

FORMAK Site Assessment - *Tirohanga Tuatahi* Planning Instruction

Overview

Why do it?

- It is required to identify and define the site before further FORMAK monitoring can be undertaken.
- To get a “snap shot” of the current status of the forest and help identify key areas where further management or monitoring is required.
- To provide an overview description of the site to help interpret more detailed measurements
- To allow comparison of different sites – identifying sites that are similar or different. e.g. different level of animal pests, similar vegetation etc.

What's involved?

- Looking over the area from a vantage point, and walking through the site, visually assessing and rating the current state of the forest, and collecting some simple counts.

How long?

- Two to three hours, depending on the site.

How often?

- Once when you are first setting up a FORMAK site and then occasionally (e.g. every 2 years) to audit how management is going. On some small sites where there is no time / money or requirement for additional monitoring it may be the only monitoring undertaken. In these cases it may be done annually.

Equipment Checklist

- FORMAK Site Assessment Field Instruction
- FORMAK Visual Guide
- FORMAK Header Guide
- FORMAK Site Assessment Form
- Small tape measure – to measure thumb & arm length (or measure and recorded before you leave home).
- Binoculars (optional – but a good idea)
- NZMS 260 series map of the area.
- GPS (optional – but use it if you have one)
- Aerial Photograph – if available
- Clipboard
- Pencils
- Rubber

Skills

- Basic knowledge of main canopy tree species
- Basic knowledge of main bird species
- Basic knowledge of main weed species.

How many people?

- Generally done with one person.
- Having two people provides slight benefit in allowing one person to record while the other undertakes basic counts. It also allows decisions on classification under different site criteria to be discussed and agreed.

Measure / Re-measure

- Measurements are normally repeated every two to four years. On some small sites where this assessment is the only monitoring undertaken, monitoring may occur every year.
- If this is a new measurement, you will need to work through all the steps below.

FORMAK

- If it is a re-measurement, some steps around defining the scope of the site and the assessment route etc will already determined.

Planning - Before you go out into the field

Scope of Site

- The site assessment must relate to one “site”.
- A site is an area of forest being assessed that will be logically grouped into one unit for monitoring and analysis. Ask yourself:
 - Is management of this area likely to be similar over time?
 - Are the condition and threat issues broadly similar across the area (edges and internal areas will always be different – so don’t worry about these differences)
 - Is it an area and location that you will be able to continue to assess over time. Will you have the time / resources to keep re-measuring it in the future.
- Examples of sites are:
 - Small distinct forest remnant
 - Area of forest being assessed that is part of a larger forest area.(try to make the area selected generally representative of the larger area – that is too large to monitor cost effectively).
 - See also Case Studies at the end of this instruction.



Sampling

- One site assessment is done at a site.

Plan Route

- The route you take through the site will determine what you see and will affect the judgements you make on the site assessment form. It will also determine where you undertake a series of simple counts.

- Where possible, determine the general route you will take from a map or aerial photograph, before you go to the site.
- From the map, or your knowledge of the area, plan the following
 - The best way to access the site.
 - A good “overview” site where you can view the site, as much as possible of the edge of the site, and the surrounding area including neighbouring vegetation.
 - The best route to access important edges of the block to check these.
 - The best walking route through the site so that you will get a representative overview of the forest.

See example in case study below.

Adjust Route

- You may need to adjust your actual route when you are at the site for easier access, or to check out important features.

If no Map

- If there is no useful mapping or aerial photography available for the site – particularly if it is a small site, you may need to design your route in the field, once you reach the overview point.

Read field instruction

- Read through the field instruction for this module and make sure you are clear on what is involved.

Check background information

- This may include:
 - Previous Site Assessment Forms.
 - Information from talking to previous assessors about the site.
 - Information from talking to owners / managers if separate from measurer. This may provide information on key issues or changes (e.g. changes in management, environmental impacts such as wind, casual observations of changes etc).

Bush Safety

- Refer to the NZ Mountain Safety Council leaflet “Going Bush” and check you are prepared at a level appropriate for the monitoring trip.
- Make sure you leave details of where you are going, and when you will be back with a responsible person (see the NZMSC Help Form).

CASE STUDY

A community group is interested in undertaking some intensive control of possums and mustelids (stoats, ferrets & weasels) on some easier, more accessible faces of a larger native forest block.

They wish to get an indication of the current condition of the site and begin to monitor broad trends on the site over a number of years as they continue with the control.

They are all volunteers and don't have much time for monitoring on top of all the effort that they are putting into animal control. They decide that FORMAK will be a good tool to use. From the FORMAK instructions, they know they will have to do a site assessment first.

After looking over the wider area where they are undertaking control, they decide that it would be too difficult to monitor the whole area. They identify an area that is generally representative of the wider forest block, and that they can easily access to undertake ongoing measurements. This will be their FORMAK Site.

Using the 260 series Topo map for the area, they identify the broad extent of the site (see image below). They then obtain an aerial photograph of the area by downloading an orthophoto from the Land Information New Zealand Website (www.linz.govt.nz).

They plan their assessment route. There is a good raised knoll on farmland adjacent to the site, and the owner is very supportive of their project, so will let them access it. They will use this point for their overview (see 1 in the image below). They can then walk down to the site and assess some of the edge (see 2 in image below), before walking through the main part of the site (3 in image below). They will then check some more of the edge, before completing a final check of their site assessment form (4 in image below). They mark this planned route on the aerial photo – and after checking they have got all their site assessment equipment, and have safely prepared for the trip into the bush, they are ready to set off.

