



INITIAL STEPS IN THE RESTORATION OF THE OFFSET PROPERTY

May 2025

Worsley Alumina has recently received environmental approvals to expand its mining operations in the Boddington area.

To offset the impact of the clearing of 3,855 ha of native vegetation, Worsley will provide the following offsets:

- 4,384 ha of habitat protection and enhancement, and
- 7,962 ha of farmland restored to native vegetation.



The Gibbs property spans 518 ha, comprising 300 ha of pasture and 219 ha of parkland trees.

Regulatory targets for the restoration of Gibbs will see:

- Karrak, Ngoolark, Ngolark (Black Cockatoo spp. use of artificial breeding hollows);
- Chuditch (Western Quoll return 10 years), and
- Kenngoor (Red-tailed phascogale return 20 years).

Gibbs Property proposes a number of restoration challenges, including

- Best methodology for restoring areas of pasture to native vegetation.
- Restoration steps to see the:
 - return of the Kenngoor;
 - return of the Chuditch, and
 - return of Karrak, Ngoolark and Ngolak etc breeding to the property.

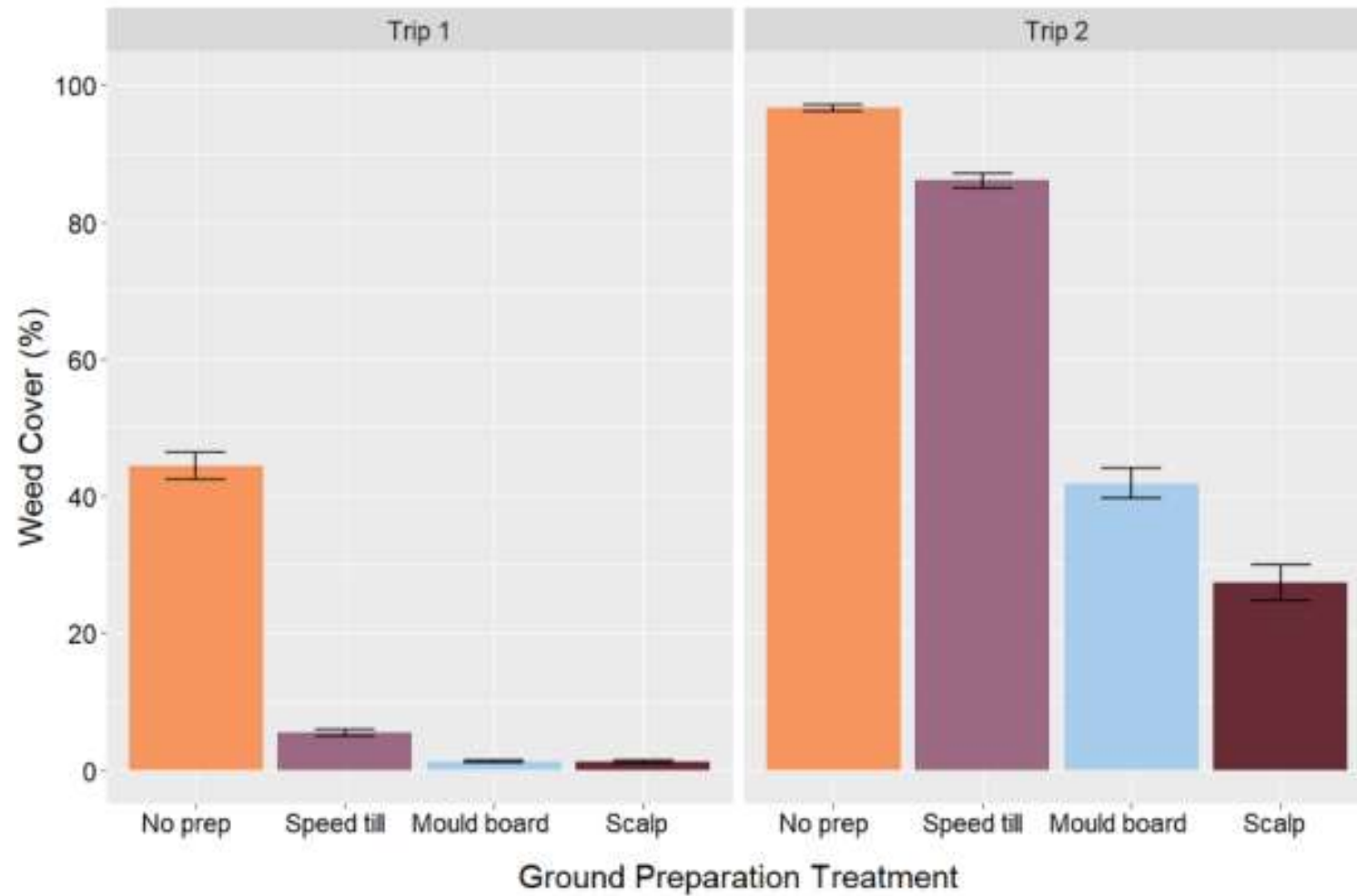
Aim: To determine the best agricultural methodology for removing the weed seed load prior to sowing native plant species.

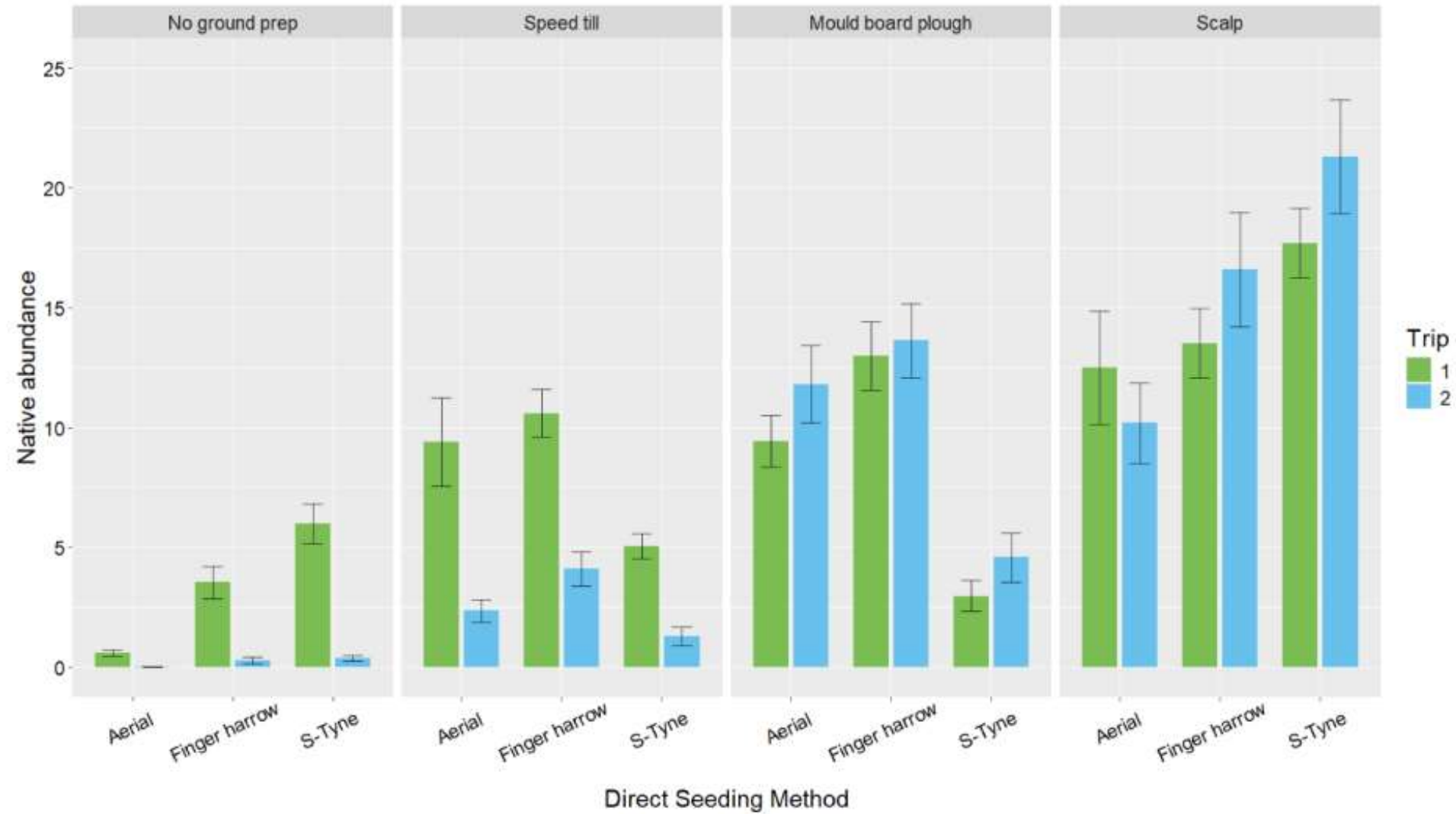
Hypothesis: Soil preparation methodology will have a significant impact on the establishment of native species in areas with existing pasture.



Plots	20m x 40m plots	4 replicates		
Ground Prep Technique	Control	Speedtill Offset Disc	Mould board Plough	Scalping (grader)
Seeding Tech	Aerial sowing	Finger harrows	S-tyes	

Trial was designed, implemented and monitored by Dr’s Todd Erickson and Vanessa Brown from Biologic Seeds.





5 ha SCALPING TRIAL 2025



RETURN OF KENNGOOR IN 20 YEARS

Aim: To see the return of the Kenngoor in 20 years.

Hypothesis: A lack of hollows has limited Kenngoor presence in areas of parkland trees.

Trial: To use the Hollow Hog tool to increase the number of hollows in existing parkland trees.

Standard nest boxes versus Hollow Hog?





450 MM CUTTING EXTENSION



POTENTIAL FUTURE INSTALLATIONS



RETURN OF CHUDITCH WITHIN 10 YEARS

- Aim:** To see the return of the chuditch within 10 years.
- Hypothesis:** Lack of denning opportunities resulted in low chuditch numbers across the property.
- Trial:** Install and monitor Marsupial Dens created by Habitat Innovation.

RETURN OF CHUDITCH WITHIN 10 YEARS

Key Features:

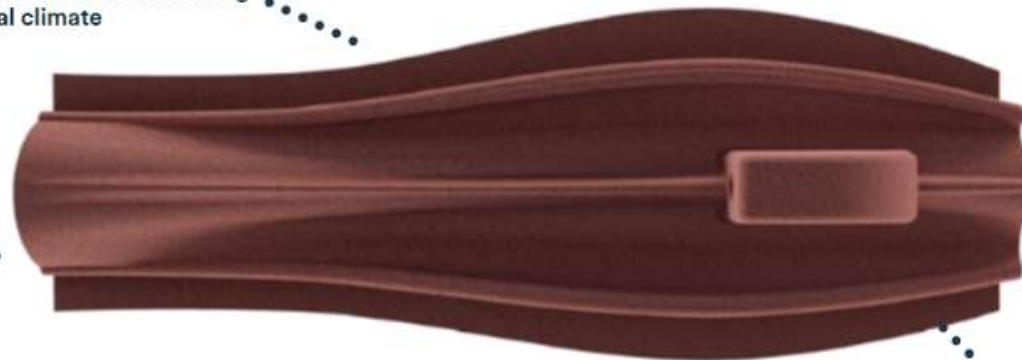
Available with optional fire retardant to withstand low intensity bushfire and ecological burning typical in the environment



Internal shelf acts as both a resting point (specifically desired by Quoll species), and a refuge point in case of predators

Double-walled design for optimal thermal performance mimicking the natural climate

Venting to facilitate air flow and expel hot and humid air



Entrance size is based on the morphometrics of an adult cat to minimise chance of den entry

External ridged design supports rock and soil substrate allowing vegetation to grow over the den further improving thermal qualities and camouflaging into the surrounding landscape

Length of the den matches ideal naturally occurring marsupial dens

Combination of a flared base design and correct installation reducing the likelihood of burrowing by potential predators

Installation of Marsupial Den



Camera Trap Monitoring



Black Cockatoo use of Artificial Breeding Hollows on Gibbs

- Aim:** To see the use of artificial breeding hollows by the Karrak, Ngoolark, Ngolark on the Gibbs Property.
- Hypothesis:** Lack of natural hollows has resulted in no breeding on the Gibb Offset Property.
- Trial:** Install and monitor cockatubes (installed at two different heights, 10m and 18m) across the Gibbs Offset Property.

Suitability of Gibbs to House Cockatubes

As assessment of the property was completed to determine suitability. Key findings were:

- Known breeding nearby (1.2 km) of the property;
- Roosting locations were identified on the property;
- Evidence of foraging present;
- Existing old farm dams provide known sources of water, and
- Low abundance of natural hollows.

The study identified in excess of 300 potential trees suitable for installation.





Feral animal control program on the Gibbs Offset.



OTHER WORKS

Baseline fauna and flora survey have been completed

Ongoing cleanup of old farming infrastructure

Installation kangaroo-proof fencing

Development of a restoration plan for the property (Biologic Seeds).

Control of pasture grasses and creek line infestation of spiny rush.

Creek line seedling planting with Danju Rangers
14,000 2024 .



