TREES THAT COUNT TE RAHI O TĀNE

ADVANCED MONITORING GUIDE

HOW TO MONITOR YOUR PLANTED NATIVE TREES

Once you've added trees to the count on the Trees That Count website, we ask that planters provide us with monitoring data so we can measure our collective success.

For larger projects, where over 1000 native trees are planted, we recommend planters use the Advanced Plot Method, to provide a statistically robust estimate of survival and early growth.

The Advanced Plot Method is based on sampling a small proportion of planted native trees using a network of plots placed across a representative area of the planting site.

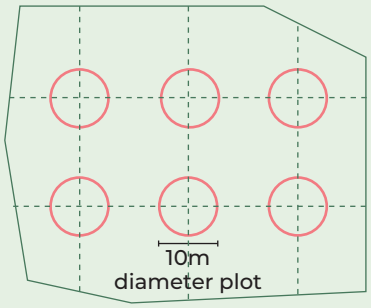
This level of monitoring has been designed to be easy to implement while still collecting high quality data. It will take two people approximately half a day to set up and complete baseline measurements. Subsequent measurements will take less time.

SETTING UP YOUR PLOTS

This should be done as soon as possible after planting.

You will mark out several small plots within your planting. Each plot will contain between 15 and 30 trees, and sufficient sampling plots should be established at your site to ensure a minimum total sample of about 200 trees. These should be across representative areas of your planting. To avoid any sampling bias (e.g. placing plots in only easily accessible sites), plots should be distributed evenly along a transect or in a grid pattern across the planting site.

SAMPLING LARGE-SCALE PLANTED AREAS



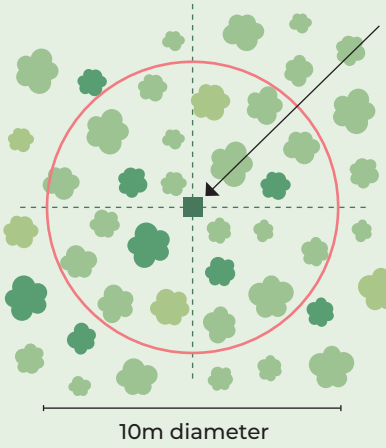
Establish grid across planted area with plot at each intersect of grid.

Require minimum of six 10m diameter plots per planting.

Aim to sample a minimum of 200 planted natives.

To mark out the plots place a permanent peg at the centre of each plot, and mark out a circular area with a 5 metre long piece of string to create a 10 m diameter plot.

SAMPLE PLOT LAYOUT



Place permanent peg at the centre of each plot

Record survival and height by species for planted trees within 5m radius

COLLECTING MONITORING DATA

The measurement is ideally performed by two people. One person records the data while holding the pole at one end of the string against the centre peg. The other person moves around the plot holding the other end of the string, counting planted natives by species within the plot area, measuring heights using a height pole or long ruler, and assessing seedling vigour.

To make it easy, you can download and print our Advanced Monitoring Field Sheet to record the data when you are checking your plantings.

A note should be made of any plants within the plot area which are on the edge of the plot to avoid errors in repeat survival assessments. Establish your plots as soon as possible after your trees are planted, ideally within a few days of planting.

Initial baseline monitoring should be undertaken as soon as possible after planting. The following data needs to be recorded for each group of species within a plot:

- Species name
- Number of plants of that species within the plot
- Average height (in centimetres)
- Subjective assessment of plant vigour using 1-5 score (optional):

  1. Poor
  2. Struggling
  3. Average
  4. Very good
  5. Excellent

- Optional additional information e.g. frost damage, animal browsing, broken top, drought, weed suppression

For each subsequent monitoring, species, height and vigour should be recorded for living trees only.

MONITORING FREQUENCY

The minimum recommended frequency for monitoring is at intervals of approximately one year until a permanent cover of native trees has been established, which could be between two to five years after planting depending on the site.

RECORDING DATA

To make it easy for you in the field, we suggest you print an Advanced Monitoring Field Sheet to record your data. Once you've captured this info you can enter your findings directly into the Monitoring section of your My Trees account at treesthatcount.co.nz

Thank you! We really appreciate your efforts to help create areas of more native forest in New Zealand!
treesthatcount.co.nz

CONTACT
Contact your local Trees That Count Regional Advisor or email
emma.giesen@projectcrimson.org.nz

Funded by
Te Uru Rākau Forestry New Zealand
The Tindall Foundation
Managed by
PROJECT CRIMSON