



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.

Texas needlegrass (*Nassella leucotricha*)

Texas needlegrass is an unpalatable perennial grass that vegetatively resembles some native *Austrostipa* species and invades unsown pastures or native vegetation with a grassy understorey. It is localised in South Australia, with the largest infestations occurring in the Onkaparinga valley.

The closely related Chilean needlegrass, *Nassella neesiana*, is the subject of a separate policy.

Management Plan for Texas Needlegrass

Outcomes

- Pasture and native vegetation protected from degradation by unpalatable invasive grasses.

Objectives

- Contain and control existing infestations.
- Prevent the establishment of new infestations.

Best Practice Implementation

- Containment and destruction of known infestations.
- Inspection for new infestations as part of routine inspection by regional landscape boards and Green Adelaide, particularly in high risk regions containing or adjacent to existing infestations
- Raising awareness of land owners of the identification, impact, and best practice management.

Regional Implementation

Refer to regional management plans for further details.

Texas needlegrass policy

Region	Actions
Alinytjara Wilurara	Prevent entry or sale; destroy if detected
Eyre Peninsula	Prevent entry or sale; destroy if detected
Green Adelaide	Contain and destroy infestations
Hills and Fleurieu	Contain and destroy infestations
Kangaroo Island	Prevent entry or sale; destroy if detected
Limestone Coast	Prevent entry or sale; destroy if detected
Murraylands and Riverland	Prevent entry or sale; destroy if detected
Northern and Yorke	Prevent entry or sale; destroy if detected
South Australian Arid Lands	Prevent entry or sale; destroy if detected

Declaration

To implement this policy, Texas needlegrass is declared under the *Landscape South Australia Act 2019* throughout the whole of the State of South Australia so that movement of contaminated fodder or machinery can be prevented. Its entry to the State, movement or transport on a public road, by itself or as a contaminant, or sale by itself or as a contaminant are prohibited. In the Green Adelaide, Hills and Fleurieu, and Murraylands and Riverland regions movement of Texas needlegrass within and between properties is also prohibited.

Notification of infestations is necessary to ensure these are destroyed. In all regions, land owners are required to destroy Texas needlegrass plants growing on their land. Landscape boards and Green Adelaide are required to destroy plants on road reserves in their regions and may recover costs from the adjoining land owners.

Texas needlegrass is declared in category 1 under the Act for the purpose of setting maximum penalties and for other purposes. Any permit to allow its entry to the State, road transport, movement 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 Texas needlegrass on public roads, within or between properties, 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 Texas needlegrass. 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 Texas needlegrass throughout each of the regions noted below:

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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
186(3) Prohibiting movement within and between properties			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	X	X	X	X	X	X	X	X	X
192(2) Land owners to control the plant on their properties									
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. Success will be measured by the number of new infestations recorded by regional landscape boards.

Weed Risk

Invasiveness

Texas needlegrass spreads by seeds, which are produced abundantly in stalked panicles and become attached to animals, vehicles and clothing. They could also be dispersed in contaminated produce, notably hay, or be blown by the wind. Texas needlegrass is more likely to become established in degraded pasture or native grass situations, therefore maintaining a resilient system will reduce likelihood of establishment.

Impacts

Texas needlegrass forms dense infestations in pasture, native grasslands and woodlands where it can exclude desirable species. It has low feed value to stock, and is not palatable so tends to be allowed to increase as long as more palatable pasture species are present.

Potential distribution

Climate matching suggests that grasslands, perennial pastures and grassy woodlands across much of the southern agricultural regions of South Australia provide suitable habitat for Texas needlegrass.

Feasibility of Containment

Control costs

Permits have been issued by the Australian Pesticides and Veterinary Medicines Authority for the use of glyphosate, fluzifop and flupropanate for the destruction of Texas needlegrass incursions. Herbicide control is labour intensive, as these are non-selective controls and it is necessary to repeat the treatment over several years and search for remaining plants. Control depends on management of infested properties to prevent spread and replace with desirable vegetation over a long period.

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Persistence

Eradication of an incursion is slowed by the long life of seeds in the soil and the difficulty of detecting all needlegrass plants among other grasses. The evolution of herbicide resistance is a high potential risk for this species.

Current distribution

Texas needlegrass occurs along most of the Onkaparinga River downstream from the Clarendon Reservoir, and is also established at Scott Creek Conservation Park, Belair National Park and Mount Bold Reservoir. No additional infestations have been reported; due to its resemblance to native grasses it could be growing unnoticed elsewhere in the State. It is established in central Victoria and also recorded from New South Wales.

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 152	very high 14	destroy infestations
Native vegetation	medium 79	very high 14	contain spread

Considerations

Risk assessment indicates destroying infestations as the management action at State level; this is implemented by preventing further entry or spread of Texas needlegrass in South Australia. In the Green Adelaide and Hills and Fleurieu regions where there are established infestations, the action is containment with the aim of eventual destruction.

Synonymy

Nassella leucotricha (Trin. & Rupr.)R.W.Pohl, Taxon 39: 610 (1990)

Basionym: *Stipa leucotricha* Trin. & Rupr., Mém. Acad. Imp. Sci. Saint-Pétersbourg, Sér. 6, Sci. Math., Seconde Pt. Sci. Nat. 5: 54 (1842)

Taxonomic synonym:

Stipa ciliata Scheele, Linnaea 22: 342 (1849)

Hon David Speirs MP
Minister for Environment and Water

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