Declared Plant Policy
under the Natural Resources Management Act 2004

Government of South Australia

English broom (*Cytisus scoparius*)

English broom is a shrub that forms dense thickets, excluding native vegetation and providing cover for rabbits. It has become a major woody weed in the Mount Lofty Ranges and Fleurieu Peninsula region.

Management Plan for English Broom

Outcomes

- Prevent further spread of broom into bush and pasture
- Maintain the integrity of native vegetation.

Objectives

- High priority infestations of English broom in the control areas destroyed
- Larger infestations in these areas contained.
- No further spread of English broom to currently uninfested areas.

Implementation

- NRM authorities to control infestations on road reserves.
- NRM authorities and Chief Officer to enforce the prohibition on sale of plants of these broom species.
- NRM authorities in the active control areas to ensure all high priority infestations on private or public land are controlled.
- Infestations too large for immediate destruction in these areas to be the subject of plans for containment and progressive reduction by direct treatment or by encouraging regeneration of native vegetation as appropriate.

Regional Implementation

Refer to regional management plans for further details.

NRM Region	Actions
Adelaide and Mount Lofty Ranges	manage sites
Alinytjara Wilurara	limited action
Eyre Peninsula	protect sites
Kangaroo Island	contain spread - regional alert
Northern and Yorke	protect sites
South Australian Arid Lands	limited action
South Australian Murray Darling Basin	protect sites
South East	protect sites

Declaration

To implement this policy, English broom is declared under the *Natural Resources Management Act, 2004* throughout the whole of the State of South Australia. The movement or transport of the plant on a public road, by itself or as a contaminant, or the sale by itself or as a contaminant is prohibited. NRM authorities in all regions except Alinytjara Wilurara and SA Arid Lands may require land owners to control English broom plants growing on their land. NRM authorities in these regions are required to control plants on road reserves and may recover costs from the adjoining land owners.

On Kangaroo Island, notification of the presence of plants is necessary to ensure any incursion is promptly detected.

English broom is declared in category 3 under the Act, for the purpose of setting maximum penalties and for other purposes. Any permit to allow its movement or sale can only be issued by the Chief Officer pursuant to section 188.

The following sections of the Act apply to English broom throughout each of the NRM regions noted below:

Region / Sections of Act	AMLR	AW	EP	KI	NY	SAAL	SAMDB	SE
175(1) Prohibiting entry to area								
175(2) Prohibiting movement on public roads	X	X	X	X	X	X	X	X
177(1) Prohibiting sale of the plant	X	X	X	X	X	X	X	X
177(2) Prohibiting sale of contaminated goods	X	X	X	X	X	X	X	X
180 Requiring notification of infestations				X				
182(1) Landowners to destroy the plant on their properties								
182(2) Landowners to control the plant on their properties	X		X	X	X		X	X
185 Recovery of control costs on adjoining road reserves	X		X	X	X		X	X

Review

This policy is to be reviewed by 2020 or in the event of a change in one or more regional management plans for English broom.

Weed Risk

<u>Invasiveness</u>

English broom is a leguminous shrub that grows rapidly after the first year and produces large quantities of hard seed.

Seed is scattered for a few metres when the pods burst. Longer distance dispersal is due mainly to road graders and earthmoving equipment, with some movement by animals or in mud on vehicles. Infestations are only found in regions where English broom has been used as an ornamental.

Germination occurs in autumn and spring after the seed coat has been damaged by fire or abrasion. Major disturbance, such as fire or partial clearing, is usually needed before English broom can establish in native vegetation.

Impacts

English broom can form dense thickets that exclude native shrubs, at least in the short term, and provide cover for rabbits. Being a legume, English broom fixes nitrogen from the air, increasing soil fertility and providing a more suitable habitat for other weeds to invade.

It has the ability to become the dominant shrub species, particularly after fires, due to strong seedling recruitment. Brooms also out-compete poor or degraded pasture and reduce agricultural production. Although stock will browse seedlings and thereby prevent encroachment into managed pasture, old broom infestations on neglected land can exclude stock and necessitate more expensive control measures to restore the land to production.

English broom is a fire hazard in forest areas where it can form an inflammable understorey at the edge of forests where fires are most likely to start.

Potential distribution

English broom prefers moderate to high rainfall areas of humid temperate regions, often on steep slopes at altitudes of 300-800 metres above sea level. Infestations in South Australia occur in areas with over 700 mm annual rainfall. It grows on a wide range of soils including sandy soils, and is particularly common on roadsides and in woodland.

It may be expected to grow in hill vegetation from southern Eyre Peninsula, Kangaroo Island, Fleurieu Peninsula and Mount Lofty Ranges to the lower South East; it has a narrower potential range than Cape broom in this State.

Feasibility of Containment

Control costs

Due to English broom's persistence, no one method alone will give total control of existing broom plants and subsequent seedlings. A combination of methods is required for long-term control.

Sheep, goats and cattle eat English broom, particularly younger seedlings, and may suppress the development of infestations. Larger plants may need to be cut or slashed to allow better grazing access for stock.

Several herbicides are registered in South Australia for use as a foliar application or as part of basal bark and cut stump application. Cutting seedlings when they are 5 to 10 cm high can provide effective control of regenerating plants. Thickets can be slashed with a brush cutter and any regrowth sprayed with herbicide.

Persistence

Matures stands of English broom produce up to 2000 seeds per plant annually. These are long lived in the soil, more than 80 per cent remaining dormant and viable after 45 months, and can germinate in autumn and spring for a number of years.

Current distribution

The current distribution of English broom in SA is less that its potential distribution, with infestations limited to the Mount Lofty Ranges and both sides of the Fleurieu Peninsula. 85% of infested area is within the Adelaide and Mount Lofty Ranges region.

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
Native vegetation	medium 42	high 22	Protect sites
Forestry	low 28	medium 40	Limited action

Considerations

English broom was first proclaimed for a few Pest Plant Board areas in the Adelaide Hills in 1980. At that time, it was seen as a 'community pest plant' as its impacts were on native vegetation.

Risk assessment indicates a management action at State level of protecting sites in native vegetation. Regional management plans vary according to regional habitats and presence of the weed. In the Adelaide and Mount Lofty Ranges NRM region where the largest and longest-established infestations occur the weed is managed. The Eyre Peninsula, SA Murray-Darling Basin, South East and Northern and Yorke NRM regions protect sites. Kangaroo Island, where English broom is still absent, treats it as an alert weed to be contained. English broom has been recognised as a Weed of National Significance and will be the subject of a national control strategy.

Synonymy

Cytisus scoparius (L.)Link, Enum. Hort. Bot. Berol. Alt. 2: 241 (1822)

Basionym: *Spartium scoparium* L., Sp. Pl. 2: 709 (1753)

Nomenclatural synonyms:

Sarothamnus scoparius (L.)Wimm., Fl. Schles. [Wimmer] (1832)

Taxonomic synonyms:

Cytisus scoparius 'Andreanus'
Sarothamnus bourgaei Boiss., Diagn. Pl. Orient. ser. 2, 2: 6 (1856)
Sarothamnus oxyphyllus Boiss., Diagn. Pl. Orient. ser. 2, 2: 7 (1856)
Sarothamnus vulgaris Wimm., Fl. Schles. [Wimmer] 278 (1832)

Other common names include common broom and Scotch broom.

Many cultivars, e.g. 'Dragonfly', 'Lord Lambourne', 'Fulgens', Mrs E. Maude', 'Cornish Cream', 'Sulphureus' and 'Crimson King' are believed to be selections or hybrids of this species.

Hon Ian Hunter MP
Minister for Sustainability, Environment and Conservation

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