

Wednesday Walk Report

22/6/2016

Felltimber Creek in Gordon Craig Park

Leader Glen Johnson, DELWP

Despite some heavy showers our walk around Gordon Craig Park was most successful, with the creek providing quite a contrast to House and Huon creeks in the inner urban zones.

Starting at the bridge, Glen explained that this difference is because the creek here is relatively close to it's source in the bushland reserve upstream, and has been much more recently urbanised. This means it retains much of it's natural character in terms of vegetation.



Before we move on, Glen explains the significance of some planting that has already occurred at the bridge in 2009. The previous Felltimber Creek Landcare group (now the Friends of Felltimber Creek) had worked with Glen to plant eucalypts in key spots to provide a Glider Crossing. Not all of the trees survived but those that did are doing well (see 'before' and 'after' photos below). They provide a link for gliders to safely cross Moore Park Drive with no negative safety impact on traffic due to the existing guard rail at this site. These could be supplemented to transform a key glider fragmentation point into a viable Glider cross over point. *As mentioned in previous Walk Reports, gliders need mature eucalypts to glide between to move within their habitat – an absolute maximum of 40m apart – along with native trees and shrubs that flower at different times of year to keep them in food, and tree hollows to nest in.*



Glider Crossing plantings 1.

Looking east, lhs on Moorefield Park Drive at Felltimber Creek bridge

Left: 2009 plantings

Right: in 2016.



Glider Crossing plantings 2.

Looking east, rhs on Moorefield Park Drive at Felltimber Creek bridge

Left: 2009 plantings

Right: in 2016



Walking upstream, creek to our right.

As we walk upstream Glen points out the narrow vegetation zone close to the bridge, which creates an obvious fragmentation of habitat for arboreal mammals, reptiles and birds. Improving connectivity and habitat through the staged replacement of existing willows with eucalypts, planting additional eucalypts and supplementing the understorey species would be appropriate here. River Red Gums are the trees most likely to be growing along Felltimber creek here.



On our left is proof of how the park's neighbours appreciate their outlook and are interested in gardening beyond their boundaries. Engaging these residents in planting appropriate species and stewardship of Felltimber Creek would be a fantastic asset for the future. Current neighbouring gardens and resident's plantings in

the park include many species which are either current invaders of the creek (palms, privet) or have potential to invade (agapanthus).

Growing in the rich riparian zone at the edge of the creek we note a variety of weeds which have obviously escaped from gardens, including three types of privet, prunus, palms, ivy, elephant's ears, arum lilies, violets and wandering jew (also called Trad) (*right*).



Some are most likely to have been dumped with garden waste (Trad, arum lilies, elephant's ears, violets, (*right*)), but many of these are berry based plants spread by birds (especially blackbirds) and foxes. Blackbirds shelter in the dense leaved exotic trees (willows, box elder and poplars) in summer and poop out these seeds – therefore we see blackberries, privet (*far right*), prunus, ivy (*right*), inkweed and palms growing under these trees and spreading from them.



Hand pulling: Every time you walk the park there are opportunities to make a difference by hand pulling weeds. Palms should be hand pulled when newly emerged, as they are very difficult to remove once established. Privet plants are easily hand pulled up to a metre high – please do so whenever you see them! Just shake the dirt off the roots and leave them - they will not regrow.



Palms are an effective bush invader and favourite garden plant in Wodonga – moving from gardens and fence line plantings in the park, and ever onward – especially into riparian zones and mulched areas (*pics previous page*). They overtake sites which would otherwise have native plants, they **do not** provide nesting sites, shelter, food or nectar suitable for native species, they **do** provide nesting sites, shelter, food or nectar for invasive species like blackbirds, starlings and mynahs.

At the steep site of 2015's 'Transform-a-thon' planting with Wodonga Guides (*right*) we pause to admire the progress of the plants, which have flourished under the protective canopy of the large old eucalypts along the bank. These are all understory plants and native grasses, which currently need some maintenance by hand to help them establish dominance over the competing weeds. This site is deeply mulched and a good example of the double-edged nature of mulch. We see a lot of woody weed seedlings emerging in the perfect seedbed it creates. With the planted natives still small, there is not enough competition to prevent these weeds from establishing strongly. Thus we must always remember that mulched plantings need maintenance (weeding/ adding mulch) until the plants we want are established enough to deter germination of weeds.



At this point discussion about some strange holes we can see drilled into the trees (*right*) turns to the structure of trees. Looking at the trunk of a large tree, it is the outer layers which are the living part – the inside is effectively dead wood. This is why cutting a collar all the ways around the trunk ('ringbarking') will kill trees, why white ants set up in live trees, and how hollows form. One third of native fauna – reptiles, mammals and birds – depend on hollows to reproduce.



This area also provides some examples of native – but not indigenous – plants which need to go onto our Woody Weed ‘Watch’ list. Firstly, is a Mt Morgan Wattle in the park to the left of the track (*below left and insert*). This looks very similar to the Cootamundra wattle which we know to be weedy, and has potential to behave aggressively in the same way. The native Silky Oak also has potential to spread, and we do indeed see a seedling from this parent plant (*right*). These natives are both indigenous to Qld. They will provide food and shelter for native fauna, but can also decrease the biodiversity by replacing the indigenous species. For these reasons they would not be the first weeds to remove, but need to be watched and action taken if they continue to increase.



Further along there is a good example of the successful use of mulch in the park. In this case, mulch adds to the competitive and allelopathic effects of the trees, effectively preventing germination of most weeds beneath the canopy. The council supplied mulch is replenished by the self-mulching of the eucalypts.

Also effective in this patch is the use of the footpath as a weed buffer between the grassed area and the planted bed. The grass grows to the left of the path, the path prevents the spread of creeping weeds such as couch and kikuyu, then the mulch and tree canopy on the right prevent weed germination.

The removal of one or two fruit trees and the addition of native grasses in this particular patch will complete a very good native habitat patch.

Allelopathy is a biological phenomenon by which an organism produces one or more [biochemicals](#) that influence the germination, growth, survival, and reproduction of other organisms. Allelopathy is characteristic of certain [plants](#), [algae](#), [bacteria](#), [coral](#), and [fungi](#). Allelopathic interactions are an important factor in determining [species distribution](#) and abundance within plant [communities](#), and are also thought to be important in the success of many [invasive plants](#). For specific examples, see [Casuarina/Allocasuarina](#) spp. The process by which a plant acquires more of the available resources (such as nutrients, water or light) from the environment without any chemical action on the surrounding plants is called [resource competition](#). This process is not negative allelopathy, although both processes can act together to enhance the survival rate of the plant species. (Wikipedia)



Towards the southern end of the park we see the work carried out last year by the Green Army team. This included removal of many trailer loads of Tradescantia (Trad) and 'Cut and Paint' weeding of large areas of woody weeds, particularly Box Elder. The riparian zone was planted with understorey species and native grasses, and mulch spread. The story since then is mixed. The cleared areas are definitely much better than before; the plants planted are doing very well (above), but the mulch has encouraged the mass germination of elm and privet seedlings. These now need to be removed to allow the native plants to establish.



Glen points out a treasure on the waterline here; a *Chietlanthes* or Austral Rock Fern growing on the creek bank (*right*). This lovely indigenous fern would have a parent plant upstream in the bush reserve.

Right at the top end of the park there is a good stand of native trees, again showing the self-maintaining character of an established grove. Edging the creek - a very pleasant change from the privet and box elder we have been passing - is a thick stand of bottlebrush and tea tree (*right*). Great habitat!



At the Parkers Road and Lawrence St intersection, another fragmentation area is creating a barrier to the movement of gliders and other fauna. This is not as easily fixed as the Moorefield Park Drive bridge and will require some thinking and negotiation with Council to overcome.

Kim points out a new weed here. Thriving in an inaccessible spot is a type of thornless rose. This, like other weeds right in the creek, needs to be tackled at 'low tide' - summertime when the water is low.

Walking downstream, creek to our right and Moore Park Drive to our left.

This stretch reveals the best of the creek, including some very special areas that need to be treasured!

We come across several large patches native grass - almost pure stands of Weeping Grass (*Microlaena stipoides*) both the mown (*right*) and un-mown areas. This bright green tussocky grass can handle some foot traffic and mowing, making it a perfect native lawn grass which requires no watering.



of
in

Left to grow, it creates a thick sward of low growing grass with elegant weeping seed heads above (*right*).



There are several areas where a small amount of hand weeding would complete a pure stand of native grass. These are beautiful, self-maintaining, low grasses which are green in summer (important for fire season).

There are also large patches totally overgrown by Trad. This is a very difficult problem to tackle when it is so dominant, and would require dedication and resources which we could better spend elsewhere (following the Bradley principles). Glen recommends

- a) Mapping it's occurrence throughout the park

- b) Holding it where it is: pull expanding edges/ plant natives
- c) Reducing it: Pulling small areas. In large patches, letting nature do the work for us by replacing the deciduous trees with eucalypts.

Tradescantia thrives with shade in summer and sun in winter – perfectly provided by woody weeds like Box Elder, Willow and Poplar! Remove these and the Trad will weaken it's hold.

A similar approach can be taken with the thick kikuyu beds. Glen recommends removing the few other weeds such as cocksfoot and phalaris by hand and replacing them with native poa, then planting eucalypts. The poas will hold their own against the kikuyu and the eucalypts will gradually weaken the kikuyu as they shade it out.

There are several woody weeds in low numbers along this side which should be removed before they gain a foothold, particularly seedling Olive trees and Black wattle.

Further along to our left is a storm- water wetland, alive with the call of frogs. This has been planted with natives and is a great asset to the park, providing habitat for frogs and filtering the water before it enters the creek.



Now we arrive at a very special spot! Quite a large patch of pure native raspberries, set within a natural sedge-land. This is almost 100% free of weeds and should be top priority for protection. There are only a few weeds to be removed to make this a fully intact natural site, which could be a showcase for the indigenous



vegetation of Felltimber Creek. Glen recommends replacing the few phalaris and cocksfoot plants with poa, removing the woody weeds and finding a way to inform walkers about this special site. Being so close to the walking track makes this an ideal site for interpretive signage.

Above: Native raspberry patch – sample the raspberries around September! Sedge-land next to raspberries.

Here ended our walk. By this time the rain had stopped and we shared a nice hot cuppa and biscuits. Thanks everyone for coming and thanks Glen for your inspiring leadership of this walk!

A note on Mistletoe



Mistletoe is the common name for most [obligate hemiparasitic plants](#) in the [order Santalales](#). Mistletoes attach to and penetrate the branches of a tree or shrub by a structure called the [haustorium](#), through which they absorb water and nutrients from the host plant (Wikipedia). On our walk, Glen demonstrated the sticky nature of the seeds, which will sprout and attempt to penetrate any timber. If they find live wood, they will then attach and grow, depending on the species.

Mistletoes are not inherently 'bad'!! Mistletoes are very important plants within ecosystems as they provide a rich source of nutrients through their leaves

(possums love them) and flowers (nectar reliant insects and birds) at different times of year. In the photo left, Glen points out one variety of mistletoe growing on another, which is itself growing on a eucalypt. Usually, only trees that are not connected to their natural ecosystems (e.g. single paddock trees) are susceptible to being overrun by mistletoe.

In Summary: Gordon Craig Park

Assets

- Wide Riparian corridor providing a fantastic recreational and environmental green space in central Wodonga.
- Older parkland and more recent creek line native plantings
- A framework of large remnant River Red Gum; Silver Wattle; Lightwood Wattle, River Bottlebrush, Red Stem Wattle; Bursaria lasiophylla
- Great wetland & frog habitat
- Contiguous creek line of established relatively high quality mulched beds (lacking significant weed threats and therefore manageable/viable into the future?)
- A fantastic recreational trail (concrete one way) with well-formed and accessible gravel return loop
- Fantastic natural 'sedge land' and adjoining Native raspberry stand in otherwise relatively clean zone
- Naturally occurring riparian edge Ferns!
- Engaged / supportive community & council

Threats

- Woody Weeds in riparian zone including Willows, Box Elder Ash, Golden Ash, Broom, Elm suckers, Peppercorn, Poplars, Plane tree
- Berry based / fox bird spread plants (Privet x 3 species, Briar Rose, Prunus, Blackberry, Ivy)
- Non local Weedy Wattles - Acacia floribunda / Cootamundra Wattle / Mt. Morgan Wattle
- Other weeds including Vinca Periwinkle, Honeysuckle, Wild Tobacco, Passionfruit, Verbena, Ornamental grapes, Wandering Jew (key issue in this reserve), Canary Island Date Palm, Elephant Ears, Arum Lily

Management Actions

Planning

- Develop a map based strategic Plan of Action for the park – showing core Assets, Threats and Actions proposed. Include Weed Zone mapping per species with GIS overlays. Follow the Bradley Technique - Protection of the Best Bits First.
- Stage community works - Focus on establishment of large trees (especially river red gums) every 25m along both sides of creek, regular removal of woody weeds when they can still be pulled by hand, protection of existing native species and consolidation of small weed free areas before expansion.
- Determine what's manageable/ viable based on Community and Council support and resources (volunteers, mulch, chainsaw / cut and paste options, Green Corp, Council crews; level of community / local landholders support etc) before attempting large projects.
- Consider mulch value and limitations, management and maintenance requirements (- OK use in this parkland in some well-established areas - other not so good examples)

Engage private landholders adjoining the park:

- Emphasis on private landholders that back onto the south side of the creek
- Demonstrate the vision, benefits and outcomes on the "community side of the creek"
- Organise Community events to build up goodwill – e.g. community planting events, Gardens for Wildlife events to engage and educate re native plants and weeds.

- Provide information (At events, circulation or letter drop of pamphlets) Bush Invaders; reserve Aims and Management Plan; how you (private landholders) can help; Assistance available (incentives, plants, etc); plant lists of preferred and suitable non weedy natives for creek line.
- Gradually increase numbers of residents on board – supportive and active.

General Engagement and Awareness:

- Increase community awareness of the benefits of natives over exotics, understanding of threat status, weeds species recognition and identification.
- Negotiate with Council re engagement of residents in riparian zones, Green Army to assist with woody weed removal, general cessation of planting woody weed species in Wodonga.
- Install Nest Boxes as a limited addition – education tool benefits

Revegetation

Aim for

- Indigenous trees every 25m for arboreal mammals and suppression of grasses/ weeds.
- Indigenous understorey for food source and habitat
- Felltimber Creek = Exotic free zone (Natives only)

Methods

- Remove weeds in 30cm circle before planting (scalp/spray/shade out)
- Take advantage of competition and weed suppression principles - plant near established trees
- Mulched zones OK provided under existing established native tree zones (and out of flood zone) and edged both sides preferably e.g. track edge.

Priorities

- Connectivity plantings (below).
- Stabilize creek banks with River Bottlebrush
- Focus on riparian zone generally

Weed control

Methods:

- Hand pulling small plants before difficult to manage (winter ideal)
- Cut and paste slightly larger plants
- Frill & paste or Chainsaw large plants

Approach:

- Follow Bradley Technique - Protection of Best Bits First.
- Undertake the majority of weed maintenance in riparian zone during summer when creek low and bed/bank accessible.
- Consider value of managing difficult weeds such as Kikuyu with occasional slashing rather than mulching or spraying in inappropriate areas.
- Map progress
- Green Army CoW potential for Woody Weed cut and paste
- Landmates potential chainsaw crew - use Mulcher for waste via CoW or contract
- Stage removal of Weeping Willows and low priority woody weeds
- Round-up edge zones have NO value – only encourage annual weeds and erosion.

Priorities:

- Prioritise aggressive invaders (Box elder, privet, poplars, black willow, palm, wandering jew)

Ensure Connectivity

- Lawrence Street / Moorefield Park Drive fragmentation / barrier - investigate planting options - see earlier plantings

- La Trobe / Tafe connection downstream (weed control emphasis)
- Riparian corridor
- Parkland, access track and parkland linkages – priorities

In a Nutshell: Celebrate and protect the best bits (assets), engage the community, reduce the weeds (threats), improve and connect the native vegetation.