



Government
of South Australia

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.

wild artichoke (*Cynara cardunculus*)

Wild artichoke is a crop plant gone wild, a large perennial thistle conspicuous by its size. It is rarely a weed of arable land but may encroach on neglected pastures in high rainfall, red-brown earth areas.

Management Plan for Wild Artichoke

Outcomes

- Prevent degradation of southern perennial pastures and associated native vegetation remnants by artichoke incursion.

Objectives

- To control any high-priority wild artichoke infestations.
- To contain spread from large infestations and prevent reinvasion of lands cleared of wild artichoke in high rainfall areas.

Best Practice Implementation

In high rainfall areas with suitable soils (e.g. red brown earths) where regional management plans include enforced control:

- Regional landscape boards to seek control by land owners of high priority infestations.
- Regional landscape boards to control high priority infestations on road reserves and recover costs from adjoining landholders.
- Regional landscape boards to develop a plan to control or contain large infestations and to implement the plan progressively.
- Regional landscape boards and Green Adelaide to ensure flower heads are not collected and distributed or sold for floral arrangements.

Regional Implementation

Refer to regional management plans for further details.

wild artichoke policy

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

Declaration

To implement this policy, wild artichoke 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. An exemption is made for cultivated artichokes sold or transported as a vegetable. The Hills and Fleurieu, Northern and Yorke and Kangaroo Island Landscape Boards and Green Adelaide, may require land owners to control wild artichoke on their land unless it is cultivated as a commercial crop or in a domestic vegetable garden. These authorities are required to control plants on road reserves in their regions, and may recover costs from the adjoining land owners.

Wild artichoke is declared in category 3 under the Act, for the purpose of setting maximum penalties and for other purposes. Any permit to allow its road transport or sale 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 variegated thistle 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 variegated thistle. 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 artichoke, unless planted and maintained for commercial or domestic use, 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 | | | | | | | | | |
| 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) Land owners to destroy the plant on their properties | | | | | | | | | |
| 192(2) Land owners to control the plant on their properties | | | X | X | X | | | X | |
| 194 Recovery of control costs on adjoining road reserves | | | X | X | X | | | X | |

Sections 186(2) and 188(1) do not apply to artichokes harvested for use as a vegetable.

wild artichoke policy

Sections 192(2) and 194 do not apply to artichokes planted as a commercial crop or in domestic vegetable gardens.

Review

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

Weed Risk

Invasiveness

Wild artichoke rarely flowers in the first year of growth but if allowed to survive it will flower and seed annually from the second summer. The seed has a pappus of feathery hairs but is not adapted for wind dispersal because the pappus easily breaks away from the heavy seed. Most falls within 18 metres of the parent plant. Small seed-eating birds may disperse them for more than 200 metres, and flood waters can carry them much further downstream. Cut pieces of the perennial taproot can produce new plants but this is important only where infested areas are cultivated.

Control of wild artichoke can be difficult because it is a perennial weed, but it does not readily spread into competing vegetation. It will slowly take over neglected pastures in high rainfall, red-brown earth areas.

Impacts

Wild artichoke can come to dominate permanent pastures, where it reduces yields by competing for space with more palatable plants, and competing for moisture. Its spines deter sheep and cattle from grazing on heavy infestations but, when hungry, animals will eat the leaves and survive on them. It has low nutrient value and may cause stomach impaction and mechanical injuries, but is not poisonous and was promoted as a forage plant in the early 20th century.

Wild artichoke may invade native grasslands, grassy woodlands, and riparian vegetation where it forms large dense stands in disturbed areas. In parts of the mid-north it is a weed of lucerne.

Potential distribution

Wild artichoke is common in the higher rainfall areas receiving over 450 mm per annum, with heavy red-brown earths. There is scope for local spread in the higher rainfall areas although it is unlikely that the externalities caused by it are high in these areas.

Feasibility of Containment

Control costs

Wild artichoke is a relatively simple weed to control. An integrated management program is the key to successful thistle management. The use of a range of tools such as the maintenance of a strong perennial pasture and strategic herbicide application is very successful in controlling this plant. Herbicide control can be very effective and is an essential

wild artichoke policy

part of the overall management of this plant. When there is a low density of wild artichoke spot spraying is cheap and effective.

Grazing by goats can substantially reduce flowering of wild artichoke and thus restrict its seed production.

Persistence

Seeds may germinate at any time of the year but most do so after autumn rains. Seedlings develop slowly through winter before making rapid growth in spring. Plants may flower in the first year but generally flowering does not occur until the second summer. A deep taproot develops in the first year.

Current distribution

Wild artichoke is found wherever there is a suitable soil type on east and west slopes of the Mount Lofty Range, extending north to the Lower Flinders region. It also occurs as scattered infestations on Eyre Peninsula, Yorke Peninsula, Kangaroo Island, the Murray Mallee and upper Limestone Coast.

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 |
|--------------------|------------------|-------------------------------|--------------------------------|
| Grazing - southern | medium 69 | medium 36 | manage sites |
| Native vegetation | low 20 | high 23 | monitor |

Considerations

Artichoke is a native of southern Europe and North Africa, introduced to South Australia as a vegetable by 1839. Its primary dispersal was due to cultivation, but before 1903 it had established as a wild plant.

Cultivars of artichoke are grown commercially and in home gardens for their flower heads which are eaten as the vegetable "globe artichoke" and sometimes for its leaf bases which are the vegetable "cardoon". The declaration is worded to allow these uses of the plant to continue.

Risk assessment at State level indicates site management to prevent wild artichoke establishing in pasture, and monitoring infestations in native vegetation. Regional management plans vary according to regional habitats and presence of the weed. In the Northern and Yorke region where the largest and longest-established infestations occur, and also the Green Adelaide and Hills and Fleurieu regions, high priority infestation sites are managed and control may be enforced. The Eyre Peninsula and Murraylands and Riverland regions also aim to manage sites but through voluntary management by land owners. Kangaroo Island aims to contain spread, and Limestone Coast monitors the weed.

Synonymy

Cynara cardunculus L., Sp. Pl. 2: 827 (1753)

Taxonomic synonyms:

Carduus cynara E.H.L.Krause, Deutschl. Fl. (Sturm), ed. 2. 14: 61 (1906)

Cnicus communis Lam., Fl. Franç. (Lamarck) 2: 15 (1779)

Cynara ferox Ten. ex Steud., Nomencl. Bot. ed. 2. 1: 462 (1840)

Cynara horrida Aiton, Hortus Kew. (W. Aiton) 3: 148 (1789)

Cynara scolymus L., Sp. Pl. 2:827 (1753)

Cynara spinosissima J.Presl & C.Presl, Delic. Prag. 109 (1822)

Cynara sylvestris Lam., Encycl. (Lamarck) 1(1): 277 (1783)

Other common names include alcachofa, artichoke thistle, cardoon, globe artichoke, Scotch thistle and Spanish artichoke.

Hon David Speirs MP

Minister for Environment and Water

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