# Fountain Grass *(Cenchrus setaceum)*

April 2017

Fountain grass is a highly invasive, perennial, tufted grass growing to 0.9m tall. Also known as African fountain grass, it can form dense stands that exclude all other plants, and may live up to 20 years. It is a weed of pastures and roadsides.

Fountain grass originates from northern and eastern Africa, and south-western Asia (i.e. Oman, Saudi Arabia, Yemen, Lebanon and Syria). It was introduced to Australia as an ornamental plant used in gardens, along roadsides, and for soil stabilisation.

There has been a recent reclassification *from Pennisetum setaceum* to *Cenchrus setaceum*. Plants previously referred to as *Pennisetum setaceum* 'Rubrum' are now considered to be another species *Cenchrus* advena (A.K.A. *Pennisetum advena*). This species is not considered to be as weedy as fountain grass as the seed is sterile. It is able to be sold if labelled correctly as *Cenchrus advena*.

## DESCRIPTION

**Stems**

The flowering stems are upright (i.e. erect or slightly drooping) and either unbranched or sparsely branched. Stems arise from the base of the plant along with the majority of the leaves.

**Leaves**

Leaf blades are linear in shape, very narrow (15-40 cm long and 1-3 mm wide), and rough to the touch. They are mostly hairless, and can be folded or flat. Where the leaf sheath meets the leaf blade there is a small fringe of hairs.

**Flowers**

Flower heads (seed head) are upright or drooping, feathery or bristly in appearance, and spike-like. They are 10–25 cm long and 1.2–1.6 cm wide. Younger seed-heads are reddish, pinkish or purplish in colour, and mature to straw-coloured or whitish. Flowering occurs sporadically throughout the year, but mostly during summer.

Seed heads consist of large numbers of densely packed, stalk less flower spikelet clusters. Each of the flower spikelet clusters contain 1-3 spikelets and are surrounded by numerous long feathery bristles.

**Seeds**

The seeds themselves (i.e. the grains) are yellowish-brown in colour and smooth in texture. Seeds may survive 6 years in the soil.

## DISTRIBUTION

Fountain grass is widespread, with a scattered presence throughout most of Australia, especially in southern and eastern Australia. It is common near inhabited coastal areas and can be found in woodlands, grasslands, coastal vegetation, watercourses, rail embankments, roadsides, and mines. It prefers drier, hot, rocky and generally exposed sites, cliffs in arid or semi-arid areas, and seasonally dry tropical and subtropical areas.

On Kangaroo Island, infestations are currently being controlled at Emu Bay. Individual plants have been removed from Dover Farm, Kingscote. Historically, plantings at the Kingscote Airport escaped onto the runway before the control program commenced, since then all plants have been removed from the site.

## HOW IS IT SPREAD?

Fountain grass seed is light and feathery, and primarily spread by wind-dispersal. Seed may also become attached to clothing, float on water, or be spread by vehicles, livestock, in dumped garden waste, and possibly by birds. Seed can remain viable in the soil for at least 6 years.

A major factor to the spread of fountain grass is through ornamental garden plantings. Fountain grass has recently been declared so to prevent sale and new garden plantings spreading.

Fountain grass is well adapted to fire and fires may also contribute to fountain grass spread.

Flower spikelets with numerous bristles © Sheldon Navie.

## IMPACTS

Fountain grass is an environmental weed that threatens biodiversity. It is highly adaptable and out-competes native vegetation to form monocultures. It has spread to roadsides, rail corridors, along watercourses and into pastures and native vegetation.

Fountain grass increases intensity and spread of fire because of its high biomass, resulting in damage to plant species and communities that are not as fire tolerant.

It is also an economic agricultural weed reducing the carrying capacity of pasture because of its low grazing value (due to its coarse rough leaves).

## CONTROL METHODS

Fountain grass is difficult to eliminate. Control may need to be repeated several times a year. Continued monitoring after treatment is essential because of the plant's long-lived seeds. Control should initially be directed to outlying populations followed by treatment of the core area.

Small infestations of fountain grass can be removed by uprooting (hand-pulling, chipping), removing and destroying seed heads. Wear gloves as the leaves and seed heads can cause skin irritation.

Extensive infestations of fountain grass may be best controlled with herbicides, combined with mechanical techniques.

There is no known biological control.

For advice on chemical control techniques, contact the Natural Resources Centre in Kingscote or download the *Weed control handbook for declared plants in South Australia* for advice on chemical control http://www.pir.sa.gov.au/biosecurity/weeds_and_pest_animals/weeds_in_sa.

Fountain grass infestation along coast at Emu Bay.

## DECLARATIONS

The following sections of the NRM Act apply to fountain grass in the Kangaroo Island NRM region:

**175**(1) Movement of fountain grass on public roads

**175**(2) Movement of fountain grass on public roads

**177**(1) Prohibiting sale of the plant

**177**(2) Prohibiting sale of contaminated goods.

## For more information

**Kangaroo Island Natural Resources Centre**
37 Dauncey Street, Kingscote
P (08) 8553 4444
E kinrc@sa.gov.au

**www.naturalresources.sa.gov.au/kangarooisland/**

Team Leader Pest Management: 0429 616 414

Animal and Plant Control Officer: 0418 708 557