

Section 2.4: Weeds

WHAT IS THE ISSUE?

Exotic, introduced, invasive, weeds.....you have heard at least one of these terms used to describe plants. But what do they mean? Well, an exotic or introduced species is, as the name suggests, something that did not originate here. These non-native plants were brought to the Mount Lofty Ranges, either on purpose or by accident. Your first thought about 'non-native plants' might be species from overseas, but it can apply to interstate plants and other SA regions e.g. Flinders Ranges wattle (*Acacia iteaphylla*). Think: any species that did not originate in an area. Weeds' is a term used for plants growing where they are not wanted.

Invasive refers to plants that can take over a landscape to the point of causing problems with the plant community they live in. These plants are fast-growing and generally do not need specific habitat requirements, meaning they can grow in lots of places and can end up as a 'Declared' weed. The most common and problematic weed species for watercourses in the Mount Lofty Ranges are the woody weeds - Blackberry, Broom and Gorse, and the exotic deciduous trees such as Willow, Desert Ash and Poplar.

Some plants are classed as Declared pest plants or weeds in South Australia or [Weeds of National Significance \(WONS\)](#) and land managers have a statutory obligation to control them due to their threat to agriculture or biodiversity.

Contact your local Landscape SA Boards: <https://landscape.sa.gov.au/hf/find-us> for a list of species or refer to several resources listed under Further Resources of this sheet. Declared pest plants are to be managed and controlled under the [Landscape South Australia Act 2019](#), formerly known as the *Natural Resources Management Act 2004*, as they can have significant impacts on industries and the environment.

However, many other plant species may not be regarded as a Declared pest plant or a weed, but they can still limit an enterprise's productivity or reduce the biodiversity of remnant native vegetation. Even native plant species can be seen as a plant growing where it is not wanted, however, before action is taken you must ensure it is not protected under the [National Parks and Wildlife Act 1972](#) or other legislation. Some native species can be mistakenly identified as being a "weed" and accidentally removed so it is important to correctly identify a species before removing it. In some pasture situations, a non-protected native plant species may be seen as a "weed", however please contact your local Landscape SA Board or other land manager advisor for advice on how to manage this.

Exotic perennials, woody weeds such as Gorse and Broom present a fire hazard, and some have become invasive. Controlling weeds in a tangled gully or on a rank riverbank may seem an epic task, but the most effective method of control may not be immediate and total removal. Removal of woody weeds may lead to a loss of habitat for local native species and should be evaluated with advice from your Landscape SA Board Officer. An Officer can help you to identify weeds and devise a staged plan of removal utilising the most appropriate and efficient methods, herbicides, and timing for weed control. This can also help you to see how and when you will need to make time for control activities and work out the financial costs of doing so.

Baring the soil may result in erosion and is often the condition that allowed weeds to establish in the first place.

Long-term control may be better achieved with selective targeting and the establishment of desirable competitors. Pasture species may be selected for if they are not grazed before seed set while weedy grasses can be grazed to stop them setting seed.

Emerging weed species or pest species identified as [Alert Weeds](#) also need to be look out for as they can become a problem very quickly and out compete native species which may be of conservation significance and cause other serious environmental and economic damage. After a bushfire event woody weeds and other weeds will emerge.

HOW DOES IT AFFECT YOU AND YOUR CATCHMENT?

Weed invasion has been a significant problem in the River Torrens over many years, which has been reduced by removing exotics species such as willow and ash, particularly in the top and upper reaches. This has been essential in getting a reduction in the seed bank of these woody weed species to minimise areas of the river being choked, particularly downstream. These exotic plants do not allow for native species to colonise. Also, the collection of silt and diversion of water around the roots of these exotic species roots, can occur which tends to result in bank erosion issues.

The establishment of plant species away from their natural environment can pose a threat to sustainable productivity and biodiversity.

The conditions necessary for weed species to spread vary greatly. Knowledge of a weed's biology is essential if control methods are to be successful.

Most properties in the Mount Lofty Ranges will have both agricultural and environmental weeds that need to be controlled to some degree.

Most importantly, land managers should be familiar with the vegetation of their local area so that they can react to new weed infestations before they become difficult or costly to control.

Commercially unproductive land should be retired, fenced and replanted to native vegetation. Areas managed this way should harbor fewer weeds, weeds that may recolonize your valuable sown pastures.

After a bushfire event it is likely woody weeds and other weeds will emerge in pasture, bushland and watercourse settings and appropriate timing and methods will be the key to successfully management outcomes. You may even find other weeds you have not seen before emerging after a fire. Some weed species, such Montpellier broom and Gorse are “fire-responsive” and thrive after fire. If you are familiar with your property and know of the location of the significant weed infected areas, prior to the fire, then you will know where to target your weed control efforts before the exotic species become difficult to control.

Careful application of herbicides on pest plant species near watercourses will need to be followed to minimise adverse impacts to the surrounding native plant species, water resource and aquatic fauna species, such as frogs and macroinvertebrates.

Various organisations such as [Landscape SA Boards](#), [PIRSA](#) and local [Landcare SA](#) groups operate throughout the region and will provide advice or assist in the control of pest weed species on your property.

MANAGEMENT OPTIONS

- Weed control is often one of the biggest, most challenging and expensive tasks required for a good watercourse restoration project. It requires careful planning with accurate time and cost estimations. It will also require ongoing weed control maintenance after the major problems have been removed. Start weed control in the best, least-weedy areas first and then move into denser infestations.
- Manage weeds prior and during a revegetation watercourse project – take the long-term approach for successful outcomes.
- Monitor the occurrence of weeds on your property (record locations on your property management plan). Identify weed-free areas and try to keep them free of weeds.

- Establish and manage perennial vegetation cover to out-compete weeds.
- Cooperate and work with your adjoining neighbours to combat weed problems.
- Monitor and control woody weeds and other weeds after a bushfire event – a long-term approach will be beneficial.
- Report an Alert Weed or emergent weed to the appropriate authorities – Landscape SA Board and PIRSA.
- Consider the Minimal disturbance (Bradley Method) approach to manage weeds in remnant vegetation setting. Refer to From Watercourse Weeds to Native Revegetation: A Planning Guide (Janet Pedler 2002) and Bringing Back the Bush (Bradley 1998).
- If using herbicides apply during appropriate conditions and situations.
- Seek expert information and advice on the best methods, herbicides, and timing for weed control.
- Regulate live stocking rates to avoid selective grazing.

FUTHER RESOURCES

Natural Resource Centres:

[Adelaide Hills Natural Resource Centre – Norton Summit](#)
[Mount Pleasant Natural Resource Centre](#)
[Strathalbyn Natural Resource Centre](#)

Landscape SA documents & websites:

Post-fire woody weed control in bushland, [Factsheet](#), January 2020
[Post-fire woody weed control video](#)
[Best practice land management guidelines for small grazing properties](#) (2017)
[Land, livestock, and pasture care after fire Weeds \(pest plants\)](#)

[Weed management techniques](#) (minimal disturbance), Factsheet 2019

Other resources:

Atlas of Living Australia – <https://www.ala.org.au/>
 Census of SA Plants, Algae and Fungi – <http://www.flora.sa.gov.au/>
 Coopers Farm Supplies of Mt Torrens or Mt Pleasant – <https://www.coopersfarmsupplies.com.au/>
 Pedler, J. A. (2002). From Watercourse Weeds to Native Revegetation: A Planning Guide, Adelaide, South Australia.
 Local weed spraying contractors (refer to Appendix 3, Contacts)
 South Australian Legislation – <https://www.environment.sa.gov.au/about-us/Legislation>
 Trees For Life / Bush For Life – <https://treesforlife.org.au/bush-for-life>
 Upper River Torrens Landcare Group – <http://www.torrenslandcare.org/>
 UTE Guide Apps – [http://uteguides.net.au/Water Wise Factsheet No. 3](http://uteguides.net.au/Water_Wise_Factsheet_No._3), Exotic Trees Along Watercourses, EPA, South Australia.
[Water Wise Factsheet No. 4](#), Woody Weed Control Along Watercourses, EPA, South Australia.

PIRSA websites & documents:

Declared Plant of South Australia – are they on your land? [Information Sheet](#)
 Reporting Alert Weeds – https://www.pir.sa.gov.au/biosecurity/weeds_and_pest_animals/weeds_in_sa/reporting_alert_weeds
 Weed Control App – https://www.pir.sa.gov.au/biosecurity/weeds_and_pest_animals/weeds_in_sa/weed_control_app
 Weeds in South Australia – https://www.pir.sa.gov.au/biosecurity/weeds_and_pest_animals/weeds_in_sa
 Weed Information and Identification Notes – https://pir.sa.gov.au/biosecurity/weeds_and_pest_animals/weeds_in_sa/weed_id

Datasheets provided:

Woody Weed Removal

Why Exotic Trees Have No Place In Our
Watercourses

Spiny Rush, *Juncus acutus*