

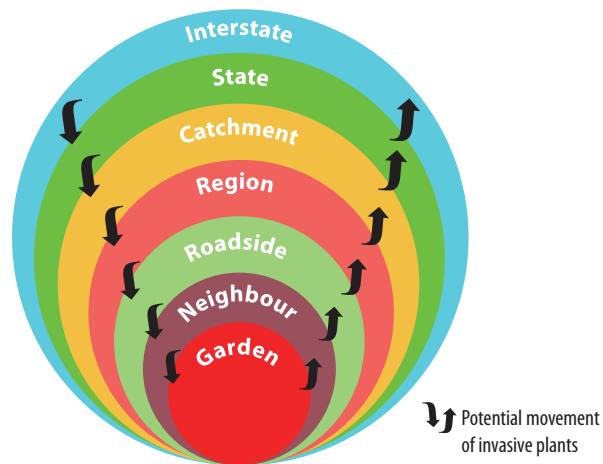


INVASIVE PLANTS IN YOUR PATCH

Weeds are everyone's business

Many plants which have been innocently introduced to gardens have subsequently 'jumped the garden fence' and become invasive elsewhere. Some of these garden escapees have become declared noxious weeds and others are environmental weeds.

Once an invasive plant escapes from the garden it can spread into neighbouring properties and roadsides. It may travel downstream and become a problem within the region, catchment, or even pose a threat to the State. Similarly invasive plant species may arrive in your patch from interstate or from another part of Victoria.



Give a weed an inch and it will take your yard!

Under the *Catchment and Land Protection Act, 1994* it is the legal responsibility of the land owner/manager to adopt control measures and prevent further spread of those noxious weeds that are classified as 'Regionally Controlled' and that occur on their land.

Other plants known as undeclared or environmental weeds can and do cause serious environmental, agricultural and financial issues. Land management includes taking measures to control the spread of environmental weeds on your property.

It makes sense to minimise the chance of weeds taking a hold on your property. Best results are achieved by remaining vigilant, and early intervention. Participating in group control is more effective than working alone. There are a number of Blackberry Action Groups and Landcare groups within the Murrindindi Shire that coordinate efforts on a local scale. Murrindindi Shire Council collaborates with these groups and prioritises roadside weed control programs around group efforts, endangered and threatened species and communities and areas of high conservation significance.

Having invaded all Australian landscapes and with seven new species naturalising in Victoria each year, weeds are second only to habitat loss as the greatest threat to biodiversity.

How weeds spread

Weeds spread easily, in great numbers and in a variety of ways. Plants may produce seeds or spread rhizomes (under-ground stems), or stolons (above-ground stems). They may spread by corms or bulbs or may be capable of vegetative reproduction (stems may root on contact with soil).

Wind can transport seeds many kilometres.

Water can wash seeds and plant parts down drains and into waterways where they can grow and spread.

Animals (domestic and wild), stock, introduced pest animals, people and pets all carry seeds attached on fur, hair, clothing and shoes from garden to bushland. Birds and foxes eat fruit and seed which they can carry many kilometres afield.

Machinery such as vehicles, slashers, earthmoving and farming equipment can all transport seeds or plant parts in radiators, wheel arches, tyres, blades, tynes, buckets and cabins. Earthwork creates disturbance and may trigger suckering of plants.

Present in gravel or soil, mulch, hay, fodder, seed, turf.

Dumping garden waste 'over the back fence' or in bushland and forests.

Some of Victoria's most significant weed species are likely to become more widespread with changes in land use and climatic conditions.

Invasive plants can:

- Compete with native vegetation for space, water, nutrients and light.
- Alter habitats and reduce food and shelter for native plants and animals.
- Form barriers and restrict access.
- Create a financial burden and become time consuming when undertaking control methods.
- Can injure or be irritating and/or toxic to people, stock and native animals.
- Invade waterways and may choke or divert water courses.
- Increase fuel loads and heat generated from fires.
- Decrease amenity value and productivity.

Treatment

Spot Spray—Spraying herbicide directly onto the foliage of the plant. When using herbicides to control invasive plants be sure you have chosen appropriately, exercise caution and always follow the labeled directions. Extra care needs to be taken around waterways, organic farms, schools and residential areas. Murrindindi Shire Council has spray units available for loan to assist landholders with their land management responsibilities. Many Landcare groups also have spray units available for hire at minimal cost. The Upper Goulburn Landcare Network and the Goulburn Broken Catchment Management Authority also offer rebates and incentives.

Cut and Paint—Appropriate for woody weeds. Herbicide is directly applied to the cut stem of a plant reducing the amount of chemical required.

Drill and Fill—Appropriate for woody weeds. Herbicide is directly applied into a series of holes drilled into and around the base of a plant or directly into the roots reducing the amount of chemical required.

If choosing to use herbicides as a method of control be sure to follow the Material Data Safety sheet and the instructions on the label. Chemicals should be handled with caution and protective safety gear should be worn when mixing and applying the herbicide. Weather conditions should be suitable for weed spraying and note there are restrictions on chemical use around waterways, near schools, nursing homes and organic farms.

Mechanical—If choosing mechanical methods (slasher or heavy machinery) for removal of weeds, consider the conditions and be aware of secondary affects such as erosion, sediment movement offsite and weed spread. Be mindful of where soil is deposited as it may contain a seed bank. Clean down machinery afterward and before commencing work on another site.

Hand weeding—Be sure to wear gloves as many plants have prickles or thorns or may produce irritating sap. Minimise cuts or infection by wearing tough gardening gloves.

Ensure you have correctly identified the plant as a Declared or environmental weed before taking measures to eradicate it. Some native plant species can be mistaken for weeds and under the *State Planning and Environment Act, 1987* native vegetation is protected.

Some of the more common invasive plants
in the Murrindindi Shire

Weeds of National Significance	Regional Controlled Weeds	Environmental Weeds
Blackberry	Bathurst Burr	Agapanthus
Boneseed	Blackberry	Arum Lily
Boxthorn	Boxthorn	Blue Periwinkle
Bridal Veil Creeper	Cape Broom	Bridal Creeper
Chilean Needle Grass	Dodder	Desert Ash
English Broom	English Broom	Gazania
Gorse	Gorse	Holly
Cape Broom	Hawthorn	Ivy
Some Willows	Horehound	Japanese Honeysuckle
	Paterson's Curse	Morning Glory
	Ragwort	Phalaris spp.
	Silverleaf Nightshade	Prunus species)
	Some Cotoneaster spp.	Silver Poplar
	Some Thistles	Some Willows
	St John's Wort	Sycamore Maple
	Sweet Briar	Tree of Heaven
	Thorn Apple	Wandering Jew
	Tutsan	Watsonia
		Robinia

If any of the invasive plants listed in this publication are already established in your garden then take steps to ensure that they do not become a nuisance to yourself, neighbours or roadsides. Avoid planting near drains, prune seed heads before maturity and consider replacing with sterile varieties or a local native plant (see inside table).

Disposing of Invasive Plants

When disposing of garden waste and invasive plant material it is important to ensure that it will not pose a threat elsewhere.

Seeds or vegetative pieces that may reshoot can be heat treated to temperatures that destroy their viability. This can be achieved by placing in bags and left to be solarised by heat from the summer sun for a few weeks. Alternatively a weed tea liquid fertiliser can be made, See 'Fact Sheet: Weed Tea Fertiliser' at www.abc.net.au/gardening/stories/s2267268.htm

For larger infestations mulch on site creating a green mulch and be prepared to either hand pull or spray emerging new growth.

MORE INFORMATION

Murrindindi Shire Council Alexandra Office
(03) 5772 0333 www.murrindindi.vic.gov.au

Upper Goulburn Landcare Network Yea (03) 5736 0105
<http://goulburnbroken.landcarevic.net.au/ugln>

Goulburn Broken Catchment Management Authority
Yea (03) 5736 0100 www.gbcma.vic.gov.au

Department of Environment and Primary Industries
Alexandra Office (03) 5772 0200 www.depi.vic.gov.au

Sustainable Gardening Australia
www.sgaonline.org.au

Gardening Australia-ABC
www.abc.net.au/gardening

Nursery and Garden Industry Victoria
www.ngiv.com.au

Identification & Reference Guides

The Weeds of Murrindindi iPhone and iPad app is a free download available from the iTunes store.

Weeds of the Goulburn Broken A Field Guide to Terrestrial and Aquatic Weeds Goulburn Broken Catchment Management Authority 3rd edition, 2008.

Stay informed, remain vigilant, be aware of changing conditions and take steps to minimise the spread of weeds in your patch.

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NATIVE PLANT SELECTION AS ALTERNATIVES TO INTRODUCED INVASIVE PLANTS

Invasive Plant	Comments	Alternative Native Plant Selection
Arum Lily <i>Zantedeschia aethiopica</i>	Thick rhizomous roots. Seeds spread by birds and other animals.	Kangaroo Paw - <i>Anigozanthus flavidus</i> Native Fuschsia - <i>Correa reflexa</i>
Blue Periwinkle <i>Vinca major</i>	Forms dense mats and can smother other desirable plants. Able to spread rapidly in heavily shaded conditions. Stem fragments can regrow.	Creeping Boobialla – <i>Myoporum parvifolium</i> Purple Coral Pea – <i>Hardenbergia violacea</i> & selected cultivars Running Postman - <i>Kennedia prostrata</i> Dusky Coral Pea - <i>Kennedia rubicunda</i>
Box Elder <i>Acer negundo</i>	Fast growing deciduous tree. Male & Female flowers on different plants. Spread by winged seeds.	Prickly-leaved Paperbark – <i>Melaleuca styphelioides</i> Snow in Summer - <i>Melaleuca linariifolia</i>
Bridal Creeper <i>Asparagus asparagoides</i>	Weed of National Significance. Spread by seed or rhizomes and dumping of garden waste.	Austral Clematis - <i>Clematis aristata</i> Apple Berry - <i>Billardiera scandens</i>
Broom, Cape & English <i>Genista monspessulana</i> <i>Cytisus scoparius</i>	Weeds of National Significance Forms dense stands excluding other vegetation. Spread by seed. High seed germination after fire.	Hop Goodinia - <i>Goodinia ovata</i> Golden Tip - <i>Goodia lotifolia</i>
Cotoneaster & Pyracantha <i>Cotoneaster</i> species	Produces berries that are readily dispersed by birds. Berries can be poisonous. Cotoneasters sucker readily.	Prickly Currant Bush – <i>Coprosma quadrifida</i> Sweet Bursaria - <i>Bursaria spinosa</i>
Desert Ash <i>Fraxinus angustifolia</i>	Suckers freely from roots. Can escape into riparian vegetation forming dense colonies, displacing native vegetation and affecting water quality.	Blackwood - <i>Acacia melanoxylon</i> Blueberry Ash - <i>Elaeocarpus reticulatus</i>
English Ivy <i>Hedera helix</i>	Spread by seed and stems. Stems reshoot at nodes when cut. Climbing stems have roots along the underside, slowly killing trees due to its weight and increased fungal infection caused by ivy roots penetrating host plant bark. Only becomes reproductive when climbing. Produces berries readily dispersed by birds. Fruits can survive mulch decomposition process and germinate in spread mulch. Forms dense mats and prevents revegetation of native species.	Wonga Wonga Vine - <i>Pandorea pandorana</i> Purple Coral Pea – <i>Hardenbergia violacea</i> & cultivars
Gazania <i>Gazania</i> species	Spreads by seed through wind, water and dumping of garden waste. Hybridises readily.	Fan Flower - <i>Scavoela aemula</i> Swan River Pea - <i>Brachysema lanceolatum</i>
Hawthorn <i>Crataegus monogyna</i>	Regionally Controlled weed. Produces berries readily dispersed by birds and other animals. Disturbance can cause suckering resulting in dense thickets.	Rosemary Grevillea - <i>Grevillea rosmarinifolia</i> Scarlet Bottlebrush - <i>Callistemon macropunctatus</i>
Holly <i>Ilex aquifolium</i>	Produces berries readily dispersed by birds. Plants can grow in heavy shade and can form impenetrable thickets. Broken stem pieces may re-shoot.	Pink-flowering Gum - <i>Eucalyptus leucoxyton rosea</i> Red-flowering Gum - <i>Corymbia ficifolia</i> (selected colours available)
Japanese Honeysuckle <i>Lonicera japonica</i>	Stems produce roots when at nodes when they contact soil. Produce berries which are easily dispersed by birds and other animals. Berries are poisonous and leaves may be toxic. Cut stumps reshoot. Very invasive.	Running Postman - <i>Kennedia prostrata</i> Dusky Coral Pea - <i>Kennedia rubicunda</i> Purple Coral Pea - <i>Hardinbergia violacea</i> Snake Vine – <i>Hibbertia scandens</i>
Laurel Cherry & Portugal <i>Prunus laurocerasus</i> <i>Prunus lusitanica</i>	Produces berries that are dispersed by birds. Stems root when touch ground. Can spread by suckers Evergreen. Seeds can be toxic,	Blackwood - <i>Acacia melanoxylon</i> Blueberry Ash - <i>Elaeocarpus reticulatus</i>
Lily of the Nile <i>Agapanthus praecox</i> ssp. <i>orientalis</i>	Spread by rhizomes forming thick clumps or by 100's of seeds. Leaves and rhizomes are toxic.	Spiny-headed Mat rush - <i>Lomandra longifolia</i> Tasman Flax-lily - <i>Dianella tasmanica</i>
Morning Glory <i>Ipomoea indica</i>	Forms dense blanket that smothers other vegetation. Rhizomes are capable of sprouting months after removal from ground. Stems produce roots at nodes when they contact soil.	Australian Bindweed – <i>Convolvulus erubescans</i> Creeping Boobialla - <i>Myoporum parvifolium</i>
Silver Poplar <i>Populus alba</i>	Often sends up numerous suckers forming dense thickets. Suckering stimulated when soil disturbed.	Mountain Swamp Gum - <i>Eucalyptus camphora</i> Argyle Apple - <i>Eucalyptus cinerea</i> Red Flowering Yellow Gum - <i>Eucalyptus leucoxyton rosea</i>
Sweet Pittosporum <i>Pittosporum undulatum</i>	Native to Eastern Victoria but now a widely spread environmental weed. Prevents growth around it by producing toxic chemicals. Produces berries which are readily spread by birds and other animals.	Native Frangipani – <i>Hymenosporum flavum</i> Weeping Pittosporum - <i>Pittosporum angustifolium</i>
Sycamore Maple <i>Acer pseudoplatanus</i>	Fast growing. Spread by winged seed.	Prickly-leaved Paperbark – <i>Melaleuca styphelioides</i> Snow in Summer - <i>Melaleuca linariifolia</i>
Wandering Jew <i>Tradescantia fluminensis</i>	Spread by stem sections in water or garden waste; or seed. Carpets the ground preventing regeneration of other species.	Australian Bindweed – <i>Convolvulus erubescans</i> Apple Berry - <i>Billardiera scandens</i>
Willow spp. <i>Salix</i> species	Some willows are Weeds of National Significance. Most species can spread by stem fragments and can block water flows. Some produce seeds, and some spread by root suckering. Reduces water quality when defoliates by increasing water nutrients and causing algal blooms. Deoxygenation of water degrades fish habitat and affects aquatic organisms. . Readily hybridise with other Willow taxa.	Drooping She-oak – <i>Allocasuarina verticiliata</i> River Wattle - <i>Acacia cognata</i> Weeping Bottlebrush – <i>Callistemon viminalis</i>

Acknowledgement: With thanks to Geoff Olive for assistance with native species selection.

(Note that there are numerous alternatives that could be substituted for the above listed invasive plants and that this list provides a sample selection only).