REPORT

ISSN 1174 - 1234

Volume 25 No.3, 2000

Liro copyright © 2000

Attracting and Retaining a Skilled Work Force

Warwick Palmer and Shane McMahon

Summary

N ew Zealand will require a further 2700 skilled workers in the next 10 years if the 'wall of wood' is to be harvested. At a time when worker shortages are already noticeable in some regions, this will require some new approaches to employment.

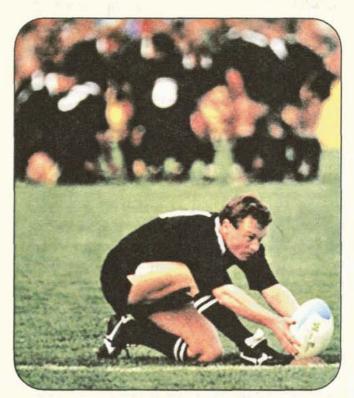
This report presents some ideas which contractors may use to enhance their ability to attract and retain suitable staff. Specifically, this report looks at;

- remuneration
- work conditions
- · management techniques.

Introduction

New Zealand currently harvests about 17 million cubic metres annually. This requires a harvesting workforce of about 3800. By the year 2010, the potential harvest volume would have risen to 29 million cubic metres. Given the current logging crew and machine configurations, workforce numbers will need to increase to 6500. The industry is faced with attracting and retaining a skilled workforce to cope with these expected volumes.

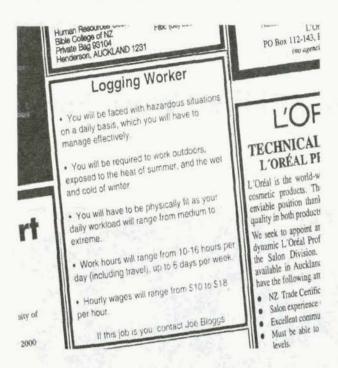
Contractors in many regions are already experiencing problems in employing suitable workers. High turnover is also contributing to a skilled workforce shortage. Workforce attraction and retention is a problem that is largely left to individual employers to solve.



Goal setting can ensure staff knows what is expected of them and when they have succeeded.



Private Bag 3020, Rotorua, New Zealand Telephone: +64 7 348 7168 Facsimile: +64 7 346 2886 Email: liz.wright@forestresearch.co.nz If you were to analyse a job description for logging it might read as shown in below (many silviculture jobs involve similar conditions).



Working in these conditions is only likely to attract a small number of people relative to other jobs. In some cases, the work conditions cannot be changed. However, there is scope to offset these by changing some work conditions and offering additional benefits to workers.

Often, people unhappy with their job focus on the pay rate which they may feel is inadequate. This may or may not be the driving force behind their feelings for the job. It may well be that the pay is too low given other work factors, such as the hours, work conditions, management style and so on.

Although not providing the whole answer to attracting and retaining the workforce, this report summarises some things an employer can do to improve the chances of worker attraction and retention.

Remuneration

The normal remuneration for a forest worker is an hourly wage paid to them fortnightly. It's quite common that a worker will quit one job for another for an extra \$50 per week. A recent Liro study found that 22% of a sample of polytechic-trained workers left the forest industry for better remuneration. The cost to the contractor can be quite significant especial for the worker is skilled and is a key player in the crew. Sheldon Drummond (Juken Nissho, Gisborne) recently stard turnover cost his company about \$10,00 per principles.

What incentives can we provide to retain

First, there may be ortunite an average wages. However, this may worker you attract or retained additional benefits can be important as they remote a workforce more focused on stability than the ready money.

There is a strong link between productivity and monetary rewards. Researchers have observed as much as a 25% difference in harvester operator productivity because of improved remuneration via additional benefits.

There are a number of advantages in providing benefits for employees over and above their wages or salaries. Not only does it boost morale within the organisation but also a benefit can provide a specific win-win situation for both the company and employees.

Depending on the benefit offered, the advantages gained are;

- · loyalty which leads to a retention of staff
- a healthier workforce through company sponsored health care, and
- a trust that the employer is not just out to maximise profits regardless but is actually interested in the health and well being of his/her employees.

Interestingly, many forest companies offer superannuation and health insurance schemes to their employees. However, similar conditions are seldom offered to the forest workforce.

Health insurance

A health insurance scheme is the most popular form of employee benefit. It is surprisingly inexpensive to cover major hospital, specialist and diagnostic costs (Table 1). Costs vary by occupation and age and cover can include doctor's visits and prescriptions at a higher fee.

Table 1 – Typical cost of health insurance for a crew of 10 and the additional volume to pay for it

Cost for crew of 10	\$4000/year
Increased volume/day	manus la man
@\$8/m³	2.2m ³
@\$18/m ³	1.0m ³

Superannuation

As with health insurance, superannuation plans range from sole traders to companies with more than 100 staff. The majority of members belong to organisations with less than 30 staff. Superannuation provides a way to cushion the impact of redundancy or retirement for employees. It is a way of being a responsible employer at a time when saving for retirement is an essential part of everyone's working life.

There are many types of options available, from an employer who pays the administration costs of an employee superannuation scheme or where the employer actually contributes a sum to the scheme as well.

The potential cost to the contractor of funding a 5% contribution is shown in Table 2 (an average annual income of \$35,000 was assumed).

An example of employee and employer contributions is shown in Table 3.

Table 2 – Typical cost of superannuation for a crew of 10 and the additional volume to pay for it

Cost for crew of 10	\$17,500/year
Increased volume/day	
@\$8/m ³	8m³
@\$18/m ³	4m³

Table 3 - Superannuation options

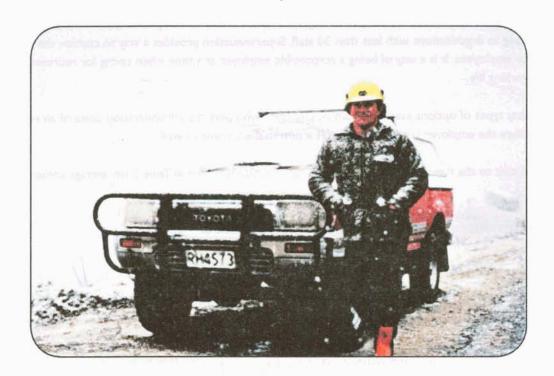
Category description	Member contribution rate	Employer contribution rate
Managers and key staff	5% of salary	10% of salary
Members who have completed 3 years with employer	5% of salary	5% of salary
Members with less than 3 years service with employer	Minimum of 2% of salary	The cost of administration fees and the insurance premiums

Work Conditions

Many forestry jobs are physically hard and potentially dangerous. They work long hours in these conditions, exposed to extremes of weather. For some, this discomfort may start when they're picked up in the morning and end when dropped off at night.

It is difficult to improve the work conditions of many forestry tasks. However, it may be possible to improve other aspects of the work to offset the physical difficulty. Specifically, suggestions are:

- allow job rotation
- · ensure adequate rest breaks are taken
- · reduce the hours of work
- · mechanise where possible
- · provide later model machines
- · provide more comfortable crew vehicles



Job rotation

Many employers will be aware of job rotation, a mechanism promoted among Scandinavian harvesting crews. Job rotation allows workers to extend their competencies and knowledge, which also allows for future career promotion.

Job rotation may occur during the day. The use of job rotation within the working day from machine to manual work provides additional health benefits to the worker by reducing the risk of Occupational Overuse Syndrome (Gellerstedt, 1997; Liro Report 22(10)).

In some crews, there will be key staff who are unable to rotate jobs. Examples may be the yarder operator or foreman.

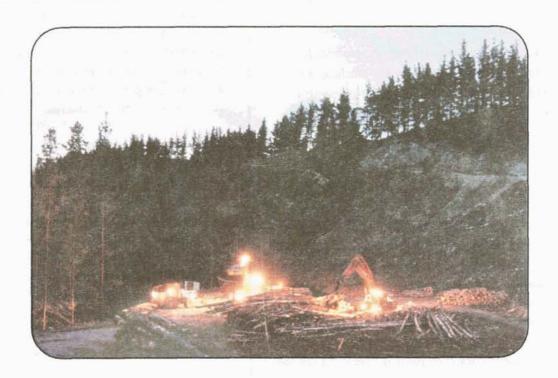
Rest breaks

Rest breaks during the working day are necessary to re-energise and re-fuel the body. Unlike machines, people cannot be expected to work continuously and effectively over a whole day, every day. Rest breaks are akin to scheduled maintenance. Without them things start to fall apart and production drops.

Where production pressure exists, there may be a tendency to reduce rest breaks in order to meet production targets. This may be acceptable over a number of days but should not be looked upon as standard practice. If production pressure exists, it is recommended that external assistance is sought to evaluate system efficiency. Everyone wins if production levels can be maintained (or improved) without having to work more hours or harder.

Based on previous Liro work, the following rest breaks are recommended:

- manual workers should not work more than eight hours in a day. For every hour worked there should be a corresponding
 5-10 minutes taken as rest breaks. There should be at least two rest breaks per day.
- machine operators should work no more than 4 hours continuously, one 30 minute rest break should be taken every 3-4 hours. Every hour, operators should climb down from their machine to stretch their legs.



Hours of work

A recent survey by Liro found that the average work hours have changed for harvesting crews over the last 13 years. On average, the "at work" hours per day worked has increased from 8.1 to 9.2 hours (n=37 and n=38, respectively). In 1987, average travel time was 1.4 hours. No data exist for 1999.

The hours of work directly influence wages. Therefore, there may be reason for workers to accept longer work days and weeks. However, the long-term cost to the employer may be worker fatigue and movement of the workforce to easier jobs.

Obviously, no one wants to work longer than they need to. The issue of wages does incentivise crews to work longer rather than improve efficiency and complete the task sooner. If efficiency gains can be made, it is not necessary to penalise staff wages. If daily wages can remain the same, but the hours at work reduced, a win-win situation can be generated. The employer reduces daily costs through reducing running costs of machines, and the workers get to go home earlier with the same money in their pockets. The key to being able to achieve this is improving operational efficiency. This may mean improving productivity through optimising extracted payloads. Alternatively, operational and mechanical delays can be reduced through improved training or communication during specific activities, such as line shifts.

Mechanisation

Opportunities for mechanisation of specific harvesting activities are limited to felling, delimbing and processing. A US study of safety successful contractors found that those contractors with high safety performance had embraced mechanisation where possible within their operations. A positive spin-off of mechanisation was that crew stability was greater than for other crews. Thus, the costs of turnover were greatly reduced and the continuity of the crew meant that they worked well as a team.

With mechanisation comes greater responsibility for the operators to maintain and use the machine in a safe and effective manner. This can add extra dimension to what was previously a single skilled job.

Later model machines

Everybody wants the chance to work on the newest machine within an operation. Many transport operators will be aware that drivers enjoy driving 400-500 horse power trucks, even if such power is not necessary for the job. Machines that are old, and constantly requiring maintenance and repair to function, will be passed up for a newer machine with more creature comforts if the opportunity exists. If the opportunity exists with another crew, then you may have lost a valuable crew member.

Crew vehicles

The total time in a vehicle per day may be up to three hours for some crews. Many crew wagons are vans or double cab utilities that not only provide transport but also double as smoko huts. The opportunity to stretch your legs out and enjoy a relaxing ride to and from work or smoko may be limited in these vehicles.

With the availability of a wide range of Japanese vehicles on the market today it's quite possible to purchase a coach type van at a price not vastly different than a van. Some are equipped with comfortable seats, plenty of legroom and headroom and soundproofing, and air conditioning. Going to and from work has never been more pleasant! Think of the benefits, increased worker morale, less sore backs and knees, happier workers.

Effective Management Techniques

Goal setting and feedback

Goal setting is an effective way of improving productivity or work quality. Goal setting also helps clarify expectations and relieve boredom. Some logging tasks can be at times monotonous. Introducing a goal that is difficult but attainable increases the challenge of the job and provides a sense of purpose. Providing feedback to workers on goal achievement is an important objective of the employer or crew boss. Both the goals and worker performance should be reviewed to ensure that the goals are realistic, and provide guidance where achievable goals are not achieved.

To apply this in a cable operation for example you can set individual goals for various areas of the operation. When the production target has been established for the crew (say 250 tonnes at 1.7 piece size) you can then break down the target into various areas. The faller(s) must fell at least 147 trees per day to meet target. You discuss with him what might be an achievable goal given the nature of the setting and within the required standards (safety, quality) to do the job. You set a goal of 161 trees 10% above target. At the end of the day you must get feed back from your faller. How did he do, did he achieve target, if not why? Similarly, goals can be applied to the breakerouts or other parts of the operation.

Note that for goal setting to be effective, the employee must have the requisite knowledge and skill for the job they are doing. Motivation of the highest degree is of little use if employees are not technically capable of fulfilling the job requirements.

Job performance reviews

A job performance review can be a useful tool in maintaining and improving performance and standards.

One logging contractor in the United States reviews his employees on a monthly basis. During the month, he frequently observes the work of each employee and notes good and bad work habits and safe or unsafe work practices. At the end of the month, he reviews the employee performance forms of prior months and rates the employee's performance in three different categories as either "professional," "satisfactory,"

or "needs improvement". He then has a one-on-one conversation with the employee to review his/her work performance during the month.

The contractor believes it provides him with a valuable tool to improve communications and involve his logging workers in his operations safety awareness and loss control programme. During the monthly review sessions, employees provide feedback about their jobs safety and production issues. The contractor said "it made me more aware of each employee and it makes each of his employees feel they play an important part in their safety program".

Climate surveys

A climate survey is not about the weather. It is a tool which can be used to define how the dynamics of a crew or business works. It can define the attitudes and expectations of the staff and management. Most importantly of trust has developed.

Exit interviews

If you find yourself in the position where staff members are leaving, it may be worth completing an exit interview. The aim is to determine why the staff member is moving on. It should allow honest comment on the experience of working for you in a aggravation free manner.

Additional management techniques

A US report on the managerial and operational characteristics of 'safety successful' contractors revealed that a close kinship or togetherness could be observed on all the operations visited regardless of crew size. A mutual respect of the contractor for his employees and of the employees of the contractor was found. One contractor summed up the typical attitude when he stated that "I don't call the men who work here my employees, they are my people and they don't work for me but with me". This type of attitude was indicative of the type of contractors who were visited and seem to lead to reduced turnover and improved safety. Picnics, BBQs and other special activities with the crew and families are other ways to foster crew/ team spirit.

Final Thoughts

Providing the right environment for staff to want to work safely, and efficiently is a cost to the employer. A cost which is often not accounted for on costing templates. Principal employers should share in meeting these reasonable costs.

The 'wall of wood' is fast approaching. The nature of the terrain is getting more difficult. Whether or not the industry can find the required workforce to harvest this wood will depend on what initiatives the industry takes now to improve the number and skill of workers they can employ.

This report has highlighted some of the things employers can do to improve their chances of attracting and retaining a skilled workforce. However, these alone will not ensure that the potential value of the 'wall of wood' is realised.

en 'inserta inservançan' (in tour bas a l'incomençant deliveration sont des revenances et se qui batter mans conferenceptures in comp

eys the discount of

place has a real and also may read, but a mirror taking a second control of the c

100 700 660

the second section of the second sections of the

Manual Vineughba

and assessment our original and an electric state of their American states are an expension of their and their states are as a particular and their states are an expension of their states are an expension of the states are as a second of the states and a second of the states are a second of the states are a second of the states and a second of the states are a second of

and the second of the second o

the same of the property of the same of th