



**Trial for B WV Deer, Pig and Goat Trial
Meridian Energy – Laurie Forestry - Maruia**

General information –
Test in crops –
Data collection –



b_WV Deer Pig and Goat Trial Maruia July 2024_ (Master).docx

General information:

General rules for trials

- If machinery (e.g., sprayer, tanks etc.) is used for the trial, use this equipment first for the control field and then do the penergetic field. After the application, clean the machinery. It takes up to several weeks before the effect of the penergetic information disappears from the machinery.
- Penergetic recommends a trial size of 1 hectare.
- For the control field choose the field beside.
- In the case of sloping sites, place the penergetic plot at the bottom of the area, otherwise rain, for example, flushes the penergetic products down on to the control plot.

Setting up and documenting a measurement

- A photo documentation from the start until the end of the trial period (high quality images) is mandatory with each trial.
- Description of the initial situation and the objective.
- Use the data collection form below.

Data collection:

Penergetic b WV

General data

Penergetic consultant	Paul Newton	
Customer	Meridian Energy – Laurie Forestry	Date: 10/07/2024
Farm location: country, city	Maruia New Zealand's South Island	
Using penergetic products for the first time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No, for _____ years
Total farmland in ha	89 Ha Ex grazing land now in Forestry	
Objective of the trial	To understand the Penergetic B WV deterrent product dosage requirements of the effective prevention of Goats entering an area.	
	A Higher rate of 2.19Kg has been recommended.	

Trial data

Crop type / variety	Redwoods 2022 + 2023, Totara and Beech 2022 + 2023, Indigenous 2006
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	Area (ha)	Planting/seeding date
Control		
Penergetic test	7.3 Ha	August 2023
Animal species	<input checked="" type="checkbox"/> Pigs <input checked="" type="checkbox"/> Deer <input checked="" type="checkbox"/> Goats <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

Special weather conditions	Application By R44 helicopter, 50Ltr water rate
<ul style="list-style-type: none"> ● Rain (quantity, when) ● Temperature variation ● Frost / hail / snow ● Others 	Frost and Fog -2°C at 8:30 and by 10:00 +4°C Wind max speed 5km/h
Southern and eastern boundary 50m wide	2.19Kg/Ha @ 50m wide perimeter application over 7.3Ha



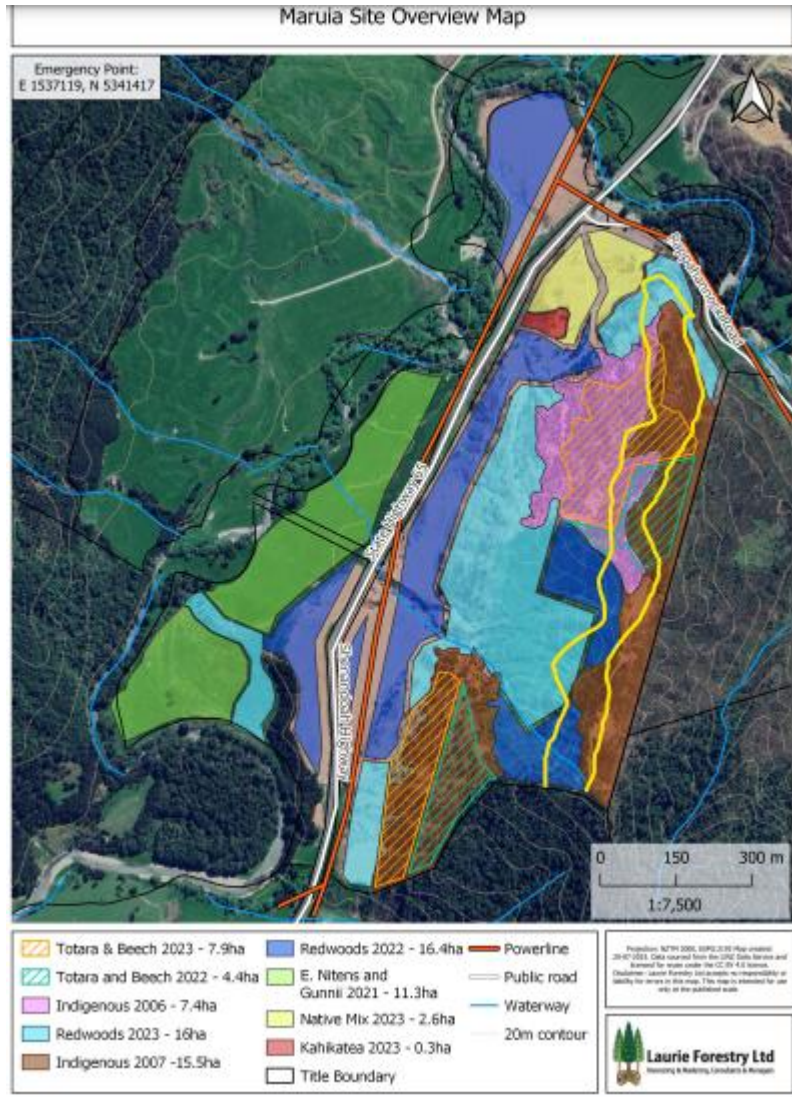


Photo from site visit 10/07/2024



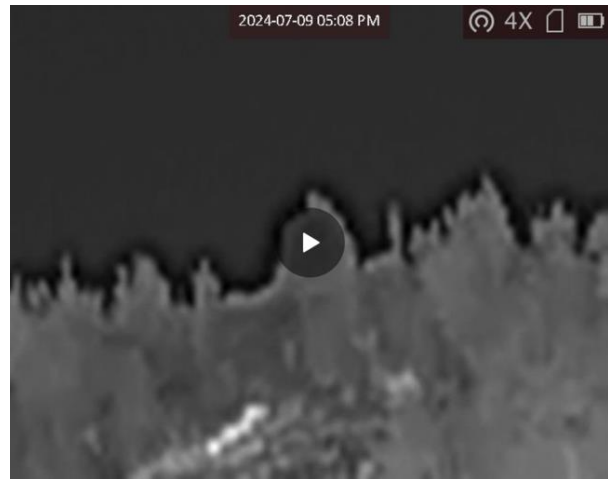
View from the South Western trial area

Observations

Observation 1: Pre application assessment	9/07/2024	1 day before application
<p>Notes, Counts and Timings Arrived on site 65 minutes before sunset 4:15pm, drove up to the top without seeing any animals however there was recent pig rooting up the track and on the top. Due to the conditions I took the truck very carefully back down the track and walked the base of the hill on the road side. There was evidence of both pigs and goats on that lower level. I then drove down where the farmer had just taken cows out of the paddock at the Southern roadside and his dogs were making a large amount of noise which is when I saw the pigs 5:06 - 5:08. I then sat viewing the hillside for another 90minutes and saw no other animals in the area. I was back on site again at 07:00am the next day before the helicopter arrived with the fog too thick to see but walked up into the Southern Face where there were deer, goats and pig footprints. I then waited in the cold for the helicopter to arrive at 10:00.</p>		



Above as the first pig comes into view 5:06pm



The other 4 arrive and move on 5:08pm



Damage on trees, the top has been stripped.



View from the top looking back down to the West.

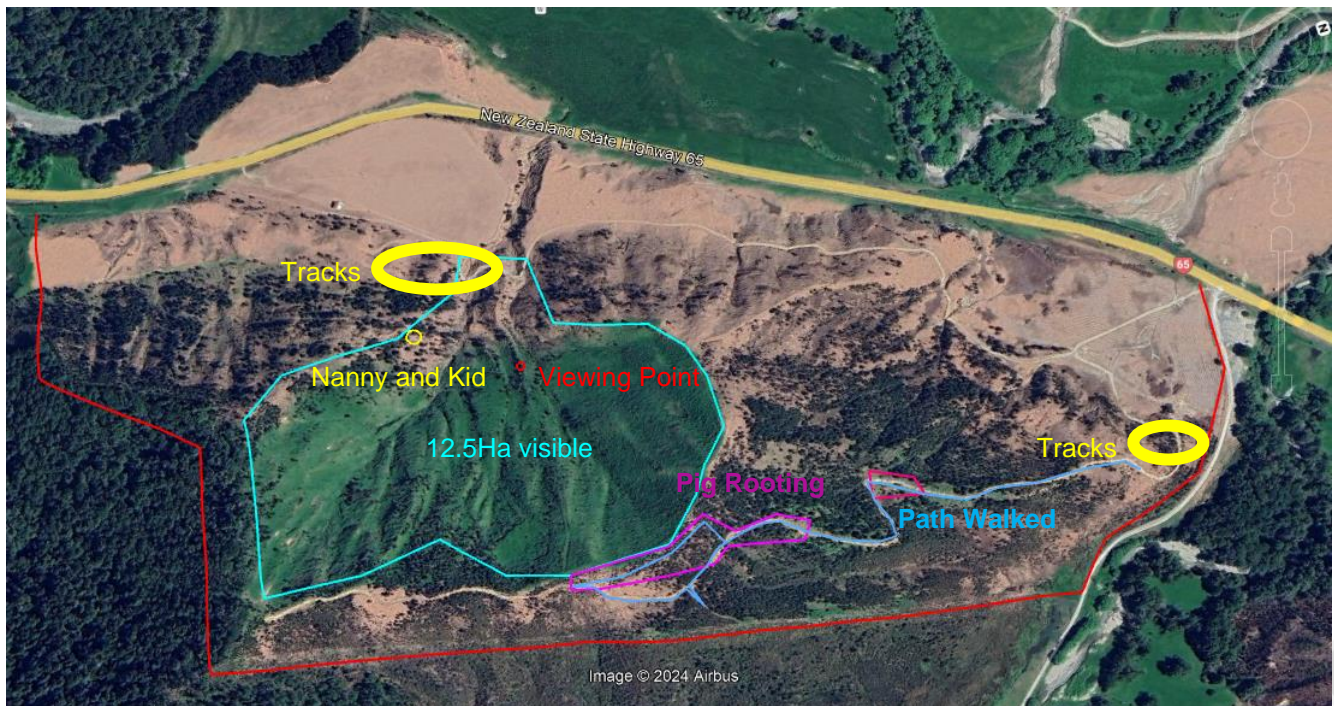
1st Application Products dates and rates

Penergetic product	Art. no.	Dosage / ha	Date of application (dd/mm/yy)
penergetic b WV	3152	2.19Kg/Ha	10th July 2024

Application 10/07/2014 Ahaura helicopters.



Observation 2: 5-6/08/2024	28 Days after 1st application
<p>It was 4:35 when i started walking up and with the wind coming down from the north it was decided to enter from the South and position myself where I could see a large area on the South west face. Map below showing location and area visible. There was a strong smell of Billy Goat that was unmistakable (it was that bad.) and after about 30 minutes i noticed the nanny and kid but they were behind bush and didn't come into clear site until about 5:25, I could only see the nanny and dispatched her (location on map). I waited around until it was dark without seeing any other animals. Then walked back down and left site about 6:45pm. There was little to no wind the next morning so as it became light enough to see although foggy to about 50m visibility I walkup up the hill from the North of the block. Seeing old and also fresh pig sign some past 48hours. There seems to be alot of pig though and crossing the track, some deer sign and goat tracks but not much compared to the pigs. As I got closer to the boundary I noticed the sign had got older and then became fresh as I got over 60m away from the boundary. The tracks from all animals were visable away from the sprayed area and close to the boundary so that could be the location of them travelling in and out.</p>	





Nanny and Kid



Redwoods 90% with this damage



One of the large areas rooted up by the Pigs

First post application evaluation

The area that was sprayed had little to no fresh sign and it has blocked animals from being on the sprayed area. The animals seemed to be coming and going from the non-applied areas as the tracks suggest. There are a couple of prime locations to install game cameras which will enable us to confirm the animal's activities. Next site visit to be end of August/early September.

Results achieved for this report have been successful for this trial.