

NEWSLETTER

AUTUMN 2005
NUMBER 9

Ed: Bryan Both



President's page

Autumn is a good time to walk up Wild Dog Glen to Urrbrae Ridge past the working bee table to the southern boundary where you can look down valleys leading to Brown Hill Creek. It is a satisfying walk as you see the areas cleared of olives in Wild Dog Glen. Thank you to all of the working bee supporters and work for the dole crews. In this same area a local resident walking down the path was very surprised when she rounded a small gum tree and literally bumped into a koala at shoulder height.

A bit further up the Glen and on the Old Coach Road you can see some eucalypt seedlings poking up in very appropriate way from the ashes of some burnt olives. In the early morning or late afternoon this section of Urrbrae Ridge glows with red and gold colours as the light hits patches of kangaroo grass. It's from this area that kangaroos have been seen on three occasions in the last few months. The Friends of the Waite Reserve committee is interested in finding out more about the marvelous mammals that are found in our area. Its been some years since we last had an evening spotlight walk for members and hopefully this is something we can look forward to later in the year.

As the dry grass is pushed and parted by the autumn breezes the long time resident groundcovers are more readily seen. The

Astroloma and similar species are apparently hard to propagate and it would be good to find a way of encouraging these and other species back into the understory as the olives are removed. In a similar vein, the committee would like to plant out a significant number of seedlings in the western portion of the reserve. Thanks to all of the people who have been busy collecting seeds and propagating them ready for planting out in the wetter winter months.

Stephen Wait who coordinates the work for the dole team has kindly offered to lead the working bees this year. He also has additional supplies of locally collected seed available for anyone interested in growing seedlings for the reserve. A convenient way to get your seeds would be contact Stephen via Urrbrae house and to arrange to pick them up on a working bee.

A thank you to Andy and Annette Baker who will continue to supply the working Bee BBQ lunches for everyone. If people cannot get to the working bee in the morning there is a possibility of a session after lunch as well. To help people get along to working Bees we will alternate Sunday and Saturday times. As usual all equipment and training will be provided. It is a satisfying feeling to help improve the reserve and every contribution is very much appreciated.

Chris

Springwood Park

This is the property previously owned by Mr. Andrew Garrett which runs along the southern boundary of the Waite Conservation Reserve. Your committee has written to the local member and state politicians in support of a proposal to consider the public acquisition of some of this land primarily for conservation and heritage purposes. We believe that with the consolidation of titles at the eastern end of the Springwood park property it is possible to secure the remaining area of hills face zone land in a cost effective way. The benefits of this would include

- *The more effective management of problems such as foxes, olives and other weeds.*
- *the joining up of separate open space areas, enabling an increase in cooperative management between the landholders involved [City of Mitcham, University and others]*
- *The forming of a significant corridor of conservation land strategically located between Belair National park and Cleland Conservation Park. This in turn would provide :-*
- *improved, sufficiently large native mammal habitats, and greater opportunity for the survival of the endangered woodland bird species of the Mt. Lofty ranges*
- *an opportunity to revegetate with local provenance plants and thus to be part of the premier's 3 million trees program*
- *The protection of a high quality water catchments area.*
- *improved access for responsible recreation*

We believe this is an opportunity to implement the strategy suggested in last years Hill Face Zone Review of amalgamating private land parcels into conservation reserves for the sort of benefits outlined above.

No final decisions have been made yet and we hope that the disposal of the Springwood Park property results in a positive conservation outcome and not an increased management load on the Waite Conservation Reserve.

ADOPT-A-PATCH BUSHCARE

Anyone who has visited the Waite Conservation Reserve lately can't help be impressed at the huge rehabilitation effort in progress. Weed by weed, the area is being transformed from an olive-infested sheep farm into a wonderful example of native grassy woodland.

But for all this industry, you can't help be concerned that if ever the pedal comes off, the weeds are quietly waiting in the wings. In particular the seasonal germination of thousands of olive seedlings remains an insidious threat. Easy to pull in their first year, young olives quickly develop roots of steel. If the window is missed, control thereafter reverts to the painfully slow and dirty cut-and-swab technique.

The Friends group has contributed greatly to the rehabilitation effort. Structured working bees have been the mainstay of this effort but after four years it is worth asking whether there are opportunities to improve or expand the volunteer contribution. Working bees are not just about getting things done. They provide a great opportunity for the sharing of knowledge and enthusiasm, but they may not always suit everybody.

For example, working bees are always held on weekends when some people have other commitments. They must be held on scheduled days so are at the mercy of the prevailing weather conditions. They also vary in location and task to provide interest for participants, but this may compromise the sense of achievement for some. Working bees are social events, but some people simply prefer the solitude of working alone.

One possibility for appealing to a broader range of bushcarers is for a system that allows individuals to 'adopt' and manage their own small patch within the reserve. This would entail dividing the reserve (or part) into bite-size management units, say 1-hectare, then matching each patch with its own bushcarer. This approach has the benefit of giving people the flexibility to work when time, weather, body and soul permit. Moreover it instils in people a sense of ownership and pride in their patch.

This approach is not without its risks. Bushcarers working in isolation lack access to the identification and management skills freely available at working bees and could feasibly cause damage through misguided actions. Working alone also presents risks for the safety of the individual involved. I am confident that most of these problems can be overcome by some basic instruction and by carefully matching each patch to the bushcarer's capability.

The greatest benefit I see with this approach is the potential to harness the labours of some of the several hundred nine-to fivers on Waite Campus during each working week. Every hour we can interest them hand-pulling young olives before, during or after work now will save a hundred hours later.

We'll talk more about this at the AGM. Come along to share your thoughts.

Peter Bird

FRIENDS OF WAITE CONSERVATION RESERVE

ANNUAL GENERAL MEETING

Wednesday 25 May 2005

7.30 pm

URRBRAE HOUSE

Speaker

ANN PRESCOTT

Native Grasses: should we beat them, eat them or smoke them?

Ann is a botanist with a long-standing interest in the conservation and management of grasslands and grassy woodlands. She has worked on a number of grassy projects over the last 10 years and is currently on contract to the Adelaide - Mount Lofty Ranges Integrated Natural Resource Management Board as a Bush Management Adviser for the Mount Lofty Ranges.

She is probably best known as the author and illustrator of two wonderful botanical field guides: *Its Blue with Five Petals: Wildflowers of the Adelaide Region*, and *Wildflowers of Kangaroo Island and Fleurieu Peninsula*.

Interestingly, Ann's father and grandfather lived in Urrbrae House for several years, while her grandfather was director of the Waite Institute. Ann continues the tradition, being a regular walker in the grassy woodlands of WCR. This makes her intimately familiar with the management challenges of the reserve, particularly the weedy ones.

Ann is an intelligent, passionate and humorous speaker. Be prepared to learn lots about how we can better manage our patch.

RINGTAIL TALES

After seeing bandicoot-like diggings in Waite Conservation Reserve I recently took the spotlight for a quick spin to investigate. Tall grass and a chatty 8-year-old didn't help the bandicoot quest but when I turned the torch skyward we were stunned by the spectacular light show! Pair after pair of reddish golden eyes stared down from every second tree. In half an hour we counted 35 Ringtail Possums!

For the uninitiated the Common Ringtail Possum *Pseudocheirus peregrinus* is one of our more stunning local mammals. Its dark coppery brown dorsum and rich rufous face and legs contrast strikingly with a pure white belly and ears. The thin white-tipped tail of the Ringtail immediately distinguishes it from the coal black bottlebrush of the sympatric Common Brushtail Possum.

I have seen thousands of 'Ringies' in the stringybark forests of the Mt Loftys and South East but I was unprepared for such high densities in the grassy woodland of WCR. This sneak preview whetted my appetite so just after dark on 15 February I returned for a closer look. Starting from near Logania Lookout I systematically searched tracks along Sheoak Slope, Tanks Ridge, Urrbrae Ridge and Wild Dog Glen. I also ducked next door to the Garrett easement to check out some Manna Gum woodland, not otherwise represented in WCR.

The tally? In roughly 3 km of spotlighting I counted 10 Brushtails, 7 Koalas, 1 Fox, 2 Southern Boobooks, 1 Tawny Frogmouth and... 110 Ringtails. If we assume, somewhat boldly that: a) the transect was representative of the whole reserve; b) the effective strip surveyed was 50 metres wide, and c) every possum in the strip was seen, then the total population of ringtails in the reserve is currently in the order of 1000, or about 6 per hectare. In some parts the density is three times higher.

Ringtails live in trees and eat mainly leaves. But which trees and which leaves? To better understand this I recorded the tree species in which each Ringtail was sighted. I also estimated the proportion of each tree species represented along the transect to minimise

bias caused by differing availability of each. Very roughly the tree species occurred in the

following proportions: Grey Box (63%), Red Gum (18%), Manna Gum - all outside WCR (10%), Blue Gum (7%) and Drooping Sheoak (2%).

The results? Of 110 ringtails seen, 102 (93%) were in Grey Box, 4 in Red Gum and 4 in Blue Gum. From this it is clear that the ringtails were disproportionately favouring Grey Box. Whether Grey Box were preferred due to their nutritional superiority or to their higher density allowing the exclusively arboreal ringtails to access a high proportion of Grey Box trees without coming to ground is not clear. What is clear is that the Grey Box woodland of WCR is home to a remarkable number of these beautiful little beasts. I can almost hear the rose bushes of Urrbrae House quivering!

Peter Bird



BOTANICA

Native 'Easter Lilies'

The months of February, March and April are a tough time for plants - the heat of summer has killed off annual grasses, and few native plants are in flower, although the Grey Box (*Eucalyptus microcarpa*) with its clusters of honey scented blossoms is a notable exception.

It is at this time that, almost miraculously, the flowers of the Garland Lilies (*Calostemma*) emerge from the hard and parched ground, a cluster of purplish-pink flowers at the end of a fleshy stalk - and not a leaf to be seen.

The Purple Garland lily (*Calostemma purpureum*) is well represented in the Waite Conservation Reserve and can be seen around the cliffs on the west side of Wild Dog Glen, on the crest and upper slopes of Urrbrae Ridge and Urrbrae Hill, and on the eastern part of Sheoak Slope.

Although their initial appearance is usually triggered by a fall of rain, their continued flowering and growth is sustained by a bulb about the same size as that of a daffodil. The bulbs are buried deep, as much as 30 cm below the surface, having been pulled down a little further each year by their contractile roots. By the end of summer each mature bulb is primed with three almost fully developed flower stalk buds awaiting the signal to grow. These plants have reversed the usual pattern of a spring flowering after winter vegetative growth that is prevalent in Mediterranean climates. Instead *Calostemma* behaves like a number of other autumn flowering species where the flowers first appear on their own and the leaves follow later. *Calostemma* remains in its vegetative growth phase through winter and spring until the fleshy strap like leaves die back again for summer.

Calostemma purpureum often grows in dense colonies, and can create a mass of pink when in full flower. Flower colour on individual plants varies from a purplish maroon to pale pink and occasionally white.

When encountered for the first time *Calostemma* is often mistakenly taken to be an introduced plant: -its robust and succulent appearance just does not fit the stereotype of a scruffy native. In many features the Garland Lily resembles a smaller version of the garden plant Belladonna Lily (*Amaryllis belladonna*) and is in fact a member of the same family (Amaryllidaceae).

However *Calostemma*, (together with a related tropical counterpart genus), is uniquely Australian and confined to the eastern part of this continent. The family however is widely distributed across the world with its primary centre of origin in Africa;



Calostemma purpureum, (Purple Garland Lily)
Flowering head from Wild Dog Glen, WCR

it seems that *Calostemma* is of much more recent origin than other elements in our flora.

One of the most fascinating aspects of the Garland Lily's ecology concerns its seeds, strictly 'pseudoseeds' which behave as bulbils. These are green, water-rich, fleshy but firm and similar in appearance to a large pea. The fruit itself is reduced to a mere papery shell surrounding the seed. The flowering stems dehydrate as the seeds swell, leaning over under their growing load. Eventually they become prostrate and release their fruits thus dispersing them by a radius equal to their height. This limited dispersal is enhanced by the ability of the seeds to roll down-slope, to float in water, and perhaps in rare cases to be carried and dropped by birds.

Perhaps the most remarkable feature of the seeds is their lack of dormancy. They start to 'germinate' as soon as they are mature and do so without water, drawing on the moisture contained within them. The cotyledon with root and shoot will sometimes even emerge from the seed while it is still attached to the plant; and the seeds will grow quite happily for many months just in a paper bag. When planted out they take a few years to reach flowering age. So if you have the patience and enough snail baits, *Calostemma* are one of the easiest plants to grow.

Photo and text by Peter Lang.



Working Bee Bulletin Autumn 2005

Autumn / Winter working bees will be held on the following dates:

Sun Apr 17

Sat May 21

Sun Jun 19

9 am - 3 pm

Meet at Garrett's gate.

Dear Friends.

We on the Committee have had a bit of a rethink about working bees. Firstly, principal supervision is being taken over by our own Stephen Wait, with Fred and myself perhaps filling in from time to time. Steve has a great deal of experience in the reserve, and in bushcare in general, so we can all benefit from this.

Secondly, we have opted for one working bee per month, on alternating days, as this fits better with Steve's availability.

Thirdly, working bees will now run all day. That is, there is an option to continue for a couple of hours after lunch if you wish, or for that matter, to only come for the afternoon session. The hope is that this will not only provide more choice, but also improve the efficiency of the whole operation.

Note: If you wish to come late, please let Steve know.

As for the program, Steve tells me he has tubestock of a number of species ready to plant, and hopes to do planting at each of the next three working bees. I'm sure this will please many of you. However, there may not be enough of that for all of the people all of the time, so some good old weed control can be expected as well. There is also the possibility of doing some propagation on a rainy day in

the shed near the top of Hartley Grove. Seed collection is another possible activity.

Just a couple of reminders about how things run: The meeting point is Springwood Park. For the benefit of any newcomers, this can be found by driving up the old freeway (Eagle on the Hill Rd), and turning right at the first opportunity. Meet time is 9am; departure is 9:15 sharp. If you want to come later than that, and don't know the way to the BBQ spot, you need to communicate so arrangements can be made.

Weather can be problematic in the cooler months. It can be quite different (usually worse) at the top of the hill. If in doubt, call Steve on the morning, but leave it as late as you can to give him a chance to get up there and make a decision. Otherwise, turn up with suitable clothing and take a chance.

Steve's number is **0410 695 719**.

See you soon.

Bryan Both
8388 6998
0403 979 825
(Note new numbers)