

Gorse Control Strategy for Queensbury Mine Site – Mt Dundas Regional Reserve – March 2002

Introduction

Gorse, *Ulex europaeus*, is a perennial evergreen shrub endemic to western Europe. Gorse was introduced to Australia 150 years ago. It is now a very common plant in Tasmania, growing in most environmental conditions from dry coastal heath to damp sclerophyll forest. It is especially invasive in areas of disturbed and/or infertile ground.

Gorse is designated as a weed of National Significance in the National Weed Strategy, and is declared a “Secondary Weed” under the Noxious Weeds Act 1964.

A Gorse infestation was detected at the Queensbury Mine site in Mt Dundas Regional Reserve. In February 2001 the Coastal Weed Spraying Division of the Civil Construction Corporation sprayed the gorse along the last 900 metres of the Queensbury Mine Track (QMT). The herbicide, Grazon DS with a penetrant used was, distributed from a 600L quickspray unit mounted on a 4WD. Where the gorse infestations were very dense a track was cut through to allow car access to the interior.

2002 Site Inspection

An inspection undertaken by David Gatehouse (Mineral Resources Tasmania) and Ben Hill (Ranger – Parks and Wildlife Service) on the 27th February 2002 found that the gorse kill rate was high. However, there was high incidental damage to the surrounding native vegetation, and in addition not all gorse along the QMT was treated.

Juvenile gorse (<30cm) was detected growing in those areas where the adult gorse from the previous year was treated. The inspection also detected pockets of untreated gorse bordering the southern end of the QMT (last 6.5 kilometres), increasing in density towards the mine. The infestation at the mine covers an area of 0.75 hectares.

2002 Control Strategy

The 2002 control strategy can be divided into two parts; the translocation of dead gorse plants from along the QMT to a central pile for burning; and the chemical control of the remaining gorse infestation.

Translocation of the dead gorse

The gorse killed in the previous year is predominantly located adjacent to the mine site. Lesser amounts of dead gorse are located verging the last 900 metres of the access road to the mine site. The dead gorse beside the road should be cut and piled with the dead gorse at the mine site (Fig 1).

Following the chemical control of the remaining gorse infestation and the preparation of a burn plan, the gorse treated in the 2001 and 2002 gorse control programs should be burnt.



Fig 1: dead gorse near mine site

Chemical control of the Gorse infestation

The gorse will be chemically treated with a herbicide mix of Weedmaster Duo (1:100) and the penetrant, Freeway Gold (1:500) and applied using a 4WD mounted Quickspray unit. The herbicide mix should be applied at a rate sufficient to ensure the entire plant is contacted, not just the outer leaves and stems.

The mixing of the herbicide can be undertaken at the mine site using water extracted from Lode Creek.

The gorse infestation can be divided into two areas: the pockets of gorse verging the last six and half kilometres of the QMT; and the large infestation bordering Lode Creek at the Queensbury Mine site.

Gorse verging Queensbury Mine Track

There are scattered pockets of gorse bordering the last six and half kilometres of the QMT. The gorse growth is predominantly one to two metres thick and consists of individual plants at the northern end of the infestation, however further towards the mine site the infestation extends up to ten metres from the track.

Gorse infestation at Queensbury Mine site bordering Lode Creek

The gorse infestation located at the mine site can be separated into two areas: the eastern and the western sections.

Eastern Section

To access this section follow the left fork of the QMT thirty metres before the mine site. This track leads directly to the mine site (shown in Fig 2). A 4WD with quickspray unit can be parked at the mine site and long hose run out to access all the gorse.

The eastern section covers approximately six hundred square metres. The gorse is predominantly located in a small cleared gully on the southern bank of Lode Creek. Scattered trees are located further upstream of the site and juveniles are located on the northern bank



Fig 2: Gorse infestation in the eastern section of the Queensbury Mine site.

Western section

To access the western section follow the right fork in the QMT which leads to a clearing a further 100 metres downstream from the mine site.

The 4WD should be parked at the end of the track and several hoses connected together to reach the furthest gorse plants.

The car will be parked on the top of the bank approximately 15 metres above the gorse infestation. The stream at this site is braided and gorse is located on a shoal within the stream, the southern bank and upstream on both banks. It may be useful to wear waders and use the stream as a corridor from which to work.

This gorse at this site covers an area of approximately 0.75 hectares.

Prior to spraying the eastern and western sections, paths should be cut into the gorse infestation to allow access to the middle of the infestation. Clearing should be undertaken with chainsaws and machettes. Where whole gorse trees are removed the stump should be cut and painted with herbicide.



Fig 3: Gorse infestation in the western section of the Queensbury Mine site.

2003 Control Strategy

Following the chemical control of the gorse a burn plan should be designed and implemented to remove the dead gorse from the mine site.

The juvenile gorse regrowth verging the QMT should be spot sprayed using Grazon.

2004 Control Strategy

After the gorse has been burned a follow up spray should be undertaken when the plants are 15cm tall. After the completion of the follow up herbicide treatment a layer of teatree matting should be applied to the northern bank above the creek line to shade the soil and prevent gorse growth and to stimulate the growth of native species.