

NORTHCLIFFE ENVIRONMENT CENTRE NORTHCLIFFE'S BLACKBERRY ERADICATION PROJECT 2011

INTRODUCTION

Blackberry is a Priority No.4 weed of National Significance. It is one of the most devastating weeds in Australia. Eradication and control of damage cost over \$70 million a year.

The Problem: Blackberry's -

- **invasiveness**
- **potential and speed of spread**
- **overwhelming economic and environmental impact**
- **immense load of dry fuel creating a deadly fire hazard; in the case of Northcliffe this hazard is in the centre of town**

Blackberry is spread by emus, foxes, rabbits and birds.

This paper comes in sections:

Northcliffe Environment Centre Management Plan including Sites and Monitoring

Project Implementation

Costing

Caring for our Homes and Farms

What is wrong with blackberry?

Northcliffe Bushland

Northcliffe Environment Centre Management Plan June 2011 (NEC) ¹

Introduction

Since 2004 NEC has recognised the community's concern at the growing, invasive problem of blackberry and over the years took its concerns to the Shire of Manjimup. The Warren Catchment Council's *Initial Field Assessment 2007*, the shire of Manjimup's several Environment Strategies and appreciating Northcliffe is also within the boundaries of the internationally acclaimed Southwest Australia Ecoregion, created in 2001 as one of the "jewels of the continent", NEC met with those it felt was responsible for overcoming the continuing blackberry invasion.

In 2009, FESA's prescribed burn through the township of Northcliffe exposed far more blackberry thickets than anyone had expected, with gullies choked and two thickets 400 metres long. NEC considered any future project would belong to the Northcliffe community and it spoke widely to various local groups.

Implementation

1. • NEC began an understorey bird count in the areas where blackberry was prolific and recorded very few, considerably less than in the bushland five kilometres to the north
 - In 2011 NEC was successfully awarded a grant of \$4,598.50 by the Minister for Environment and Water for a townsite blackberry eradication project. Northcliffe Forest Park Management Committee, a partner in this program, has made up the shortfall of \$402.95
2. NEC plotted blackberry sites on a map of the townsite, which is 975 metres long north to south ²:
 - The sites were prioritised in order to realistically decide how large an area could be funded
 - In addition to blackberry eradication, the aim is also to ensure the Shire of Manjimup's assets are conserved and enhanced ³
 - Land effected –
 - ◆ Shire of Manjimup Recreation and A Class Reserves with urban bushland; this includes Reserve 23740, the 246 ha Northcliffe Forest Park
 - ◆ DEC's Bibbulmun Track walking trail
 - ◆ Unallocated Crown Land
 - The sites -
 - ◆ To the north west sites are between Zamia and Richards Streets, between North Street and the Northcliffe-Pemberton Road and include Residents' Ramble
 - ◆ To the north east there is a site along the lane in Northcliffe Forest Park opposite the hotel
 - ◆ To the south west sites are between the Catholic church and the disused quarries
 - ◆ To the south east sites are along the disused railway line, which is part of the Bibbulmun Track, in Northcliffe Forest Park near its southern boundary
 - ◆ Sites are along the Gardner River which is on Northcliffe's eastern boundary
3. NEC walked some of the sites with DEC :
 - to record the native vegetation in the area
 - to plan at a later stage the collection of seed to give the community the opportunity to grow seedlings prior to planting in addition to the *cut and brush* method
 - to prepare a list to be forwarded to a nursery 12 months in advance of planting
4. Local residents and groups will be advised of the program outlining why it is important that private property is also included in this project (separate section).
5. All sites will be rehabilitated after the 3rd spray in 2014, as soon after the first winter rains as possible.
6. The project will be monitored for its success as follows:
 - Have we protected and conserved the biodiversity of the bushland and forests

- Have we improved the health of both, offering a variety of habitats -
 - Pollen and nectar close by
 - Leaves and litter nearby
 - Trees with suitable bark
 - Water, perches, hollows (for nesting and/or drinking bowls)
- Have we noticed an increase in plants, animals, birds, tadpoles and frogs
- How much success have we had with feral animals and intruding pets; look for tracks, scats, scratches on bark, tunnels in banks, runnels, day and night sightings
- Are there weeds in the bush, riparian zones, creeks, Gardner River banks
- How successful have we been with *cut and brush* and have we been collecting seed
- Do any banks need stabilizing

6. Reports and photographs will be forwarded to supporters of this project:

DEC, Land for Wildlife, Manjimup Horticultural Research Institute, Northcliffe Community Development Group, Shire of Manjimup, Warren Catchment Council with publicity to *Manjimup Bridgetown Times*, *Karri Pigeon* and ABC

¹ *National Blackberry Program* with Australian Government and others

² Shire of Manjimup information

³ *Watsonia*, another invasive weed, had not been overlooked by NEC but until now there had not been a grant available for its control. In summer 2011 the SW Catchment Council advertised the SW On-Ground Funding and NEC is pursuing this further.

Project Implementation

Introduction

Lambert Contracting Services of Manjimup has secured this project. The company is registered with the WA Health Department, is accredited, is approved by the Shire of Manjimup and is frequently contracted to DEC.

Project Preparation

In autumn 2011 Ken Lambert walked the sites with NEC for two hours, and then spent a further three hours examining the sites, taking GPS locations and recording details. The control of blackberry is a long term process and cannot be achieved with a one-off effort. The level of control is variable and is influenced by a range of factors. Legislation in Australia requires a minimum level of accreditation. Site rehabilitation is an important control tool because revegetation with appropriate plants prevents or minimises reinvasion.

Implementation

Summer 2011/2012	1 st spray; the chemical mix will continue to work over the following months.
Summer 2012/2013	2 nd spray. A controlled fire will follow for seed stimulation.
Summer 2013/2014	3 rd spray.

- The community then continues the project with rehabilitation of the sites. Any canes remaining are removed; most will have been destroyed in the fire.

- Plants need to be available by now and tube stock is sufficient. Residents will be encouraged to grow plants from local seeds as tube stock and local species will also be ordered the previous year from a suitable nursery to be ready for 2014. NEC is donating plant guards and 4 stakes per plant worth \$1,200 and it will only take a week or so with a small team working half a day throughout this period to plant all the sites.
- Soon after the first winter rains of 2014 planting can begin. Watering should not be necessary unless 2014 is a very dry winter. The Bush Fire Brigade has offered to water in this case.
- Plants need to be monitored from time to time to ensure the guards remain in place; rabbit and kangaroo appetites must be forestalled.

Costing

- | | |
|--|------------|
| • Two professional sprays 2011/2012 and 2012/2013
(Grant \$4,598.50 plus Northcliffe Forest Park \$ 402.95) | \$4,981.45 |
| • Part III – 3 rd Spray 2013/2014 | \$1,348.73 |
| • Possible donation to Northcliffe Bush Fire Brigade for watering
in winter 2014, say | \$200.00 |
| • Plants from commercial nursery with local species, say | \$800.00 |
| • Northcliffe townsite publicity | ? |

NEC will cover administration costs and donate the guards and stakes for the rehabilitated sites worth \$1,200. -

NEC points out:

- A grant applied for by the Northcliffe Environment Centre with community donation has made this project totalling \$4,981.45 possible for two years to summer 2013.
- Donations have also been made to cover administration costs and plant guards of over \$1,000
- All work, other than that of Lambert Contracting Services, is voluntary by the Northcliffe community
- The invaded sites are on Shire of Manjimup Recreation and A Class Reserves, DEC Bibbulmun Track walking trails and Unallocated Crown Land. It is anticipated that support for the 3rd spraying, fire brigade watering if required, purchase of plants and Northcliffe townsite publicity may be available from some of the project's supporters.

Caring for our townsite private properties and farms

Blackberry seed is carried by emus, foxes, rabbits and birds, all of which come through the town of Northcliffe and are on our farms.

Blackberry is one of the most devastating weeds in Australia and it costs over \$70 million a year for eradication and control.

It is every property owner's obligation under the Agricultural Resources Protection Act to control declared weeds. Frequently the Shire of Manjimup provides a leaflet to assist owners.

Blackberry is a Priority 4 weed and it is vital that everyone contributes to this project by eradicating blackberry on private properties, both homes and farms.

Contacts

MANJIMUP HORTICULTURAL RESEARCH INSTITUTE

Phone James Dearle on 9777 000 or 0429 085 795 and at j.dearle@agric.wa.gov.au

Advice over the phone, literature and property visits are available.

WARREN CATCHMENT COUNCIL

Phone 9771 8180

????????? WHAT IS WRONG WITH BLACKBERRY ?????????? DISTURBANCE

AGRICULTURAL PRODUCTION

- Competition with pastures and crops for light, moisture and nutrients
- Restricted access to land
- Restricted access to rivers and creeks for watering stock
- Competition with amenity tree plantings

BIODIVERSITY INTERRUPTION

- Frequent loss of spiders, insects and frogs breaking the food chain
- Subsequent loss of birds by departure or demise
- Promotion of additional weed infestation
- Possible dominance of native plants with a preference for fire which will squeeze out previous native inhabitants, thus breaking the food chain and understorey habitat
Examples: *Bossiaea aquifolium* (Water bush) and *Gatrolobium spinosum* (Prickly Poison)
- Habitat for vermin such as rabbits and foxes, and local domestic cats. Examples:
These unwanted animals will either scare away native fauna or use them as a food supply

THIS INTERRUPTION TO THE BUSH HINDERS –

- Maturation of seeds
- Laying of eggs by birds frequenting understorey
- Opportunity for fungi and insects, essential fauna food
- Habitat including hollows, runnels and nests

FIRE HAZARD

The dry fuel in the blackberry thickets is a major fire hazard on both pastoral properties and in town. They present a major increase in fuel load for as long as they are allowed to remain.

Northcliffe's Bushland

Understorey fauna expected to colonise the rehabilitated sites

Red capped robin	<i>Petroica goodenovii</i>
Scarlet robin	<i>Petroica multicolour</i>
White breasted robin	<i>Eopsaltria</i>

Golden Whistler	<i>Pachycephala pectoralia</i>	
Grey fantail	<i>Rhipidura fuliginosa</i>	
Weebill	<i>Smicornis brevirostris</i>	
Western thornbill	<i>Acanthiza inornata</i>	
Splendid Fairy wren	<i>Malarus splendens</i>	
Blue breasted Fairy wren	<i>Malarus pulcherrimus</i>	
Spotted paralote	<i>Pardalotus punctatus</i>	
New Holland honeyeater	<i>Phylidonyris novaehollandiae</i>	
Western spinebill	<i>Aschthorhynchus superciliosus</i>	
Red eared Firetail finch	<i>Emblema oculatum</i>	
Shrike thrush	<i>Colluricincla harmonica</i>	Vulnerable
White browed babbler	<i>Pomatostormus superciliosus</i>	Vulnerable
Quokka	<i>Setonix brachyurus</i>	Vulnerable
Quenda or bandicoot	<i>Isodon obesulus</i>	Vulnerable
Water rat	<i>Rattus fuscipes</i>	Vulnerable
Mardo	<i>Anthechinus flavipes</i>	
Western Green Tree or Motorbike frog	<i>Litoria moorei</i>	
Western Banjo or Pobblebonk frog	<i>Limnodynastes</i>	

Establishment of Vegetation (samples from GPS 34-37-55.5, 54.5, 56.3, and 49.1)

Variety of sedges	<i>Astartea</i>
<i>Callistachys</i>	<i>Pallidus</i>
<i>Lepidosperma</i>	<i>Taxandria</i>
Kangaroo Paws	and other species suitable to the sites
<i>Pimelea</i>	Tube stock and <i>cut and brush</i> methods