to ovoid, pale yellow. Pappus of 6-8 plumose hairs united at base into a small cup.

Craspedia variabilis (photo on right)

Erect herb, with 1 to many scapes to 50cm high. Recorded in sclerophyll forest, woodland, and grassland. Stems retain reddish overlapping leaf bases. Leaves basal and cauline, narrow-spathulate, 50-130mm x 5-13mm, apex broad-acute, pale to olive-green. Flowerheads globose, 10-25mm diam, golden yellow. Pappus of 13-21 plumose hairs united at base.

Craspedia haplorrhiza

Erect herb, with 1 to many scapes 7-15cm high, branching from the base. Recorded on heavy soils, on floodplains and in damp situations. Leaves basal and cauline, spatulate to oblanceolate, 10-80mm x 2-12mm, apex obtuse to broad-acute, pale green, margins woolly. Flowerheads globose, 7-28mm diam, golden yellow. Pappus of 10-16 plumose hairs, united at base.

***Pycnosorus pleiocephalus*, Soft Billy-buttons**

Erect herb with many stems to 40cm high. Recorded in mallee and chenopod shrubland on sandy soils, usually on raised sites. Leaves oblong to oblanceolate, 30-70mm x 2-10mm, apex broad acute, olive-brown to green. Flowerheads single and ovoid to globose or branched below or from centre giving rise to smaller secondary flowerheads, main flowerhead 10-20mm long, 10-15mm diam, lemon-yellow. Pappus of 8-15 plumose hairs united at base.

Pycnosorus thompsonianus

Erect herb with woody stems to 35cm high, branching at base. Recorded usually in chenopod shrubland on heavy soils of floodplains, and occasionally on red sandy ridges. Leaves linear, 10-50mm x 1-5mm, apex broad acute, white to grey, woolly with appressed fine hairs; upper leaves with a lanceolate golden hyaline tips Flowerheads globose or slightly ovoid, 4-12mm diam golden-yellow. Pappus of 12-14 plumose hairs united at base.

***Pycnosorus chrysanthus*, Golden Billy-buttons**

Erect herb, with woody stems to 60cm high, branching at base. Recorded In wet areas of chenopod shrubland. Stems white with woolly hairs. Leaves linear to linear-lanceolate, 17-100mm x 2-7mm, apex acute, upper surface olive-green to dark brown lower surface paler with margins and the main vein densely hairy. Flowerheads ovoid, 8-15mm diam x 9-20mm long, golden yellow. Pappus of 11-16, plumose hairs united at base.

***Pycnosorus globosus*, Drumsticks**

Stout silvery-white herb, with several flowering peduncles to 120cm high, branching from the base. Recorded in open moist, low-lying areas and roadsides on heavy soil. Leaves basal and cauline, linear, mostly 100-300mm x 4-12mm, with 1-8 prominent longitudinal veins, white to brown-grey, woolly with appressed hairs, uppermost leaves with a lanceolate golden hyaline tip. Flowerheads globose, 8-35mm diam, yellow. Pappus of 9-16 plumose hairs united at base.

Eric Whiting



MEMBERS' SIGHTINGS

These sightings are from members' observations. Please check with the relevant person before quoting any record.

White-bellied Sea-Eagle [1 imm]	Fivebough Wetlands, Leeton	02/02/23	Keith Hutton
Yellow Tufted Honeyeater	Livingstone National Park	04/02/23	Sarah Danckert
Rainbow Bee Eater	Livingstone National Park	04/02/23	Sarah Danckert
Crested Shrike-tit	Livingstone National Park	04/02/23	Sarah Danckert
Speckled Warbler	Livingstone National Park	04/02/23	Sarah Danckert
Glossy Black Cockatoo [6]	"Yarrabimbi", Colinroobie Road, Leeton	08/02/23	Andrew Thompson
Purple-backed Wren [5]	Narrandera Wetlands	08/02/23	Susan Whitehead
White-bellied Sea-Eagle	Narrandera Wetlands	08/02/23	Alan Whitehead
Dollarbird	Narrandera Wetlands	08/02/23	Alan Whitehead
Sacred Kingfisher	Narrandera Wetlands	08/02/23	Alan Whitehead
White Necked Heron [3]	Marrambidya wetlands, Wagga Wagga	13/02/23	Sarah Danckert
White Faced Heron [3]	Marrambidya wetlands, Wagga Wagga	13/02/23	Sarah Danckert
Nankeen Night Heron [3]	Marrambidya wetlands, Wagga Wagga	13/02/23	Sarah Danckert
Latham's Snipe [1]	Fivebough Wetlands, Leeton	18/02/23	Keith Hutton
Cattle Egret [>50]	Fivebough Wetlands, Leeton	18/02/23	Keith Hutton
Swamp Harrier [1]	Fivebough Wetlands, Leeton	18/02/23	Keith Hutton
Whiskered Tern [11]	Fivebough Wetlands, Leeton	18/02/23	Keith Hutton
Pink Cockatoo [20]	Milbrae Quarry, Colinroobie Road, Leeton	18/02/23	Glenn Currie
Walleroo	Milbrae Quarry, Colinroobie Road, Leeton	18/02/23	Glenn Currie
Dusky Woodswallow	Rocky Hill, Kooringal	18/02/23	Sarah Danckert
Brown Quail	Rocky Hill, Kooringal	18/02/23	Sarah Danckert
Golden Headed Cisticola	Rocky Hill, Kooringal	18/02/23	Sarah Danckert
Double Barred Finch	Rocky Hill, Kooringal	18/02/23	Sarah Danckert
White-necked Heron [7]	Fivebough Wetlands, Leeton	19/02/23	Keith Hutton
Nankeen Night Heron [>35]	Fivebough Wetlands, Leeton	19/02/23	Keith Hutton
Little Pied Cormorant [>50]	Fivebough Wetlands, Leeton	19/02/23	Keith Hutton
Pelican [>20]	Fivebough Wetlands, Leeton	19/02/23	Keith Hutton
Buff-banded Rail [1]	Fivebough Wetlands, Leeton	19/02/23	Keith Hutton
Hoary-headed Grebe	Fivebough Wetlands, Leeton	19/02/23	Keith Hutton
	2 pairs with downy young		
Australasian Grebe	Fivebough Wetlands, Leeton	19/02/23	Keith Hutton
	3 pairs with downy young		
Great Crested Grebe	Fivebough Wetlands, Leeton	19/02/23	Keith Hutton
	1 pair with 4 well grown young		
Little Raven [150]	Wilga Road	19/02/23	Glenn Currie
Glossy Black Cockatoo [5]	"Mountain Dam", Colinroobie Road, Leeton	24/02/23	Dionee Russell
Wedge Tailed Eagle [2]	Rocky Hill, Kooringal	25/02/23	Sarah Danckert
Chestnut Teal	Bomen Lagoon, North Wagga	25/02/23	Sarah Danckert
Double Barred Finch	Pomigalarna, Wagga Wagga	26/02/23	Sarah Danckert

BirdLife's Birds in Backyards Autumn survey is underway (from 1 March). These surveys are run quarterly (each season). All you do is submit at least one 20 min count alongside some information about your garden. They form an important part of their research into the birds that live where people live and allow anyone with a backyard - large or small, urban or rural - to take part. To monitor changes in the distribution and abundance of either whole groups or individual birds that live where people live. Information can be found at <https://www.birdsinbackyards.net/getinvolved/How-survey>

**** COMING EVENTS ****

Please note all outings are subject to weather conditions.

Please register with the nominated person.

9 March Thursday



Monthly Meeting in the Yellow Room at the **Leeton Library**, Sycamore St., Leeton commencing at 7pm. You can be there!! 😊 Online or in person.

Guest Speaker: Bronwyn Ayre from the Murray-Darling Basin Authority (MDBA)

Topic – Honeybees

Bronwyn will be talking about her past work on the impact honeybees have on our native plants, bird pollination of kangaroo paws, and orchid conservation.

Bronwyn grew up in the South-West corner of Western Australia- studying and working at Perth's botanic garden, before moving to Melbourne in 2020 and finally Griffith in 2021. She is enthusiastic about native plant conservation and pollination- and is trying to learn her NSW plants!

Bring along your 'show & tell'

Contact: Dione Russell 0428 536 290

Email: murrumbidgeefieldnaturalists@gmail.com

12 March Sunday

Outing to McCaughey's Lagoon, Murrumbidgee Valley National Park

A twilight visit to local wetlands and the Fruit Bat colony by the lagoon.

Meet at the lagoon, at 5:00pm

Bring binoculars, repellent, nibbles and/or tea and drinks.

Register with Eric Whiting ericwhiting4@bigpond.com. Phone: 6953 2612.

18 March Sunday

Outing to Tarcutta Hills Reserve, Tarcutta

Meet at the truck memorial in Tarcutta

Time: 9:30am

Note 4WD vehicles only

RSVP Sarah Danckert spdanckert@gmail.com

5 April Wednesday

Copy for the April newsletter is due. Please send to Rowena.

Email: ericwhiting4@bigpond.com. Phone: 6953 2612.

13 April Thursday

Monthly Meeting in the Yellow Room at the **Leeton Library**, Sycamore St., Leeton commencing at 7pm.

Topic –

Bring along your 'show & tell'

Contact: Dione Russell 0428 536 290

Email: murrumbidgeefieldnaturalists@gmail.com

15 April Saturday

Yenda Flora and Fauna Reserve

Meet at Yenda Post Office

Register with Eric Whiting ericwhiting4@bigpond.com. Phone: 6953 2612.

Other Events

2023 Cowra Woodland Bird Surveys,

Dates for 2023 are April 15/16, July 15/16, October 14/15, and February 17/18 2024.

Contact Julian Reid on 0405 922 505 or at julianr@homeemail.com

Southeast Australian Naturalists Association (SEANA) conferences

Autumn camp Date April 28 - 30

Host club Timboon FNC, Location Port Campbell, Victoria

For more information email or phone Rowena; ericwhiting4@bigpond 6953 2612.