Case Study: Weed hygiene station

Overview

Wagga Wagga City Council’s weed hygiene station is different from other boot scrubbers as it has a duster to clean down footwear, clothing, pet fur, bike parts and a walkway metal grate that the boot scrubber is attached to. The most important part is the sump that sits underneath the grate for catching vegetation and soil thus minimising the spread or movement of debris once cleaned from the user and enabling propagation of collected seeds, contributing to weed monitoring.

Background

A major priority for Wagga Wagga City Council is the prevention and reduction in the spread of weeds on reserves managed by Council, as both a landowner and local control authority under the NSW Biosecurity Act 2015.

Council has a number of major reserves containing highly invasive weed species including Coolatai grass (*Hyparrhenia hirta*) and Cane needle grass (*Nassella hyalina*). These reserves are heavily used as recreational areas and monitoring to determine the major causes contributing to the spread of weeds, identified hygiene protocols as a key driver.

The main objective of the project was to design a simple, effective and familiar design for a Weed Hygiene Station that could be installed at the entrance of all nature reserves. Some important design considerations were:

- No moving gears or mechanisms that would need maintenance
- A structure able to take the outdoor weather, and a colour/appearance that draws people in to use the station.
- Low cost so that it was cost effective to install in multiple places and maintenance and repair was easy.
- Ability to collect weed seeds for monitoring.

The idea of catching the seed in the sump was the most important part of the design. This feature sets it apart from other boot scrubbers available. The idea is to prevent contaminated weed debris left at the station from being picked up by the next person, moved by natural elements or growing in the scrubber itself. The Weed Hygiene Station has a grate and sump to keep seeds from being transferred and the collected soil media can be grown to monitor weeds in the reserve.

Implementation

Wagga Wagga Council went through the following steps to develop the Station:

- Research and design – to identify an existing weed station by contacting other regional, state and national environmental departments to determine what hygiene stations were already installed, or to design one if no suitable one existed.
- Engineering - approach suitable engineers to build the prototype, with a defined budget.
- Build - Track down material that was suited to the environment and could withstand the elements and potential vandalism, finalise the quote and get it built.
- Paint - paint the Weed Hygiene Station with appropriate colours that were recognisable and that it could be seen at day or night for collision safety.
- Installation - Assess the site (to avoid underground services) and ensure it is easily accessible for users without restricting other vehicles for maintenance or emergency services.
Interpretational posters were installed on notice boards, keeping content to a minimum.

Mountain bike users of the reserves were consulted during the research and design stage to ensure the Weed Hygiene Station was as user friendly and effective as possible. The use of the Weed Hygiene Station was promoted on site (through users showing other reserve users), in the Council media and through other environmental management channels.

The budget was kept to under $2000, with the overall timeframe for the project from research to installation being just over 6 weeks. As the Weed Hygiene Station will be used for monitoring of invasive species, the station will be maintained under Councils' current weed management budget as an educational and weed management tool.

Outcomes

The Weed Hygiene Station is a very simple introduction to biosecurity hygiene that can be easily incorporated into an outdoor experience on Council nature reserves. Engaging the public with a practical active educational tool delivered a more effective result than written material alone. Site managers where the station was installed also saw it as a positive for weed control.

Council has already begun designing an improved second hygiene station to accommodate higher volumes of traffic including bicycles. The Weed Hygiene Station materials will remain the same because of its cost and durability, as will the look / colours so that the target audience recognise the station at different locations. The sump under the grate may be reduced in depth for ease of access to soil media.

Key Learnings

The main challenge for the Weed Hygiene Station project was making weed hygiene a priority for the users of the nature reserves and other land owners. The Station is the start of a much larger program carrying the theme of “Biosecurity Starts at the Gate. Check your Tread to Reduce the Spread”.

The Weed Hygiene Station project can be used by other departments in council e.g. Parks and Gardens, etc. but also the private sector and other regions and states. The costs for setting up and maintaining the Station are low.

The next step is to build more Weed Hygiene Stations, reviewing the design to ensure it suits the needs/volume of the target audience and keeps users engaged and actively making hygiene a part of their outdoor experience. Consultation with other groups and clubs (horses, four-wheel drives, motorbikes) will be undertaken to develop weed hygiene control strategies to incorporate into their user experience.

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