

Te Uru Rākau



New Zealand Forest Service

Native Nursery Survey 2022 Summary



**Te Kāwanatanga
o Aotearoa**
New Zealand Government



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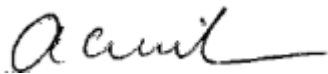
THE NURSERY SECTOR

Native trees and forests will play a major part in how we address climate change — Aotearoa New Zealand’s most pressing long-term environmental challenge. Through Budget 22, the Government has invested to reduce barriers to establishing native forests through the Climate Emergency Response Fund.

By planting more trees with a focus on indigenous (native) species, we can create long-term carbon sinks while managing erosion and enhancing biodiversity, soil health, and water quality.

In 2022, Te Uru Rākau – New Zealand Forest Service commissioned a survey and asked for the Nursery sector’s help to understand the barriers it faces.

I’d like to acknowledge all those who participated in the survey and say thank you to the nurseries for taking the time to complete the survey. The findings in this summary report will help to inform the Native Afforestation Programme and the work we will do with the sector to address these challenges. We hope it will also support nurseries’ capability and capacity to grow native seedlings and enhance economic, social, environmental, and cultural outcomes.



Alex Wilson
Director Forestry Engagement and Advice
Te Uru Rākau – New Zealand Forest Service
Ministry for Primary Industries

ABOUT THE SURVEY

This voluntary, confidential survey was completed, online, between 10 November 2022 and 23 January 2023.

A total of 467 nurseries were invited to complete the survey on 10 November 2022 with valid responses received from 140 respondents. This represents a response rate of 30 percent. If this is calculated on the number of nurseries that were contactable (n=299), the response rate is 47 percent.



ABOUT THE RESPONDENTS AND NURSERIES THAT RESPONDED

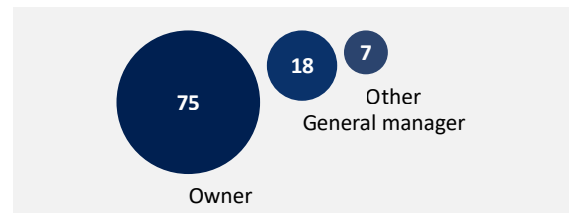
Most respondents identified themselves as the business owner (75 percent) and 18 percent as general managers.

Almost all operated as private businesses (89 percent) and described them as being horticultural businesses (32 percent) or involved in eco-system restoration (31 percent).

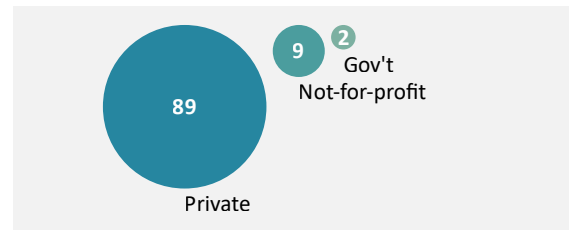
Of the responding nurseries most were located in the upper North Island (47 percent) followed by central New Zealand (38 percent), central North Island (23 percent) and Southern South (20 percent). Please note that percentages total more than 100 percent due to some nursery respondents having nursery sites located in multiple regions.

In terms of worker numbers, most were small businesses (45 percent with up to and including 5 workers) or medium-sized businesses (34 percent, with between 6-19 workers). The remaining 21 percent were large businesses with 19+ workers.

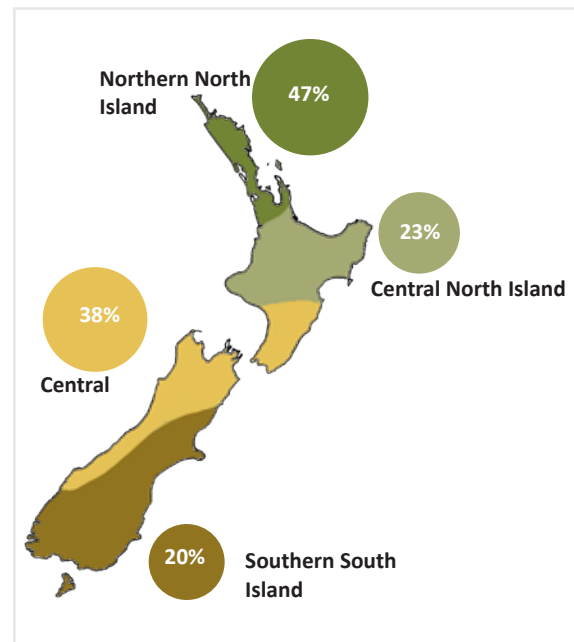
Respondents (%)



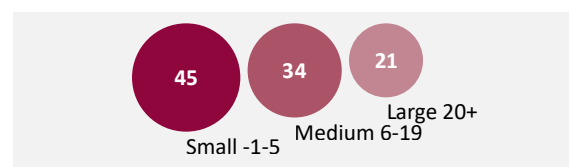
Business ownership (%)



Business location



Business size (%)



PRODUCTION CAPACITY

Based on the respondents' answers to the survey questions, the average nursery has 4.4 hectares of productive land. However, only 58 percent of the available productive land is currently being used.

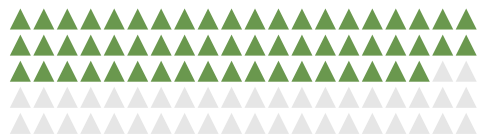
The average respondent nursery is operating at 63 percent of its capacity and, therefore, is currently producing about 434,700 seedlings per annum. If they were to operate at full capacity, the average respondent nursery would produce about 690,000 seedlings.

Although almost three-quarters of all nursery respondents produced and sold native tree seedlings in their most recent financial year (71 percent), the size and current productive capability of most nurseries may account for levels of production that are currently relatively low.

Two-thirds of respondents produced and sold up to and including 50,000 seedlings (65 percent); with most producing up to and including 5,000 (35 percent), compared with 16 percent producing between 5,001 and 20,000 and 14 percent between 20,001 and 50,000.

However, the production of native tree seedlings appears to be increasing, with approximately one-half of current "producers" (49 percent) reporting their nursery increased production in the most recent financial year in comparison to the previous year. Significantly, over 50 percent of these "producers" stated they had produced 51 percent or more native seedlings.

58% of total land was productive, at an average area of 4.4 hectares



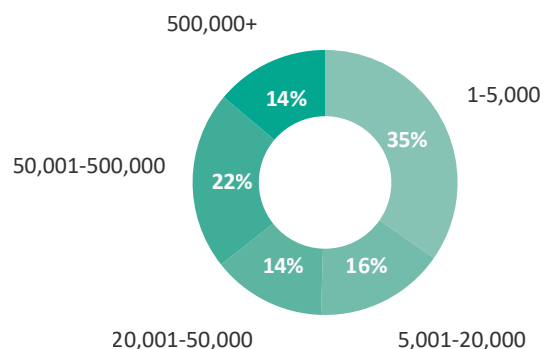
About 434,700 seedlings were produced, or 63% of capacity was produced last financial year



71% of nurseries produced native tree seedlings last financial year



Tree seedling production numbers



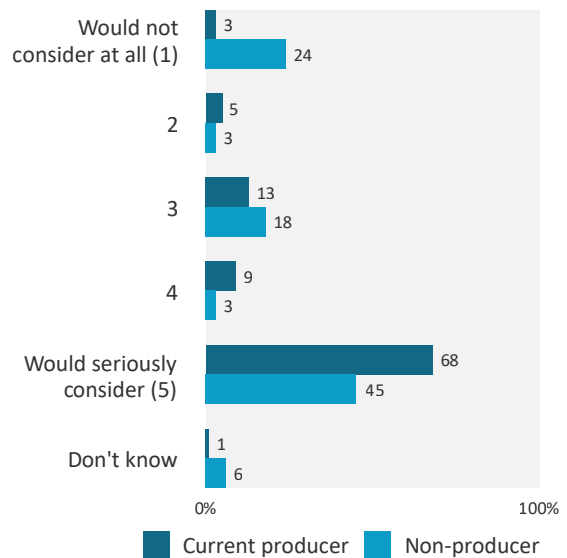
FUTURE INTENTIONS

Over two-thirds of all nursery respondents stated they would be interested in producing more or starting to produce native tree seedlings (68 percent). This interest is greatest amongst current “producers” (77 percent) compared with current “non-producers” (48 percent).

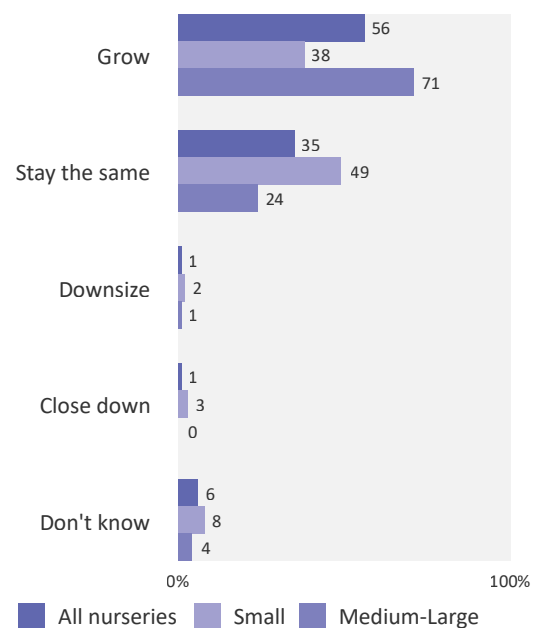
To help support these intentions, and possibly increasing production of all plant types in general, over one-half of all nursery respondents stated they planned to grow their business (56 percent).

This was especially expressed by “medium-large” nurseries, which comprised 52 percent of all nurseries. As a group, they were almost twice as likely to state this compared with “small” nurseries (71 percent and 38 percent respectively). In contrast, “small” nurseries were more likely to state they want to “stay more or less the same size” (49 percent).

Interest in producing more or starting to produce more native tree seedlings



Short-term business plans



BUSINESS DEVELOPMENT

The fact that many nursery respondents stated they wanted to grow their business may be reflected in the fact that 64 percent said they had made operational changes in their most recent financial year, with the change identified as “most important” considered to be up-sizing the nursery’s productive land area (i.e. to increase production capability).

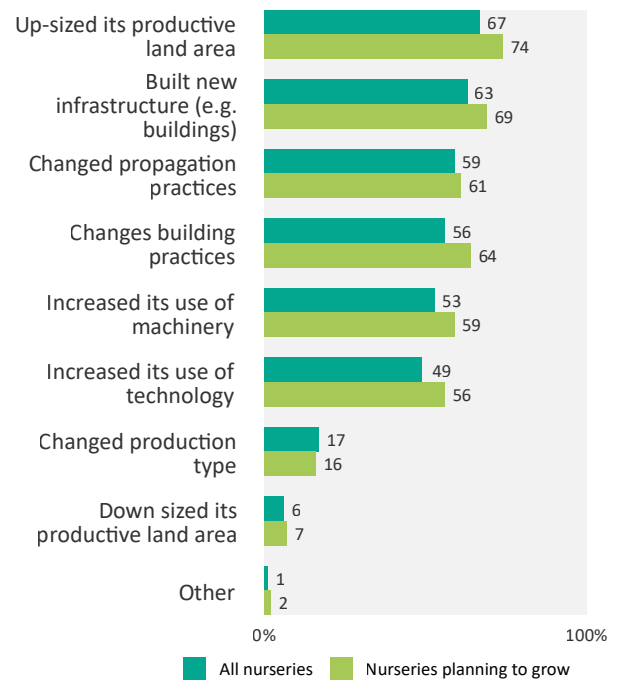
Two-thirds of those making changes stated they had up-sized their nursery’s productive land area (67 percent), while other frequently mentioned changes included:

- Building new infrastructure such as buildings (63 percent).
- Changing propagation practices (59 percent).
- Changing business practices (56 percent).
- Increasing machinery use (53 percent).
- Increasing technology use (49 percent).

Reflecting the increased use of technology, well over one-third of respondents stated their nursery was already using technologies such as: electronic inventory systems (41 percent) and environmental monitoring systems (37 percent).

In addition to the above, one-third of all nursery respondents (28 percent) stated they had conducted or funded research and development in their most recent financial year.

Operational changes made in the most recent financial year



Most identified the subject areas that merited being investigated first as seed supply and storage (28 percent), followed by germination rates (14 percent).

Nurseries wanting their business to “grow” were the most likely to state they had made the above changes in their most recent financial year, were already making good use of technology, and had conducted research and development.

INHIBITORS TO BUSINESS DEVELOPMENT

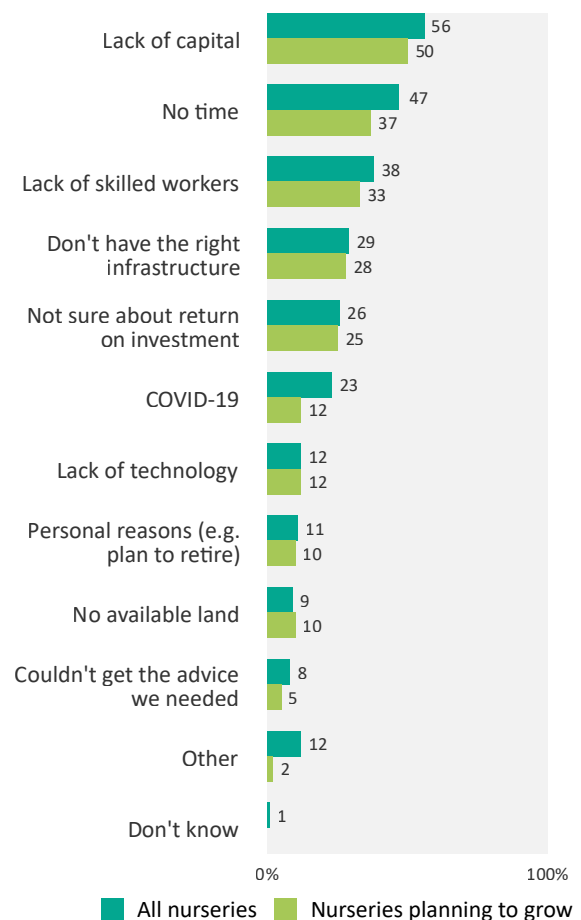
While many nursery respondents stated they had made changes in their most recent financial year, many of these, as well as others, stated they had wanted to make (other) changes, but did not (71 percent); mainly because of a lack of capital. With this inhibitor in mind, note that two-thirds of all respondents were not aware of any possible investors (66 percent).

The types of changes they wanted to make, but did not, included:

- Increasing the use of technology (34 percent)
- Increasing their productive land area (33 percent).
- Building new infrastructure such as buildings (32 percent).
- Employing more staff (32 percent)
- Increasing the use of machinery (27 percent).

Nurseries wanting their business to "grow" were the more likely than other nursery respondents to state they had been unable to make these changes in their most recent financial year.

Reasons nurseries were unable to make operational changes



RESEARCH AND DEVELOPMENT, AND WORKFORCE ISSUES

Another key reason why nurseries were not able to make the operational changes they wanted to make is because of a lack of qualified/skilled staff. In this regard, while most respondents stated they have workers with NZQA-level qualifications (72 percent), these workers tended to have only Level 1-3 qualifications.

Furthermore, relatively few (25 percent) stated that 51 percent or more of their current NZQA-qualified workers had formal agricultural, horticultural or nursery production qualifications.

While 72 percent provided on-the-job training, relatively few had formal training practices (at best, 16 percent had training for the NZ Certificate in Horticulture in their most recent financial year).

Compounding this situation, 37 percent had experienced difficulties recruiting skilled staff.

Nurseries wanting their business to “grow” were as likely as other nursery respondents to state they lacked qualified/skilled staff, did not have agricultural, horticultural or nursery production qualifications, and they had experienced difficulties recruiting skilled staff.

