Central Otago Labour Survey Horticulture and Viticulture

Druce Consulting

August 2018

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Acknowledgements

We acknowledge support from members of the Steering Committee, Central Otago Winegrowers Association, New Zealand Winegrowers, Central Otago Fruit Growers Trust, Immigration New Zealand, Seasonal Solutions Cooperative Ltd and the Central Otago District Council. We also acknowledge the help of many others within the horticulture and viticulture sectors and the goodwill displayed by all growers during the survey process.

Druce Consulting

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Contents

1. Context

The Central Otago horticulture and viticulture sectors are facing ongoing and intensifying labour challenges. The difficulties lie not only in sourcing adequate seasonal workers, but also finding New Zealanders interested in pursuing a career in the sectors.

While these labour challenges are neither unique to the region nor the sectors, Central Otago does have unique labour conditions that make meeting the demand for workers particularly challenging. The region does not have the benefit of a large town or city in proximity from which to attract seasonal workers during the peak, it has a low unemployment rate and demand for labour is projected to increase significantly over the next five years.

Central Otago as a region, stands out from the rest of New Zealand for the following reasons:

- Unemployment of approximately 2.6% meaning a reduced number of Kiwi Jobseekers looking for jobs[1]
- Rental levels are perceived to be high and with reduced availability. The upper quartile rent for a four bedroom house is now $520 per week.[2] In Cromwell in particular, weekly rentals are likely to exceed this figure
- House price levels are now beyond the reach of many families. Ex Ministry of Works houses in Cromwell which were selling five years ago in the range $260,000 to $280,000 are now selling for $500,000 to $515,000. Three/four bedroom homes in the newer subdivisions in Cromwell are now selling for around $700,000 to $800,000.[3]
- The permanent population of Cromwell is expected to grow to over 8000 by 2023 and the visitor population is expected to peak at over 5000 also by 2023. Cromwell is Central Otago's fastest growing town and the fastest growing small town in New Zealand.[4] In the last five years the population of Cromwell has grown by 18%[5]
- Reduction in commercial accommodation e.g. campsites

Since the 2014/15 labour survey, the sectors have invested further in accommodation, continued to embrace the kiwis first policy and invested in digital technology in pack houses to increase productivity. There is also an increasing realisation that growers who provide a high level of pastoral care and realistic wages are more likely to be able to retain and attract staff in the future.

Central Otago is unusual compared with other fruit growing regions in New Zealand. For example, Bay of Plenty is predominantly kiwi fruit, Hawkes Bay apples and Marlborough grapes. Central Otago offers a very mixed environment that includes grapes, stone fruit and pip fruit and thus can offer a longer season, with work typically available for up to six or seven months.

During the 2017/18 season, the horticulture and viticulture sectors in Central Otago experienced significant labour shortages of both permanent and seasonal staff, particularly over the summer. The season was unusually hot and early. This coupled with a delay in the arrival of RSE workers into the region exacerbated the challenge to fill vacancies.

While matching supply with demand in this previous season was particularly tricky, there is no indication that vacancies are going to be any easier to fill in upcoming seasons. Indeed, many

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[1] MSD statistics
[2] Tenancy Services web site- Market rent in Central Otago 1 March 2018 to 31 August 2018
[3] Informal real estate market commentary
[4] "An Eye to the Future", Rationale August 2018
[5] CODC web site "An Eye to the Future" August 2018

sectors in New Zealand, tourism being one, are competing for the same pool of labour and facing very similar issues attracting permanent workers. Additionally, significant additional plantings in other regions, particularly of kiwifruit in the Bay of Plenty and grapes in Marlborough are also driving demand for seasonal workers.

The result is that Central Otago growers are increasingly concerned about their labour supply and indeed a number of growers are not pursuing planting plans due to these labour challenges. Other growers are investing in significant plantings despite the tight labour market and have indicated they intend to compete with other growers by offering premium conditions for workers.

While labour challenges continue to impact upon the productivity of the sector, there is a general optimism among growers after a run of generally good prices for fruit and wine at market. In this ever more challenging labour environment however, continued growth in these sectors in Central Otago is contingent on solving the labour challenges.

Solutions will require strong concerted action by the growers, stakeholder groups and local and central government, supported by the Central Otago Labour Market Governance Group.

This report provides the data and recommendations to guide this action. It makes recommendations to help improve the functionality of the seasonal labour market and ensure that industry labour challenges are addressed, to encourage the sustainability and prosperity of horticulture and viticulture in the region.

2. At a Glance

Sector Growth

- Growth in the next four to five years will come predominantly from the horticulture sector in the Cromwell region.
- There are plans for 465 hectares of new cherry plantings in the next four to five years (a 56% increase on current plantings), with feasibility studies under way to develop a further 495 hectares of cherries.
- There will be new grape plantings of 284 hectares, a 14% increase over the next four to five years bringing the total Central Otago vineyard estate to 2275 hectares. There is also the possibility of a further 100 hectares of development.
- Total orchard plantings will overtake grape plantings during the next four to five years.

Employment

- 105 new permanent workers have been employed by orchards and vineyards in the last three years. This brings the total number of permanent employees to 614, an increase of 19%.
- With Ministry of Social Development support, there has been a modest uptake of Kiwi seasonal workers on six week seasonal work schemes. This scheme has run for some three to four years.
- There was a desire on the part of those surveyed to employ jobseekers when they are available, although the number of unemployed in Central Otago is low.
- Horticulture in Central Otago employed 4965 workers in the 2017/18 season, up 22% or 884 workers since our last report. Over 3100 (or 64% of these) were backpackers.
- Viticulture employed 1427 workers during the last season, a reduction of 36 since our last report.
- The peak horticulture harvest period will see an increase in labour demand of 1186 workers over the next four to five years, with predicted viticulture increases for the same periods of 123 workers at harvest.
- There was a shortage of workers last season, peaking in December 2017 with a shortfall of over 400 workers.

RSE and Backpackers

- RSE workers are still considered to be the backbone of both sectors. The expansion plans of many growers are predicated on a continued and increasing supply of RSE workers. RSE workers bring reliability and stability to the work force.
- Backpackers are also essential to the functioning of both sectors. However, they are becoming more fickle and have a greater propensity to move from employer to employer, particularly from viticulture to horticulture seeking higher wages.
- Backpackers continue to be a fragility in the labour market. The majority of the backpacker workforce are reliable and productive and can respond quickly to orchard and vineyard labour demands, which is important in sectors that are driven by climate.

Contractors

- Vineyard contractors are expected to be managing almost 1000 hectares in four to five years' time, or 44% of the total planted hectares of grapes.

Productivity

- Since the 2014/15 survey, there has been considerable investment in new technology, particularly in pack houses and this trend is picked to continue. It is likely that the influence of robotics will be felt in the next four to five years in the orchard and the vineyard.
- There is also an increasing realisation that growers who provide a high level of pastoral care and realistic wages are more likely to be able to retain and attract staff in the future.
- Over the next four to five years, it is expected that new fruit varieties will extend the season at both ends lengthening the harvest period. More geographically dispersed planting locations and the impact of growing fruit under cover will also extend the season. There is also evidence that growers are planting on higher altitude land which will also have the effect of extending the season
- A change from conventional planting styles to more intensive planting systems for cherries and for apples particularly, may allow faster picking and less climbing. This may allow for the adoption of robotic pickers and picking platforms down the track.

Accommodation

- Orchards and vineyards are planning on investing in an additional 1615 beds for seasonal workers over the next four to five years. It is likely that the majority of these beds will be serviced campsites onsite, together with the development of purpose built backpacker accommodation.
- Both sectors are planning to increase RSE beds by 288 by 2021/22.
- There will be a peak harvest demand by 2021/22 for both fruit and grapes of 6198 beds.
- While there is a predicted increase in bed and camping capacity supply of 1615, there is still a forecast shortfall of 2298 beds.
- There is widespread concern that due to a reduction in commercial camping ground capacity, together with upcoming restrictions on freedom camping, that the region will be unable to accommodate seasonal workers over peak periods.
- A number of growers raised issues regarding the affordability of housing in the Cromwell region for permanent workers. Many permanent workers now can't afford to buy a house and furthermore, rental housing is expensive and in short supply. The increasing unaffordability of Queenstown housing means that many people who work there are now forced to live in Cromwell and commute, thus reducing the amount of housing stock for Cromwell locals. Anecdotal evidence suggests that many people who work in Cromwell are now looking at buying in places such as Omakau and Roxburgh and commuting.
- There is a trend for cherry growers to look further afield for expansion. There are developments planned for Dairy Creek, Ardgour Valley and the Lindis area. A few large growers have secured or are looking to secure land in these areas. If developments proceed in the more outlying areas, it raises issues about how workers will be accommodated and/or transported.

3. Recommendations

Strategic Level

It is recommended that:

1. The Chair of the Central Otago Labour Market Governance Group presents the results of this survey to Horticulture New Zealand, Immigration New Zealand and Ministry of Business Innovation and Employment officials, highlighting the need for:
    - A raise in the RSE cap in upcoming years to respond to the forecast demand for labour.
    - More flexibility and simplification in the Essential Skills visa category to make it easier for employers to fill gaps.
    - In addition, work needs to be done on how to attract a greater number of working holiday visa holders to the horticulture and viticulture sectors given the increasing competition from other sectors.
    - Immigration New Zealand visa processing services to be available over the Christmas break to ensure that Supplementary Seasonal Employer Work Visa's (SSE's) can be processed.
    - Central Otago representation on the National Labour Steering Group, including the Chair of the Central Otago Labour Market Governance Group plus a representative from Central Otago Winegrowers Association and the Central Otago Summerfruit industry.
2. Research be undertaken by both sectors and in conjunction with the Central Otago District Council to further understand the drivers and dynamics of the backpacker workforce.
3. The sectors and the Central Otago Labour Market Governance Group support and promote the use of the "Work The Seasons" website, launched in March 2018 that aims to match workers with seasonal work opportunities.
4. Sector groups maintain and develop accurate databases of all grape and fruit growers to ensure that communications and research is easily facilitated.

Workplace Recommendations

It is recommended that:

1. The Central Otago Labour Market Governance Group work with industry bodies and growers to develop a set of guidelines around the care of workers including pastoral care, accommodation and minimum conditions. An ethically driven approach to the care of workers has the potential to give Central Otago a regional advantage when attracting workers.
2. It is noted that as labour challenges intensify, providing attractive employment conditions and affordable accommodation for workers is going to be the key to securing workers in the future.

3. Growers explore options for working cooperatively or in partnership to develop accommodation and around the provision of human resources for their business.
4. Growers explore the opportunities presented by engaging underutilised workers in the community (such as older people and parents with young children) and consider revisiting traditional employment models to allow for more flexible working conditions and roles.

Training

It is recommended that:

1. The Central Otago Labour Market Governance Group leads an initiative to work with training organisations, including the Otago Polytechnic Cromwell Campus and local high schools to develop training options that are relevant for the future of the sectors. This needs to address the ongoing shortage of supervisors, managers, machine operators and tractor drivers in both sectors.
2. The industry notes the growing demand for software and electronics technicians, capable of operating and maintaining the growing number of machines in packhouses, orchards and vineyards.
3. The Central Otago Labour Market Governance Group, Central Otago Winegrowers Association and Central Otago Fruitgrowers work with the Primary ITO and Horticulture New Zealand to communicate opportunities in the sectors to prospective employees. There are skill profiles and clear career path frameworks in place that could be used.
4. The Central Otago Labour Market Governance Group work with Central Otago Winegrowers Association and Central Otago Fruitgrowers to develop orchard and vineyard visit programmes for schools to encourage understanding and interest in the sectors.

Community

It is recommended that:

1. The sectors and community acknowledge the ongoing value of backpackers to the Central Otago region and find ways to celebrate this appropriately. One current example is an arts mural project being progressed by the Teviot Valley Community Development Scheme that brings together seasonal workers and locals.

4. Background

4.1 Objectives and Scope

In 2018, Druce Consulting was engaged by the Central Otago Labour Governance group to undertake a survey of labour issues in the horticulture and viticulture sectors in Central Otago. The project builds on a similar research project undertaken by Druce Consulting in 2014/15 as well as work by the Central Otago District Council (Bill Dolan) in 2006.

As with the 2014/15 project, the aim of this work is to provide up to date and detailed information on horticulture and viticulture labour issues to allow the sectors to plan effectively for the future.

The Central Otago Labour Market Governance Group intends for this report to provide recommendations aimed at:

- Improving the functionality of the seasonal labour market;
- Assuring the inward flow of seasonal labour and promoting Central Otago as a place to work (and live);
- Addressing the accommodation issue;
- Identifying linkages with government labour market policies and programmes, in particular the Recognised Seasonal Employment (RSE) programme;
- Ensuring that industry labour requirements are addressed.

The Steering Committee for the project, made up of representatives from the Central Otago District Council, Immigration New Zealand, Seasonal Solutions Cooperative Ltd, the Otago Chamber of Commerce and industry representatives have a broad range of labour issues they are interested in canvassing with the project.

The result is an in-depth picture of labour issues in Central Otago and recommendations on work that might be undertaken towards solving the labour challenges.

4.2 Terms of Reference

The terms of reference required the use of a survey-based methodology to research the labour needs of the horticulture and viticulture sectors, looking out to and including the 2021/22 season. The following key components were to be addressed:

- Crop plantings
- Labour needs
- Recruitment and retention
- Variability / predictability of labour
- Upskilling
- Matching
- Productivity
- Demand for accommodation
- Supply of accommodation

The boundary for the horticulture survey was the Central Otago District. The viticulture survey also included this area but in addition captured the Wanaka and Gibbston Valley wine growing regions in the Queenstown Lakes District.

4.3 Methodology

Horticulture Methodology

Preparatory work for the horticulture survey was carried out in early 2018 with surveying and interviews taking place in June and July 2018.

An in-depth survey was constructed with input from the Steering Committee (see Annex). This survey was adapted from that used in 2014 to allow for comparison of results but with changes to respond to the changing labour picture.

Following this, a database of fruit growers was prepared from information supplied by industry groups and through consultation with senior members of the horticulture industry. The database was then segmented according to both size and region. Within the segmentation, a random selection of 24 orchards were then identified for interviews.

A total of 37 surveys were mailed out to the balance of the database and 23 responses received. This achieved an overall response rate from both interviews and mailed surveys for the horticulture sector of 47 surveys or 77% of the orchards in Central Otago and representing 91% of the planted hectares.

In order to account for the twelve non-respondents, we used experienced industry experts to estimate the plantings for each of the remaining orchards and lessees. The result is that the 59 businesses represented in the fruit plantings data represent close to 100% of the total hectares in horticulture. An adjustment factor of 9.2% has been applied to the labour figures to compensate for non-respondents.

It is important to note that with the 2014/15 survey we counted 84 entities in contrast to 59 this time. While some consolidation has occurred in the region, there were additional cherry orchards in the 2014 survey that were considered separately however these engaged contractors to manage their labour. For this survey, these entities are included in the planted and managed hectares of the contractors or leasees as they do not manage any labour themselves.

Viticulture Methodology

In order to survey the viticulture sector an in-depth survey was constructed with input from the steering committee (see Annex). A database of vineyards was then prepared from databases supplied by both the Central Otago Winegrowers Association (COWA) and New Zealand Winegrowers (NZW). This database was then segmented by size and region.

A random selection of 24 vineyards was then identified for interview together with six contractors making up 30 interviews in total. A total of 105 interview forms were mailed out to the balance of the database and a total of 85 responses received. This represented a response rate of 63%. This is considered acceptable as it represents approximately 93% of all planted hectares in Central Otago. Where the respondent indicated that they used a contractor for managing their vineyard, their results were included with those of the relevant contractor, thus giving overall a group of 61 responses for further analysis.

We also interviewed six key contractors. In order to avoid double counting of hectares, where a response showed that a contractor was principally used to manage a vineyard, the hectares for that vineyard were recorded against the contractor concerned.

In addition, a calculation was made of the area not returned, by identifying those vineyards and then referring back to either the COWA or NZW original data. These “non-returned” hectares have been used as an adjustment factor in the calculation of the overall Central Otago vineyard estate.

4.4 Confidentiality & Disclaimer

Confidentiality was an important consideration with the project. Information collected during the interviews was kept secure and the results in this report are in aggregate form, with no reference to individual businesses. Once the report has been published, the survey forms will be destroyed.

While every effort has been made to elicit and compile accurate data, Druce Consulting, Central Otago Labour Market Governance Group, Immigration New Zealand and Central Otago District Council will not accept any liability for actions, or consequences of those actions, taken by growers or other parties based on the information contained in this report.

5. Labour in the Viticulture and Horticulture Sectors

The horticulture and viticulture sectors are co-dependant as they often draw upon much of the same labour pool and face very similar labour issues. Accordingly, it is useful to consider the sectors in tandem, as is done in this section of the report.

Production

Labour demand inevitably grows in line with growth in plantings in the sectors. Growth over the next four to five years will come predominantly from the horticultural sector, with Central Otago fruit plantings projected to grow by 32% or 583 hectares. This will take total fruit plantings from 1830 hectares to 2413 hectares in 2021/22.

The main driver of growth is the 465 hectares of planned new cherry plantings where the land has been secured, plant stock ordered and land development underway. There are feasibility projects underway to consider the viability of another 495 hectares of cherries and 60 hectares of other fruit types in the region.

Viticulture will also show a smaller, but still significant, increase over the same period averaging at approximately 3% year on year growth. New plantings totalling 284 hectares are planned over the next four to five years with the speculation that there could be an additional single development of approximately 100 ha. The majority of these plantings are also in the wider Cromwell Basin including Bendigo.

Table 1: Current and Projected Horticulture and Viticulture Plantings for Central Otago 2014/15 to 2021/22

	Fruit	**Grapes**	**Total**
2014/15 Planted hectares	1565	1901	3466
2017/18 Planted hectares	1830	1991	3821
2021/22 Projected hectares	2413	2275	4688
Projected ha increase 2017/18 to 21/22	583	284	867
% increase in ha 2017/18 to 21/22	**32%**	**14%**	**23%**
Hectares under feasibility 2017/18	555	100	655
Projected total ha if feasibility ha are realised	2968	2375	5343
% increase in ha if feasibility ha are realised 2017/18 to 21/22	**62%**	**19%**	**40%**

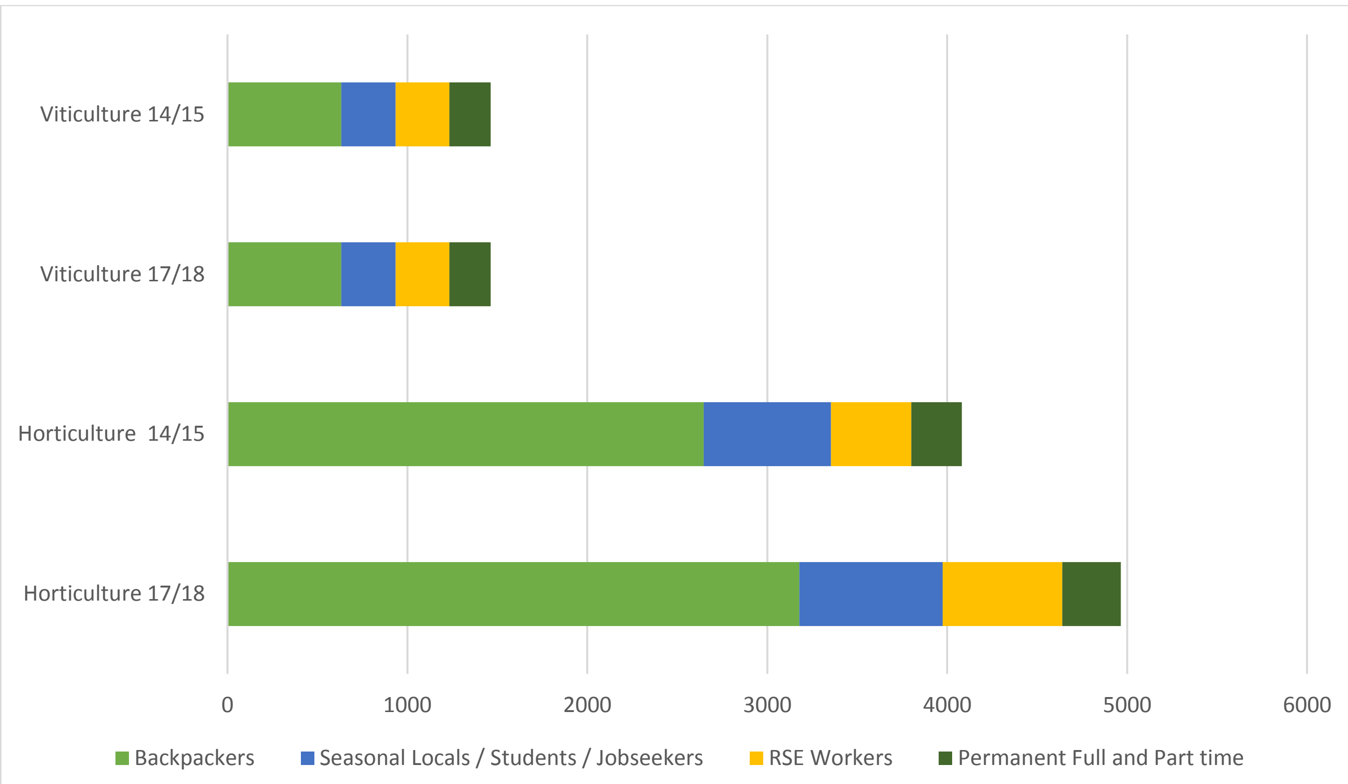
It is interesting to note that in Central Otago to date, grape plantings (in hectares) have outnumbered fruit plantings. Over the next four to five years however this will be reversed, as a significant number of new fruit plantings are realised. By 2021/22 there will be a minimum of 138 more hectares of fruit plantings than vineyards. Should all current feasibility plans be realised, this differential is estimated to be 593 hectares.

Labour Demand

The Central Otago horticulture industry employed 4965 workers in the 2017/18 year. This is up 22% or 884 workers on three years ago. Backpackers made up over 3100 or 64% of these workers, 796 were locals and students and 665 RSE workers (up from 446 three years ago). There has been a 16% increase in the permanent workers employed by the industry with an additional 45 positions created and filled over the last three years.

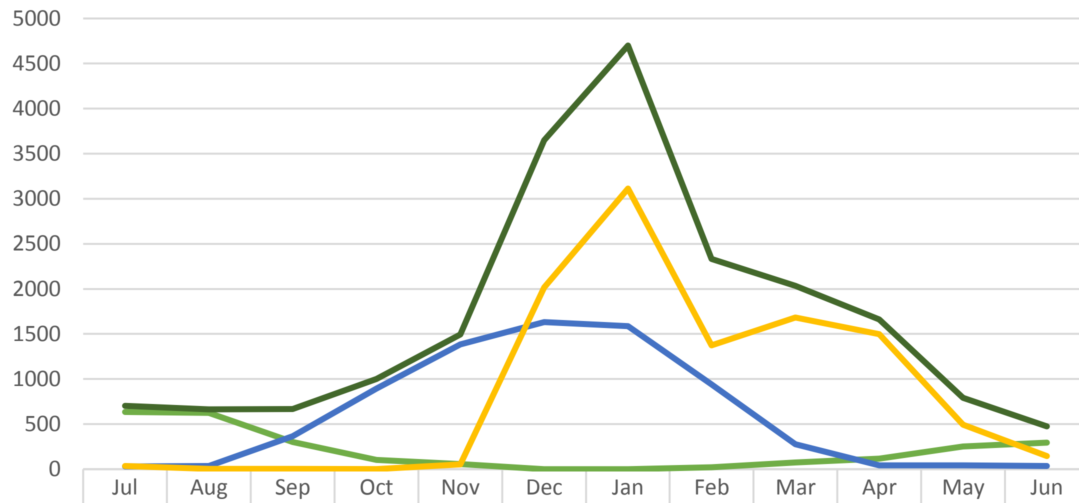
The viticulture industry employed a total of 1427 workers in the 2017/18 year, a reduction of 36 when compared with 2014/15. Backpackers made up 32% (or 452) of these workers, a reduction of 180 from the number employed in 2014/15. RSE workers employed show a slight drop and seasonal locals, students and job seekers showed a significant increase in numbers employed of 89 (or 27%) over the time since the last survey.

Figure 1: Horticulture and Viticulture: Labour Demand by Worker Type 2014/15 – 2017/18



Note: Results show the number of people employed in each category, as opposed to jobs filled. More than one worker can fill a position as a result of worker turnover.

Figure 2: Horticulture and Viticulture: Seasonal Distribution of Labour Demand 2017/18



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Winter	635	625	301	105	57	0	0	21	75	118	252	293
Spring / Summer	31	36	364	894	1384	1632	1587	940	277	44	44	37
Harvest	36	2	2	1	55	2017	3113	1373	1683	1499	494	145
Total	702	663	667	1000	1496	3649	4700	2334	2035	1661	790	475

January is still the peak season for labour demand when there are 4700 workers engaged across both sectors. Labour numbers at this time are ten times that of the lowest month of June. It is this differential between the troughs and peaks of demand that make the provision of accommodation a difficult undertaking for growers, particularly the smaller ones.

Future Labour Demand

The next four to five years is going to see continued growth in demand for seasonal workers throughout the year but most of the growth will continue to come from the horticulture sector for orchard work during spring and summer and for pickers at harvest. It needs to be noted that these are seasonal roles and some workers can fill more than one role.

Table 2: Seasonal Labour Demand 2017/18 and 2021/22

Horticulture	**Winter**	**Spring / Summer**	**Picking**	**Pack house**
2017/18	409	1337	2632	1232
2021/22	581	1980	3616	1434
Change	**172**	**643**	**984**	**202**
% change	42%	48%	37%	16%

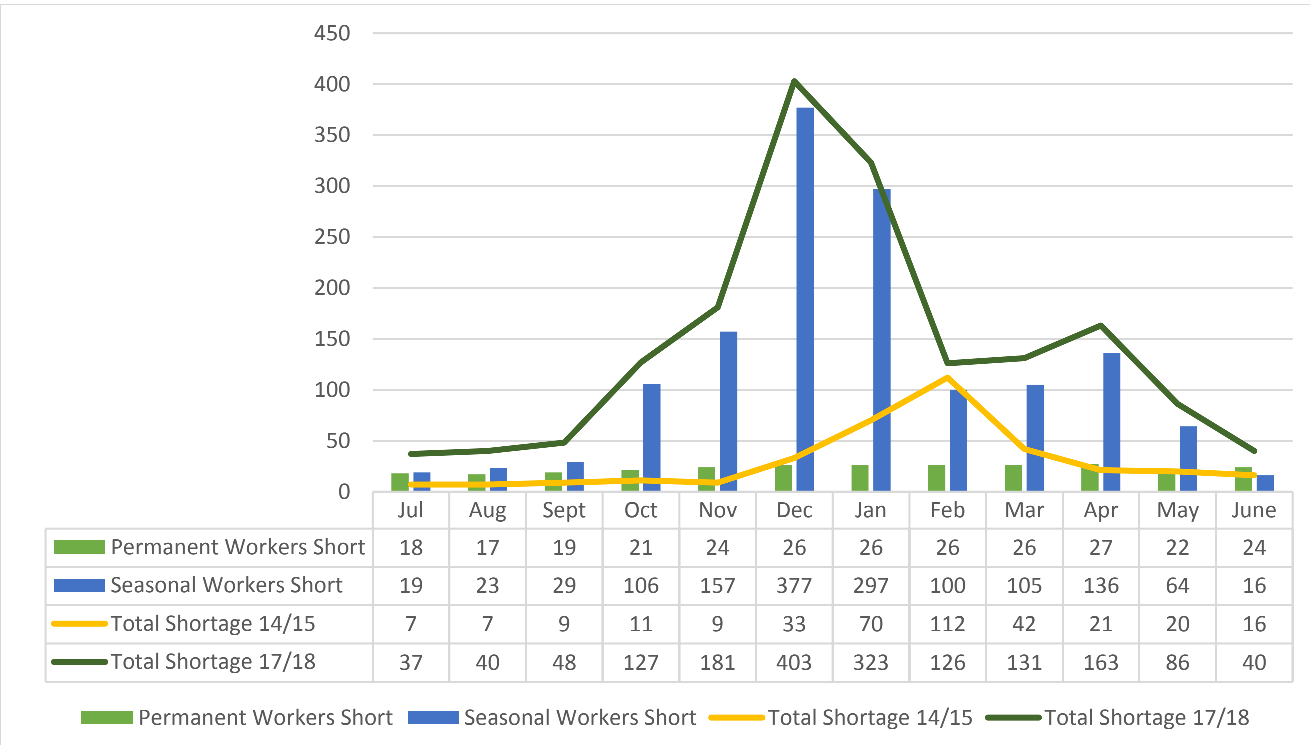
Viticulture	**Winter**	**Spring / Summer**	**Harvest**
2017/18	328	655	1025
2021/22	386	740	1148
Change	**58**	**85**	**123**
% change	17.6%	13%	12%

Labour Supply and Shortages

During the 2017/18 season, growers experienced significant labour shortages of both permanent and seasonal staff, particularly between November 2017 and January 2018.

The season was unusually hot and early. This, coupled with a delay in the arrival of some RSE workers into the region, exacerbated the situation. At the peak, the sectors were short of over 400 workers in December 2017.

Figure 3: Labour Shortages 2017/18 in Horticulture and Viticulture



	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Permanent Workers Short	18	17	19	21	24	26	26	26	26	27	22	24
Seasonal Workers Short	19	23	29	106	157	377	297	100	105	136	64	16
Total Shortage 14/15	7	7	9	11	9	33	70	112	42	21	20	16
Total Shortage 17/18	37	40	48	127	181	403	323	126	131	163	86	40

Impact of Technology and Intensification

Horticulture growers indicate that significant changes have been made to pack house technology while others continue to invest in new equipment. This is resulting in improved productivity in the pack house. The projected growth in plantings and growing intensification of many orchards will result in a net increase in pack houses in the next four to five years.

A change to planting styles, new varieties and new canopy techniques are going to produce a significant increase in production per hectare, particularly of cherries and apples.

In most cases, the range of viticultural operations are not yet of sufficient scale to warrant significant investment in expensive capital equipment, such as mechanical harvesters. Having said that, there are a small number of the larger growers and contractors who will be making a commitment over the next four to five years to introduce a greater degree of mechanisation. While this trend is inevitable given the predicted increase in wage costs it is still the strongly held view in Central Otago that the focus should be on quality and a premium product, which is best achieved by manual operations in the vineyard.

That said, survey responses indicate there will be a moderate but significant increase in mechanical harvesting of grapes over the next four to five years from 17% of the total area now to 22% in 2021/22.

The survey highlighted that as the use of technology in orchards and pack houses increases, so too does the demand for workers who are skilled in (or can be trained) to operate and service the machines. Increasingly this involves knowledge of software and electronics.

A recent report by Infometrics titled "From Education to Employment: Megatrends affecting New Zealand's working environment" indicates that 30% of jobs in New Zealand are at high risk of automation over the next twenty years[6]. There is no question that growers will continue to look for efficiency through technology as wages increase at a faster rate than the return on sales. It is imperative that training organisations adapt accordingly to respond to the growing demand for technical personnel.

RSE Workers

RSE workers are still considered to be the backbone of both sectors and this last season 959 RSE workers were employed in Central Otago.

In many cases, growers indicate that future expansion plans are dependent on the increased availability of RSE workers, especially for cherry plantings. Many in the horticulture sector are worried they will not have enough RSE workers in the future. Frustration was expressed regarding the difficulty of achieving breakthrough with central government, the challenges communicating our regional issues and the need to increase RSE numbers if growth is to be achieved.

Additionally, a number of growers who are not currently RSE accredited nor shareholders of Seasonal Solutions indicated they were investigating or intended to investigate the viability of engaging RSE workers in the future.

Backpackers

Backpackers are essential to the functioning of both the horticulture and viticulture sectors. Indeed, over 3600 backpackers were employed across the sectors during the 2017/18 season and should not be underestimated as crucial to the current labour model of the region.

It is significant that this year, the viticulture sector employed fewer backpackers than identified in our previous survey three years ago. This is possibly due in part to the particular timing of the past season but is additionally due to the growing demand for cherry workers. Cherry growers were in some cases prepared to pay more than grape growers.

It is noticeable that this season, backpackers tended to spend less time working for any single employer and moved on much more readily than in the past. One contractor said he had to replace his entire backpacker workforce during the course of the season. Further anecdotal evidence suggests this not unique to Central Otago nor indeed to the rest of New Zealand. It seems that there is a growing disinclination for backpackers to want to commit to lengthy periods of manual outdoor labour, often paid at the minimum rate.

It seems to us that there is not yet a clear understanding of the drivers and dynamics of the backpacker market, i.e. what it is that brings backpackers to Central Otago and what may attract them in the future. Concern was expressed by a number of growers about their vulnerability to changes in the Working Holiday Visa Scheme. One grower struggled with the time required to verify visa details.

[6] *From Education to Employment: Megatrends in New Zealand's working environment; Infometrics 2018.*

New Zealand Permanent Workers

Both sectors struggle to find permanent staff at all levels. In particular this applies to supervisors, managers, machine operators, irrigation technicians and tractor drivers. In addition, the permanent workforce in Central Otago is ageing. We came across a number of growers employing machine operators aged well into their 70's and we know of one instance where a person well into his 80's is employed as a tractor driver.

The sectors have struggled to develop clear career pathways to attract young New Zealanders and the horticulture sector in particular has a growing need for technical expertise among permanent staff.

In order to attract permanent senior staff in the horticulture sector, some growers are prepared to offer significant salaries which appear out of step with the rest of the sector in Central Otago.

Role of Contractors

The role of contractors continues to grow in Central Otago. In viticulture, contractors are expected to manage a growing area of the estate from 750 ha now to 1000 ha by 2021/22 or 44% of the total vineyard area. While no data is available for horticulture there is a growing number of managed blocks, particularly in the Cromwell cherry sector.

Training and Upskilling

The majority of training in the sectors is on the job, with some use of industry training organisations and the Cromwell Campus of the Otago Polytechnic. Growers indicated an ongoing shortage of training courses in:

- Supervisory, management and leadership skills
- Tractor driving and irrigation services
- Health and Safety
- Targeted short courses for orchard workers e.g. pruning techniques.
- Training for cadets
- Electronics and software training
- Options for upskilling permanent workers
- New knowledge and fresh ideas

Matching

Growers continue to struggle to find workers with the right skills and attributes, due to the following:

- Lack of suitable affordable accommodation for individuals and families.
- Lack of young people keen to enter the industry with an often negative perception of the horticulture sector
- Challenges finding people with the right attitude prepared to work in physical roles.
- Lack of locals seeking permanent work in the industry.
- Competition with other sectors for skills staff.

Care of Workers

It is evident that growers who provide both a high level of pastoral care and realistic wages are more likely to be able to attract workers in the future. Pastoral care for all seasonal workers is now seen to include good quality accommodation (including ablution facilities) at a reasonable rate, provision of WiFi services, and a sense of belonging to the enterprise.

There are growers in the region who do not know where their workers stay and do not see housing their workers or making sure they are adequately housed as their responsibility. In a competitive environment, these growers are likely to find it increasingly hard to attract and retain staff.

Productivity

In both sectors, the top three barriers are largely unchanged from the previous survey i.e. lack of suitable accommodation, shortage of labour when required and a lack of suitably trained mainly permanent staff. For cherry growers, securing nursery stock will be a significant issue if the planned increase in cherry plantings are realised.

Accommodation Demand and Supply

There has been significant investment by growers in accommodation on both orchards and vineyards over the last three years, with the addition of 539 orchard beds and 170 vineyard beds (including camping capacity). The 2014/15 survey found that an additional 600 beds would be required for workers by 2018/19 and the delivery of this supply has been exceeded, although as noted, many of these "beds" may be campsites.

Horticultural growers plan to add an additional 1436 beds (720 of these as camping capacity) over the next four to five years bringing the total capacity to 3359 beds. Our labour projections indicate that at peak the horticulture industry will need 5050 beds leaving a shortfall of 1691 beds in 2021/22. Our previous survey indicated a shortfall of viticulture beds. The forecast growth in viticulture will exacerbate this problem leaving a shortfall of 607 beds by 2021/22.

Table 3: Forecast Accommodation Supply and Demand to 2021/22

	Horticulture	Viticulture
Demand for beds at peak	5050	1148
Supply of beds	3359	541
Shortfall	**1691**	**607**

A number of growers raised issues regarding the affordability of housing in the Cromwell region for permanent workers. Permanent workers, being paid what would be considered a reasonable salary as supervisors or managers are often unable to afford to buy a house and furthermore, rental housing is also expensive and in short supply.

There is widespread concern that due to a reduction in camping ground capacity together with upcoming restrictions on freedom camping, that the region will be unable to accommodate the seasonal workers needed over peak periods.

There is a trend for cherry growers to look further afield for expansion. There are developments planned for Dairy Creek, Ardgour Valley and the Lindis area. A few large growers have secured or are looking to secure land in these areas. If developments proceed in the more outlying areas, it raises issues about how workers will be accommodated and/or transported.

6. Horticulture Labour Survey Results

Planted Hectares

6.1 Central Otago Plantings

There is a marked confidence in the horticulture sector in Central Otago. This is reflected particularly by the very significant growth predicted for the cherry sector in and around Cromwell.

The main trends are as follows:

Central Otago fruit plantings are projected to grow by 32% or 583 hectares over the next four to five years from 1830 hectares to 2413 hectares.

Growth will come predominantly from 465 hectares of planned new cherry plantings (an increase of 56% over 5 years). These planned plantings are developments where the land has been secured, plant stock ordered and land development underway.

86% of these cherry plantings are planned for the Cromwell (including the Tarras, Bannockburn and Lindis) areas, 10% for the Alexandra area and the final 4% for the Teviot Valley.

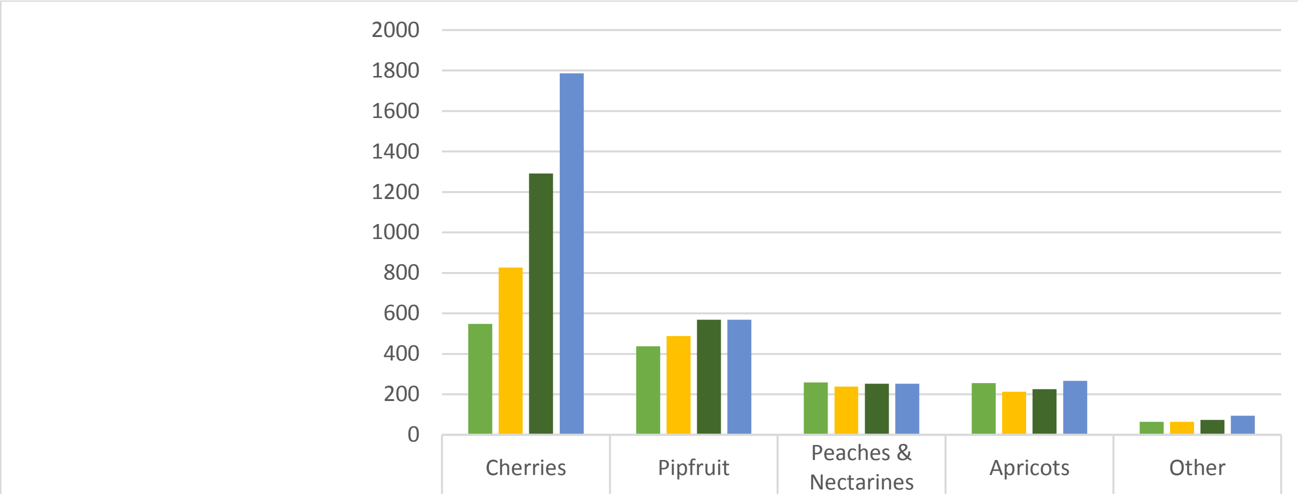
There are feasibility projects underway to consider the viability of another 495 hectares of cherries and 60 hectares of other fruit types in the region. If these plantings are also realised, it would see a 124% increase in cherry plantings on the current baseline which equates to over 1000 ha of additional plantings, over the next 5 years. These possible plantings would be predominantly in the wider Cromwell region.

Table 4: Current and Projected Horticulture Planting for Central Otago (R=47, DNR 12)

Fruit Type	Cherries	Pipfruit	Peaches & Nectarines	Apricots	Other	TOTAL
2014/15 Planted hectares	548	437	259	256	65	1565
2017/18 Planted hectares*	826	488	238	213	65	1830
2021/22 Projected hectares	1291	569	253	226	74	2413
Project increase 2017/18 to 21/22	465	81	15	13	9	583
% increase 2017/18 to 21/22	**56%**	**17%**	**6%**	**6%**	**14%**	**32%**
Hectares under feasibility 2017/18	495	0	0	40	20	555
Projected ha if feasibility ha are realised	1786	569	253	266	94	2968
% increase in ha if feasibility ha are realised 2017/18 to 21/22	**116%**	**17%**	**6%**	**25%**	**45%**	**62%**

*Note: 2017/18 data includes an adjustment of 9.2% to account for non-surveyed hectares. There has been no growth factor projections applied for future years as there is no indication these entities expanding their operations.

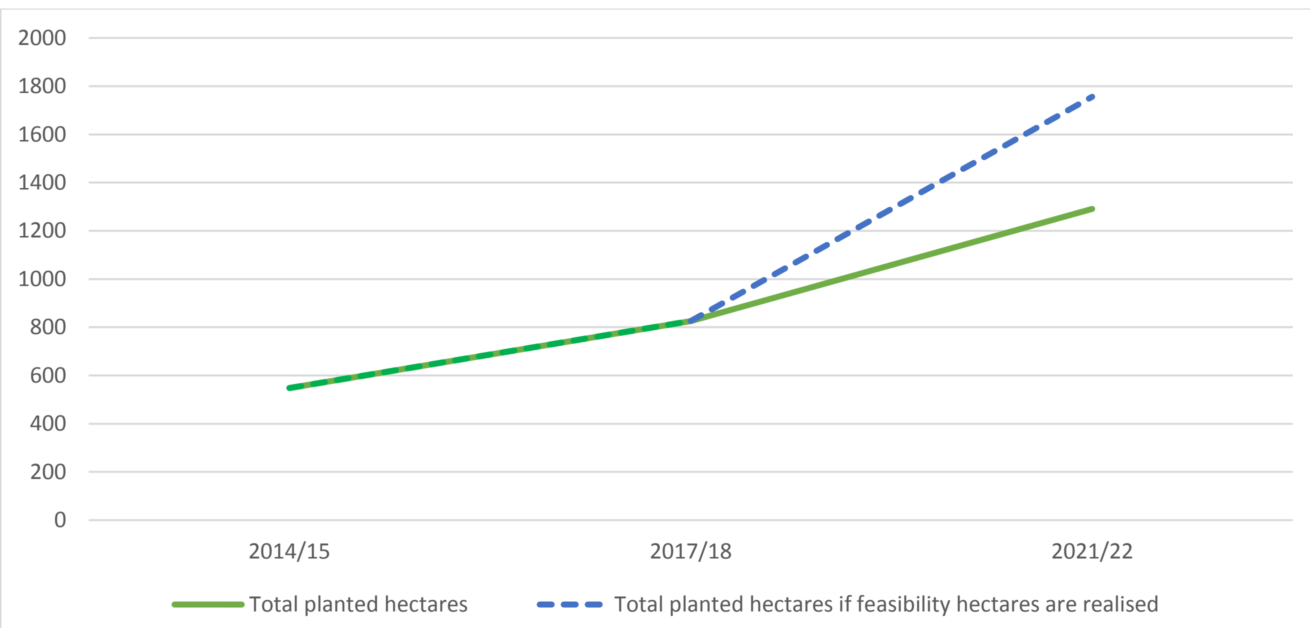
Figure 4: Central Otago Horticulture Plantings 2014/15 to 2021/22 (R=47, DNR=12)



	Cherries	Pipfruit	Peaches & Nectarines	Apricots	Other
2014/15 Actual planted hectares	548	437	259	256	65
2017/18 Actual planted hectares	826	488	238	213	65
2021/22 Projected planted hectares	1291	569	253	226	74
If feasibility ha realised	1786	569	253	266	94

**Note: 2017/18 data includes an adjustment of 9.2% to account to non-surveyed hectares. There has been no growth factor projections applied for future years as there is no indication these entities expanding their operations.*

Figure 5: Central Otago Cherry Plantings 2014/15 – 2021/22 (hectares)(R = 47, DNR 12)



While the vast majority of growth will come from cherries, there is some moderate growth predicted through a 17% increase (or 81 new hectares) of pipfruit, mainly in the Alexandra area, a 6% increase in peach and nectarine plantings and a 6% increase in apricot plantings across the region. Other crop types are set to increase by 4%.

There are only nine hectares of trees being replaced with a different crop and two hectares of tree removals planned for the period to 2021/22.

6.2 Plantings by Sub-Region

There is significant diversity within the Central Otago sub-regions, with regard to crop plantings, projections and the number of entities. These are now explored.

*Table 5: A Comparison of Central Otago Sub-regions (*R=47, DNR=12).*

Sub Region	Number of Entities	Current Total Planted Hectares 2017/18*	Predicted % Growth in Plantings 2017/18 to 21/22**
Cromwell	33	597	69%
Alexandra	14	587	22%
Teviot Valley	26	645	3%

***These figures do not include ha currently under feasibility*

Note that some orchards and contractors are operating in more than one sub region and may be reflected more than once in the count of entities.

Contractors and contract managers operate predominantly in the cherry business.

Cromwell

As indicated above, the vast majority of growth in the Central Otago horticulture sector in the next four to five years will come from cherry plantings in the Cromwell sub-region.

Since the 2015 survey, total plantings across all fruit types in the Cromwell region have increased by 47% or 191 hectares from 406 to 597 hectares. Cromwell plantings now represent 33% of the planted hectares of fruit in Central Otago and there are 33 entities managing labour – either independently or as contractors.

Plantings in the Cromwell area are now forecast to increase by a significant 69% (or 411 hectares) to 1008 hectares by 2021/22. These are developments where the land has been secured, plant stock ordered and land development underway.

If further developments move from the feasibility stage to planting, an additional 555 hectares of development (mostly cherries), on top of the 465 already planned are possible in the Cromwell Region over the next four to five years.

While cherries currently represent 86% of fruit plantings in the sub region, this is likely to rise to well over 90% over the next four to five years. It is also likely that planting will be spread more widely in the Cromwell Basin and include growth in Bannockburn, Tarras and the Lindis.

Alexandra

The Alexandra region has 14 growers and 587 ha or 32% of the total planted fruit in Central Otago. There is no one dominant fruit type planted with peaches and nectarines, cherries, apricots and pipfruit all planted in significant numbers.

Growers have plans to increase these plantings by a further 22% (or 127 hectares) over the next four to five years with 63% of these new hectares planned for pipfruit.

Teviot Valley

The Teviot Valley (including Roxburgh and Ettrick) currently has the highest number of planted hectares by sub-region with 645 or 35% of the planted hectares of fruit in Central Otago. There are 26 growers managing labour in the sub-region.

Plantings in the Teviot Valley since the 2015 survey have grown by 18%, driven by a 105% increase in cherry plantings taking them from 60 ha to 123 ha.

Pipfruit is the dominant crop in the area representing 54% of the total planted hectares. Cherries are the next most planted crop at 19% followed by apricots at 17% of plantings.

The Teviot Valley has the lowest projections of growth in plantings going forward of the three Central Otago sub regions. There are plans to increase plantings by only 21 hectares (or 3%) over the next four to five years. The majority of these plantings will be cherries.

6.3 Ownership

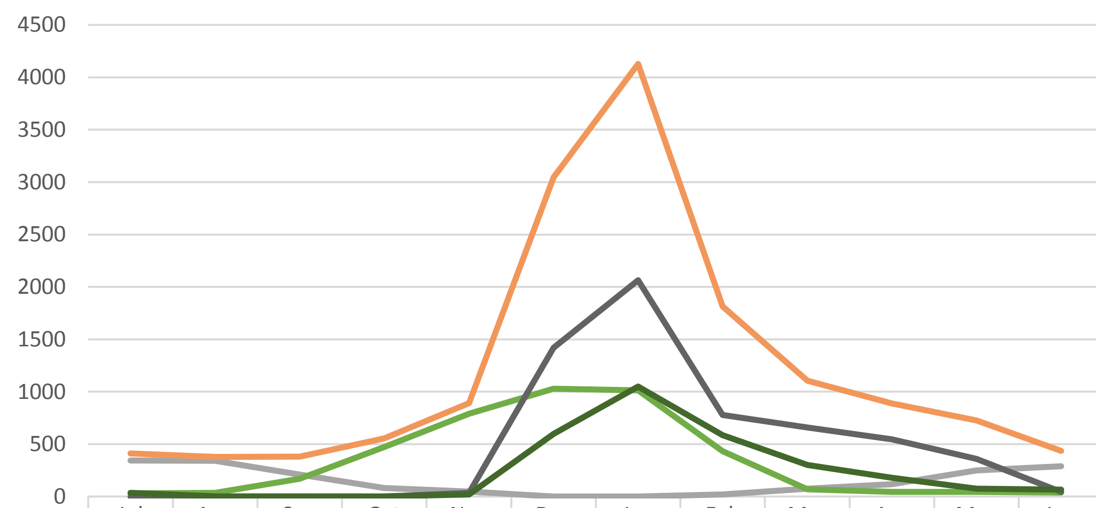
Fifty five of the orchard entities in Central Otago are owned by New Zealanders living in Central Otago. The remaining eight are owned by New Zealanders living elsewhere in New Zealand.

The Horticulture Labour Force

6.4 Seasonal Variation in Labour Demand

While labour demand has grown across all times of the year, the increase in cherry plantings has led to an accentuation of the summer peak – a trend which is set to continue. Figure 6 shows that there are ten times more workers employed in January compared with July.

Figure 6: Seasonal distribution of horticultural labour 2017/18 season (R= 47, DNR 12)



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Winter	344	340	209	80	47	0	0	21	75	118	248	289
Spring / Summer	31	36	170	473	790	1029	1014	431	69	44	44	37
Picking	0	0	0	0	36	1419	2064	778	657	545	359	44
Packing	36	2	2	1	19	598	1049	585	302	180	76	66
Total	411	378	381	554	891	3046	4128	1815	1104	887	727	436

Note 1: R=47. An adjustment of 9.2% has been added to labour figures to account for unsurveyed hectares.

Note 2: Workers may be employed in more than one season so this is a count of workers per season rather than total workers engaged.

6.5 Current and Future Labour Demand

The survey asked growers to indicate how many workers they employed in each seasonal role on the orchard and how many they will require going forward.

The net result is that the number of jobs to be filled in each season will increase by between 16% and 48%, requiring at the harvest peak, an additional 1186 workers in the orchards picking and in pack houses. This figure is conservative however and does not include the labour required should the developments that are under feasibility over the next four to five years be realised.

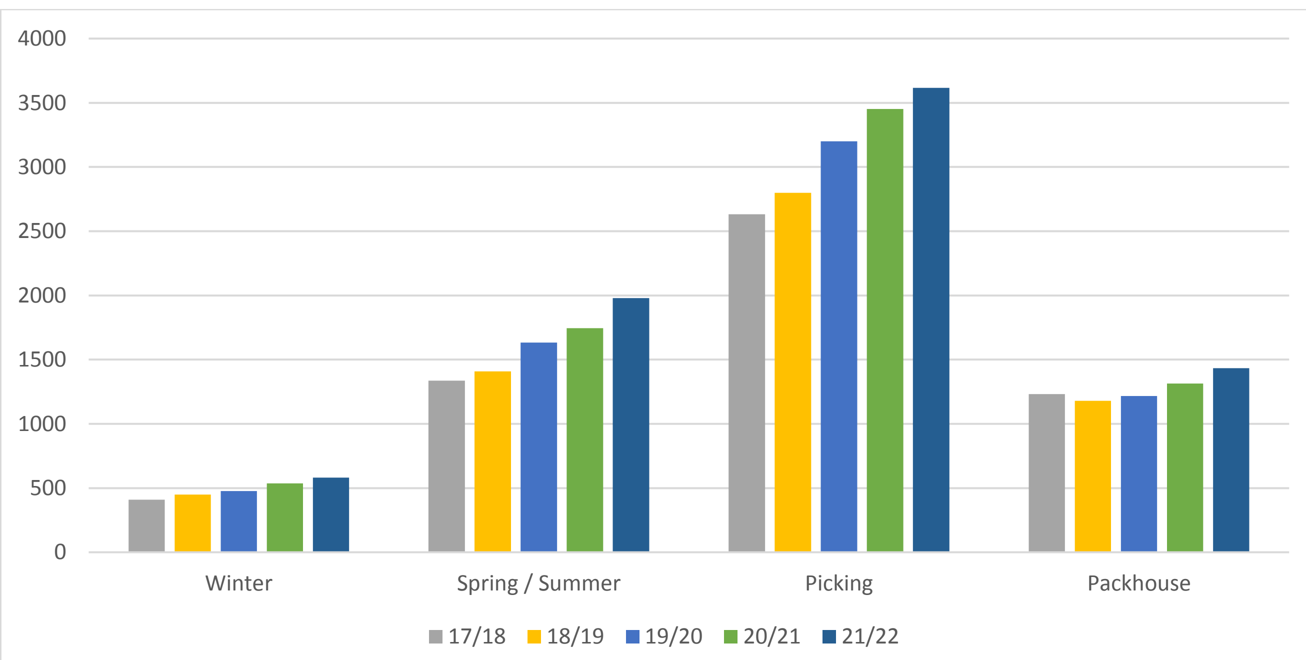
Table 6: Labour Requirements for the Central Otago Horticulture Sector (R =47, DNR=12)

Total Labour Required	**Winter**	**Spring / Summer**	**Picking**	**Pack house**
17/18	409	1337	2632	1232
18/19	449	1408	2799	1178
19/20	476	1634	3200	1215
20/21	537	1744	3451	1315
21/22	581	1980	3616	1434
Change over 5 yrs	**172**	**643**	**984**	**202**
Percentage change over 5 yrs	**42%**	**48%**	**37%**	**16%**

Note: Includes adjustment factor of 9.2% to account for non-surveyed hectares.

The least change is predicted for the pack houses with 202 additional workers needed. This is undoubtedly a reflection of the growing role of technology and mechanisation and follows the same trend found in the 2015 survey.

Figure 7: Forecast Seasonal Labour Requirements 2017/18 to 2021/22 (R = 47, DNR 12)



Note: Includes adjustment factor of 9.2% to account for non-surveyed hectares.

6.6 Source of Labour by Worker Type

Growers were asked to indicate how many workers they employed of each worker type over the 2017/18 season. By contrast to section 4.2 above, these results show the number of people employed in each category, as opposed to jobs that were filled (where more than one worker can fill a position, due to turnover).

The Central Otago horticulture industry employed 4965 workers in the 2017/18 year. This is up 22% or 884 workers on three years ago. Backpackers made up over 3100 or 64% of these workers, 796 were locals and students and 665 RSE workers (up from 446 three years ago). There has been a 16% increase in the number of permanent workers employed by the industry with an additional 45 positions created and filled over the last three years.

Table 7: Source of Labour by Worker Type 2014/15 and 17/18 (R=47, DNR 12)

Type of Worker	Workers employed 14/15	Workers employed 17/18*	% of workforce 17/18	Increase	% Increase
Backpackers	2647	3179	64%	532	20%
Seasonal Locals / Students / Jobseekers	708	796	16%	88	12%
RSE Workers	446	665	13%	219	50%
Permanent Workers Full time	280	250	5%	45	16%
Part Time		75	2%		
TOTAL	**4081**	**4965**	**100%**	**884**	**22%**

Note: Includes adjustment factor of 9.2% to account for non-surveyed hectares.*

Impact of Technology

Growers were asked if they thought technology was going to affect the number of workers they employ in the orchard or pack house over the next four to five years. 44% thought it would and 56% said no. One was unsure.

Many growers indicated that significant changes have already been made to pack house technology while others are currently investing in new equipment – particularly graders that use optical sorting. A number of growers indicated that the introduction of new graders will save them between 20 and 40 labour units during harvest. Automatic box stacking is also being introduced in some pack houses.

Despite this investment in technology, growth in plantings and rising productively of many orchards will however result in a net increase in labour in the pack houses over the next four to five years,

There is a change from conventional planting styles to more intensive planting systems for cherries and for apples particularly. This means faster picking, less climbing and more fruit within arm's length. It would also allow the adoption of robotic pickers and picking platforms down the track.

Recruitment and Retention

6.7 *Methods of recruitment*

Growers were asked to indicate the methods of recruitment they find most useful in securing the seasonal and permanent workers they require.

The top four methods used to recruit seasonal workers have not changed since the last survey, being online, previous year's workers returning, casual walk-ups and RSE through SSCO.

In this survey we also asked growers how they recruit their permanent staff. Local referrals is the top method, followed by online recruitment and print advertising.

Table 8: *Value of Methods of Labour Recruitment (R = 42, DNR =17)*

	Seasonal Workers: Rank	**Permanent Workers: Rank**
Online (website or email) and Social Media	1	2
Previous Years' Workers Returning	2	n/a
Casual Walk Ups	3	n/a
RSE through Seasonal Solutions Ltd	4	n/a
Casual Workers from Seasonal Solutions	5	n/a
Local Referrals	6	1
Direct RSE	7	4
Print Advertising	8	3
Referrals from Work and Income	9	5

6.8 *Factors affecting recruitment or retention*

Respondents were asked to indicate how a number of factors have affected their ability to recruit or retain staff. Growers are most 'affected' by the availability of suitable accommodation. They were also 'somewhat affected' by language barriers and the availability of transport. None of the other factors were challenges for growers.

Table 9: *Factors affecting recruitment or retention (R = 47, DNR = 12)*

Factors affecting recruitment or retention of staff	Rank 2014/15	Rank 2017/18
Availability of suitable accommodation	1	1
Lack of Working Holiday Visa or VOC	4	2
Language barriers	2	3
Location of work	7	4
Incorrect paperwork (IRD, Bank a/c etc.)	6	5
Availability of WiFi	n/a	6
Availability of transport	3	7
Work placement of spouses	5	8
Availability of childcare	8	n/a

Variability / Predictability of Labour

6.9 *Labour Supply*

In the 2017/18 year, 65% of respondents were able to source the labour when they needed it *(R = 47, DNR = 12)*. This is down 14% from 79% 3 years ago.

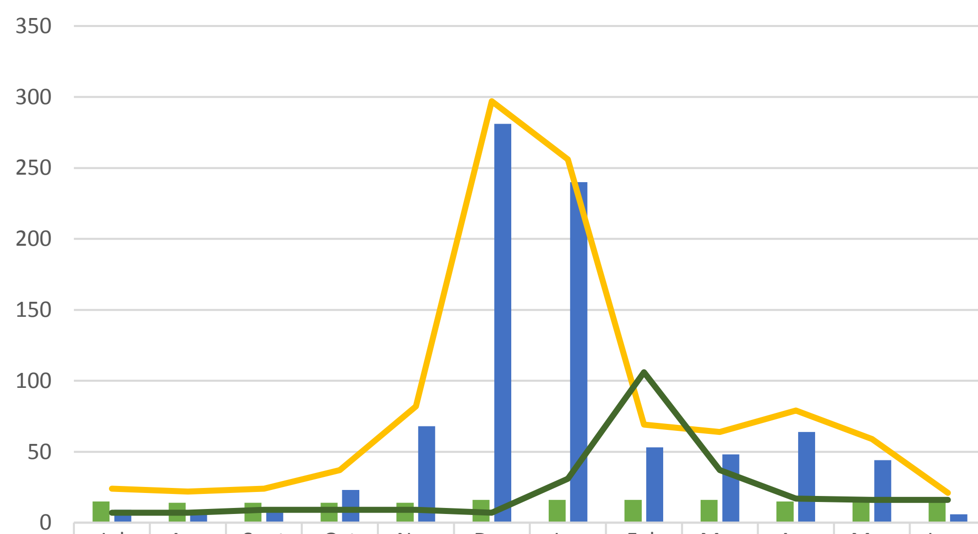
The 2017/18 season was an unusually warm one with crops ripening up to a month early and perishing quickly. The early season was also coupled with a delay to the arrival of some RSE workers in Central Otago in November, resulting in a significant labour shortage.

In the horticulture sector, there was a shortage of 297 workers in December and 256 in January. This compares with three years ago when the peak stress period came with a labour shortage of 106 in the month of February. This last season also saw the labour challenge return in April with a shortage of another 79 workers.

Discussions with growers indicated that in order to cover this shortfall, employees worked harder and that hours of work were extended. Some fruit was also left on trees as it was perishing so quickly in the heat.

The shortage was predominantly for seasonal workers however also of significant note is the shortage of permanent workers across the season. While 14-16 workers may not seem like many, when they are the supervisors and machine operators on orchard, which was the case, the impact to the sector was significant.

Figure 8: Number of Workers Short 2017/18 Season compared with 2014/15 (R=47, DNR12)



	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Permanent Workers Short	15	14	14	14	14	16	16	16	16	15	15	15
Seasonal Workers Short	9	8	10	23	68	281	240	53	48	64	44	6
Total Shortage 17/18	24	22	24	37	82	297	256	69	64	79	59	21
Total Shortage 14/15	7	7	9	9	9	7	31	106	37	17	16	16

6.10 *Concern for Labour Availability*

89% of growers are concerned about the adequate supply of workers while 11% are not.

There is concern about:

- Possible changes to the Working Holiday Visa Scheme that may affect the supply of backpackers to work on orchards.
- A lack of understanding by government as to Central Otago's unique labour challenges, lack of a regional strategy to address these, the scale of horticultural expansion, the need for an increase to the RSE cap and facilitation of backpacker labour.
- Growth in cherry orchards in Central Otago and other horticultural plantings elsewhere in New Zealand (particularly kiwifruit in the Bay of Plenty) will grow labour challenges and competition for labour in the future.
- New Zealand is seen as an expensive destination which may impact the ongoing supply of backpackers.
- Lack and high cost of accommodation threatens to make Central Otago a less appealing destination to work.
- A trend for backpackers to stay in jobs for shorter periods.
- Lack of kiwis who are available for work and a very limited number of young kiwis choosing horticulture as their career.
- The unaffordability of housing in the area, preventing kiwi workers settling in the region.

One orchard indicated that the government has created interest in cherries through the Coriolis Report[7] and as a result they were confident that government will relax visa requirements to allow industry the resources it needs to expand.

6.11 Labour Supply as a Factor in Planting Plans

Growers were asked whether or not they take labour supply into consideration when making decisions regarding new plantings. 39% indicated they do, 31% don't and 30% indicate they are not currently planting.

Growers highlighted initiatives they employ to manage labour demand including the adopting of technology, lengthening the peak to allow for a longer work period, making do with the labour they have, considering applying for RSE workers and planning new accommodation to house workers.

Five orchards indicated they have not pursued planned plantings or have limited their developments due to the unavailability of labour.

Upskilling

6.12 Supply of Training Courses

Growers indicated an ongoing shortage of training courses in:

- Supervisory, management and leadership skills
- Health and Safety
- Targeted short courses for orchard workers e.g., pruning techniques.
- Training for cadets
- Electronics and software training
- Options for upskilling permanent workers
- New knowledge and fresh ideas

[7] *Investment Opportunities in the New Zealand Cherry Industry, March 2018, Coriolis*

6.13 Apprentices and Cadets

Fourteen growers have engaged an apprentice or cadet in a variety of roles on their orchard.

Matching

Growers were asked to explain the challenges in finding employees with the right skills and attributes. This question was included to give respondents the opportunity to make a range of qualitative responses without prompting.

Challenges are summarised as follows:

- It is difficult to find staff with supervisory and management skills.
- Interviewees don't always match expectations
- There is a lack of locals wanting fulltime permanent work in the industry.
- A variety of recruiting methods are used to ensure a continuous supply of labour - RSE/locals returning/walk-ups/online applications/phone calls/social media.
- Finding the right skills is not the problem as people can be trained. Challenge is finding people with the right attitude.
- Hard to find people who are physically fit and mentally able to pick. Finding people that want to work and understand that it is a physical job.
- Drug/alcohol and criminal convictions can be a drawback with health & safety.
- A lack of young people keen to enter the industry. Would like to see cadets and apprentices and people keen to make a career in horticulture management. A negative perception of the horticulture industry by schools.
- Expensive for staff to move here.
- A shortage of orchard managers, supervisors, leading hands, tractor drivers, fork lifter operators and bird scarers.
- Accommodation is the biggest problem.
- Attitude / Aptitude / Availability / Accessibility / Age are all challenges.
- Low unemployment in the area.

Productivity

6.14 Barriers to increasing productivity

This question asked growers what the barriers were to increasing their productivity. The largest barriers are a shortage of labour when required, lack of suitably trained staff and shortage of nursery stock. This compares with three years ago when the most significant barriers were lack of suitably trained staff and the availability of accommodation.

The availability of nursery stock will be a rising issue for growers as the significant planned cherry plantings are realised.

Additionally, a recent biosecurity scare has affected eight stone fruit orchards in Central Otago resulting in affected stone fruit plantings having to be destroyed. Seven of the eight orchards only had 'test' trees for new varieties while one had significant plantings of a new variety[8].

[8] *Otago Daily Times. "Eight Orchards affected by biosecurity scare" - 2 August 2018.*

Table 10: Barriers to increasing productivity (R = 32, DNR =17)

Shortage of labour when required	1
Lack of suitably trained staff	2
Shortage of nursery stock	3
Availability of suitable accommodation	4
Underutilisation of expensive capital investments due to seasonality	5
Lack of technical knowledge	6
Availability of finance for purchasing equipment	7
Availability of transport for staff	8

Growers also highlighted the cost of labour and land availability as barriers to productivity.

Accommodation Demand

6.15 Current Demand

Growers were asked if they think there is a shortage of accommodation in their area. 88% of respondents think there is a shortage, up from 85% three years ago.

Of those who believe there is a shortage, growers think there is a shortage of all types of accommodation including campsites, backpacker house beds and rental houses for permanent workers.

There was concern raised about the impact of proposed bylaws to limit camping on the foreshore of Lake Dunstan from summer 2018/19. While many growers support this move and indeed many have invested and plan to invest more in accommodation on their properties, many are concerned that the message may go out to backpackers that it is expensive to stay and/ or accommodation is hard to find in Central Otago.

6.16 Future Demand

Change in demand for accommodation is reflected directly by the growth in demand for labour as outlined in 6.5. Growers were also asked to forecast their labour demands out five years.

At the harvest peak, these forecasts will require a minimum of 1187 additional beds or campsites (984 more beds for pickers and 203 for packing staff) bringing the total demand at harvest to 5050.

Table 11: Seasonal Demand for labour 2017/18 to 2021/22

Total Labour Required	Winter	Spring / Summer	Picking	Packhouse
17/18	409	1337	2632	1232
21/22	581	1980	3616	1434
Change	172	643	984	203
Percentage change	42%	48%	37%	16%

Accommodation Supply

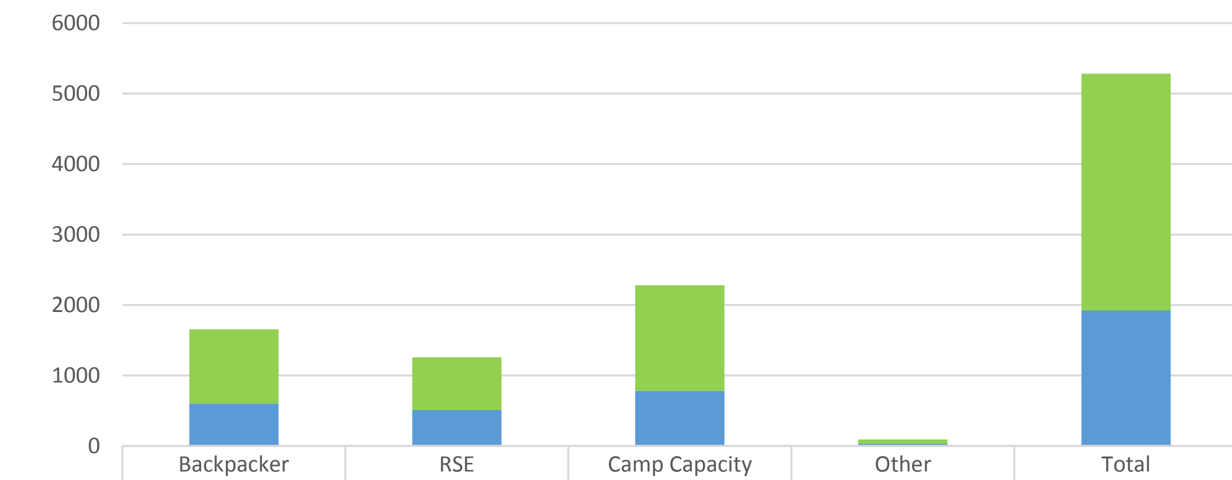
6.17 Current Accommodation by Type

This section of the survey was filled in only by growers who provide accommodation. These growers were asked how many beds of each type they have and how many they plan to add in the next four to five years.

The horticulture industry in Central Otago now provides accommodation for 1923 workers at any one time. Of this capacity, 599 beds are backpacker style, 512 RSE approved accommodation and 780 that can be accommodated in camping facilities. There is additional accommodation provided by third parties such as backpackers, other growers, homestays and commercial camping grounds. Freedom camping is also widely undertaken.

Significantly, there are plans to add 1436 beds or camping capacity over the next four to five years. This includes 454 backpacker beds, 234 RSE approved beds (with 200 planned by one grower), and camping capacity for an additional 720 workers.

Figure 9: Grower's accommodation capacity 2017/18 and projected capacity 2021/22 (R = 33, DNR = 26).



	Backpacker	RSE	Camp Capacity	Other	Total
2021/22	1053	746	1500	60	3359
2017/18	599	512	780	32	1923

Table 11: Forecast Accommodation Supply and Demand 2021/22

	Horticulture
Demand for beds at peak	5050
Supply of beds by growers	3359
Shortfall	**1691**

Our labour demand projections above indicate that at harvest time the horticulture sector will be needing a minimum of 5050 workers by 2021/22 (see pickers + packers in Figure 10), leaving **an accommodation shortfall of 1691 beds or campsites**. This is despite the considerable investment being made by a number of growers and others in developing accommodation.

6.18 Ministry of Business, Innovation and Employment Guidelines

Respondents were asked if they have any issues complying with the Ministry of Business, Innovation and Employment Guidelines for RSE accommodation. Of the 23 that engage RSE workers, four identified issues such as complying with the size requirements for RSE accommodation, making older style farm house accommodation compliant, requirements being too restrictive and an inability to use caravans to house RSE. No other growers had issues complying with the guidelines *(R = 23).)*

6.19 Council requirements

Thirty three respondents have had no issues complying with Council requirements for accommodation, while six do *(R = 39).* The six with concerns said they either didn't know the rules regarding camping on orchards or thought they were probably breaking the rules. All would welcome clarity in this area.

7. Viticulture Labour Survey Results

Planted Hectares

7.1 Central Otago

It was encouraging to note an overall mood of positivity within this sector. Grape growers were asked to indicate how many hectares they currently had planted and how many they expected to have planted in 2021/22. The data shows a moderately significant increase over the period averaging out at approximately 3% year on year growth. New plantings totalling 284 are planned over the time frame with the speculation that there could be an additional single development of approximately 100 ha also occurring. This development has not been included in the table.

Surveys were received for 93% of the total NZ Winegrowers levied area which represents a considerable improvement from the earlier 2015 survey. The " non-returned" hectares referred to in the methodology total approximately 136 ha rising after applying the adjustment factor to 153 ha in 2012/22.

Table 12: Grape plantings in Central Otago 2014/15- 2021/22 (ha) (R=61, DNR= 0)

2014/15 Planted hectares	2017/18 Planted hectares	2021/22 Projected hectares	Projected increase 2017/18 to 21/22	% increase 2017/18 to 21/22
1901	1991	2275	284	14.2

The 2015 survey indicated that 1997 hectares were likely to be in production in 2017/18 and this correlates closely with the 2017/18 planted hectares from this latest survey.

Ownership

The wine sector in Central Otago has seen recent consolidation as well as a rise in offshore investment. A measure of majority ownership was not undertaken in the 2014/15 survey. It was however added to this project to produce a baseline for any further studies and allow comparisons over time. While the majority of vineyards are still owned by either Central Otago resident owners or New Zealand residents, a significant proportion of vineyards are managed by contractors and owned by offshore owners.

Contractors

Contractors continue to play a significant role in the Central Otago winegrowing industry. We interviewed all the major contractors who between them manage about 750 hectares (compared with an estimated 705 hectares in 2015), corresponding to about 38% of the total 2017/18 area (compared with 37% in 2015). Services range from full vineyard management to undertaking a variety of other tasks such as mechanised vine management, spraying, irrigation, and harvesting (either mechanically or by hand).

The role of contractors is expected to increase with almost 1000 ha expected to be under contract by 2021/22. This corresponds to about 44% of total hectares and results from some consolidation occurring within the industry. As before, the majority of vineyards so serviced are in the greater Cromwell basin.

It is not straightforward to estimate hectares accurately by sub region due to historic disagreements regarding boundaries, the fact that a significant number of entities straddle different sub regions and the difficulty in allocating contractors managed hectares across sub regions.

Respondents were, however, asked to indicate the sub region in which any new plantings were planned and these results are indicated in the following table.

Table 13: Sub-Regional Breakdown of Planned New Plantings (R=19, DNR= 42)

Sub Region	Planned New Plantings (ha)
Cromwell	117
Bendigo	145
Alexandra	15
Wanaka	14
Gibbston	34
Total	325

While the results from Table 12 and 13 disagree by some 41 hectares, the overall increase is expected to be within the range.

In our previous report we indicated that the impact of the global financial crisis of 2008 was still being felt in the Central Otago grape growing community. The current survey found a spirit of some optimism within the industry with both prices and demand for Central Otago fruit firming.

Growers were also asked to identify if they used mechanical harvesting, if they were planning to and whether this was likely to increase. At the time of the 2015 survey it was predicted that 364 hectares would be mechanically harvested and this year's survey indicated that the current area so harvested is 356 hectares amongst nine growers. In five years' time it is predicted that 11 growers will be mechanically harvesting some 509 hectares. This increase of 43% is considered to be significant but is consistent with the trend towards greater mechanisation as wage costs rise.

Approximately 62% of the total vineyard area is currently spur pruned. And this is not expected to change significantly over the next five years.

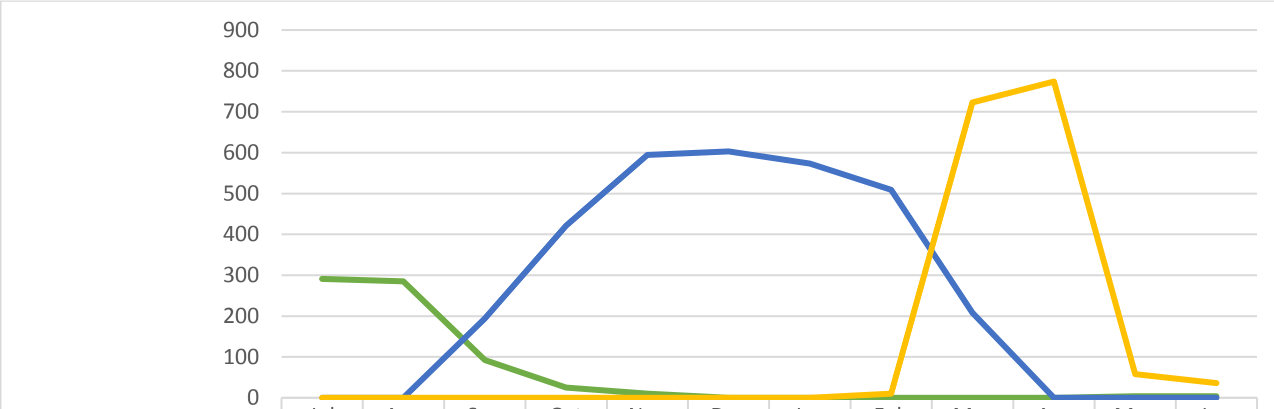
Number of vines per hectare averaged 3100 compared with 2933 in 2015 and row spacing averaged 2.26 metres compared with 2.15 previously.

The Viticulture Labour Force

7.2 Seasonal Variation in Labour Demand

The graph below indicates that last season the peak labour demand occurred during harvest in March and April 2018, with harvest starting 3-4 weeks earlier than normal.

Figure 10: Viticulture: Seasonal Variation in Labour Demand 2017/18 (R =61)



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Winter	291	285	92	25	10	0	0	0	0	0	4	4
Spring / Summer	0	0	194	421	594	603	573	509	208	0	0	0
Harvest	0	0	0	0	0	0	0	10	723	774	58	36

7.3 Labour Demand by Job Type

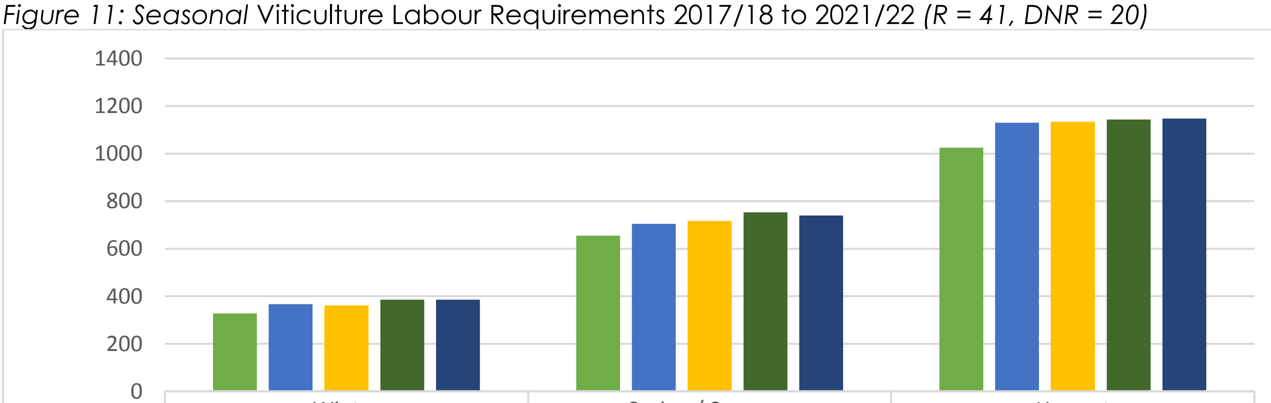
The survey asked growers to indicate how many workers they employed in each seasonal role on the vineyard and how many they will require going forward.

The net result is that the number of jobs to be filled will increase by approximately 266 in the next five years – keeping in mind that some of the same workers will fill the non-harvest and harvest roles.

The increase in labour demand of between 12% and 17.6% (depending on the season) correlates reasonably well with the expected growth in new planted hectares of 14.2% that is predicted to occur over the next four to five years.

This demand will increase if any new large plantings were to occur during the time frame.

Figure 11: Seasonal Viticulture Labour Requirements 2017/18 to 2021/22 *(R = 41, DNR = 20)*



	Winter	Spring / Summer	Harvest
2017/18	328	655	1025
2018/19	367	705	1131
2019/20	362	717	1134
2020/21	386	754	1144
2021/22	386	740	1148

Table 14: *Viticulture Labour Requirements (R= 40, DNR=21)*

Total Labour Required	Winter	Spring / Summer	Harvest
17/18	328	655	1025
21/22	386	740	1148
Change	58	85	123
% change	17.6%	13%	12%

7.4 Source of Labour by Worker Type

Growers were asked to indicate how many workers of each worker type they employed over the 2017/18 year. These results show the number of people employed in each category, as opposed to jobs filled (where more than one worker can fill a position as a result of worker turnover).

The industry employed a total of 1427 workers in the 2017/18 year, a reduction of 36 when compared with 2014/15. Backpackers made up 32% (or 452) of these workers, a significant reduction of 180 on the number employed in 2014/15. RSE workers employed showed a slight drop and seasonal locals, students and job seekers showed a significant increase in numbers employed of 89 (or 27%) over the time since the last survey.

Table 15: *Source of Labour by Worker Type (R= 45, DNR=16)*

Type of Worker	Workers employed 14/15	Workers employed 17/18	% of workforce 17/18	Increase	% Increase
Backpackers	632	452	32%	(180)	-28%
Seasonal Locals / Students / Jobseekers	303	392	27%	89	29%
RSE Workers	299	294	21%	(5)	-2%
Permanent Workers Full time	229	205	14%	60	26%
Part Time		84	6%		
TOTAL	**1463**	**1427**		**(-36)**	

7.5 Impact of Technology

There is predicted to be a modest but nevertheless significant increase in the use of mechanical harvesting over the next four to five years. A number of growers and contractors see that with the increase in the minimum wage that increasing use of mechanisation is inevitable.

Table 16: Area mechanically harvested (R=11, DNR=50)

	2014/15	2017/18	2021/22
Area mechanically harvested	317 ha	356 ha	509
Percentage of total area	16.7%	17.8%	22.2%

Recruitment and Retention

7.6 Methods of recruitment

Vineyard owners were asked to indicate the methods of recruitment they found most useful in securing the seasonal and permanent workers they require.

The top three methods used to recruit seasonal workers have not changed since the last survey; casual walk ups, previous year's workers returning and local referrals. This time, however, the use of social media has climbed from its previous seventh ranking up to number four supplanting the use of print media which now drops to the least preferred method. The use of print media is still one of the top three preferred methods for permanent staff along with local referrals and on-line advertising.

Table 17: *Value of Methods of Labour Recruitment (R=47, DNR=14)*

Figure 1: Value of Methods of Labour Recruitment	**Seasonal Workers: Rank**	**Permanent Workers: Rank**
Casual walk-ups	1	5
Local referrals	2	1
Previous years workers	3	4
Use of Social Media	4	7=
RSE workers from SSCO	5	7=
Casuals from SSCO	6=	6
Online advertising	6=	2
Direct RSE	8	9
Referrals from Work and Income	9	10
Print media	10	3

7.7 Factors affecting recruitment or retention

Respondents were asked to indicate how a number of factors have affected their ability to recruit or retain staff. As in the 2015 survey growers are most affected by the availability of suitable accommodation. This was the standout issue for 2017/18 by a considerable margin with many of the lesser ranked factors now not material.

Table 18: *Factors affecting recruitment or retention (R=41, DNR= 20)*

Factors affecting recruitment or retention of staff	Rank 2014/15	Rank 2017/18
Availability of suitable accommodation	1	1
Lack of Working Holiday Visa or VOC	4	2
Language barriers	3	5=
Location of work	2	4
Incorrect paperwork (IRD, Bank a/c etc.)	6	5=
Availability of WiFi	n/a	8
Availability of transport	5	3
Work placement of spouses	8	7
Availability of childcare	7	n/a

Variability / Predictability of Labour

7.8 Labour Supply

In the 2017/18 year, 36% of respondents were able to source labour when they needed it but with a similar number (34%) indicating that they were unable to find workers when needed.

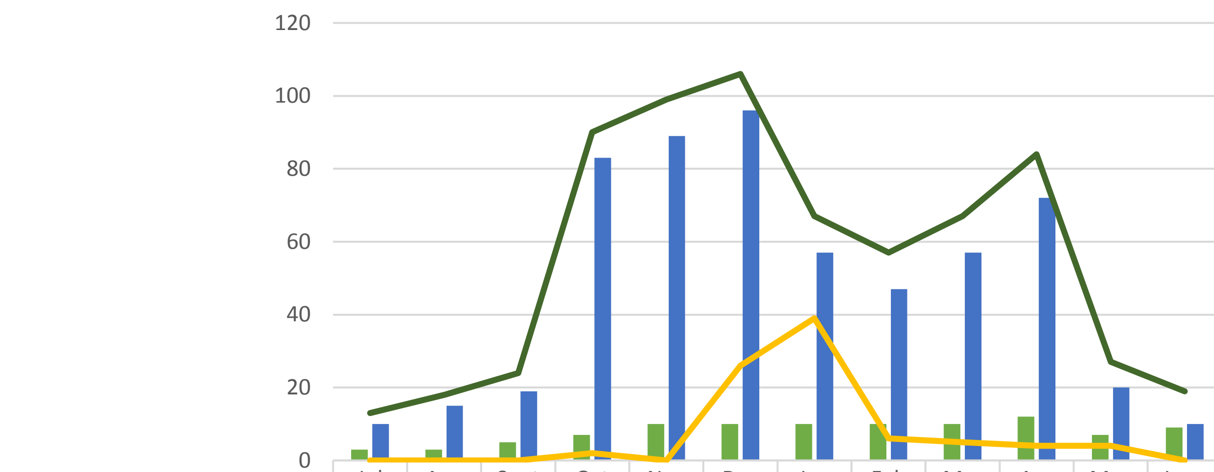
The season was a difficult one for all growers due to the unseasonably early and warm spring and summer. The sector struggled to find workers with competition from the cherry sector being pronounced and a delay in the supply of RSE men.

The months of October through to January were a period of particular stress with the impact being felt most strongly in the contracting sector.

While most of this shortfall was in the supply of seasonal labour, the shortage of permanent workers was felt acutely as these tended to be at the manager or supervisor level making the supervision of seasonal workers a real challenge.

There was a shortage of 272 workers in total for the months of November to January – critical months in the vineyard before the nets go on. With harvest brought forward by up to a month for most vineyards, there was an acute secondary shortage occurring in March and April coinciding with the early harvest and rapidly ripening fruit.

Figure 12: Shortage of Labour 2017/18 Season (R=61)



	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Permanent Workers Short	3	3	5	7	10	10	10	10	10	12	7	9
Seasonal Workers Short	10	15	19	83	89	96	57	47	57	72	20	10
Total Shortage 14/15	0	0	0	2	0	26	39	6	5	4	4	0
Total Shortage 17/18	13	18	24	90	99	106	67	57	67	84	27	19

7.9 Concern for Labour Availability

Growers were asked if they are concerned about the adequate supply of future workers. Of the 45 respondents to this question, 78% expressed concern while 22% were not concerned.

Respondents were concerned about the following issues and commented thus:

- An increase in horticulture impacting on the availability of vineyard workers
- An aging workforce and competition from cherry growing
- Lack of camping ground facilities plus a lack of RSE workers
- A general lack of affordable accommodation
- Growth in the region is a problem. Backpackers tend to shop around for the best conditions and those where the pay is above the minimum wage
- Concern about backpackers ability to secure the necessary work visas
- Local staff are not always available as work is not permanent
- A particular need this season for help with putting on nets earlier and difficulties in sourcing backpackers
- Contractors struggled to find enough staff as some of their crews were stuck in Marlborough
- One respondent had to purchase a leaf plucker so as to manage the labour shortage
- Problem with many vineyards needing staff all at the same time, particularly over harvest
- Increased competition from cherry orchards at peak times, especially December
- A vicious cycle of a large growth in cherry orchards, a decrease of affordable accommodation together with high living costs
- A perception of less people travelling through Central Otago this last season
- Just managed to make it through the season given the difficulties for seasonal staff to find adequate camping facilities
- Big risk with any changes to the working holiday visa scheme
- Nervous about government decisions made with a lack of any real understanding of what is needed on the ground
- Accommodation will become a massive problem from next year with changes to freedom camping rules and a decrease in the number of camping grounds
- Expectation that a large number of young people will now start to avoid Cromwell as the number of camping ground spaces decreases
- Possible changes to immigration rules will progressively see NZ becoming a less attractive place for backpackers
- With the change in camping rules danger is that people may only come to visit and not to work
- There is an attitude shift with young people not wanting to work as hard as their parents

However, a number of respondents who did not experience any issues attracting staff put this down to providing a very positive working environment and to always paying above the minimum wage.

7.10 Labour Supply as a Factor in Planting Plans

Of the 46 people who responded to this question the majority (54%) indicated that they had no plans to be planting any more grapes. The remaining respondents were evenly split between those who did and those who didn’t consider labour supply when planting.

Upskilling

7.11 Supply of Training Courses

Growers indicated a range of ongoing training issues as set out below:

- Need for training of RSE workers to take on the role of team leaders and supervisors
- Also a need for more supervisor training courses in general leading to people who can manage a vineyard
- There is a constant need for ongoing on the job training as a result of the high churn rate
- Need for specific courses in irrigation management, tractor and fencing skills, pruning, shoot thinning, shoot selection etc.
- One person had no idea where to go for training but noted that there was a need for more field days focussing on vine management, spraying and how to fit into the tourism sector
- An ability to deal with a range of different cultures and languages within the vineyard
- Keeping staff up to date with new technologies and how they might benefit the sector

Some respondents commented that the Cromwell Campus of the Otago Polytechnic did a good job and noted that there was no lack of training options

7.12 Apprentices and Cadets

17 growers indicated that they had employed apprentices or cadets with some trying to nurture them into full time supervisory positions through the use of Hort ITO courses and diploma in viticulture. A number had hired Lincoln students over the summer break.

Matching

Growers were asked to explain the challenges in finding employees with the right skills and attributes. This question was included to give respondents the opportunity to make a range of qualitative responses without prompting.

Challenges are summarised as follows:

- There is a limited pool of potential employees and long term shortages of positions such as vineyard manager are now the norm
- Availability of workers when needed plus the provision of suitable accommodation
- Enhanced competition for workers plus affordability of pay rates that will attract them
- The cost of living in the Gibbston Valley is a real issue
- A lack of money to pay people means that cannot get staff even if needed
- A good work ethic and attitude is becoming increasingly hard to find
- Only have short term work available during certain times of the year which only suits a small minority of people
- Reliance on approaches from Woofers, farm helpers and backpackers but need to be well organised in advance
- Finding the right balance between having reliable permanent staff and getting other assistance when needed

- A lack of people to employ within the region let alone ones with the required skills. Increasingly looking outside the region but cost of living in the area is high, accommodation is not available and rentals are expensive
- Younger people are not impressed with having to work long hours outside and employees are not prepared to start at the bottom. There is a lack of practical experience coupled with unrealistic expectations about what they are worth
- The termination of the Otago Polytechnic viticultural course will put real pressure on local training needs
- Lack of willingness on the part of New Zealanders to work outside and very hard to get permanent workers
- Issues with ex-Polytechnic graduates as they expect to go straight into a management role – young kiwis don't want to do the hard yards. Most backpackers (but not all) have a better work ethic than kiwis
- Noted that RSE workers are hardworking and more efficient than other workers
- A sense that schools and the Polytechnic aren't engaging sufficiently with the needs of the sector
- Attitude not skills is the thing – get that and can train people to do anything
- Need to ensure a sense of pride and belonging as well as paying well – otherwise how do you distinguish yourself from the cherry growers

Productivity

This question asked growers what the barriers were to increasing their productivity. The largest barriers are lack of suitable accommodation, lack of suitably trained staff and shortage of nursery stock. This compares with three year ago when the most significant barriers were lack of suitably trained staff and the availability of accommodation.

Table 18: Barriers to increasing productivity (R = 32, DNR =29)

Shortage of labour when required	1=
Lack of suitably trained staff	1=
Availability of suitable accommodation	3
Availability of finance for purchasing equipment	4=
Lack of technical knowledge	4=
Availability of transport for staff	6=
Availability of nursery stock	6=
Availability of expenditure for capital investment	8

The lack of availability of suitable land was also identified by two respondents as a barrier to increasing their productivity

Accommodation Demand

7.13 Current Demand

Growers were asked if they think there is a shortage of accommodation in their area. 81% of respondents think there is a shortage, down from 86% three years ago.

Of the 81% of those who believe there is a shortage, growers focussed on the whole issue of the need for affordability and identified a lack of basic camping facilities, cheap backpacker accommodation and rental houses for permanent workers.

Plans to limit the availability of camping on the shores of Lake Dunstan is predicted to significantly affect the future supply of seasonal workers.

7.14 Future Demand

Change in demand for accommodation is reflected directly by the growth in demand for labour going forward. Growers have identified a need for a further 123 beds at harvest by 21/22.

If any large scale developments occur during the next four to five years in addition to those identified then this will put further strain on the available accommodation.

The 2014/15 survey showed there was to be an increase in demand of about 300 more beds by 2018/19.

Table 19: Change in Labour Demand 2017/18 to 2021/22

Total Labour Required	Winter	Spring / Summer	Harvest
17/18	328	655	1025
21/22	386	740	1148
Change	58	85	123
Percentage change	17.6%	13%	12%

Accommodation Supply

7.15 Current Accommodation by Type

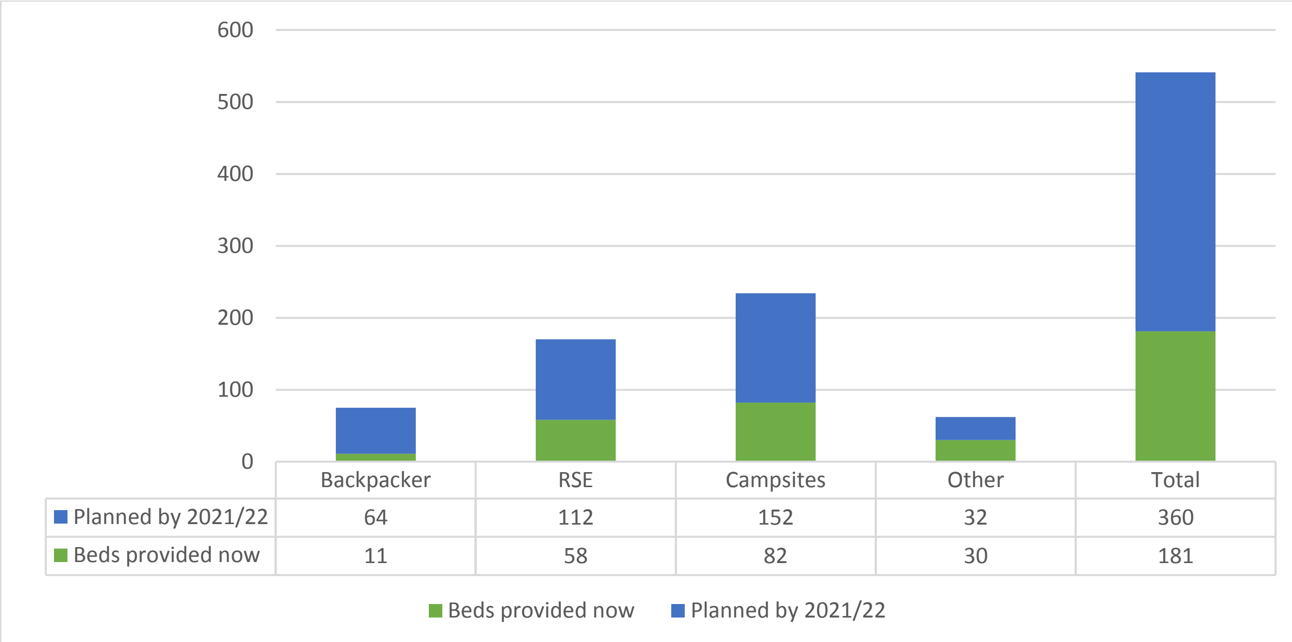
This section of the survey was filled in only by growers who provide accommodation. These growers were asked how many beds of each type they have and how many they plan to add in the next four to four to five years.

The viticulture industry in Central Otago now provides accommodation for 181 workers at any one time. This should be compared with the figure of 122 beds identified in the earlier 2015 survey. Growers indicated the addition of a further 179 beds by 2021/22. Increase in camp sites and RSE beds make up 77% of this predicted increase.

Table 20: Grower's accommodation capacity 2017/18 and projected capacity 2021/22

	Backpacker	RSE	Campsites	Other	Total
Beds provided 2017/18	11	58	82	30	181
Planned by 2021/22	64	112	152	32	360
Increase	53	54	70	2	179

Figure 13: Grower's accommodation capacity 2017/18 and projected capacity 2021/22



Business owners were also asked what other facilities they provided, with many offering kitchens, staff rooms, a caravan park, ablution blocks and toilets for workers to use. Some owned houses in the area that could be rented out. A number, however, indicated that they were not sure where their workers stayed and slept although many assumed that they freedom camped by the lake or else slept in their cars at unknown locations. There was a feeling that charging more than about $5 per night if camping would be considered uneconomic.

Of those responding, 26 or 79% said they made no distinction between providing RSE beds and others.

The shortfall of **607 beds** identified will be in part absorbed by third party providers such as camp grounds, backpacker hostels and home hosting.

7.16 Ministry of Business, Innovation and Employment Guidelines

In general there were no difficulties in complying with MBIE guidelines

7.17 Council requirements

There were no difficulties with compliance.

8. Annexes

8.1 Horticulture Mail Survey

Central Otago Labour Market Survey
Horticulture Sector Survey 2018

Privacy Statement - Under the provisions of the Privacy Act 1993

Thank you for taking the time to fill in this survey. The purpose of collecting this information is to measure the labour requirements in the horticulture and viticulture industries. Its use is to support discussions in relation to labour demands and seasonal labour shortages. The data is collected at an individual business level and will be aggregated so that all published information will never disclose an individual entity.

This survey is being commissioned by the Central Otago Labour Governance Group. The coded data may also be provided to the Ministry for Business, Innovation and Employment to be added to a national Labour Supply and Demand Model, currently being constructed to support national labour discussions and decisions. Individual businesses will not be identified.

The data and information will be stored securely. We will ensure that there are safeguards against loss, misuse or disclosure. You have the right to access and correct any of the individual information you provide. You may request that the individual information be removed. Individual information will not be kept for longer than needed for the purpose for which it was collected. You may request a copy of the aggregated information.

SECTION A: All growers to please complete

1. Business Details

Your position	Date of completion	Business Code
		(Office use only)

2. Grower Fruit Crop Details

Cherries	**2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**
Planted hectares					
Planned new plantings (hectares) Please indicate sub-region of plantings					
Planned removals without replanting (ha)					
Apricots	**2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**
Planted hectares					
Planned new plantings (hectares) Please indicate sub-region of plantings					
Planned removals without replanting (ha)					
Peaches & Nectarines	**2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**
Planted hectares					
Planned new plantings (hectares) Please indicate sub-region of plantings					
Planned removals without replanting (ha)					
Pipfruit	**2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**
Planted hectares					
Planned new plantings (hectares) Please indicate sub-region of plantings					
Planned removals without replanting (ha)					
Other (Specify):_______________	**2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**
Planted hectares					
Planned new plantings (hectares) Please indicate sub-region of plantings					
Planned removals without replanting (ha)					

3. If you are replanting, are you replacing with a different fruit crop? If yes, how many hectares with what fruit crop?____

____

____

4. Is your orchard majority:

	Tick
Central Otago owned	
Owned by New Zealanders not living in Central Otago	
Owned offshore	

<u>If you use all contract labour or if your orchard is leased to someone else then the remaining questions are not relevant to you. Please post us Section A in the envelope provided. Thank you for your time. If you employ any workers (including yourselves) please continue to Section B.</u>

<u>SECTION B: If you employ any workers (including yourselves) please complete this section.</u>

YOUR LABOUR FORCE

5. Please estimate your labour requirements for the current and upcoming seasons (including yourselves).

Number of workers required for:	2017/18	2018/19	2019/20	2020/21	2021/22
Winter (pruning etc.)					
Spring/Summer work (thinning, development)					
Autumn - Picking					
Autumn - Packhouse					

6. Do you think that technology will affect the number of workers you employ in the orchard or packhouse over the next 5 years? Yes / No

   If yes please explain the technological change and indicate how many jobs will be affected by this change:

   ____

   ____

7. Please detail below your seasonal labour requirements for the past season (17/18).

Number of workers required for:	July 17	Aug 17	Sept 17	Oct 17	Nov 17	Dec 17	Jan 18	Feb 18	Mar18	April 18	May 18	June 18
Winter (pruning etc.)												
Spring / summer work (thinning, development)												
Autumn - Picking												
Autumn - Packhouse												

8. How many of the following types of worker do you expect to have employed or managed for the 12 months from July 2017 – June 2018? Please include yourselves.

	Number of workers	
Permanent workers	Part time:	Full time:
Seasonal workers under the RSE scheme		
Seasonal workers under other schemes (e.g. WHS, SSE VOC etc.)		
Locals and other casuals (seasonal workers, jobseekers and students)		

RECRUITMENT AND RETENTION

9. Rank the top three methods of recruitment that you find the most useful for securing the workers you require?

	Seasonal (Rank top 3. 1 = Most useful)	Permanent (Rank top 3. 1 = Most Useful)
Casual walk-ups		
Social Media (Facebook, Twitter etc.)		
Online recruitment (Seek, Trade Me Jobs)		
Previous year's workers returning		
Local Referrals		
RSE workers from Seasonal Solutions		
Casuals from Seasonal Solutions		
Direct RSE – engaged by yourselves		
Work and Income		
Print Advertising (e.g. newspaper)		
Other (please specify)		

10. Please indicate how the following factors have affected your ability to recruit or retain staff?

	Not affected at all (Tick)	Somewhat affected (Tick)	Affected (Tick)	Significantly affected (Tick)
Availability of suitable accommodation	☐	☐	☐	☐
Language barriers	☐	☐	☐	☐
Availability of transport	☐	☐	☐	☐
Lack of working holiday visa or VOC	☐	☐	☐	☐
Lack of driver's license	☐	☐	☐	☐
Work placement of spouses	☐	☐	☐	☐
Lack of available WiFi	☐	☐	☐	☑
Incorrect paperwork (IRD, Bank a/c etc.)	☐	☐	☐	☐
Location of work	☐	☐	☐	☐
Other				

VARIABILITY / PREDICTABILITY OF LABOUR

11. In the season from July 2017 to June 2018 was the labour there when you needed it?

    Yes / No (Please Circle)

12. If No, how many workers were you short in each month?

	July 17	Aug 17	Sept 17	Oct 17	Nov 17	Dec 17	Jan 18	Feb 18	Mar18	April 18	May 18	June 18
Number of permanent workers short												
Number of casual workers short												

13. Are you concerned that an adequate supply of seasonal workers may not always be available in the future when you need it?

    Yes / No (Please circle)

    If yes, please explain:

    ____
    ____
    ____

14. Do you consider availability of labour supply when you are planning for additional plantings?

	Tick
Yes	☐
No	☐
I am not planning new plantings	☐

Please explain further:

____
____
____

15. What are the challenges in deciding when to engage a permanent New Zealander to fill the role of RSE workers?

    ____
    ____
    ____

    I do not engage RSE workers ☐

MATCHING

16. Can you explain the challenges in finding employees with the right skills and attributes to fill your vacancies?

___

___

___

___

UPSKILLING

17. What do you think your greatest training needs are now and into the future?

___

___

___

___

18. Have you engaged any cadets or apprentices?

Yes / No If Yes, how many and what tasks or roles have they undertaken?

___

___

___

PRODUCTIVITY

19. Please rank the barriers to increasing your productivity?

	Rank (1 - greatest barrier)
Shortage of labour when required	
Lack of suitably trained staff	
Availability of suitable accommodation	
Availability of transport for staff	
Availability of finance for purchasing equipment	
Shortage of nursery stock	
Underutilization of expensive capital investments due to seasonality	
Lack of technical knowledge	
Other – please specify	

DEMAND FOR ACCOMMODATION

20. Is there a shortage of suitable worker accommodation in your area?
Yes / No (Please circle)

If yes, please indicate the type of accommodation that is lacking:

	Tick
Rental houses for permanent staff	
Rental houses for seasonal staff	
Purpose built (including, backpacker hostels, cabins, onsite dorms)	
Homestay accommodation	
Campsites	
Other types of accommodation (please specify)	
Facilities for campers e.g. ablution, kitchen	

21. By how many beds (in houses, dorm units or chalets) will your demand for worker accommodation increase or decrease each year over the next five years.

	2017/18	2018/19	2019/20	2020/21	2021/22
Change in number of beds required (+ or -)					

ACCOMMODATION

22. How many beds of each type of accommodation do you provide and how many have you added in the last 3 years?

	Number of beds added in last 3 years	Number of beds now	Number of beds planned in the next 5 years
Backpacker house beds			
RSE certified accommodation beds			
Campsite capacity (number of workers)			
Other types of accommodation - Please specify:			
Other facilities for campers. e.g. ablution, kitchen: Please specify:			

23. Do you make a distinction between the accommodation you provide for RSE workers and other workers? Yes / No (Please circle)
If Yes, please state what the differences are:

___

___

___

24. What other types of accommodation do your workers stay in (not provided by you)?

____
____
____

25. Do you have any difficulties complying with Immigration New Zealand guidelines for RSE accommodation? (RSE employers only) Yes / No / Not applicable (Please circle)

If yes, in what area?____
____
____

26. Do you have any issues complying with Council requirements for worker accommodation?
Yes / No (Please circle)

If yes, in what area?____
____
____

27. What trends in the horticulture sector do you think will affect labour in the future?

____
____
____
____

BUSINESS DEVELOPMENT

28. What do you currently do with your waste fruit? ____
____
____
____

29. How many tonnes did you have of each fruit type this year?

____
____
____
____
____

30. Are you interested in exploring the development of added value products from this fruit?____________
____
____
____

Please put the survey in the prepaid envelope provided and post it back to us.
We appreciate you taking the time to fill in the survey and
thank you for your involvement.

8.2 Viticulture Survey

Central Otago Labour Market Survey
Viticulture Sector Survey 2018

Privacy Statement - Under the provisions of the Privacy Act 1993

Thank you for taking the time to fill in this survey. The purpose of collecting this information is to measure the labour requirements in the horticulture and viticulture industries. Its use is to support discussions in relation to labour demand and supply and seasonal labour shortages. The data is collected at an individual business level and will be aggregated so that all published information will never disclose an individual entity.

This survey is being commissioned by the Central Otago Labour Governance Group. The coded data may also be provided to the Ministry for Business, Innovation and Employment to be added to a national Labour Supply and Demand Model, currently being constructed to support national labour discussions and decisions. Individual entities will not be identified.

The data and information will be stored securely. We will ensure that there are safeguards against loss, misuse or disclosure. You have the right to access and correct any of the individual information you provide. You may request that the individual information be removed. Individual information will not be kept for longer than needed for the purpose for which it was collected. You may request a copy of the aggregated information.

SECTION A: All grape growers to please complete

1. **Business Details**

Your position	Date of completion	Business Code
		(Office use only)

2. **Grower Fruit Details -** In order to estimate labour demands for the future we need to understand current plantings and planned developments you forecast over the next 5 years. Please fill in the sections below regarding the grape crops you own or lease.

	2017/18	**2018/19**	**2019/20**	**2020/21**	**2021/22**
Planted hectares					
Planned replacement plantings (ha)					
Planned removals without replanting (ha)					

3. If you are planning new plantings, how many hectares are you planning and in which sub-region will the developments be located?

	2017/18	2018/19	2019/20	2020/21	2021/22
Alexandra Basin					
Bannockburn					
Bendigo					
Gibbston Valley					
Wanaka					
Cromwell Basin					

4. What percentage of your grape crop is mechanically harvested?______% Estimate in 5 years______%
5. What percentage of your grape crop is mechanically stripped? _____% Estimate in 5 years_____%
6. What % of your vines are spur pruned? ________________% Estimate in 5 years_____%
7. Please estimate your average number of vines per hectare?________________________________
8. Please estimate your average row spacing in metres?________________________________

9. Is your vineyard majority:

	Tick
Central Otago owned	
Owned by New Zealanders not living in Central Otago	
Owned offshore	

If you use all contract labour or if your vineyard is leased to someone else then the remaining questions are not relevant to you. Please post us Section A in the envelope provided. Thank you for your time. If you employ any workers (including yourselves) please continue to Section B.

SECTION B: If you employ any workers (including yourselves) please complete this section.

YOUR LABOUR FORCE

10. Please estimate your labour requirements for the previous and upcoming seasons (including yourselves).

Number of workers required for:	2017/18	2018/19	2019/20	2020/21	2021/22
Winter (pruning etc.)					
Spring/Summer work (thinning, development)					
Autumn (harvesting)					

11. Please detail below your seasonal labour requirements for the previous (17/18) season.

Number of workers required for:	July 17	Aug 17	Sept 17	Oct 17	Nov 17	Dec 17	Jan 18	Feb 18	Mar18	April 18	May 18	June 18
Winter (pruning etc.)												
Spring / summer work (thinning, development)												
Autumn (harvesting)												

12. Do you think that technology will affect the number of workers you employ in the vineyard over the next 5 years? Yes / No

If yes please explain the technological change and indicate how many jobs will be affected by this change: ____

____

____

13. How many of the following types of worker do you expect to have employed or managed for the 12 months from July 2017 – June 2018? Please include yourselves.

	Number of workers
Permanent workers (part-time and full-time)	Part-time: Full-time:
Seasonal workers under the RSE scheme	
Seasonal workers under other schemes (e.g. WHS, SSE VOC etc.)	
Locals and other casuals (seasonal workers, jobseekers and students)	

RECRUITMENT AND RETENTION

14. Rank the top three methods of recruitment that you find the most useful for securing seasonal workers and permanent workers?

	Seasonal Workers (Rank top three 1 = Most useful)	Permanent Workers (Rank top three 1 = Most useful)
Casual walk-ups		
Social Media (Facebook, Twitter etc.)		
Online (Seek, TradeMe Jobs, WineJobs Online)		
Previous year's workers returning		
Local Referrals		
RSE workers from Seasonal Solutions		
Casuals from Seasonal Solutions		
Direct RSE – engaged by yourselves		

Work and Income		
Print Advertising (e.g. newspaper)		
Other (please specify):		

15. Please indicate how the following factors have affected your ability to recruit or retain staff?

	Not affected at all (Tick)	Somewhat affected (Tick)	Affected (Tick)	Significantly affected (Tick)
Availability of suitable accommodation	☐	☐	☐	☐
Language barriers	☐	☐	☐	☐
Availability of transport	☐	☐	☐	☐
Lack of working holiday visa or VOC	☐	☐	☐	☐
Lack of driver's license	☐	☐	☐	☐
Work placement of spouses	☐	☐	☐	☐
Lack of available WiFi	☐	☐	☐	☐
Incorrect paperwork (IRD, Bank a/c etc.)	☐	☐	☐	☐
Location of work	☐	☐	☐	☐
Other (please explain)				

VARIABILITY / PREDICTABILITY OF LABOUR

16. In the season from July 2017 to June 2018 was the labour there when you needed it?
    Yes / No (Please Circle)

17. If No, how many workers were you short in each month?

	July 17	Aug 17	Sept 17	Oct 17	Nov 17	Dec 17	Jan 18	Feb 18	Mar18	April 18	May 18	June 18	TOTAL
Number of permanent workers short													
Number of casual workers short													

18. Are you concerned that an adequate supply of seasonal workers may not always be available in the future when you need it?

    Yes / No (Please circle)

    If Yes, please explain:

19. Do you consider availability of labour supply when you are planning for additional plantings?

	Tick
Yes	☐
No	☐
I am not planning new plantings	☐

20. What are the challenges in deciding when to engage a permanent New Zealander to fill the role of RSE workers?

I do not engage RSE workers ☐

MATCHING

21. Can you explain the challenges in finding employees with the right skills and attributes to fill your vacancies?

UPSKILLING

22. What do you think your greatest training needs are now and into the future?

23. Have you engaged any cadets or apprentices?

Yes / No

If Yes, how many and what tasks or roles have they undertaken?

PRODUCTIVITY

24. Please rank the barriers to increasing your productivity?

	Rank (1 - greatest barrier)
Shortage of labour when required	
Lack of suitably trained staff	
Availability of suitable accommodation	
Availability of transport for staff	
Availability of finance for purchasing equipment	
Shortage of nursery stock	
Underutilization of expensive capital investments due to seasonality	
Lack of technical knowledge	
Other – please specify	

DEMAND FOR ACCOMMODATION

25. Is there a shortage of suitable worker accommodation in your area?
Yes / No (Please circle)

If yes, please indicate the type of accommodation that is lacking:

____

____

____

26. By how many beds (in houses, dorm units or chalets) will your demand for worker accommodation increase or decrease each year over the next five years.

	2017/18	2018/19	2019/20	2020/21	2021/22
Change in number of beds required (+ or -)					

SUPPLY OF ACCOMMODATION

27. How many beds of each type of accommodation do you have or plan to add?

	Number of beds added in last 3 years	Number of beds now	Number of beds planned in next 5 years
Rental houses for permanent staff			
Rental houses for seasonal staff			
Purpose built (including backpackers, cabins, onsite dorms)			
RSE certified beds			
Homestay accommodation			
Campsites			
Other types of accommodation - Please specify:			
Other facilities for campers. e.g. ablution, kitchen. Please specify ______________________			

28. Do you make a distinction between the accommodation you provide for RSE workers and other workers? Yes / No (Please circle)

If Yes, please state what the differences are:

____

____

____

29. What other types of accommodation do your workers stay in (not provided by you)?

____

____

30. Do you have any difficulties complying with Immigration New Zealand guidelines for RSE accommodation? (RSE employers only) Yes / No/ Not applicable (Please circle)

If yes, in what area?

____

____

31. Do you have any issues complying with Council requirements for worker accommodation
Yes/No (Please circle)

If yes, in what area?

____

____

32. What trends in your industry do you think will affect labour for the viticulture sector in the future?

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Please put the survey in the prepaid envelope provided and post it back to us. We appreciate you taking the time to fill in the survey and thank you for your involvement.