

Landcare-led Landscape Resilience

Tools and data for restoration decisions

Overcoming Phalaris - scalping techniques

OBJECTIVES

Revegetation of a sensitive creek area.

This waterway was eroded and unstable and required fencing to stop the erosion. Ripping and was not recommended and the Phalaris got away before site preparation for revegetation could be done.

The landholder decided to try scalping as a technique. The fencing contractor used a small excavator to scalp some lines. The landholder also used a tractor to scrape some areas with the bucket.

The circumstances in which you might consider Scalping are:

- in highly modified or 'greenfield' sites with no native vegetation
- landscapes with low slope and low erosion risk
- spot scalping as a non-chemical pre-planting weed control for greenfield sites being hand planted (less risk)
- along rip lines in low-risk sites if you don't want to use chemicals.

KEY STEPS

- This is a specialist area and a developing technique – do your research and seek advice from Landcare or your local natural resource management agency before considering it.
- Assessing the site: Determine how much topsoil needs to be removed (recommendation of approx. 10cm for weed seed removal) and where to stockpile it
- Removing topsoil: Use precise excavation techniques to minimize soil disturbance
- Analyzing the soil: may need to add organic matter, correct pH levels, or add lime or sulfur to improve the soil structure
- Planting: Introduce new plant species through direct seeding, tube-stock planting, or other methods
- Control any new weeds that might blow in by hand digging or spot spraying.



Photo of what we would expect it to look like - a success in 30 years



WHAT IS SUCCESS?

- The scalp areas are still free of Phalaris three months after planting and the plants are doing well
- Because of the thick Phalaris buffering the creek there hasn't been any erosion



A LOCAL NETWORK OF DEMONSTRATION SITES ARE BEING ESTABLISHED UTILISING 'BEST PRACTICE' RESTORATION AND REVEGETATION TECHNIQUES FOR CLIMATE RESILIENCE. THIS IS SHOWCASING OF THE POSITIVE ECONOMIC, PRODUCTION AND ENVIRONMENTAL IMPACTS OF NATIVE VEGETATION RESTORATION, AND THE POTENTIAL FOR INCOME STREAMS FOR BUSINESS RESILIENCE.

KEY LEARNINGS FROM EXPERIENCE

- Only suitable for relatively flat sites
- Trees probably do better than shrubs in this situation. Plant trees and come back in with shrubs when the trees begin to outcompete the Phalaris (5-10 years)
- Need to scrape at least 10 cm to remove the nutrient rich layer with the weed seeds

COST CONSIDERATIONS

- If you are using your own tractor then this technique is relatively cheap but is expensive option if you have to pay a contractor.

Thanks to the Locke family for sharing their story



www.revegetation.org.au