Seeding pampas grasses include forms of *Cortaderia selloana* and *Cortaderia jubata* that are naturalised in SA, having been cultivated for ornament since the 19th century. Another *Cortaderia* species, toe-toe, is not present in SA 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 grasses infestations.

**Implementation**

- NRM authorities to survey for the presence of seed-producing pampas grass in their regions.
- NRM authorities to control priority infestations.
- NRM authorities and Chief Officer to enforce the prohibition on sale of plants.
- NRM authorities to ensure any plants found in nurseries are destroyed.

**Regional Implementation**

Refer to regional management plans for further details.

<table>
<thead>
<tr>
<th>NRM Region</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide and Mount Lofty Ranges</td>
<td>Protect sites</td>
</tr>
<tr>
<td>Alinytjara Wilurara</td>
<td>Limited action</td>
</tr>
<tr>
<td>Eyre Peninsula</td>
<td>Protect sites</td>
</tr>
<tr>
<td>Kangaroo Island</td>
<td>Protect sites - regional alert</td>
</tr>
<tr>
<td>Northern and Yorke</td>
<td>Protect sites - regional alert</td>
</tr>
<tr>
<td>South Australian Arid Lands</td>
<td>Limited action</td>
</tr>
<tr>
<td>South Australian Murray Darling Basin</td>
<td>Protect sites</td>
</tr>
<tr>
<td>South East</td>
<td>Destroy infestations</td>
</tr>
</tbody>
</table>
Declaration

To implement this policy, pampas grasses are declared under the *Natural Resources Management Act, 2004* throughout the whole of the State of South Australia so that cultivation, sale and movement of plants can be prevented. NRM authorities in all regions may require land owners to control seed-producing pampas grass plants found on their land. NRM authorities are required to control plants on road reserves and may recover costs from the adjoining land owners. Notification of the presence of plants is necessary to ensure any incursions are promptly detected and destroyed.

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 movement or sale can only be issued by the Chief Officer pursuant to section 188. Under the *Natural Resources Management (General) Regulations 2005*, the transport or movement of grain for milling or wool for cleaning is exempt from the operation of sections 175 and the sale of wool or grain is exempt from section 177(2) if at the time of the sale the person believes on reasonable grounds that the purchaser will remove the plant from the wool or grain before any re-sale.

The following sections of the Act apply to pampas grass throughout each of the NRM regions noted below:

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

Review

This policy is to be reviewed by 2020, 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 2 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 *C. selloana* plants 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 SA. They are short-lived in the soil, most germination occurring within 2 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.

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 Mount Lofty Ranges and the Mount Gambier region. Planted specimens are found in most towns around that 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:

<table>
<thead>
<tr>
<th>Land use</th>
<th>Weed Risk</th>
<th>Feasibility of control</th>
<th>Response at State Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry</td>
<td>low 34</td>
<td>very high 10</td>
<td>monitor</td>
</tr>
<tr>
<td>Native vegetation</td>
<td>medium 70</td>
<td>high 18</td>
<td>protect sites</td>
</tr>
</tbody>
</table>

Considerations

All pampas grass naturalised in SA 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. 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 NRM regions, seeding pampas grasses are additionally treated as a regional alert weed. 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

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:
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).
seeding pampas grasses policy

Taxonomic synonyms:

Common names include common pampas grass.

References


Hon Ian Hunter MP
Minister for Sustainability, Environment and Conservation

Date: 28 July 2014