

# Spartina

*Spartina alterniflora*,  
*S. angilica*, *S.townsendii*

**Total Control Plant under the  
West Coast Regional Pest Plant  
Management Strategy**



**Suspected sightings of this Total Control Plant should be reported promptly to the West Coast Regional Council**

## Where have these Spartina species come from?

Spartina, also known as cord grass, was introduced into New Zealand from North America in 1913 because of its success there, and in Europe, in foreshore protection, land reclamation and marshland stabilisation. However attempts to use it here for the previous reasons has resulted in overgrowth which threatens indigenous estuarine ecologies to the extent that is now a much unwanted pest plant. Fortunately there have been only a small number of outbreaks on the West Coast making total control feasible.



## What do the Spartina species look like?

All the Spartina species look similar and are members of the Grass Family of plants. However they are the ONLY grass species which tolerate conditions found in the intertidal zone of estuaries. Tall fescue, couch and other grass species look similar to Spartina but do not grow in intertidal areas.

All Spartina species are perennial, clump-forming grasses growing on erect stems to 1m tall. Leaves can be up to 15mm wide and are ribbed and the flowers are produced in a head of short flattened spikelets. The strong, fleshy root system is rhizomous. Overall the plant is robust to the detriment of native species.

All three species propagate readily from rhizomes and plant fragments but only *Spartina angilica* produces seeds in New Zealand. Spread is mostly via broken rhizomes from flood events and churning up of estuary areas by livestock or boat propellers.

*Top right : Spartina angilica [Plant Protection Society of NZ]  
At left: Spartina alternifolia [ARC]*

## Why are the *Spartina* species Pest Plants?

The three species of *Spartina* known so far in New Zealand have the potential to seriously damage indigenous estuarine ecosystems. The plants trap sediment, raising ground levels above the high tide mark and stranding former inter-tidal habitat for birds and fish.

Estuaries and shallow harbours can be reduced to thin drains surrounded by rough weedy pasture with very large loss of biodiversity. Other affects are loss of seafood gathering sites and increased difficulty of small boat navigation. This plant is very difficult to eradicate once introduced.

*At right: Spartina townsendii [ARC]*



## What are the best methods of control?

### **Manual Methods**

Small patches of *Spartina* can be eradicated by hand grubbing but all care must be taken to ensure no rhizomes fragments are left to be moved on by tide and current to start afresh elsewhere. Mechanised methods are not recommended for the latter reason.

Cutting and burning, steam treatments and smothering have also been used to control *Spartina* but are usually only partially successful. They can also be side effects on wanted biodiversity (such as spawning fish from these methods).

### **Herbicide Methods**

Herbicide application is the most frequently used control method due to its practical ease of use and cost effectiveness. The herbicides Fusilade (active agent Fluzifop) and Gallant (active agent Haloxyfop) both regularly achieve over 90% kill after one application. However complete eradication will require repeated treatment application.

**For personal safety please use all herbicides as per manufacturer's labelling**

### **Biocontrols**

There are no known biocontrol agents for *Spartina* species known at present.

## Where can I get more help?

For further information call either of the Regional Weedbusters Co-ordinators. They are:

**Mary Traves:** Environmental Information Officer, West Coast Regional Council (768 0466 or 0508 800 118)

**Tom Belton:** Technical Support Officer Biosecurity & Weeds, Department of Conservation, West Coast - Tai Poutini Conservancy, Hokitika (03 756 9100)



[www.weedbusters.org.nz](http://www.weedbusters.org.nz)

*The West Coast Regional Council does not accept liability for any advice given on this sheet regarding application of herbicides for pest plant control. The brand names listed imply neither endorsement of those brands, nor criticism of any other brands not listed.*