



## Declared Plant Policy

*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.*

### perennial thistle (*Cirsium arvense*)

Perennial thistle a deep-rooted perennial with extensive rhizomes and is a weed of broad acre agriculture in some temperate regions of the world. It has occasionally been collected in South Australia and may still be present.

#### Management Plan for Perennial Thistle

##### Outcomes

- No losses to pasture production from perennial thistle in South Australia.

##### Objectives

- Prevent the establishment of perennial thistle in South Australia.

##### Best Practice Implementation

- Any infestations of perennial thistle found to be destroyed.

##### Regional Implementation

Refer to regional management plans for further details.

| Region                      | Actions                               |
|-----------------------------|---------------------------------------|
| Alinytjara Wilurara         | Limited action                        |
| Eyre Peninsula              | Limited action                        |
| Green Adelaide              | Contain spread                        |
| Hills and Fleurieu          | Contain spread                        |
| Kangaroo Island             | Destroy infestations - Regional alert |
| Limestone Coast             | Manage sites                          |
| Murraylands and Riverland   | Limited action                        |
| Northern and Yorke          | Monitor                               |
| South Australian Arid Lands | Limited action                        |

## perennial thistle policy

### Declaration

To implement this policy, perennial thistle is declared under the *Landscape South Australia Act, 2019* throughout the whole of the State of South Australia. Its entry to the State, movement or transport on a public road by itself or as a contaminant, or sale by itself or as a contaminant are prohibited. In all regions except Eyre Peninsula, Alinytjara Wilurara and South Australian Arid Lands, land owners are required to notify their regional landscape board or Green Adelaide of infestations on their land.

The Eyre Peninsula, Hills and Fleurieu, Kangaroo Island, Limestone Coast, Murraylands and Riverland, and Northern and Yorke Landscape Boards, and Green Adelaide, may require land owners to destroy perennial thistle plants on their land. These authorities are required to destroy plants on road reserves in their regions and may recover costs from the adjoining land owners.

Perennial thistle is declared in category 1 under the Act for the purpose of setting maximum penalties and for other purposes. Any permit to allow its entry, road transport or sale can only be issued by the Chief Executive of the Department for Environment and Water or their delegate 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 perennial thistle on public roads, or bring them into the State. 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 perennial thistle. Note that certain produce or goods may be excluded from these general movement and sale exemptions by Gazettal Notice of the Chief Executive, DEW.

The following sections of the Act apply to perennial thistle throughout each of the regions noted below:

| Sections of Act   | Region |    |    |    |    |    |    |    |      |
|---|--------|----|----|----|----|----|----|----|------|
|   | AW     | EP | GA | HF | KI | LC | MR | NY | SAAL |
| 186(1) Prohibiting entry to area                            | X      | X  | X  | X  | X  | X  | X  | X  | X    |
| 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                      |        |    | X  | X  | X  | X  | X  | X  |      |
| 192(1) Land owners to destroy the plant on their properties |        | X  | X  | X  | X  | X  | X  | X  |      |
| 192(2) Land owners to control the plant on their properties |        |    |    |    |    |    |    |    |      |
| 194 Recovery of control costs on adjoining road reserves    |        | X  | X  | X  | X  | X  | X  | X  |      |

### Review

This policy is to be reviewed by 2025, or in the event of a change in one or more regional management plans for perennial thistle.

## **Weed Risk**

### Invasiveness

Unlike other thistles, perennial thistle is dioecious with separate male and female plants. It is insect pollinated so the male and female plants would need to be growing in the same locality for seed to be produced. Along with its perennial habit, this is characteristic of a plant forming permanent populations rather than an opportunist coloniser. However, seed can be produced in large quantities and is efficiently adapted for dispersal by wind. A new clonal infestation can reach several metres in diameter in the first two years of growth.

### Impacts

Overseas and in Victoria, perennial thistle causes losses by competition with pasture and some cultivated crops in cool temperate climates.

### Potential distribution

Although it was introduced in 1888, perennial thistle has never become established in South Australia. Isolated patches were previously found in the Mount Gambier area and Fleurieu Peninsula, suggesting that it can grow in the highest rainfall areas of the State or under irrigation.

## **Feasibility of Containment**

### Control costs

Control of established infestations requires a sustained management effort over several years. The timing of annual treatments is important; herbicide is translocated to the root system if applied to the rosettes, but much less if applied to plants in the bud stage.

### Persistence

As a perennial, perennial thistle can regrow after grazing or slashing. It has no dormant or drought-resistant vegetative parts so is not likely to survive dry periods. Seed may be able to persist through these conditions but seed production would depend on both male and female plants being present.

### Current distribution

No locations are currently known in South Australia. The State Herbarium has twentieth century specimens from Victor Harbor, Murtonga and Mount Gambier. Other incursions were destroyed at Piccadilly Valley and Hatherleigh.

## **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:

## perennial thistle policy

| Land use           | Weed Risk   | Feasibility of control | Response at State Level |
|--------------------|-------------|------------------------|-------------------------|
| Grazing - southern | low<br>38   | very high<br>0         | monitor                 |
| Irrigated pastures | high<br>112 | very high<br>0         | destroy<br>infestations |

### Considerations

Perennial thistle was originally proclaimed because it is a significant weed in other countries and information on its potential in South Australia was lacking.

Risk assessment indicates a management action of containment only to protect irrigated pastures and high-rainfall grazing. Only small areas of South Australia are potential habitat for perennial thistle. While sale and movement are prohibited uniformly across the State, regional actions vary according to the extent of the vulnerable land use in each region.

Kangaroo Island treats perennial thistle as a regional alert since the island has high rainfall pastures and is free of the weed. The Hills and Fleurieu region aims to contain spread by treating any new incursions, and the Limestone Coast aims to manage sites.

### Synonymy

*Cirsium arvense* (L.) Scop., Fl. Carniolica edn 2, 2:126 (1772)

Basionym

*Serratula arvensis* L., Sp. Pl. edn 2, 2:1149 (1763)

Nomenclatural synonym:

*Carduus arvensis* (L.) Robson, Brit. Fl. 163 (1777).

Taxonomic synonyms:

*Cirsium dioicum* Cass., Dict. Sci. Nat., ed. 2. 27: 190 (1823).

*Cirsium incanum* (S.G.Gmel.) M.Bieb., Fl. Taur.-Caucas. 3: 561 (1819).

Other common names include Californian thistle, Canada thistle, corn thistle and creeping thistle.

Hon David Speirs MP  
**Minister for Environment and Water**

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