THREATS

Marram Grass

a hazard to our beaches

Parks and Wildlife Service Tasmania

DEPARTMENT *of* TOURISM, PARKS
HERITAGE *and the* ARTS

Marram grass (*Ammophila arenaria*) is a perennial grass that was introduced into Tasmania from Europe to stabilise coastal dunes. It is very effective at trapping sand and grows vigourously, so reducing the natural changes often associated with coastal dune systems.

Uncontrollable...

Unfortunately marram grass is able to spreadrapidly and over long distances from dune stabilisation projects to invade other coastal areas.

For example, along the south west coast beaches, marram grass was found up to 110 kilometres south from the nearest deliberate planting of marram grass at Ocean Beach.

Generally marram grass is found on northern and eastern Tasmanian beaches. Many of these beaches are now dominated by marram grass and many others have small infestations.

There is a growing realisation overseas and in Australia that marram grass does pose a threat to nature conservation values and geomorphological processes in coastal areas.

A strong invader...

Marram grass develops deep and extensive rhizomes (roots) and produces dense clumps of grass, often up to a metre or so high, which dominate plant communities and entrap sand. It is more vigorous where sands are mobile, covering the plant and stimulating growth. Similarly burning promotes healthy and dense growth. The main methods of spread are either the extension of rhizomes under ground over very large distances or by sea currents washing fragments of the rhizomes around the coast where they wash ashore and establish communities.

Where it occurs on sands that are not disturbed, native species such as coastal wattle (*Acacia sophorae*) can establish if there is a seed source and gradually out shade the marram grass leading to a succession to a native community. However in the beach environment sands tned to be regulalry disturbed and successional removal does not tend to happen.

Why is it a problem?

Coastal processes are radically and permanently altered by the presence of marram grass. Marram grass produce coastal landforms which have completely different shapes to dunes produced by native plants. Large steep faced dunes are characteristic of areas with marram grass. These steep faced dunes are susceptible to wave erosion which leads to coastal recession. The build up of dunes by marram grass removes sand from the beach, surf and near shore zone and so has serious consequences for the natural dynamics of the coastal environment.

Impact on native vegetation

Native grasses do not compete well against the rapid growth rates and sand gathering capability of marram grass. Two native beach grass communities and five other coastal dune plant communities are displaced by marram grass. Marram grass can also vegetate areas of sand not otherwise occupied by native vegetation. Marram grass is so extensive and well established, that three plant communities dominated by marram are recognised.

coastal wattle

Thefuture is heading towards the fact that native sand binding plant communities will steadily decline in extent if no action is taken to protect them from the infiltration of marram grass.

Impact on wildlife

Animal habitat is also affected by the infiltration of marram grass. Displacement of native grass communities by marram grass, could be contributing

to the loss of beach nesting sites of shoreline birds. Hooded Plovers use sand dune blow out areas for nesting sites. These blowout sites are being stabilised and overgrown by marram grass and it is likely that this is contributing to the decline in hooded plover numbers around the State.

What can we do?

Marram grass falls into that difficult catagory of introduced plants that once served a useful purpose, only to evolve into a weed capable of causing significant environmental harm.

Continued use of marram grass for dune stabilisation is strongly discouraged due to the adverse affects discussed above.

There are important opportunities for managing marram grass, these are:

1. Protect those areas that are currently free or very lightly infected with marram grass

2. Identify the important assets such as threatened beach communities or species and control marram grass in the vicinity of these.

3. Manage the existing marram grass plantings/ infestations to favour the succession to native species e.g. control disturbance, burning etc

In your area...

Each local community can play a very important role in monitoring the invasion of marramgrass on beaches that are currently free. And reporting beaches where small marram grass infestations could be controlled to prevent wider impacts.

People should not contemplate removing marram grass without receiving advice from the Parks & Wildlife Service as there could be adverse impacts e.g. sand destabilisation, erosion of heritage sites.

Further Information

Contact:
Nature Conservation Branch: DPIWE.
134 Macquarie Street,
Hobart 7000.
Ph. 1300 368 550.

Head Office: 134 Macquarie Street Hobart TAS 7000
Phone: (03) 6233 5732
Internet: www.parks.tas.gov.au