



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.

hymenachne (Hymenachne amplexicaulis and Hymenachne × calamitosa)

Hymenachne is a tropical, semi-aquatic grass introduced to northern Australia as pasture but has now invaded wetlands and sugarcane fields. It is not known to grow in South Australia. In line with the national strategy, sale of hymenachne plants and seed is prohibited in South Australia as in other jurisdictions.

Management Plan for Hymenachne

Outcome

- Prevent spread of hymenachne to new habitats.

Objectives

- Prevention of trade or other importation of hymenachne into South Australia.

Best Practice Implementation

- Compliance action in the event of hymenachne plants being produced in South Australia for sale.

Region	Actions
Alinytjara Wilurara	Prohibit sale and movement
Eyre Peninsula	Prohibit sale and movement
Green Adelaide	Prohibit sale and movement
Hills and Fleurieu	Prohibit sale and movement
Kangaroo Island	Prohibit sale and movement
Limestone Coast	Prohibit sale and movement
Murraylands and Riverland	Prohibit sale and movement
Northern and Yorke	Prohibit sale and movement
South Australian Arid Lands	Prohibit sale and movement

Declaration

To implement this policy, hymenachne is declared under the *Landscape South Australia Act 2019* throughout the whole of the State of South Australia. Its entry to South Australia, movement or transport on a public road by itself or as a contaminant, or sale by itself or as a contaminant are prohibited.

Hymenachne is declared in category 3 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 regional landscape board or Green Adelaide 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 hymenachne 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 hymenachne. Note that certain produce or goods may be excluded from these general movement and sale exemptions by Gazettal Notice of the Chief Executive of the Department for Environment and Water.

The following sections of the Act apply to hymenachne 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										
192(1) Land owners to destroy the plant on their properties										
192(2) Land owners to control the plant on their properties										
194 Recovery of control costs on adjoining road reserves										

Review

Success of the program will be measured by its effectiveness in preventing any reported supply of hymenachne from South Australia to other States. This policy is to be reviewed by 2025, or in the event of a change in the status of hymenachne as a Weed of National Significance.

Rationale

Hymenachne (*Hymenachne amplexicaulis*) is a tropical, semi-aquatic grass introduced to northern Australia from Hispaniola via Venezuela in 1973 as a pasture species. It has now invaded wetlands and sugarcane fields, and has hybridised at several localities with the native *Hymenachne acutigluma* to produce the similarly invasive *Hymenachne × calamitosa*. None of these species grow in South Australia.

In accordance with the Australian Weeds Strategy, the former Australian Weeds Committee agreed that the Weeds of National Significance (WONS) should be proclaimed in all States and Territories to prevent their further spread by sale.

Weed Risk

Invasiveness

Hymenachne spreads by seed and detached vegetative fragments; seedling establishment requires wet conditions.

Impacts

No impact of hymenachne has been recorded in South Australia. In States where it is established it has become a major invader of wetlands, growing from wet ground into water where it forms large floating mats. It is also a serious competitor in sugarcane crops.

Potential distribution

The distribution predicted from climate modelling was mainly in the wet tropics, extending to the extreme north coast of NSW. However, outlying patches have been now been found in south-western Queensland, suggesting that some microhabitats on the South Australian side of the border are also potential habitat.

Feasibility of Containment

Control costs

Control in infested areas is achieved by long-term management to contain and reduce densities, with eventual eradication from a paddock by herbicides.

Persistence

Hymenachne regrows from seed and rhizomes, with no technique giving a 100% kill. Seed can persist for up to 8 years in soil.

Current distribution

Not present in South Australia.

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
Aquatic	negligible 5	very high 0	monitor

Considerations

Hymenachne is one of the Weeds of National Significance, which are subject to a uniform prohibition on sale in all jurisdictions. In line with the national strategy on hymenachne, sale of the plant is prohibited in South Australia. Hymenachne has been declared under the *Landscape South Australia Act, 2019* in compliance with the national strategy.

There is no demand for hymenachne plants, and prohibiting its sale it does not inconvenience the nursery trade. There is a possibility of unofficial introduction to temporary wetlands in the pastoral zone as a supposed pasture species.

Synonymy

Hymenachne amplexicaulis (Rudge)Nees, Fl. Bras. Enum. Pl. 2: 276 (1829)

Basionym: *Panicum amplexicaule* Rudge, Pl. Guian. 1: 21 (1805)

Taxonomic synonym: *Agrostis monostachya* Poir., Encycl. (Lamarck) Suppl. 1: 256 (1810)

Hymenachne × calamitosa J.R. Clarkson, Telopea 13(1-2):112 (2011)

Many infestations of hymenachne originated from the cultivar *Hymenachne amplexicaulis* 'Olive', named after the owner of the Queensland property where it was first planted as a fodder grass.

Other common names include olive hymenachne, trumpetilla, water star grass and West Indian grass.

References

Agriculture & Resource Management Council of Australia & New Zealand Australia & New Zealand Environment & Conservation Council and Forestry Ministers (2001) 'Weeds of National Significance Hymenachne (*Hymenachne amplexicaulis*) Strategic Plan.' (National Weeds Strategy Executive Committee: Launceston)

Clarkson, J.R., Karan, M. & Evans, D.S. (2011) A report of hybridisation in *Hymenachne* (Poaceae, Panicoideae) with a description of *Hymenachne × calamitosa*, a new species of hybrid origin from tropical Australia. *Telopea* 13 (1-2): 105-114.

Hon David Speirs MP
Minister for Environment and Water

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