

Environmental Management at the Copping Tip

Axel Meiss

September 2014

Background

Since spring 2010 environmental weeds have been managed at the Copping tip annually. Within two years all known populations had primary control conducted and populations were reduced to regrowth and germinating seedlings. These weeds include gorse, Spanish heath, pampas grass, and serrated tussock. All environmental weed sites have since been visited annually and treated.

In 2012 control focused on managing the large serrated tussock population, which at the time was a logistical and management challenge. The population was treated with the residual herbicide Flupropanate®. This herbicide is slow acting and may take up to twelve months to take full effect. However if the herbicide is applied in winter, it will inhibit flowering and seed production by spring. The residual effect of the herbicide controls germinating seeds in the sprayed area for up to 24 months.

In January 2013 the Copping Tip was burnt by a bushfire that affected the entire property. The lack of competition for environmental weeds, and a large seed bank with optimal conditions to become established, dictated the management for 2013.



Photo 1: Main serrated tussock site after the bushfire. February 2013

A cover crop of Rye Corn was sown in March at the main serrated tussock site to establish some competition and provide some ground cover to manage potential erosion. All environmental weed populations were treated, and re-vegetation work was carried out during the winter of 2013.



Photo 2: Competing rye corn cover crop



Photo 3: Serrated tussock seedling germinated after the bushfire.

2014

In 2014 all environmental weed sites were revisited again, and germinated seedlings treated where necessary. Very few gorse and Spanish heath seedlings were found. No Pampas grass plants were found.



Photo 4: Gorse seedling



Photo 5: Spanish heath seedlings

Serrated tussock germination was patchy and varying in density. Infested sites were spot treated with granular Flupropanate. The area of infestation has increased slightly after the bush fire. The cover crop appeared to have been successful and aiding the management and control of serrated tussock and inhibiting some germination.



Photo 6 : Serrated tussock along the fence near the tip face



Photo 7: Area of high germination of Serrated tussock at the main population



Photo 8: Area of low germination of serrated tussock at the main site

1500 plants were planted in 2014. The species list included *Poa labillardieri*, *Lomandra longifolia*, *Acacia dealbata*, *Allocasurina verticillata*, *Eucalyptus viminalis*, *Eucalyptus amygdalina*, and *Eucalyptus tenuramis*. A direct seeding trial was established to explore options of future establishment of vegetation to provide competition to weeds in particular serrated tussock.



Photo 9: Revegetation at the main serrated tussock population

In many areas natural germination will provide further competition after the bushfire.



Photo 10: Dense germination and growth of silver wattle

Future Management Recommendations

Due to the residual nature of Flupropanate, treatment of serrated tussock is required to occur every two years. Spot treatment of serrated tussock was carried out in 2014, however the focus of 2014 was to establish further competition to aid the long term management of the site. 2015 will focus again on herbicide application of all populations, with revegetation playing a minor role. Two new weed sites were found in 2014 and special attention will be paid to areas of risk of new weed populations. Horehound has benefited from the bushfire and is getting established in the same areas where serrated tussock has been populating bare hill sites and poor soils. In 2015 horehound will become a target weed species. By winter 2015 long term success of using granular Flupropanate versus Flupropanate as a foliar spray will be apparent and a report discussing the differences will be published.



Photo 11: Establishing horehound at the main serrated tussock site