2019 Forestry Labour Requirements Survey













Forestry Labour Requirements Survey

In December 2018, Te Uru Rākau, the Forest Owners Association and the Forest Industry Contractors Association, with support from Competenz, surveyed the silviculture and harvesting sectors' labour requirements for 2019.

The survey was designed to better understand:

- expected labour requirements, both seasonal and permanent roles, for the 2019 calendar year;
- for which roles, and in which regions, silviculture contractors and harvesting contractors are experiencing challenges;
- the recruitment strategies people intend to use in 2019; and
- the industry's views of the key reasons for the labour shortages.



Key messages

- Silviculture contractors involved in planting estimate that they will need approximately 1,780 workers for 2019, an increase of 750 workers or around 73 percent on 2018.
- We received 401 responses, and while not all respondents answered all questions, this was a good response rate. For key questions, such as the number of workers employed in 2018 and expected number of workers in 2019 there were 256 usable responses, of which 64 were silviculture contractors. This is a very good response rate from silviculture contractors; the response rate is not as good for other entities.
- · The main regions for forestry employment are Waikato, Gisborne, Bay of Plenty and Northland.
- In 2018, 83 percent of the silviculture and harvesting sectors' workforce was permanently employed. While the majority of seasonal workers are employed by silviculture contractors, the majority of planting workforce (71 percent) was also permanently employed.
- While overall the forestry sector permanent workforce increased in 2018, 25 percent of permanent workers left the firms they were working for during the year. Contracting organisations (silviculture and harvesting contractors) had a much higher percentage of their permanent staff leaving during the year than other entities like forest owners and managers. With high turnover rates, training and upskilling staff will continue to be challenging. High turnover may be dis-incentivising employers investing in their staff and may encourage shorter task-based training. Equally, a lack of training may be contributing to poor retention.
- Over half the new silviculture jobs are expected to be permanent roles. The expected greatest demand in 2019 for both seasonal and permanent workers will be for planting crew members. Around half the expected permanent vacancies for contractors involved in harvesting in 2019 are expected to be for machine operating roles.
- · Word of mouth or general social media is seen as the most important recruitment approach, demonstrating the importance of local networks.
- The respondents considered that the main reasons for labour shortages are due to employment conditions (pay rates, hours worked, and the location and physical nature of the work) and the inability to attract and retain new entrants. Experienced staff leaving the industry was also seen as a major concern.

Response Rate



Response Rate

Question response rate



Entire 2018 Surveyed Workforce – Seasonal and Regional Breakdown



Entire surveyed workforce - 2018 vs 2019

Entire surveyed workforce size 2018 vs 2019 (permanent and seasonal)



The survey respondents estimate that the forestry workforce for silviculture and harvesting will increase by 36 percent in 2019.

Note: The gap between the 2018 and 2019 contracting organisations involved in planting of 795 differs from the 750 figure used for the planting workforce (in slide 9). This is because the 795 figure includes the entire workforce, including workers not directly involved in planting such as admin staff...etc

Workforce size for silviculture contractors – seasonal and regional breakdown for 2018



The majority of the silviculture workforce (71%) was employed on a permanent basis.

Permanent Seasonal

Workforce size

The main regions for silviculture employment in 2018 were Waikato, Northland and Gisborne, accounting for almost 60 percent of the national silviculture workforce.

Planting workforce size – Estimates for 2019 silviculture workforce

2019 surveyed silviculture workforce estimate proportion of seasonal roles



Waikato, Gisborne, and Northland are expected to continue to be the main regions for silviculture employment in 2019.

> 2019 surveyed silviculture workforce estimates by region (permanent & seasonal)



Silviculture Workforce Size 2018 vs 2019

(permanent and seasonal) 2.500 2,000 1,777 Silviculture contractors Workforce size expect that they will need to .500 increase their workforce by 1,029 up to 73% .000 500 88 115 93 50 64 58 42 Forest Owners Forest Managers Contracting Organisations Contracting Organisations involved in planting not involved in planting (eg. Harvesting contractors) 2018 2019

Silviculture workforce size 2018 vs 2019 (permanent and seasonal)

The projected increase probably reflects respondents' upper estimate of the labour they may need. This is reinforced by the fact that one-third (21) of the silviculture contractors are expecting to increase their workforce by over 100 percent, and these respondents account for two-thirds (500 workers) of the expected additional 750 workers needed for 2019.

It is possible that the increase in the silviculture workforce by entities other than contractor organisations involved in planting reflects a "double counting" of the silviculture workforce. This may be because forest owners and managers have responded on behalf of their silviculture contractors.

Silviculture Workforce Size 2018 vs 2019

Additional silviculture labour requirements for 2019 by region



Permanent Seasonal

Silviculture contractors are looking to increase their number of seasonal workers in 2019. However, 54 percent of the new planting jobs (approximately 400 of the 750 new jobs) are still expected to be permanent roles. As a result, the silviculture workforce in 2019 is expected to be 64 percent permanent and 36 percent seasonal. If these permanent staff are retained, silviculture contractors will be better placed for the 2020 planting season.

There are regional differences – In Northland all new jobs are expected to be permanent where as in Southland and Bay of Plenty most new jobs are expected to be seasonal.

Turnover of permanent staff

While overall the forestry sector permanent workforce increased in 2018 (that is, more people were hired in 2018 than left), 25% of permanent workers left the firms they were working for during the year.

Contracting organisations (silviculture and harvesting contractors) had a much higher percentage of their permanent staff leaving during the year than other forestry entities.

This suggests that even through silviculture and harvest contractors offer permanent employment, they face difficulties retaining staff.



Turnover rate for permanent staff by organization type

NB: Given the difficulties in defining turnover for seasonal roles, questions of turnover were not asked about seasonal employees. However, it is possible when turnover rates for seasonal workers are taken into account, some entities may be experiencing turnover rates significantly higher than reported here. Care is also needed in interpreting these figures are firm turnover is different than industry turnover. As people may leave one firm to join another firm in the same industry, firm turnover can be higher than industry turnover.

Planting Areas reported by silviculture contractors

Planting in 2018

Silviculture contractors reported planting 44,800 ha of exotics, 8,300 ha of natives (excl. Manuka) and 1,700 ha of Manuka in 2018.



NB: Other organisations such as forest owners and managers also reported their planting area for 2018, however because multiple types of organisations could all be involved in planting the same area, we have chosen to focus on area reported by silviculture contractors to avoid "double counting" of the planting area.

Seasonal vacancies in 2019 for the entire surveyed workforce

24% of all respondents reported that they hired seasonal workers. Two-thirds of respondents that hired seasonal workers were silviculture contractors.

Seasonal workers are mostly employed as planting crew members.

Proportions of seasonal vacancies 2019 by role for entire surveyed workforce



on relative weightings on different roles rather than absolute numbers

Permanent vacancies in 2019 for the entire surveyed workforce

Proportions of permanent vacancies in 2019 by role for entire surveyed workforce



While planter was the permanent role in greatest demand, pruners and thinners are also being sought for 2019. It is likely that some double counting may have occurred as silviculture contractors undertake all three operations (planting, pruning and thinning), and planting crew members that are taken on permanently will move to pruning and thinning after the planting season.

Recruitment Strategies



Respondents were asked to what extent they would use the following recruitment strategies from 1 (Not at all) to 5 (To a very large extent). The circles to the left are the weighted average of responses by organisation type. The graphic below illustrates the preferred recruitment strategy by organisation type from most likely to use to least likely to use.



Reasons for labour shortages

All respondents



Respondents were asked to what extent the labour shortages are due to the following reasons from 1 (Not at all) to 5 (To a very large extent). The circles to the left are the weighted average of responses by organisation type. The graphic below illustrates the reported reasons for labour shortages from most significant to least significant.



Additional comments on labour and skills shortages



Appendix 1: List of Questions

- Q1 What is the name of your organisation? This will help us to avoid duplication of survey data.
- Q2 What type of organisation are you? (Please select one that best applies)
- Q3 Of your 2018 workforce, how many were seasonal workers (i.e. not employed year round)? (Enter zero if none).
- Q4 Of those 2018 seasonal workers, how many were directly involved in planting (i.e. Planting Crew Leader or Planting Crew Member)? (Enter zero if none).
- Q5 Of your 2018 workforce, how many were permanent workers? (Please include yourself as well).
- Q6 Of those 2018 permanent workers, how many were directly involved in planting (i.e. Planting Crew Leader or Planting Crew Member)? (Enter zero if none).
- Q7 Of your 2018 permanent workers, how many new permanent workers did you employ in the last 12 months?
- Q8 Of your 2018 permanent workers, how many permanent workers left in the last 12 months?
- Q9 Is your organisation involved in forestry planting?
- Q10 If your organisation is involved in planting, how many hectares did you plant in the 2018 season?
- Q11 If your organisation is involved in planting, how many hectares do you estimate you will plant in the 2019 season compared to last year?
- Q12 How many seasonal workers in total do you estimate you will need in the 2019 calendar year? (Enter zero if none).
- Q13 Of those estimated 2019 seasonal workers, how many will be directly involved in planting (i.e. Planting Crew Leader or Planting Crew Member)? (Enter zero if none).
- Q14 How many permanent workers in total do you estimate you will need in the 2019 calendar year? (Please include yourself as well).
- Q15 Of those estimated 2019 permanent workers, how many were directly involved in planting (i.e. Planting Crew Leader or Planting Crew Member)? (Enter zero if none).
- Q16 Do you hire seasonal workers?

For all seasonal positions that you expect to have in the 2019 calendar year, please provide your best estimate of the number of available positions, by role, start and end months,

- Q17 for each region. (Please use the other comments box if necessary to cover other roles and their regions not listed).
- Please provide your best estimate for each permanent position in the 2019 calendar year that you expect to have a vacancy for (new roles and replacing others). (Please use the other comments box if necessary to cover other occupational roles not listed).
- Q19 Which of the following recruitment strategies do you intend to use in 2019? (Please select all that apply)
- Q20 Do you think there is a labour shortage?
- Q21 To what extent do you think the labour shortages are due to the following reasons? (Select the most appropriate response for each reason below).
- Q22 Any final comments you would like to share about labour or skill requirements in the forestry industry?
- Q23 If you are willing to be contacted by Te Uru Rakau about your answers, please enter your email address below. (Please note, this is an optional question).