Newsletter 43

Autumn 2019

FRIENDS OF WAITE CONSERVATION RESERVE Inc.

COMING EVENTS

Working Bees
See page 3 For details

AGM
8th May 7:30pm
Urrbrae House
How can genetics help with conservation actions
Case studies from S.A.
Professor Steve Donnellan

Enter via Gate 3 off Fullarton Road

THE UNIVERSITY of ADELAIDE

President's message

On a rare stormy day last November, I accepted an invitation to walk the reserve with Interim Dean of Waite, Associate Professor Chris Ford. I showed him our recent olive control work on the Western Slopes, before retreating from a heavy downpour.

Chris has been a researcher and teacher for many years on campus and is obviously an expansive thinker. The centenary of Waite Research Institute (Waite Campus) is three years away but already he is thinking about how the current campus occupants might mark the occasion.

Most of what is now Waite Conservation Reserve was part of the Peter Waite bequest so Chris is interested in how the Friends group might participate. Let me know if you have ideas for projects and activities. I'm already thinking about a ceremonial felling of the last mature olive from the reserve in 2022 …maybe with a golden axe!

Talking of olives, Helen Pryor lent me a book *'Claremont' Glen Osmond* by Frances Cumming written in 1982. It tells the history of Claremont House, the heritage building below the dam at the foot of Wild Dogs Glen. The book includes an undated image (below left) showing 'some of Alfred Hardy's olive trees' in WDG. I presume the large trees were planted sometime 1845-1865, the period when Claremont, then 'Hartley Bank', was occupied by Alfred and Louisa Hardy. Today the olives pictured are gone (below right), although there are still some in Caves Gully beyond, obscured by eucalypts. These too are destined for removal in the next couple of years.

****

We've finally arrived in the 21st Century! We're on Facebook. See Clint's article inside for how you can access it.

Peter Bird

Looking up Wild Dog's Glen
Bridge on what was originally a government road. It later became the back drive for 'Claremont'. Some of Alfred Hardy's olive trees are visible in the background.

Undated Photo of Wild Dogs Glen
Note the dense grove of olives.

And now it looks like this.
Photographer: Peter Bird

Clint & Erinne are leaving

and I'm devastated! I still remember the auspicious day 8 years ago when Clint Garrett approached me after an AGM and offered his services. Since then Clint has become the heart and soul of the Friends group: Newsletter Editor, Working Bee Coordinator, track engineer, flyer designer, weed sprayer, lumber-jack, photographer, Facebook editor, wise counsel at committee meetings and much more, donating well over a thousand hours of labour to the reserve.

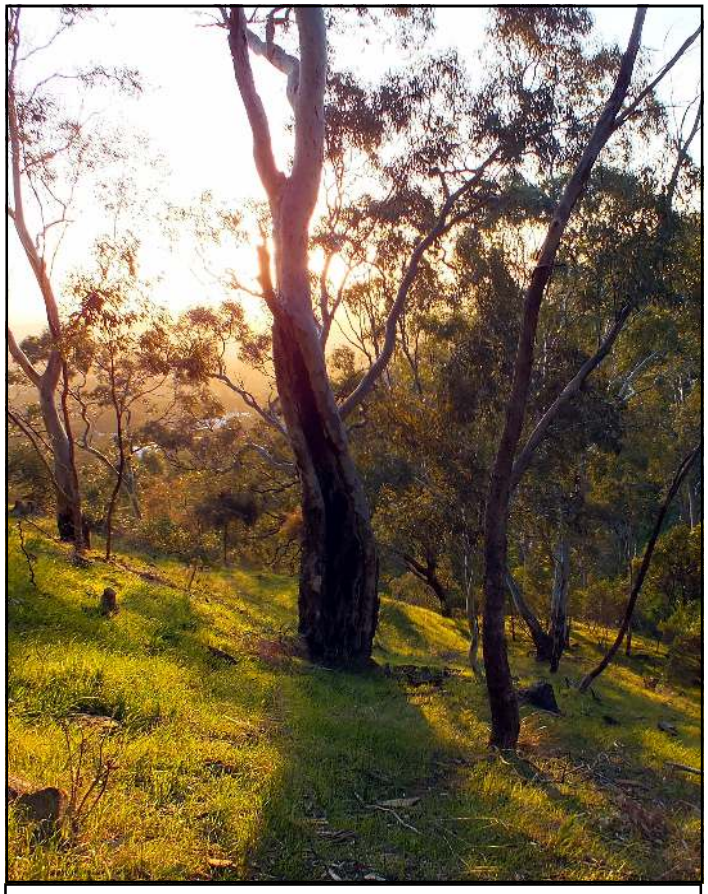
Energetic, practical, resourceful, realistic, welcoming, generous and thoughtful. A teacher by profession, Clint is the ultimate educator, doing so through quiet osmotic sharing and persuasion. Testament to his persuasion is the number of people he has met on the trail and ultimately have been persuaded to join our group.

And not forgetting Erinne. Her PhD is just a fingertip away, Erinne Stirling is heading to China to pursue Post-Doctoral research in soil biology. Despite a busy schedule, Erinne has been a major contributor at working bees, on the committee, and assisting Clint in the various activities above. She is also secretary for the Nature Conservation Society of South Australia. We will also miss the fellow students she introduced to the joys of weeding at working bees!

We and the reserve will miss Clint and Erinne enormously and wish them well. They will be around a little while yet so please get along to a working bee to catch up with them, and keep an ear open for some kind of celebration to mark their leaving.

Peter Bird

Clint Garrett & Erinne Stirling
Photographer: Tanya Gaylor



Wild Dogs Glen at sunset
Photographer: Clint Garrett

Newsletter Editor Needed:
The editor needs to have a page layout program (I use Publisher), a graphics program for editing photographs and a PDF writer eg Adobe or Nitro.
You can have my files to use as templates as well as my stock of photographs. Clint

WORKING BEES

Are you ready? This year our usual late April start date clashes with Easter so we will instead hit the ground running on **Saturday 6 April 2019**, and avoid Easter Sunday. A near-record dry spring and summer makes it a great time to go olive-spotting before autumn rains initiate the inevitable green that gradually envelopes the regenerating seedlings. Past hard work has seen a gradual reduction in seedlings over time meaning we can expect a higher *walking : weeding ratio*. With more walking and less pulling olive seedlings we get fitter, see more of our beautiful reserve and preserve our backs. Win, win, win!

As usual we meet at Gate 82 off Hillside Drive, Springfield in April-May. Thereafter we start 'up top' at Springwood Park via the South-East Freeway and Eagle-on-the Hill Rd from June-October. Late in the season we return back down to the lower entrances.

Working bees are on the first Saturday and third Sunday of each month 9.00 am-12.00 noon. Tools are supplied but bring lunch for after bee get-togethers.

Peter Bird

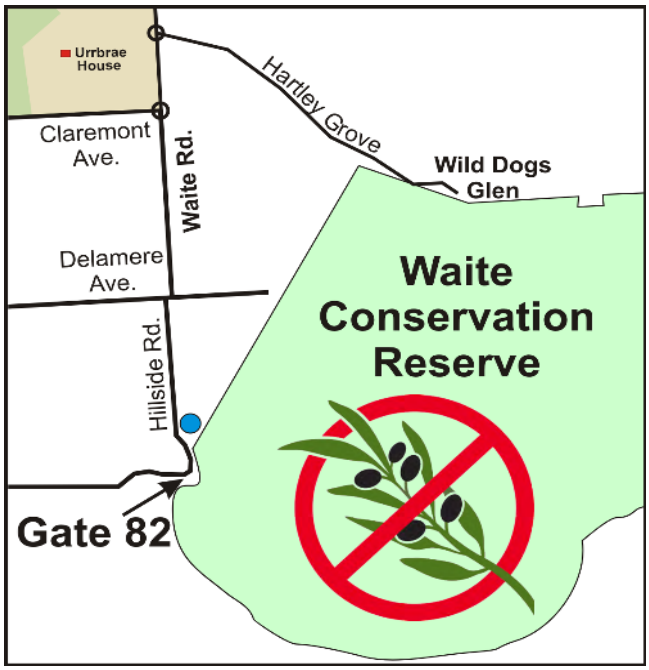
AUTUMN WINTER WORKING BEES

APRIL

Saturday 6th
No Easter Sunday Working Bee

MAY

Saturday 4th
Sunday 19th



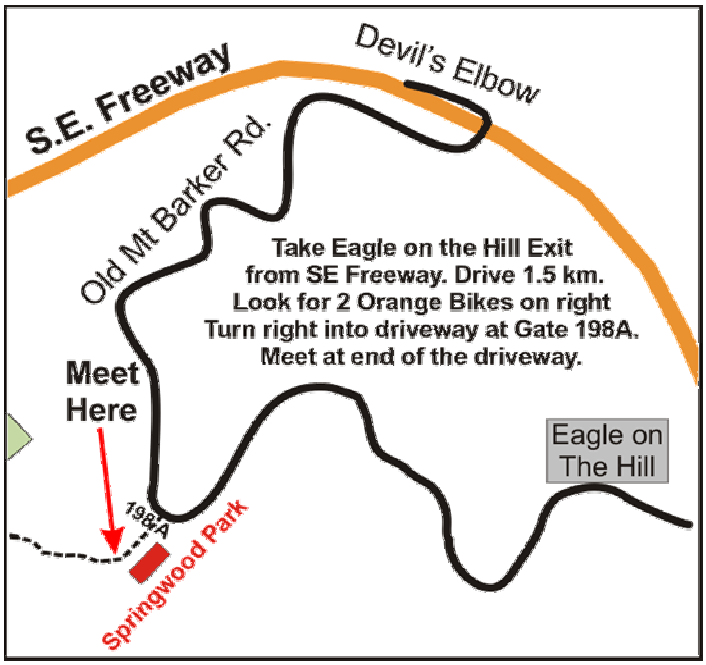
EARLY WINTER WORKING BEES

JUNE

Saturday 1st
Sunday 16th

JULY

Saturday 6th
Sunday 21st



Erinne & Chloe, demonstrating that using the tree popper makes pulling up olive seedlings easy.
Photographer: Clint Garrett

AGM May 8th

Professor Steve Donnellan

'How can genetics help with conservation actions? - case studies from SA'

Wednesday 8th May 7.30 pm
Urrbrae House
Entry 3, Waite Rd, Urrbrae

Professor Steve Donnellan.
Steve is holding a specimen of a Zaglossus, a Long beaked Echidna

Steve is Head of Research and Collections at the South Australian Museum, where he has worked as a researcher in evolutionary biology since 1985. He has explored much of Australia and beyond including almost a year in Melanesia collecting animals to study connections between faunas.

His research invariably utilises DNA technology to establish relationships amongst animals from close kin, through populations and species to orders. This has led to many adventures in wildlife forensics, natural resource management, species discovery and filling the branches of the tree of life. Steve has used genetics to uncover dozens of new species and to understand the diversity of restricted populations to inform conservation actions

Steve's talk will be followed by supper.

Direct Seeding

Last winter I noticed a lone Garland Lily *Calostemma purpurea* on the Western Slopes of the reserve. I marvelled at how this plant came to be here so far from other populations and mused at its dispersal agent. A little later I came across another … and another. Suddenly it dawned. It was me! *I* was the agent of dispersal!

I recalled the previous year I had collected a pocketful of *Calostemma* seed from Urrbrae Ridge and, thereafter, whenever I pulled an olive seedling, I would poke a single seed into the resulting hole. I ended up seeing a dozen or more *Calostemma* plants suggesting an impressive strike rate.

This observation neatly illustrates the power and simplicity of direct seeding. It had taken only a moment to add each seed to a hole. And yet here they were, all these healthy seedlings without all the months of nurturing, planting out, watering or weeding associated with propagating tube-stock.

As a group we create tens of thousands of little holes each year as we pull seedling olives at working bees. Instead of simply creating another disturbed spot for a weed to grow, let's value add by direct seeding each hole with a little native something. I'll bring the seeds.

Purple Garland Lily *Calostemma purpurea*
Photographer: Clint Garrett

Yellow faced Honeyeater

More often seen than heard and, being a small dull-coloured bird of the tree tops, you have to be a real birder to know this one. The Yellow-faced Honeyeater (*Caligavis chrysops*) is a similar size and colour to its better-known relative, the White-plumed Honeyeater, being a soft grey-green above and grey-brown below. Its most striking feature is the yellow stripe that extends from the bill below the bluish eye to the ear coverts and which is bordered by a black stripe above and below. The most usual call, described as a descending 'calip calip calip' (Pizzey 2007), is often given when feeding in the canopy or in flight.

Usually seen in pairs or small groups, the Yellow-faced Honeyeater is one of the most widespread of all the honeyeaters in the southern Mt Lofty Ranges and the Fleurieu Peninsula, as it occurs in woodlands, forests, gardens, golf courses and in riparian areas. Most often found in eucalypts, it is not too fussy about species, occurring in stringybarks, SA blue gums, pink gums, long-leaved box and other gums. It is a migratory species along the east coast, where it moves in large flocks along the spine of the Great Dividing Range and the coast, moving north in autumn and south in spring (Higgins, Peter and Steele 2001), often in company with White-naped Honeyeaters.

While not absent in the Mt Lofty Ranges in summer, they are scarce and, in some areas, like Para Wirra, they are completely absent between October and March (Ford 1977). Their arrival back into the Mt Lofty Ranges in autumn is sometimes marked by a few birds flying over the suburbs of Adelaide. In a 50 minute window at Cape Jervis on 3rd May 1986, over 80 Yellow-faced Honeyeaters flew north-east (at times in company with White-naped Honeyeaters, Red Wattlebirds and Silvereyes), suggesting a return to the Mt Lofty Ranges, possibly from the South-East of the state (Paton 1988).

Until fairly recently, observations of honeyeaters gleaning leaves and bark of eucalypts were assigned to insect-eating (e.g. Ford 1977),but more rigorous observation and research revealed that most were in fact feeding on carbohydrates, namely manna, honeydew and lerp (Paton 1980). Manna is the sugary fluid that exudes from damaged plant material; honeydew is the sugary secretion from aphids, coccids and psyllids; and lerp is the sugary protective cap of psyllid insects

Yellow-faced Honeyeaters also hawk for insects in the air and take nectar from a range of Australian plants, including eucalypts, callistemons, grevilleas, banksias and grass trees.

This species of honeyeater is monogamous, nests in pairs and, while the female bird builds the nest and incubates the two or three eggs, both birds feed the nestlings. The juvenile plumage is very similar to the adult plumage, which is attained by about one year (Higgins, Peter and Steele 2001).

Yellow faced Honeyeater
Photographer: Fir0002/Flagstaffotos

You have a high chance of seeing Yellow-faced Honeyeaters in the Waite Conservation Reserve in the cooler months of winter and spring, especially in the River Red Gums of Wild Dogs Glen (P. Bird pers. comm.). A nest was found there with two large chicks in January 2018, but breeding records in the Reserve are rare.

Penny Paton

References

Ford, H.A. 1977. The Ecology of Honeyeaters in South Australia. *South Australian Ornithologist*, 27(6): 199-206.

Higgins, P.J., J.M. Peter & W.K. Steele (Eds) 2001. *Handbook of Australian, New Zealand and Antarctic Birds. Volume 5: Tyrant-flycatchers to Chats.* Oxford University Press, Melbourne.

Paton, D.C. 1980. The Importance of Manna, Honeydew and Lerp in the Diets of Honeyeaters. *Emu*, 80(4): 213-226.

Paton, D.C. 1988. Migratory Flocks of Honeyeaters at Cape Jervis, South Australia. *South Australian Ornithologist*, 30(5): 133-134.

Pizzey, G. 2007. *The Field Guide to the Birds of Australia*. 8th edition. Harper Collins Publishers.

Cows with gums

It seems crazy but 27 years after sheep were removed from the reserve for conservation reasons, the University of Adelaide is using cattle to manage Stone Reserve …both for fire protection and for conservation.
How can this be?

It works like this. The under-storey of much of the reserve including Stone Reserve is dominated by introduced grasses. Most introduced grasses – wild oats, barley grass, brome grasses, silver grasses etc. – are annuals. They germinate with the opening autumn rains, grow through winter, produce seed in spring and die off in summer. Native grasses – spear grasses, wallaby grasses, kangaroo grass etc. – are perennials. They form tussocks that grow more slowly and, importantly, seed later than the introduced annuals.

In bushcare circles the accepted way of managing weedy annual grasses is by slashing. Depending on season, annual grasses are slashed in late winter and again in spring to remove the seed-heads before they mature. Native grass tussocks can often be avoided by the mower but even when slashed they usually survive and set seed. The seeds of most weedy annual grasses are relatively short-lived.

Regular targeted slashing will ultimately promote native grasses by reducing competition from the weedy annuals as their seed-bank diminishes.

In the same way, domestic stock can be used to strategically 'crash-graze' (short periods of intensive grazing) in winter-spring to suppress weedy annuals and promote native grasses. Compare for instance the southern end of the sheep-grazed Easement with the adjacent reserve. At least four species of wallaby grass are abundant in the Easement yet immediately through the fence the weedy annual grasses dominate …as well as some nasty perennial ones, Kikuyu, Phalaris and Cocksfoot.

A couple of cautionary footnotes: Before the next grazing event the ancient internal fence separating Stone Reserve from the rest of the reserve needs upgrading to exclude cattle from better preserved areas such as Quartz Hill. Next door managers Tony and Terry are on the case.

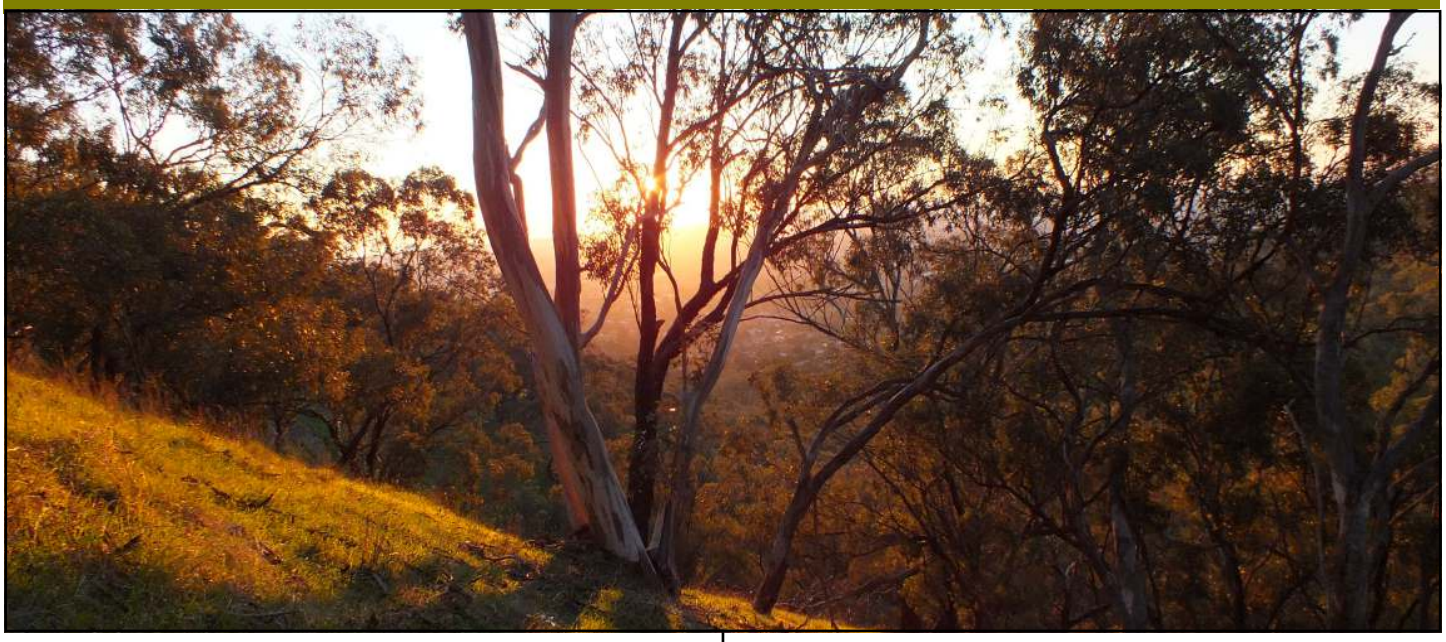
Secondly, there is a risk that cattle might bring weed seeds into Stone Reserve. While cattle do carry weeds, as the cattle come from immediately next door, it seems likely that most of the weed species are already present in the reserve.

The bottom line is whether or not the overall condition of the vegetation improves. To my eye past crash grazing has likely assisted the gradual recovery of native grasses, especially Kangaroo Grass *Themeda triandra*. Only by objectively monitoring the under-storey can we hope to measure this.

Peter Bird

Cattle grazing appears to have benefited Kangaroo Grass in Stone Reserve **Photographer: Peter Bird**

Like Us On Facebook



Thanks to Erica Boyle, the Reserve now has a Facebook Page.

You can contact the page by opening Facebook and typing Waite Conservation Reserve in the search box. When you get there click on "**Like". This is important as the more likes a page has, the higher it moves up in search rankings.**

Peter, Erica and Clint will post items various to the page from time to time. Have a look to see what's happening and add comments.

Clint has been seeding the page with pictures such as the one at the right. These have been accompanied by comments. For example: "I found this lower jaw bone while walking in the reserve. Can you identify it? "

We got a number of responses, which included that it belonged to a wombat or a unicorn. Neither of which were correct.

The answer was provided by Peter Bird.
It is the lower jaw of a young Ringtail Possum. Peter has observed that there have been quite a few of these skulls this year, possibly due to the very dry weather.

If you see something or have a photograph that you think would interest a general audience, please let us know, so that we can add it to the page.

Clint Garrett

Know someone?

We recently received notice that *Friends of Parks* are now registered hosts for Centrelink programs.
It means that anyone currently receiving benefits such as *Work for the Dole*, *Over 50s* or *Newstart* can sign up with us to work off their community hours (usually 15 hours a week) as part of their mutual obligation requirement.

Please let us know if you have anyone who might be interested in such an arrangement and we can investigate further.

Peter Bird

Bronzewings Bouncing Back

The book *'Claremont' Glen Osmond* by Frances Cumming details the history of Claremont House in lower Wild Dogs Glen built by Alfred Hardy about 1842. In it she refers to a letter by Alfred's son Charles who writes it was '...quite a wild, isolated place in the early days... (where) ...Bronze-wing pigeons and other game abounded'.

The Common Bronzewing was also noted by John Sutton at nearby Netherby over the period 1918-38, albeit rarely. He recorded these beautiful pigeons only four times, in Nov 1928, Jan & Feb 1934 and Aug 1937, suggesting they were very *un*-common.
(P. Paton, pers. comm.).

When I inherited the (contemporary) reserve bird list from Scott Field in the early 2000s the Common Bronzewing was strangely absent from his list. It took me another 7 years before I saw my first one, in Nov 2007. But it wasn't until April 2011 that bronzewings started turning up regularly. In a case of 'build it and they will come' I recorded 4 bronzewings in the newly-created habitat of Netherby Knoll on 2/4/11. Three were feeding among the copiously-seeding native grasses and wattles and the fourth, a plump almost-fully-feathered squab, sat on its flimsy nest 6 metres up a nearby Grey Box.

Since then *Common* Bronzewings have lived up to their name, featuring very regularly on my bird lists. I have noted breeding four more times. Now I see or hear them on most visits, often in multiples. Last year on 30/4/18 I saw a record 7 birds drinking at a small leak below the large SA Water tank uphill from Netherby Knoll.

In another passage from Cumming's book she quotes Thomas Gill in 1905 describing Claremont as '...one of the few picturesque spots near Adelaide where the original gum trees have been allowed to remain.

Common Bronzewing Phaps chalcoptera
Photographer: J.J. Harrison

The wattle and cherry trees had already disappeared, as had the sheoaks, although they were very common originally'.

Acacia seeds are known to be a favoured food of bronzewings. I suspect part of the reason for the recovery of bronzewings is directly related to our wattle plantings. *Acacia pycnantha* in particular is a keystone species benefiting a wide range of invertebrates and other species. It deserves to be further encouraged in the reserve especially in areas where olives are being removed. Expect the Common Bronzewing to further benefit.

Peter Bird

Common Bronzewing Nest.
Photographer: Peter Bird

President: *Peter Bird (0418-853 -834) pbjbird1@bigpond.com* ***Secretary:*** *Helen Pryor (helenpryor10@gmail.com*

Treasurer: *Lynda Yates* ***Editor:*** *Clinton Garrett*

Committee: *Kate Delaporte, Peter Lang, Penny Paton, Meg Robertson, Andrew Walters*
Address: *Friends of Waite Conservation Reserve, University of Adelaide, Waite Campus*
PMB 1, GLEN OSMOND 5064 ***Phone:*** *8313-7405*
Email: *kate.delaporte@adelaide.edu.au* ***Website:*** ***www.waite.adelaide.edu.au/reserve/***