

# Weed management in NSW national parks

# SCOTCH BROOM

## FACT SHEET



Pictured above: Scotch broom in Barrington Tops State Conservation Area.  
Photo, C. O'Brien

### History

Scotch broom (*Cytisus scoparius*) is a large shrub with bright yellow flowers. It was apparently introduced to Australia from Britain by Governor King in the early 1800s to be grown as a substitute for hops. Subsequent introductions of the weed were made for ornamental purposes and by 1901 it had spread significantly and was declared noxious.

### Distribution in NSW today

Scotch broom occurs mainly in cool temperate regions, at high altitudes or along the edges of watercourses. The weed is particularly prevalent along the Great Dividing Range in areas such as Barrington Tops, Kosciuszko National Park and the Central and Southern Tablelands.

### Impact on the environment and agriculture

Scotch broom forms dense thickets that exclude native species, leading to its complete dominance of the understorey and eventually the canopy. These thickets also impede access, alter fire regimes and dominate the landscape. The weed is spread by animals and in water, such as creeks. Scotch broom has been declared a noxious weed in NSW and is also listed as a Weed of National Significance.

## Management by NPWS

The NSW National Parks and Wildlife Service (NPWS), now part of the Department of Environment and Conservation, uses an integrated approach to manage the weed, combining different control methods to achieve the best results and minimise its impact on native plant species.

Many Scotch broom control programs are run in conjunction with local communities and councils.

## Control techniques

**Biological control** attempts to control weeds by introducing the weed's own natural enemies. The twig-mining moth, a psyllid and a seed beetle have been released in NSW as biocontrol agents for Scotch broom.

**Herbicides** are an important tool for managing Scotch broom.

**Mechanical control** methods such as hand-pulling, slashing and burning can be used, but follow-up control is crucial because of the very large numbers of seeds the weed produces: up to 65,000 per square metre, which may lie dormant for 80 years.

## SOME NPWS SCOTCH BROOM CONTROL PROGRAMS

### Biological control

NPWS has contributed to a cooperative program for biological control of Scotch broom. Three insects – the twig-mining moth, a psyllid and a seed beetle – have already been released, while the potential of a fourth agent, the broom gall mite, is under investigation. Key monitoring sites for these agents have been set up in Barrington Tops National Park.

### Protecting threatened species in Barrington Tops

NPWS has prepared a detailed management strategy identifying a containment zone and priority areas for control to manage a 10,000-hectare infestation of Scotch broom in Barrington Tops National Park. The area is known to contain threatened populations of the broad-toothed rat and around 35 rare or threatened plant species.

### Pro-active control in Kosciuszko National Park

In Kosciuszko National Park, NPWS aims to control infestations of Scotch broom as soon as they are discovered. Following widespread bushfires in January 2003, NPWS took advantage of the reduced seed bank by launching a pro-active search program to seek out new infestations or individual plants as they emerged.

NPWS, together with Snowy Hydro, have also mapped all Scotch broom infestations in Kosciuszko National Park using Global Positioning System (GPS) equipment to ensure the effectiveness of follow-up controls.