Declared Plant Policy

Government of South Australia

This policy relates to natural resources management under section 9(1)(d) of the Landscape South Australia Act 2019 *(the Act), enabling co-ordinated implementation and promotion of sound management programs and practices for the use, development or protection of natural resources of the State. Specifically, this policy provides guidance on the use and management of natural resources relating to the prevention or control of impacts caused by pest species of plants that may have an adverse effect on the environment, primary production or the community, as per object s7(1)(f) of the Act.*

field bindweed (*Convolvulus arvensis*)

Field bindweed is a deep-rooted perennial plant scattered across the agricultural regions and common in the Adelaide Metropolitan area, but principally important as a weed in irrigated pastures and locally in cropping.

Management Plan for Field Bindweed

Outcomes

- Prevent field bindweed spreading to cropping land or pastures on properties free of this weed.

Objectives

- Prevent the movement of contaminated soil, seed, hay or produce from infested areas.

Best Practice Implementation

- Inspect soil, loam and gravel pits to ensure these are free of field bindweed.
- Advice to landholders to reduce the movement of field bindweed seed or root fragments in produce from infested properties.
- Regional landscape boards and Green Adelaide to ensure that soil, loam, pot plants, grain, seed, hay and fodder are not offered for sale if contaminated with field bindweed seed or roots.

Regional Implementation

Refer to regional management plans for further details.

Region	Actions
Alinytjara Wilurara	Protect sites
Eyre Peninsula	Protect sites
Green Adelaide	Manage weed (by providing advice)
Hills and Fleurieu	Manage weed (by providing advice)
Kangaroo Island	Protect sites
Limestone Coast	Protect sites (monitor, map, contain)
Murraylands and Riverland	Protect sites
Northern and Yorke	Contain spread
South Australian Arid Lands	Protect sites

Declaration

To implement this policy, field bindweed is declared under the *Landscape South Australia Act 2019* throughout the whole of the State of South Australia. Its movement or transport on a public road, by itself or as a contaminant, or sale by itself or as a contaminant are prohibited. Landscape boards and Green Adelaide may require land owners to destroy field bindweed plants growing on their land used for the extraction or removal of soil, loam, sand or gravel. Landscape Boards and Green Adelaide are required to destroy plants on road reserves in their regions, and may recover costs from the adjoining landowners.

Field bindweed is declared in category 3 under the Act, for the purpose of setting maximum penalties and for other purposes. Any permit to allow its sale or road transport can only be issued by the regional landscape board or Green Adelaide pursuant to section 197.

Under the *Landscape South Australia (General) Regulations 2020*, Regulation 27 specifies the conditions under which a person is exempt from the operation of section 186 and may transport wool, grain or other produce or goods carrying field bindweed on public roads. Regulation 28 specifies conditions under which a person is exempt from the operation of section 188(2) and may sell wool, grain or other produce or goods carrying field bindweed. Note that certain produce or goods may be excluded from these general movement and sale exemptions by Gazettal Notice of the Chief Executive of the Department for Environment and Water.

The following sections of the Act apply to field bindweed throughout each of the regions noted below:

Region / Sections of Act	AW	EP	GA	HF	KI	LC	MT	NY	SAAL
186(1) Prohibiting entry to area									
186(2) Prohibiting movement on public roads	X	X	X	X	X	X	X	X	X
188(1) Prohibiting sale of the plant	X	X	X	X	X	X	X	X	X
188(2) Prohibiting sale of contaminated goods	X	X	X	X	X	X	X	X	X
190 Requiring notification of presence									
192(1) Landowners to destroy the plant on their properties*	X	X	X	X	X	X	X	X	X
192(2) Landowners to control the plant on their properties									
194 Recovery of control costs on adjoining road reserves*	X	X	X	X	X	X	X	X	X

*Sections 192(1) and 194 apply only on land used for the extraction or removal of soil, loam, sand or gravel.

Review

This policy is to be reviewed by 2025 or in the event of a change in a regional management plan for field bindweed.

Weed Risk

<u>Invasiveness</u>

Most dispersal of field bindweed occurs as root fragments in soil or as contamination in seed for sowing. The seed can germinate after passing through livestock, and market gardens have been infested after manure was spread.

Impacts

Field bindweed is summer growing and rarely affects cereal production in South Australia although may occur in cereals on heavy soils in higher rainfall areas. It is easily dominated by competitive crops or pastures, and is eaten by livestock; although it has been linked to photodermatitis it is not generally considered toxic to livestock. It is a nuisance weed in perennial horticulture where it competes with vines and fruit trees.

Potential distribution

Field bindweed grows in a wide range of habitats but is most vigorous on heavy soils in medium to high rainfall although it does not tolerate a high water table. The wide scatter of existing field bindweed infestations demonstrates its potential to infill other suitable habitats throughout these regions.

Feasibility of Containment

Control costs

Field bindweed can be controlled or suppressed by a wide range of selective and non-selective herbicides. However, due to its deep root system, repeated treatments are needed to manage it and complete eradication from a site may be costly.

Persistence

The vigorous extension of rhizomes from root fragments. Root growth can be vigorous, up to 10 metres per year. Cultivation allows infestations to increase in size and density by cutting and distributing root fragments and removing competition from annual plants.

Current distribution

Field bindweed is distributed through much of the Adelaide Metropolitan area and scattered in the Eyre Peninsula, Northern and Yorke, Hills and Fleurieu, Kangaroo Island, SA Murray Darling Basin and Limestone Coast regions.

State Level Risk Assessment

Assessment using the Biosecurity SA Weed Risk Management System gave the following comparative weed risk and feasibility of containment scores by land use:

Land use	Weed Risk	Feasibility of control	Response at State Level
Crop-pasture rotation	medium 46	high 27	protect sites
Grazing – southern	medium 63	high 27	protect sites
Irrigated pastures	high 185	very high 2	destroy infestations alert
Vegetables	negligible 10	medium 32	limited action
Perennial horticulture	low 22	medium 36	limited action

Considerations

Field bindweed is native to Europe, and was established in southern Australia in the nineteenth century after introduction as a contaminant of seed or nursery stock. Risk assessment indicates protecting sites as the management action; this is best implemented by providing control advice, and also enforcing control on land used as sources of soil. Any infestations that arise in irrigated pasture would be destroyed as a high priority by landholders.

As the major means of spread is by contaminated seed or soil, restrictions on extraction and movement of contaminated soil, and sale of contaminated produce, minimise spread while leaving decisions on control of field bindweed to the landowners.

Synonymy

Convolvulus arvensis L., Sp. Pl. 1: 153 (1753)

Taxonomic synonyms:

Convolvulus chinensis Ker Gawl., Bot. Reg. t.322 (1878)
Convolvulus sagittifolius (Fisch.)T.Liou & Ling, Fl. Ill. Nord Chine Fasc. 1: 17 (1931)

Other common names include bindweed, common bindweed, cornbine, European bindweed, lesser bindweed and wild morning glory.

Hon David Speirs MP
Minister for Environment and Water

Date: 28 March 2021