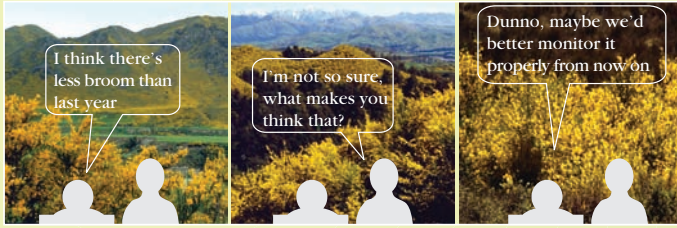


# Why monitor weed control?

If you're doing a long-term weed control programme it's important to monitor how well you're doing because:

- You'll know if you're winning
- You can show others how good your weed control is



## What is weed monitoring?

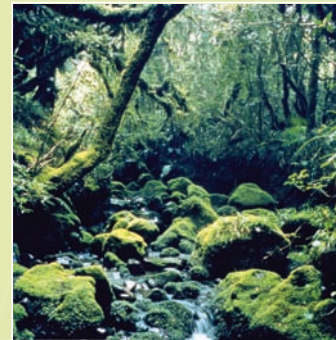
It is counting or measuring weeds *before* and *after* a weed control operation. It can also include assessments of native vegetation. There are two types of monitoring.

- Result monitoring—Did you kill the weed?
- Outcome monitoring—Did you save the natives?

The two types require different techniques. The Department of Conservation (DOC) Standard Operating Procedure explains these techniques. Monitoring isn't hard, but you've got to do it properly!

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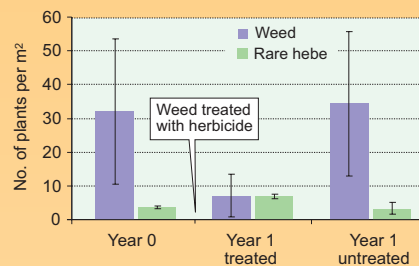
Did you save the natives?—  
Kaupokonui Stream,  
Egmont National Park, and below,  
kauri snail.



Did you kill the weed?—  
Above and right,  
Monitoring bone-seed  
control at Raumati South.

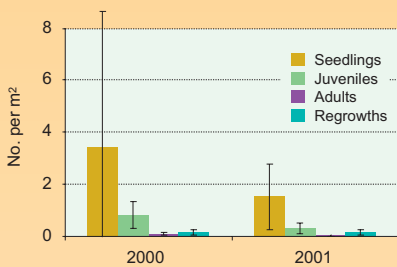
## Monitoring data

Ideal outcome monitoring could give results like these stylised ones showing the reduction in the weed and increase in the threatened species.



## Result monitoring of gorse control

Gorse plants were counted in belt transects (10 x 2 m), in November each year. Gorse appears to be declining, but the error bars show how variable weed data often are.



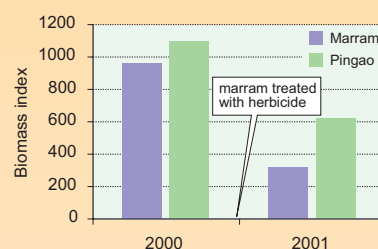
Gorse

## Outcome monitoring of marram control and pingao recovery



Checking the recovery of native pingao

Marram grass reduced appreciably, but pingao has yet to show recovery. It's too early to tell and there are no untreated plots.



## Monitoring procedure

Monitoring weed control requires more than just a quick look-see. You need:

- A clear objective for control and for monitoring
- Set procedure—repeatable and planned ahead of time
- Randomly placed plots
- Several replicated plots
- Untreated plots in outcome monitoring, to test what happens to native recovery without weed management

## When to monitor?

When it's important to know how well you're doing:

- Using a control method for the first time
- When eradication is the objective
- At high value sites
- Protecting a threatened plant or animal

## Summary

Monitoring should cover a range of weed control programmes.

People doing the monitoring should be different from those doing the control.

Result monitoring programmes are essential when eradicating newly-discovered weeds.

Outcome monitoring is most important at weedy high-value sites.

Untreated plots are vital for outcome monitoring.

DOC's Weed Control Monitoring procedure was developed by experts, is easy to use, and is freely available.