

Hume Highway aerial granular flupropanate trial

COUNCIL NAME

Hilltops Council

WEB ADDRESS

hilltops.nsw.gov.au

SIZE

7,141 square
kilometres

POPULATION

18,782

Overview

Hilltops Council worked in collaboration with Transport for NSW (TfNSW) to conduct an aerial application trial to precisely control African lovegrass on a section of the Hume Highway managed by Council (approximately 28km in one direction, totaling 300 hectares, including the centre island).

Spread along the Hume Highway in hard and sometimes inaccessible terrain, the control of weed species such as African lovegrass can be difficult and expensive using traditional methods like spraying from vehicles. By using granular flupropanate dispensed from a helicopter Council was able to treat the area in one day instead of the usual 4 to 5 weeks, and at a substantial cost saving.

Background

African lovegrass (*Eragrostis curvula*) is a highly invasive grass species, which is non-palatable to livestock and can create a monoculture to favour itself and quickly outcompete native grass species, with one plant capable of producing 40,000 seeds.

Identified in the Riverina Regional Strategic Weed Management Plan 2017-2022 as a weed of concern, control of African lovegrass requires a consistent and/or collaborative approach to ensure the best outcome for the region.



Implementation

Council originally intended to treat the African lovegrass with liquid Flupropanate using two spray vehicles and traffic control on the Hume Highway. The cost and danger involved in this process, potentially amounting to \$200,000 and taking up to 4 to 5 weeks to complete, made this option highly unfeasible. The use of liquid Flupropanate also has the possibility of causing off target damage to adjoining native species.

Council then investigated the possibility of using granular Flupropanate as an alternative. This involved discussions with commercial helicopters, Taralga Agronomy Services, TfNSW and Trafficking traffic control to check requirements and feasibility, as well as to develop the range of approvals and forms required including Safe Work Method Statements, Standard Operating Procedures, a Traffic Control Plan and Agricultural Pesticides and Veterinary Medicines Authority form.

The method chosen, to broadcast granular Flupropanate chemical with a helicopter operating a calibrated spreading machine, meant that Council were able to cover a larger area in very little time. Also, by using a specialist agronomist to advise on the granular product, it was spread at a rate of 12kg/ha, which is significantly lower than the rate that would impact on native grass species such as wallaby grass.

Outcomes

With perfect weather on the day and the smooth choreography of traffic controllers and their processes the job was completed in 1 day (6 hours). Effectively treating 300ha of the Hume Highway from the shoulders to the fence and the centre island to within budget range with minimal disturbance to traffic throughout the program. The job cost Hilltops Council \$60,000, which is significantly less than using spray vehicles.

The use of granular Flupropanate is estimated to provide 2 years protection against African lovegrass regrowth by forming a residual layer on the surface of all plants, both current and future emergences. Council plans to repeat the treatment in December 2022 using the same methodology.

Council has been back to the job site with granular products representatives and the agronomist several times since treatment and is very pleased that as of June 2021 the program appears to have been successful with all treated areas of African lovegrass showing signs of dying as well as no off-target plant species effected. The project has also resulted in a stronger relationship between Hilltops Council and TfNSW.

Key Learnings

The project ran very smoothly overall. However, Council reflected that in terms of the operations on the day, resetting the traffic control process could be tightened up to assist with a quicker turnaround and less lag time for the helicopter operator.

Council is keen to share its experience with other councils, particularly those along the Hume Highway looking at controlling African lovegrass. They are also able to share the documents they developed and acquired through their project.

Hilltops Council encourages other councils and stakeholders to approach TfNSW on similar projects, given the support and help they experienced throughout the process.

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This project was the 2021 winner of the Invasive Species Management Award at the LGNSW Excellence in the Environment Awards

