

## **Status Report – *Kunzea ericoides* in and around Gowrie Park area**

**30<sup>th</sup> June, 2015**

### **Background**

This status report provides an update to a previous report on *Kunzea ericoides* in and around Gowrie Park (Mount Roland Rivercare, May 2013), and should be read in the context of that report.

With the benefit of two years experience observing and managing *Kunzea*, significant information can be added to that known previously. This report provides updates on management since 2013, distribution, invasive capability, and effectiveness of various control options. Also provided here are recommendations for future management.

### **Overview of status and management since 2013 report**

In the 2013 report, the widespread distribution of *Kunzea* in the former township area at Gowrie Park was noted, and four critical *kunzea* hotspots were identified. These hotspots were areas with a very high potential for spreading the weed beyond its known distribution. With the assistance of grant funding from the Tasmanian Landcare Fund, and cooperative management by Kentish Council and Crown Lands Dept, each of these four hotspots has been successfully managed over the last two years, effectively eliminating these areas of critical risk in the short term. In addition, the majority of *kunzea* in the 'TopTown' area of Gowrie Park has been controlled. However, wider mapping for *Kunzea* has revealed new sites not previously known. Each of these new sites is of concern; some of critical concern. With one exception, each of these new sites has been initially controlled through the Landcare Grant, although the core area within the former Gowrie Park township remains uncontrolled. All known sites will require further followup control. Management techniques have been trialled, and effective control techniques are now available.

### **Known distribution as at June 30, 2015**

Within the boundaries of the old township at Gowrie Park, *Kunzea ericoides* is becoming the dominant vegetation, being even more aggressive and invasive than the very widespread Spanish Heath, Mont. Broom or gorse. Control efforts have primarily focussed on management of any populations outside this central area, and also of managing the 'hotspots' – those areas in the central area where the weed had a high likelihood of spreading more widely. Hotspot management has been successful in the short term, though followup actions will be required as establishment of new seedlings is still strong. The 'TopTown' area of Gowrie Park has had most of its *kunzea* controlled, with just one dense section in the north west corner still uncontrolled. Distribution and status of *kunzea* populations outside the former township area are summarized below.

Site number	Easting	Northing	area	density	Description	Control status
1	435565	5410283	8 sqm	80%	Isolated in bushland near 1262 Claude Rd	Controlled 2014
2	435744	5410256	1500 sqm	20%	Within active quarry area Claude Rd	Controlled 2014
3	435594	5410510	Single plant		1250 Claude Rd driveway	Controlled 2014
4	435599	5410479	40 sqm	20%	Claude Road verge	Controlled 2014 but slashed since
5	435536	5410429	100 sqm	30%	Private land 1262 Claude adjoining road reserve	Controlled 2014
6	434699	5409013	3 sqm		Cleared land opp jcn of Claude and O'Neills rd	Controlled 2015
7	434120	5408628	30sqm	10%	Hotspot west Gowrie pk roadside	Controlled 2014 2015
8	434320	5808739	2000 sqm	50%	North of Claude Rd opp hydro offices, plants to 6m tall	Partially controlled 2015

All gps points to 3m accuracy. Area just outside containment zone boundary has been surveyed for at least 100m in all directions. The more remote *kunzea* population – around 1250 Claude Road – was found after observing flowering *kunzea* plants on roadside. The presence of further – as yet undiscovered – populations cannot be ruled out. Much more distant populations of *Kunzea ericoides* have been reported at Trevallyn (Launceston) and in the Kingborough municipality (south of Hobart). Other unidentified or unreported populations in Tasmania are entirely possible.

Some Kunzea plants at Gowrie Park are over six metres tall. Observation has revealed that the largest Kunzea specimens have around 16 growth rings evident on a cut stump.

### **Invasiveness**

*Kunzea ericoides* appears to be highly invasive, and spreads easily and rapidly. The fine seed establishes easily on gravel soils, and is well suited to colonizing roadsides. However, it has also shown itself to be capable of invading, and replacing, intact native vegetation. This has been observed to occur in a number of locations around Gowrie Park, signalling that this plant is invasive to a degree rarely seen. This plant is also known to be highly flammable, even when actively growing, and the combination of these two factors is potentially alarming.

### **Control options for *kunzea ericoides***

A range of control options have been trialled for Kunzea. As previously noted, handpulling is difficult as the plant has tenacious roots, and often it will snap at the stem rather than be pulled out. Cut paint has proved effective in killing the plant, though the plant often has multiple stems, making this a time consuming process. Spraying has been trialled with Grazon, Garlon and Metsulfuron, in all cases using a wetter and dye. In all cases, failure to achieve complete coverage meant that the plant survived. Metsulfuron initially appeared to be successful, with leaves dropping off the plant. However, six months later, particularly on plants taller than one metre, the plant reshot from the base in many cases. Smaller plants though have been killed. Larger plants that resprouted and then were subsequently sprayed with Grazon appear to have died. Garlon has achieved around 95% kill, while Grazon appears to be 100% effective when properly applied.

### **Awareness raising**

A number of signs have been produced and erected around Gowrie Park, alerting people to the presence and threat of this weed. A field day was held on site to discuss this weed. A postcard featuring kunzea has been produced and distributed in the local area. A meeting of all landholders/stakeholders in the local area was held on site. All of these actions were implemented by the Rivercare group through the Landcare grant. However, awareness levels are still low, and more than one government agency has operated heavy machinery within the area of kunzea populations in the last two years, with no evident awareness of the weed or its presence, and no observable weed hygiene measures in place. There is a real possibility that these actions have spread the weed beyond its known distribution.



Pic 1: Kunzea reshooting, six months after spraying with Metsulfuron

### **Recommendations for future management**

1. Formal risk assessment of this plant within the Tasmanian context, with consideration given to the possible nomination of *Kunzea ericooides* as a declared weed.
2. Ongoing management of all known kunzea sites outside the containment zone at Gowrie Park, with the aim of eradication from these areas.
3. Continuing containment of kunzea within the zone at Gowrie Park, and where possible and practical, taking further actions to limit its scope and potential to spread.