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.*

gorse (*Ulex europaeus*)

Gorse is a spiny leguminous shrub that forms dense thickets. It impacts on permanent pasture and remnant native vegetation as it invades vegetation opened up by bushfires or partial clearing.

Management Plan for Gorse

Outcomes

- Maintain pasture production and the integrity of native vegetation.

Objectives

- Regional landscape boards to eradicate outlying satellite infestations of gorse
- Regional landscape boards to contain established infestations of gorse
- Regional landscape boards to develop and implement regional management plans to progressively reduce the extent and impact of gorse

Regional Implementation

Region	Actions
Alinytjara Wilurara	Limited action
Eyre Peninsula	Destroy infestations
Green Adelaide	Protect sites
Hills and Fleurieu	Protect sites
Kangaroo Island	Destroy infestations
Limestone Coast	Destroy infestations
Murraylands and Riverland	Protect sites
Northern and Yorke	Protect sites
South Australian Arid Lands	Limited action

Declaration

To implement this policy, gorse 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. Notification of infestations in the Limestone Coast region is necessary to ensure these are controlled. 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 control gorse plants growing on their land. These authorities are required to control gorse plants on road reserves in their regions, and may recover costs from the adjoining land owners.

Gorse is declared in category 2 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 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 gorse 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 gorse. 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 gorse throughout each of the regions noted below:

Region / Sections of Act	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	X	X	X	
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 any regional management plan for gorse.

Weed Risk

Invasiveness

Gorse forms infestations on a wide range of soil types, and is very competitive on alkaline soils of low nutrient status.

Gorse reproduces by seeds, which are produced in large numbers, but due to their size are seldom dispersed more than a few metres from the parent plant. Seed germinates over a range of temperatures from 14 to 24°C. Due to its slow process of dispersal, gorse has not yet reached its limits in this State and is found mainly in areas where it was once planted as a hedge.

In its native habitat gorse evolved as a fire-climax plant, readily catching fire and burning to ground level but regenerating from the base after the fire. The seeds are also resistant to a moderate burn and adapted to germinate after scorching by fire.

Impacts

Gorse reduces the quality of pasture services in grazing land uses. Although young shoots or seedlings are palatable, the mature spiny foliage is not browsed. Seedlings germinating under the cover of older bushes are protected from grazing and can slowly encroach on pasture; old gorse infestations on neglected land prevent stock access and necessitate expensive control measures to restore the land to production.

It displaces native vegetation, and forms dense monocultures. The dense spiny thickets of gorse exclude regeneration, create a fire hazard and provide cover for rabbits. It does not establish in intact native vegetation, but invades vegetation opened up by bushfires or partial clearing. As in the case of blackberry, long-range dispersal is a rare event but once established the thickets are long-lived and continue to expand in size.

Potential distribution

Gorse still has potential to expand its current range and impacts. It has slow dispersal mechanisms, with many suitable areas at serious risk of infestation. Higher rainfall areas in particular are at increased risk.

Feasibility of Containment

Control costs

Control is possible but expensive, requiring considerable time to remove old infestations, and may be neglected unless enforced.

Control of new infestations is easier and more cost effective. Isolated juvenile plants may be mechanically removed, or treated with herbicides. Some NRM regions have implemented integrated weed management programs using herbicides, mechanical, and biological control programs, achieving control of dense established infestations.

Where mechanical removal is necessary, control costs may be high in the short term, but reduce in the medium term. This has been trialled successfully in combination with revegetation in a number of locations.

Biological control offers a cost effective means to reduce seed set significantly in dense established infestations. Gorse spidermites have been successfully used in a number of locations in SA, in combination with mechanical and herbicide control techniques.

Persistence

There is a very large seedbank with high seed viability. The seeds are hard and long-lived in soil, germinating in large numbers following a fire or more slowly after clearing of the bushes.

However, the seed bank is almost entirely in the top 20 cm of soil and seed will not establish from depths of more than 10 cm.

To be effective, control programs need to include follow up control and monitoring for at least 25 years to prevent regeneration from buried seed or reinfestation from nearby plants.

Current distribution

Due to its lack of adaptations for long-range dispersal, gorse is restricted in its distribution to areas where it was formerly used for hedges. The main infestations occur in the Hills and Fleurieu, Limestone Coast and Northern and Yorke regions. Small isolated infestations occur in the Eyre Peninsula, Kangaroo Island, and Murraylands and Riverland 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
Grazing - southern	high 101	high 18	contain spread
Forestry	medium 45	very high 10	contain spread
Native vegetation	medium 63	high 21	protect sites

Considerations

Gorse was introduced as a hedge plant around 1840 and deliberately dispersed through most of its present range for this purpose. It was proclaimed for parts of the State under the *Weeds Act, 1956*, and placed on schedule three under the *Pest Plants Act, 1975.*

Risk assessment indicates manage weed as the action in permanent grazing land, protect sites in rotational paddocks and irrigated pasture, and limited action in other land uses. While sale and movement are prohibited uniformly across the State, regional actions vary according to the land uses in each region.

Gorse is a Weed of National Significance, with priority given to the eradication of outlying infestations. Five of the former NRM regions participated in management efforts supported through the National Gorse Taskforce and committed to 25-year memoranda of understanding to ensure the destruction of targeted infestations. This revised policy document replaces the five MOUs since the tenure of the taskforce ended in 2011. These regional Landscape Boards are committed to:

- Delimit and map their gorse infestations
- Facilitate the destruction of gorse plants within 12 months
- Prevent movement of seed
- Inspect gorse sites annually and report to PIRSA Biosecurity SA

Gorse is localised and delimited in the Kangaroo Island, Eyre Peninsula and Limestone Coast regions, and these regional landscape boards are committed to the destruction of gorse infestations in their regions. The Murraylands and Riverland, and Northern and Yorke Boards are committed to the destruction of certain outlying infestations only. The management action in these regions, and in the Green Adelaide and Hills and Fleurieu regions is protect sites. Gorse does not occur in the Alinytjara Wilurara and South Australian Arid Lands regions, where only limited action is required.

Synonymy

Ulex europaeus L., Sp. Pl. 2: 741 (1753)

Taxonomic synonyms:

Ulex armoricanus Mabille, Actes Soc. Linn. Bordeaux 25: 524 (1864)
Ulex compositus Moench, Methodus (Moench) 289 (1794)
Ulex floridus Salisb., Prodr. Stirp. Chap. Allerton 829 (1796)
Ulex strictus J.Mackay, Trans. Roy. Irish Acad. 14: 166 (1824)
Ulex hibernicus G.Don, Gen. Hist. 2: 148 (1832)
Ulex major Thore, Essai Chloris 299 (1803)
Ulex vernalis Thore, Essai Chloris 299 (1803)

Other common names include common gorse, golden gorse, furze, furse and whin.

References

National Gorse Taskforce (2009) *Gorse National Best Practice Manual* 2nd edition (Department of Primary Industries and Water: Hobart).

Hon David Speirs MP
Minister for Environment and Water

Date: 28 March 2021