

Declared Plant Policy

under the Natural Resources Management Act 2004



Government
of South Australia

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.

Implementation

- Containment and destruction of known infestations.
- Inspection for new infestations as part of routine inspection by NRM authorities, particularly in high risk regions containing or adjacent to existing infestations
- Awareness raising (identification, impact, best practice management) etc.
- Development of biological control supported by state and regional NRM authorities.

Regional Implementation

Refer to regional management plans for further details.

NRM Region	Actions
Adelaide and Mount Lofty Ranges	contain and destroy infestations
Alinytjara Wilurara	prevent entry or sale; destroy if detected
Eyre Peninsula	prevent entry or sale; destroy if detected
Kangaroo Island	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
South Australian Murray Darling Basin	prevent entry or sale; destroy if detected
South East	prevent entry or sale; destroy if detected

Texas needlegrass policy

Declaration

To implement this policy, Texas needlegrass is declared under the *Natural Resources Management Act, 2004* throughout the whole of the State of South Australia so that movement of contaminated fodder or machinery can be prevented. 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. In the Adelaide and Mount Lofty Ranges, and SA Murray Darling Basin, NRM regions movement of Texas needlegrass within and between properties is also prohibited.

Notification of infestations is necessary to ensure these are destroyed. In all NRM regions, land owners are required to destroy Texas needlegrass plants growing on their land. NRM authorities are required to destroy plants on road reserves 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 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 Texas needlegrass throughout each of the NRM regions noted below:

Sections of Act	Region							
	AMLR	AW	EP	KI	NY	SAAL	SAMDB	SE
175(1) Prohibiting entry to area	X	X	X	X	X	X	X	X
175(2) Prohibiting movement on public roads	X	X	X	X	X	X	X	X
175(3) Prohibiting movement within and between properties	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	X	X	X	X	X	X	X
182(1) Landowners to destroy the plant on their properties	X	X	X	X	X	X	X	X
182(2) Landowners to control the plant on their properties								
185 Recovery of control costs on adjoining road reserves	X	X	X	X	X	X	X	X

Review

This policy is to be reviewed by 2020. Success will be measured by the number of new infestations recorded by NRM authorities.

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, fluazifop 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.

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 Adelaide and Mount Lofty Ranges region 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)

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Conservation

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