Landcare-led Landscape Resilience

Tools and data for restoration decisions

Groundlayer Restoration - scalping

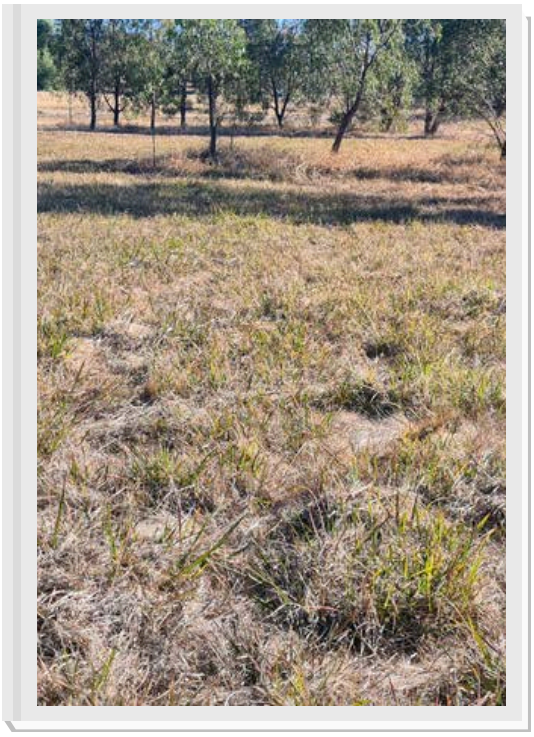
OBJECTIVES

Restoring groundlayer plants - the grasses, subshrubs and forbs - in our grassy woodlands is a major challenge in an agricultural landscape with high fertiliser use and weeds.

For small sites scalping has been trialed to remove the fertility and weed seed load to allow tubestock or direct seeding.

WHEN TO USE SCALPING?

- On highly degraded sites with no native vegetation
- On low-slope sites with low erosion risk
- As a non-chemical weed control method for greenfield sites
- Along rip lines in low-risk sites



Before
site dominated by Paspalum and weeds



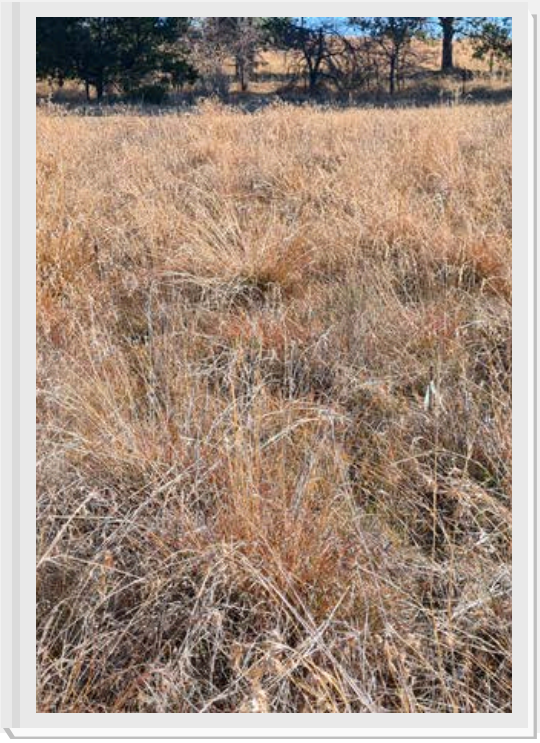
Scalped topsoil 10-15cm

KEY STEPS

- If a weedy site, check if site is suitable for scalping - is there going to be soil erosion?
- Consider costs - get quotes for machinery such as a bulldozer for large areas.
- The key to the deep scalping technique is to remove the top layer of weeds and soil (approx. 10-15 cm depth). Need a skilled operator.
- Terracing effect: Approximately one metre intervals are made in between the scalped rows and are heaped with the weed and soil.
- Sowing of the seed takes place as soon as possible after scalping. Either direct seeding or tubestock plantings
- Control any new weed loads that might emerge until natives are established.

RECIPE FOR SUCCESS

- Use a skilled operator for scalping site to reduce erosion.
- Avoid drainage and gullies
- Plant groundcovers ASAP
- Still need to control weeds after planting



Successful establishment of Kangaroo Grass (themda australis)

KEY LEARNINGS FROM EXPERIENCE

- Scalping can be very costly! Get quotes first
- Scalping is generally only used in small sites
- It removes soil from the site, so you need to have somewhere to put the spoil
- It can have a high impact on soil health
- It can have a high risk of erosion

In grassy woodlands, the best results are often gained from scalping the weedy topsoil then revegetating the ground stratum first, so that these species proliferate well before being shaded out by shrubs and trees. However this should only be done where there is no risk of soil erosion.

https://www.environment.nsw.gov.au/resources/cpp/revegetation.pdf

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.

www.revegetation.org.au

Australian Government | Future Drought Fund | Murrumbidgee Landcare Incorporated | Holbrook Landcare Network