



2021-22

# Mid Dome Wilding Conifer Control Programme

Project managed by Boffa Miskell

## Annual Summary



PREPARED BY

Boffa Miskell

on behalf of the Mid Dome Wilding Tree Trust





# THE 2021/22 SEASON

## Highlights

- 10,568.5 hectares of Aerial Basal Bark Application (ABBA) was delivered, controlling 8,043 trees
- 972.1 hectares of ground control was completed
- 320 hectares of Aerial Foliar Spraying Application (AFSA) was delivered
- A total funding of \$2,590,350 was invested into the Mid Dome Wilding Conifer Control Programme
- Four ground control contractors and one aerial operator were engaged to deliver the programme
- 89 people were employed at Mid Dome this year, undertaking 14,948 hours of work, and equating to 9.58 FTEs
- Efficiency was increased by providing aerial transport to ground crews to access remote areas of Mid Dome
- High resolution aerial imagery was captured of the core areas of Mid Dome in November 2021, which will aid planning and reporting
- Ministry for Primary Industries undertook two audits at Mid Dome, helping ensure all workers operate to high health, safety and well-being standards.







# Ground Control

Completed by Mainland Vector Contracting,  
D. M. Holdings, Full Circle Arboriculture and Trap and Trigger

Ground control techniques utilise chainsaws, handsaws, and loppers to cut trees at their base. Stumps are treated with herbicide as insurance against regrowth. Smaller trees are removed by pulling the whole plant, including the root system, from the ground. Contractors also have the responsibility to take GPS waypoints of coning trees.



Clearing the landscape: A Trap and Trigger employee prepares a tree for felling by removing lower branches, before cutting it down and pasting the stump with herbicide (February 2022).

Ground control was carried out between November 23rd 2021 and 28th May 2022 in the Cattleflat 1, Cattleflat 2, Cattleflat 3, DOC 5, Five Rivers 2, Five Rivers 3, Nokomai 1 and Nokomai 2 operational areas at Mid Dome. At the Flagstaff Management Unit, ground control was completed in both Flagstaff 1 and Flagstaff 2.

**972.1 hectares** was treated using ground control methods

The Mid Dome Wilding Conifer Programme enabled a total of 78 people to undertake ground control in the 21/22 season.



# Aerial Basal Bark Application (ABBA)

Completed by Amuri Helicopters

Aerial Basal Bark Application (ABBA), which involves a person applying herbicide via a wand to the base of trees from a helicopter, enables large, sparse areas to be surveyed and treated. Information gathered while undertaking ABBA helps to inform the programme by determining priorities and control methods for future seasons. This includes gathering information on areas that may be too densely infested and require an alternative method to be utilised, and the identification of tree age and species.

ABBA was carried out in Cattleflat 1, Cattleflat 2, DOC 1, DOC 6, Five Rivers 3 and Nokomai 1 operational areas. ABBA was also completed in Flagstaff 1 and Flagstaff 2.

A Grazon/Bioester herbicide mix was used to control the trees.



Amuri Helicopters staff in an MD 520N helicopter during a break from ABBA control.

**8,043 trees** were controlled over an area of **10,568.5 hectares.**



An aerial photograph showing a helicopter flying over a dense forest, releasing a wide spray of white mist or herbicide. The forest is composed of various types of trees, including tall conifers and shorter, bushier vegetation. The helicopter is positioned in the upper left quadrant of the frame, moving towards the right.

# Aerial Foliar Spray Application (AFSA)

Completed by Amuri Helicopters

AFSA, commonly referred to as 'boom spraying', is the all-over foliage cover of dense infestations of wildings conifers. AFSA operations require extensive planning and consultation, and an appropriate weather window, typically during the period of December - February.

The AFSA operation was completed on the 6th and 7th of February 2022,

The TDPA herbicide mix was applied via AFSA at Five Rivers 2, LINZ 1, DOC 3, and DOC 4. Two AS350 squirrel helicopters were used to deliver this work and were supported by seven ground crew members who were responsible for herbicide mixing and loading, helicopter maintenance, safe and efficient chemical handling, and the transportation of fuel and chemicals.



An AS350 Squirrel undertakes AFSA in February 2022

**320 hectares** of control using AFSA was completed over a period of **2 days** in February.