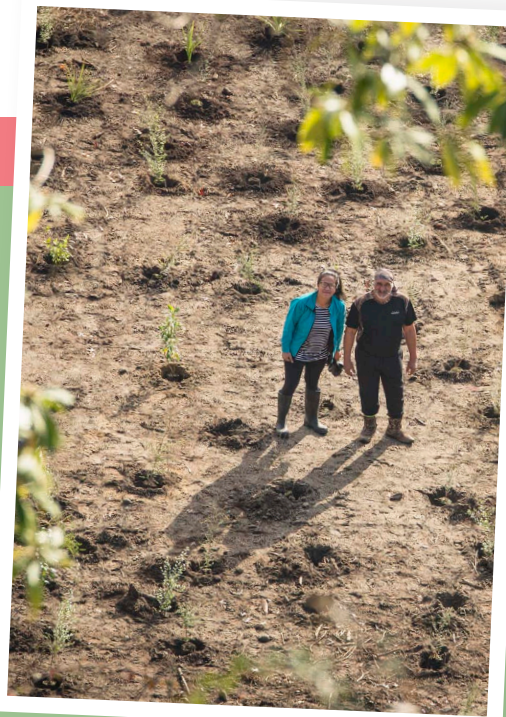**TREES THAT COUNT** T **TE RAHI O TĀNE**

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 BASIC MONITORING, YOU'LL NEED TO PROVIDE:

- The date that you monitored your plantings
- The overall average survival rate of your trees
- The average height of your trees
- If you want to capture survival rate by species you can do this, but it's not mandatory
- Any reasons you observe on tree mortality
- Upload a photo of your plantings

Basic Monitoring is really easy and provides a subjective assessment of performance for all plantings. For larger planting projects (1000+ trees) it's highly recommended that you give a more detailed survey using our Advanced Monitoring which gives statistically robust data on performance.

HOW TO DO BASIC (WALK-THROUGH) MONITORING

Trees That Count recommends any individual or group planting fewer than 1000 trees undertake at least a walk-through assessment of their planting site within a year of planting. The aim is to estimate how well a smaller planting is progressing without imposing an undue burden on planters who may lack the time or resources to carry out more formal monitoring using plots.

This walk-through estimate is best done by those that planted the site or where planting records and photographs taken at planting are available to compare what was planted to what has successfully established. To this end, this level of monitoring requires only the collection of data on the survival and growth rates of your planted natives. This is the bare minimum of data required to help us keep our overall count as accurate as possible and to aid you in the success of future plantings.

COLLECTING MONITORING DATA

The aim is to take a 5-10 minute walk through the representative area of the planting site observing the surviving planted natives comparing frequency and plant spacing compared to what the site looked like soon after planting.

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

- **Check your plantings** – after planting is completed, we highly recommended you inspect your projects a couple of times within the first few days and weeks after planting to check your planting is still there and there is nothing affecting early performance. This includes ensuring fences are keeping out grazing stock, pest animals such as rabbits are not browsing the natives, weed growth is minimal and noting any other factors which may reduce success of your planting. Early inspection and action to address any issues affecting your planted natives could mean the difference between success and failure and provide insights into what is required for future planting plans.

- **Record survival rates and growth rates** – subjective estimates of the following is to be recorded:
  - Overall survival of planted natives across the site estimated to the nearest 10%, e.g. 0%, 10%, 20%, 30%, etc.
  - An estimate of the average overall height of planted natives.

  This information not only helps us to build a picture of the risks which newly planted trees are facing in your region and nationwide, but can also help you to better target resources such as pest animal control, as well as help to identify those species more likely to survive at your site in future.

- **Record any reasons you may have lost trees (mortality rates)** – make notes of the species affected by losses and the reason why – i.e. drought, pests etc

- **Take photos of your plantings** – taking before and after photographs of your site is always an easy way to confirm a planting. Photographs taken over time will provide a visual record of the development of your planted natives.

Photo tips

Ideally, take a photograph of your planting from a fixed point (known as a photopoint) which can be repeated to systematically capture changes of your planting site over time.

Tips for effective photopoints include:

- Locate each photopoint on a high point to best cover a representative section of your planting area
- Where possible site the camera from a fixed point such as a fence post
- Select a view which will show changes in your planting area over time framing the view so it will be easy to repeat in future
- If possible, position the camera to the north of your planting area to minimise shadows and sun glare
- Have a copy of the last photograph you took from the photopoint to help replicate previous photos as closely as possible
- Repeat photographs annually preferably at the same time of the year using the same camera angle and zoom setting
- Avoid taking too many photographs as storage and captioning can be onerous. Setting up one, well-positioned photopoint should be sufficient for most planting projects.

MONITORING FREQUENCY

Initial monitoring should be undertaken as soon as soon as possible after planting (i.e. within 2 weeks). The minimum recommended frequency for monitoring is at intervals of approximately one year until plants are likely to be contributing to a permanent cover of natives, which could be 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 a Basic 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