

5

RELIABILITY

OF DATA

The New Zealand total area of planted forests in the 2006 NEFD database is estimated to be accurate to plus or minus 5 percent. That is, the New Zealand total net stocked forest area is estimated to be between 1.71 and 1.89 million hectares. The level of accuracy is reduced as the forest area is broken down into territorial authority and age class.

The data that make up the 2006 database have come from the sources as shown in Table 5.1.

»» NEFD SURVEYS

The data supplied by respondents to this survey are generally accurate and up-to-date. This reflects the commitment of the forest industry to having detailed forest resource information readily available. However, it is possible that some small-scale forest owners included in the database may change their management objectives. For example, areas currently intended to produce a harvestable timber yield may be left standing to provide shelter or for aesthetic appeal.

»» **TABLE 5.1: TOTAL AREA REPRESENTED BY EACH DATA SOURCE IN THE 2006 NEFD DATABASE**

DATA SOURCE	NET STOCKED AREA (000 HA)	PROPORTION OF TOTAL AREA (%)
2006 and 2005 NEFD surveys	1 476	82
New planting imputation (1992–2005)	202	11
2004 AgriQuality small forest growers	122	7
Total	1 800	100

Note

1. *Small Forest Grower Survey Report*, AgriQuality New Zealand, April 2005.

To minimise possible errors in the NEFD survey data, the following checks were made:

- › Numerical data were limited to certain maximum and minimum values for each entry.
- › Aggregated area data were checked at the territorial authority level against the 2005 NEFD area database to ensure variation was within acceptable limits.

Forest areas are sometimes mis-allocated between adjacent territorial authorities. One way for users to minimise this problem is to aggregate data from adjacent territorial authorities, particularly where contiguous forest areas straddle territorial authority boundaries.

»» IMPUTED NEW PLANTING

The inclusion of the imputed new planting into the 2006 NEFD database makes the following assumptions:

- › The new planting estimates from the nursery seedling surveys are the actual areas of new planting established between 1992 and 2005.
- › The imputed new planting in each territorial authority occurs in the same proportion as the new planting captured in the 2006 NEFD survey.
- › Imputed new planting for radiata pine is assigned to the tending regimes in the same proportions as the radiata pine new planting captured in the 2006 NEFD survey.

»» YIELD TABLE DATABASE

The radiata pine yield tables contained in the NEFD yield table database were produced during 1995–96, principally from data provided in 1995 by owners of extensive areas of forest. Data were collected from these owners because their holdings covered most districts in New Zealand, they made up much of the forest resource, and they had the best yield tables databases in New Zealand. For further details on the NEFD yield tables refer to *NEFD Regional Yield Tables as at 1 April 1995*.