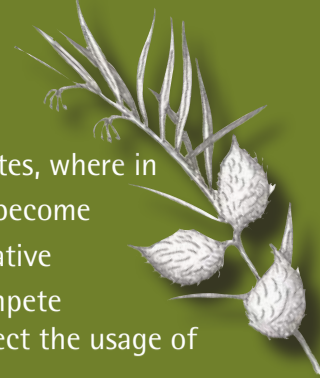


What is a Weed?

A weed is a plant growing in the wrong place often out of control. Many of the weeds in Western Australia have come from overseas or other states, where in their native conditions they do not usually pose a problem. However in a new environment, in the absence of natural predators, they can quickly become dominant. Weeds take over bushland, smothering and inhibiting native vegetation, impacting on habitat and food sources that are essential for native animals and bird species. If weeds and grasses are allowed to take over, there is the potential for fire risks, especially on roadside verges. They compete vigorously for available space, crowding out the native species, and in some cases can block waterways. On farm land they can poison stock, affect the usage of land, reduce pasture areas and interfere with hay quality. *We need to get control of them!*



Afghan Melon
Photo by Rod Randall



Apple of Sodom
Photo by DAFWA



Arum Lily
Photo by Dianne Hardwick



Blackberry
Photo by Dianne Hardwick



Blackberry Nightshade
Photo by Rod Randall



Boneseed
Photo by DAFWA



Bridal Creeper
Photo by Rod Randall



Cape Tulip
Photo by Robyn Knox



Castor Oil Bush
Photo by of Joanna Seabrook



Cotton Bush
Photo by Penny Hussey



Dock
Photo by of Joanna Seabrook



Doublegee
Photo by Rod Randall



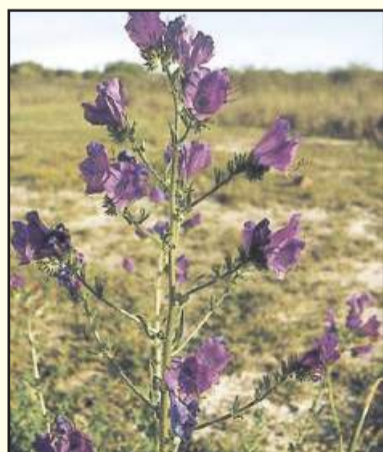
Evening Primrose
Photo by of Joanna Seabrook



Lantana
Photo by DAFWA



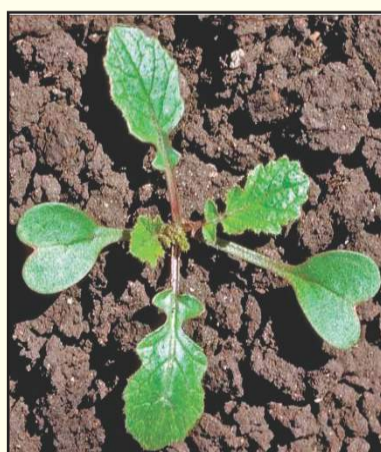
Lovegrass
Photo by of Joanna Seabrook



Paterson's Curse
Photo by of Joanna Seabrook



Watsonia hybrid
Photo by of Joanna Seabrook



Wild Radish
Photo by DAFWA



Veldt Grass
Photo by DAFWA



Victorian Tea Tree
Photo by Rod Randall

Your Responsibilities...

Whether you have a small block or a large farm, as a landowner the weeds on your property are your responsibility. This leaflet is not a complete list of all the weeds you may have on your land but a selection of the most problematic ones in our area. Some of the listed plants may be "declared" under the Agriculture and Related Resources Protection Act 1976. If a plant is declared, all landholders are obliged to control the plant on their properties. Declared plants fall into categories, which define the action required. The category varies over the State, ranging from prohibition or eradication to control, or just preventing the spread into neighbouring areas. A full list of declared plants and their categories can be found at <http://www.agric.wa.gov.au>.



Common Name	Botanical Name	Cat.	Plant Description	Control Methods
* Pest plants (PP) are those weeds proclaimed by the Shire of Serpentine-Jarrahdale as a nuisance under the Local Government Act 1995, which requires the destruction, eradication or otherwise control of those plants.				
Afghan melon	<i>Citrullus lanatus</i>		Common on road verges, disturbed ground in summer. Yellow flowers. Fruit bitter and unpalatable.	Triclopyr, apart from several restricted herbicides is the only product registered. However, extreme care will have to be taken using this product near vineyards. The effectiveness is increased by applying to small plants and by adding a spraying oil at 1% to the mixture.
Apple of Sodom	<i>Solanum inaequanum</i>	**P1, P4	Prickly species of the Solanum genus growing to 2m. Spiny deeply lobed leaves Purple flowers. Yellow berries, poisonous to humans and stock. (P1,P4; Waroona, Serp/Jarrahdale)	Amtriole gives good control and can be applied almost anytime of the year, but spring and summer are preferred. Follow up treatment will be necessary to control seedlings.
Arum lily	<i>Zantedeschia aethiopica</i>	P1,P4	Grows in wet areas, health and sand dunes. Flowers spring. Yellow spike is poisonous. Impedes water flow and is toxic to stock, especially cattle. Causes eczema.	Metsulfuron methyl, should be applied June–October. Best results are obtained near flowering time. The chemical can also be wiped on. The addition of a wetting agent or penetrant at 0.25% is beneficial. Prevention of seed formation will reduce the spread of the weed.
Blackberry	<i>Rubus species</i>	P1,**P4	A Weed of National Significance (WoNS). Perennial. Prickly shrub. Spread by seeds and rooting stems. White flowers in spring. Red fruit black by summer. Inc. Logan/boysenberry. (P1; whole of the state, P4; Murray, Serp/Jarrahdale, Waroona)	Metsulfuron, glyphosate and mixtures of both give good control. A high application volume of water is required for best results. The addition of a wetting agent Pulise gives a much quicker result and can be useful to increase the effectiveness of spraying in wet conditions. Treatments are best in summer.
Blackberry nightshade	<i>Solanum nigrum</i>		Common garden weed. Young fruit is toxic especially to stock and children. Common on wetlands, waterways, wastelands, disturbed woodlands, crops. Spread by birds.	Small seedlings can be desiccated using Reglone®. Apart from the restricted herbicides there are no other suitable products. Plants in most circumstances can be pulled by hand.
Boneseed	<i>Chrysanthemoides monnifera</i> subsp. <i>monnifera</i>	P1,P2	A Weed of National Significance (WoNS). Infestations in the Perth metro and isolated pockets in country areas.	Treat by hand-pulling seedlings or glyphosate at 2% solution with a wetting agent.
Bridal creeper	<i>Asparagus asparagoides</i>	P1	A Weed of National Significance (WoNS). An environmental weed that has excellent biological control options. Tiny white flowers in spring. Red fleshy fruits. Extremely invasive. Forms dense cover, smothering everything.	Spot application with a mixture of glyphosate and metsulfuron methyl.
Cape tulip	<i>Moraea species</i>	P1,P4	Commonly found in pastures, woodlands and disturbed land. Flowers in spring. Spread by seeds and corms. Toxic to stock.	Metsulfuron methyl can be applied as a spray or wiped onto plants. The treatments can be applied at any time after the plants have sprouted up until the flowering stalk appears.
Castor oil bush	<i>Ricinus communis</i>		Shrub growing to 4 metres. Large palmate leaves. Red and yellow flowers. Dark seeds are VERY poisonous. Common on road, rail verges, wastelands, creeks.	Triclopyr, applied in a mixture with diesel (1:60) to base of the tree to a height of 30cm. Older trees with rough bark may require more wetting. Use low pressure for spraying. Success from painting or spraying stumps or freshly cut trees. Trees need to be more than 5cm diameter. Best results if cutting occurs within 15cm of the ground level.
Cottonbush	<i>Gomphocarpus fruticosus</i>	P1,P4	A common weed in the Southwest of WA, growing to 2m. Tall slender, pale green stems. Flowers white/cream. Spiny pod. Common in disturbed sites and denser thickets in hills. Poisonous to stock.	Spring glyphosate Sep–Dec before flowers form. Thorough coverage with spray essential. The addition of a wetting agent or penetrant at 0.25% is beneficial. Small plants can be hand pulled.
Docks	<i>Rumex species</i>		Native of Europe/Asia. There are 5 species of dock that are nuisance weeds in some shires of WA. Docks are vigorous perennial plants and prolific seeders, mainly consisting of erect flowering stems. Invades paddocks, found in damper soils, creeks and disturbed wetlands.	Areas can be spot treated with metsulfuron methyl or glyphosate in pastures. Glyphosate can also give good control when applied to rosettes of dock that usually appear before the main germination of the annual pastures. This is more likely to occur when there is a late break to the season and treatments can be applied mid to late April.
Doublegee	<i>Emex australis</i>	**P1	Introduced from S. Africa as a salad vegetable. Agricultural and wasteland weed. Green flowers in winter. Woody fruit with three spines. Annual. (P1; Murray, Serp/Jarrahdale, Waroona)	Spot spraying seedlings using either glyphosate or glyphosate/simazine mixture. Control in pastures can be obtained using Broadstrike® plus diuron, Jaguar® and Tigrex®. A permit is required for Tigrex if the area being treated is within 5 km of a vineyard or tomato crop.
Evening primrose	<i>Oenothera species</i>		Common invader of roadside verges. Yellow flowers in spring/early summer. Native to S.America, growing to 1m tall common in disturbed sites. Night flowering, moth pollinated.	2,4-DB is the only product registered for the control. This is one of the herbicides listed as a restricted product near vineyards so a permit will be required. Spray the weeds before they have 6 leaves.
Lantana	<i>Lantana camara</i>	P1	A Weed of National Significance (WoNS). A common garden and roadside weed that is spreading into native vegetation.	Metsulfuron, glyphosate and mixtures of both give good control. A high application volume of water is required for best results. The addition of a wetting agent Pulise gives a much quicker result and can be useful to increase the effectiveness of spraying in wet conditions. Treatments are best in summer.
Lovegrass	<i>Eragrostis curvula</i>	PP	Perennial to 1m. Flowers spring–summer. Can seed 5–6 times a year. Found in road verges and disturbed ground. Difficult to control. Serious fire hazard.	Burn or slash infestation and then treat regrowth once it has reached 15–20cm high using glyphosate. Along roadides a mixture of glyphosate and simazine. In sensitive areas a wiper can be used to apply glyphosate.
Paterson's curse	<i>Echium plantagineum</i>	**P3,**P4	Annual. Purple flowers. Hairy leaves. Widespread on agricultural land and roadside reserves. Reduces pasture productivity by excluding everything else. (P3; Murray, Serp/Jarrahdale, Waroona, P4; Boddington and Williams)	In clover based pasture use Broadstrike or Jaguar Tigrex. Blanket wipers can be used to apply glyphosate. Along roadides a mixture of glyphosate and simazine. In sensitive areas a wiper can be used to apply glyphosate.
Watsonia/ Wild gladioli	<i>Watsonia bulbifera</i>	PP	Garden escapee. Stiff upright leaves. Serious weed in wetter areas. Chokes native vegetation. Serious fire hazard.	Glyphosate and metsulfuron methyl can be sprayed or wiped onto the plants during Jul–Aug. Species specific Fropon® and Dalapon® are effective in native vegetated areas.
Wild radish	<i>Raphanus raphanistrum</i>		A common roadside weed in all areas of the South West, one of the States most prevalent weeds of agricultural crops and pasture.	Treatments include glyphosate, metsulfuron, 2,4-D amine etc. Consult with your agricultural advisor for the best treatments.
Veldt grass	<i>Ehrharta calycina</i>		Originating from S. Africa. Perennial grass, flowers in spring and is a common roadside weed and invader of bushland areas.	Treatment by cultivation and burning to remove old growth and herbicide application of new, actively growing leaves. Use glyphosate or grass specific herbicides such as Fusilade®.
Victorian tea tree	<i>Leptospermum laevigatum</i>	PP	Eastern States species. Has become a serious roadside weed. Sandy and lateritic soils. White flowers. Serious fire hazard.	Hand pull seedlings. Spot spray small plants. Treat using cut stump or basal bark spray using 1:60 mix of triclopyr and distillate. Check and re-treat new growth.

WEED INFORMATION

** Indicates declared status varies from area to area.

Important tips...

- Always have a management plan for replacing weeds with desirable species.
- The best, low maintenance strategy is to fill the area with suitable local native plants. Use either tubestock, direct seeding or cover the area with mulch. See 'References' for help.
- Problems in paddocks are less likely if the pasture is well managed. This includes maintaining beneficial species, reseeding when necessary and keeping a watch for new infestations.
- Be aware before you buy hay that you may be bringing in weed seed, such as Paterson's curse and Cape tulip. It is an offence to move or sell hay with declared plant material in it.

N.B. Burning of weeds on road verges may resolve the immediate fire hazard and visual effect of weeds, however, this practice only increases the long term problem. It improves propagation and germination conditions for weeds. Written approval is required from Council prior to burning any Council controlled land, including road verges.

References...

Hussey, B.M.J., et al. 1997. *Western Weeds*. Plant Protection Society of Western Australia, WA.

Moore, J., Wheeler, J. 2008. *Southern weeds and their control*. 2nd Ed. Department of Agriculture and Food WA, South Perth. WA.

Mortlock, W., et al. 1993. *Field Planting of Trees and Shrubs: a guide for landowners and developers in the Shire Serpentine-Jarrahdale*. Community Catchment Centre, WA.

Scheltema, M., and Harris, J. (Eds) 1995. *Managing Perth's Bushland*. Greening, Western Australia.

Serpentine-Jarrahdale LCDC. 1999. *A Guide to the Control of Declared Plants and Weeds in the Northern Peel Region*. Agriculture Western Australia, WA.

Where can you get help?

- Dept of Agriculture and Food Bunbury.....9780 6224
Weed control Advice (Andrew Reeves)
- Dept of Agriculture and Food Waroona.....9733 7777
 Serpentine Jarrahdale Landcare Centre9526 0012
 Shire of Boddington9883 8230
 Shire of Murray9531 7777
 Shire of Waroona9733 7800
 Waroona Landcare Centre9733 2628

Website resources

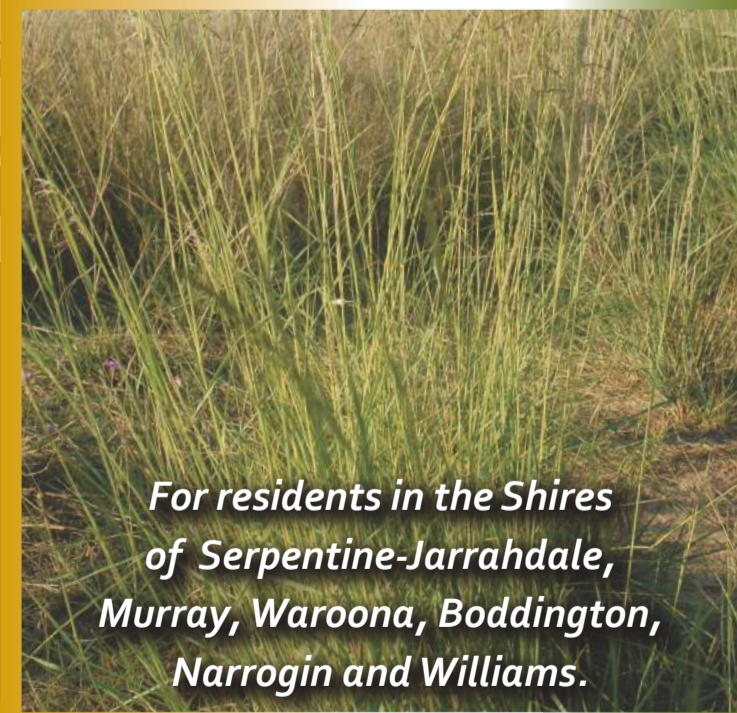
Department of Agriculture and Food WA
<http://www.agric.wa.gov.au/>
 FloraBase: The West Australian Flora
<http://florabase.calm.wa.gov.au/weeds/>

Be aware research is ongoing into the control of weeds. It is always worth contacting your Environmental and Landcare Officers to obtain the latest information. Pamphlets on control of specific weeds are available from the Department of Agriculture and Food WA.

Original pamphlet produced by:
 Serpentine-Jarrahdale LCDC, Weeds Committee.
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 Department of Agriculture and Food WA.
Updated and reprinted in 2011 by
 Serpentine Jarrahdale Landcare Centre.

There are Landcare Groups operating in our region. Why not consider joining one of them, even if you have a small block of land. They are a great source of information. Contact your local Landcare Centre for more information. See above for contact details.

The update and reprint of this brochure was funded by a Lotterywest Grant.



For residents in the Shires of Serpentine-Jarrahdale, Murray, Waroona, Boddington, Narrogin and Williams.

We need to get control of them.

