

# Why Monitor?

## Because native forests are important

*“Te wao tapu nui a Tāne”. - “The great sacred forest of Tāne”.*

*Tāne was the god of the forest and also the ancestor of humans. Therefore, before cutting down trees, certain rites were obligatory to placate him. (Hirini Moko Mead & Neil Grove; Ngā Pepepha a Ngā Tupuna; Victoria University Press, 2001)*

Native forests are important to all New Zealanders in different ways. They are extremely important reservoirs of plant and animal biodiversity. Many species of native birds have become extinct over the last 200 years because of the pressures of forest clearance and introduction of new predators. Forests provide other values such as high water quality, protection of soils from erosion, a high-quality visual landscape and amenity which are important for recreation, tourism and leisure.

Native forests are a resource of great value. They are continually exposed to threats such as browsing and predation by introduced animals, weeds, human development and changes in climate. We need to know how forests are changing so we can manage to retain their value. In short – we need to monitor them!

## Without monitoring we are working in the dark

*“Ko ia kāhore nei e rapu, tē kitea.” - “He who does not seek will not find”.*

*(Hirini Moko Mead & Neil Grove; Ngā Pepepha a Ngā Tupuna; Victoria University Press, 2001)*

Without some form of monitoring we are potentially guiding our management with “hunches” or what we think might be the case from short term observation – we have very little information – we are working in the dark.

Setting up monitoring allows us to look at trends in different parts of the forest ecosystem and see if they are changing in a way that could affect the value of the forest. For example, are possum numbers increasing to a level where damage is being done to the forest canopy? This allows sensible management decisions to be made about when we should, for example, undertake animal control.

When we are already undertaking some management steps, such as fencing a forest remnant, or controlling possums and rats, monitoring allows us to check what impact that management is having. What are the trends in different parts of the forest ecosystem now management is in place? It allows us to see if the management is moving the forest ecosystem in the desired direction in terms of maintaining and improving its values or the “ecosystem services” it provides.

Once again – without monitoring – we are at best making educated guesses about what is happening.

## **Without monitoring we can't show changes to others.**

*"Tukuna ki ētahi atu, ngā āhuatanga o Te Wao nui a Tāne, kia mau tonu. - Share with others, the characteristics of the domain [forests] of Tāne, so they are known."*

It is often important to show what is happening in a forest area to others. People who are providing help with management of the forest, whether they be organisations providing funding or volunteers providing their labour, need to see the value of their contribution.

Through monitoring of trends in a forest ecosystem under management, we can show what is happening in relation to the time and resources put in. For example we can track improvements in the forest understorey with fencing, or downward trends in possum and rat numbers following poisoning operations.

In a similar way, monitoring can be very important to demonstrate when a forest is declining in some way. For example, if the understorey is heavily browsed and the canopy is thinning, management action is required to address this. Having monitoring results that can show these trends is important to getting commitments of time and money to support management.