



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.

pampas grasses (*Cortaderia* spp.)

Seed-producing pampas grasses include forms of *Cortaderia selloana* and *Cortaderia jubata* that are naturalised in South Australia, having been cultivated for ornament since the 19th century. Another *Cortaderia* species, toe-toe, is not present in South Australia and is the subject of a separate policy.

Management Plan for Pampas Grasses

Outcomes

- Protect native vegetation and forestry plantations from impacts of pampas grass infestations.

Objectives

- Prevent the further spread of seed-producing pampas grasses in South Australia.
- Protect native vegetation and forestry plantations from pampas grass infestations.

Best Practice Implementation

- Regional landscape boards and Green Adelaide to survey for the presence of seed-producing pampas grass in their regions.
- Regional landscape boards and Green Adelaide to control priority infestations.
- Regional landscape boards, Green Adelaide and the Chief Executive of the Department for Environment and Water to enforce the prohibition on sale of plants.
- Regional landscape boards and Green Adelaide to ensure any plants found in nurseries are destroyed.

Regional Implementation

Refer to regional management plans for further details.

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

Declaration

To implement this policy, pampas grasses are declared under the *Landscape South Australia Act 2019* throughout the whole of the State of South Australia. Their entry to the State, movement or transport on a public road by themselves or as contaminants, or sale by themselves or as contaminants are prohibited. Notification of the presence of plants is necessary to ensure any incursions are promptly detected and destroyed. All regional landscape boards and Green Adelaide may require land owners to control pampas grass plants found on their land. These authorities are required to control plants on road reserves in their regions and may recover costs from the adjoining land owners.

Pampas grass is declared in category 2 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, DEW 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 pampas grass 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 pampas grass. 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 pampas grass 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	X	X	X
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	X	X
194 Recovery of control costs on adjoining road reserves	X	X	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 pampas grasses.

Weed Risk

Invasiveness

Cortaderia jubata is apomictic, so it has up to 100% seed set resulting in thousands of seeds from each tussock. It can complete its life cycle within two years, and flowers every year. In California, New Zealand and Tasmania it has spread from cultivation to a greater extent than *C. selloana*, and forms permanent infestations in which native vegetation cannot re-establish.

Most of the *Cortaderia selloana* plants that were traditionally grown for ornament produce only female flowers, and where only this form is present there is no possibility of spread by seed. However, wherever male or hermaphrodite plants have been planted seed will be produced as with pink pampas grass.

The seeds are shed in autumn at the right time to establish during the wet months of the year in South Australia. They are short-lived in the soil, most germination occurring within two weeks, therefore pampas grass will only spread when the seedlings can establish rapidly on bare ground.

Pampas grass tussocks slowly increase in size by producing new shoots around the edge, but vegetative spread occurs only when the plants are moved by flood, earthworks or deliberate replanting.

Impacts

Once established, pampas grass is highly competitive, restricting the regeneration of native trees or the replanting of pines. Infestations are a fire hazard and may harbour vermin. They are of greatest potential weed significance to forestry operations, but are not considered agricultural weeds, because young plants are readily grazed by stock and have no potential to establish in cropping systems.

Potential distribution

Pampas grass grows on soils ranging from sand to clay and moderately acid to alkaline. It is adapted to growth on low-nutrient soils and is most competitive on these sites. It has a wide potential distribution in the southern part of South Australia including the majority of forested areas of the State, and wetlands or wooded areas in much of the agricultural zone. The pastoral regions are too dry for the establishment of pampas grass.

Feasibility of Containment

Control costs

The method of control for pampas grasses depends on the site on which they occur and the potential risk for causing new infestations. Permanent mechanical removal is recommended wherever possible.

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Smaller plants (less than 40cm) can be controlled using a wiper applicator with the recommended herbicide. For larger plants, slash the plant to reduce the foliage, taking care to dispose of any plant material in the appropriate way to prevent re-establishment, and then spray with herbicide.

Pampas grass is grazed by stock when it is young, before the foliage becomes too abrasive. Grazing prevents the development of flowers and seed set. Plants can also be burnt (if local conditions allow), then allowed to reshoot and the new growth sprayed with herbicide.

Persistence

Individual pampas grass clumps are long-lived, capable of surviving for decades. They are resilient to fire once established and can tolerate extended dry periods.

As the seeds survive only a single year in the soil, no significant seed bank is formed.

Current distribution

Pampas grass has been confirmed spreading by seed in the Hills and Fleurieu and the Mount Gambier area of the Limestone Coast. Planted specimens are found in most towns around the State, and most of these have not been surveyed.

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
Forestry	low 34	very high 10	monitor
Native vegetation	medium 70	high 18	protect sites

Considerations

All pampas grass naturalised in South Australia was formerly regarded as *Cortaderia selloana*. However, the differences between naturalised plants known by this name and those called *Cortaderia jubata* are obscure and by 2006 it was recognised that both may be present here as well as possible hybrids. Searches in the Adelaide Hills found infestations of typical *C. jubata* which were spreading rapidly by seed, as well as some plants intermediate between this and *C. selloana* which were also producing seed. No distinction between the two species is made in this policy.

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 Kangaroo Island and Northern and Yorke regions, seeding pampas grasses are additionally treated as a regional alert weed. In the Limestone Coast region, infestations are destroyed. In the Alinytjara Wilurara and SA Arid Lands regions only limited action is required due to lack of habitats suitable for them to invade.

Synonymy

Cortaderia Stapf, Gard. Chron. ser. 3, 22: 396 (1897).
all species (approx. 24), including:

Cortaderia jubata (Lemoine)Stapf, Bot. Mag. 124 (ser. 3, 54): t. 7607 (1898)

Basionym: *Gynerium jubatum* Lemoine, Rev. Hort. 50: 449 (1878)

Taxonomic synonyms:

Gynerium quila Nees & Meyen, Nov. Actorum Acad. Caes. Leop.-Carol. Nat. Cur. 19: 153 (1843).

Cortaderia quila (Nees & Meyen) Stapf, Gard. Chron. ser. 3, 22: 396 (1897)

Common names include pink pampas grass and jubata grass.

Cortaderia selloana (Schult.) Asch. & Graebn., Mitteleurop. Fl. 2: 325 (1900).

Basionym:

Arundo selloana Schult. & Schult.f., Mant. 3: 605 (1827).

Taxonomic synonyms:

Cortaderia argentea (Nees) Stapf, Gard. Chron. ser. 3, 22: 396 (1897).

Gynerium argenteum Nees, Fl. Bras. Enum. Pl. 2: 462 (1829).

Common names include common pampas grass.

References

Connor, H.E. (1983) *Cortaderia* (Gramineae): Interspecific hybrids and the breeding systems. *Heredity* 51: 395-403.

DiTomaso, J.M.; Drewitz, J.J. & Kyser, G.B. (2008) Jubata grass (*Cortaderia jubata*) control using chemical and mechanical methods. *Invasive Plant Science and Management* 1: 82-90.

Hon David Speirs MP
Minister for Environment and Water

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