

# CHARACTERISTICS OF THE LOGGING WORKFORCE

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## INTRODUCTION

The logging workforce is a very well described group of people. Quite a large body of information exists detailing social and biographical features of the workforce, like average ages, marital status, work and educational backgrounds and ethnicity. The word "characteristics", however requires more than just the presentation of these statistics. A characteristic is a trait, or feature which sets something apart from others. The Thesaurus suggests words such as individual, diagnostic and distinctive to describe the word "characteristic". The purpose of this paper is, therefore, to identify what, if any features mark the logging workforce as different.

Most of the statistics that will be presented here come from either the Logging Workforce Survey which was begun in 1986 by LIRA and FRI, or the LIRA Absenteeism and Turnover study which was begun in April 1989 and completed in June 1990. Both of these studies used large nationwide samples and are the most recent statistics available. Wherever possible these statistics have been compared with the 1986 census to identify whether the logging workforce differs from the nation as a whole.

Some comparisons have also been made with two earlier studies of the logging workforce, one by Fielder in 1979 and the other by Crothers and McPherson in 1984, to see whether there have been any changes over time. Some caution should, however, be used when interpreting these comparisons. The Fielder Study, while using a very extensive questionnaire, only included 125 men in the Bay of Plenty region which means that conclusions on a national level cannot be drawn. The Crothers and McPherson study, on the other hand, was a nationwide study but the

data came from the 1981 census rather than using the interview techniques of the other studies.

## DID THE INDUSTRY CHOOSE THE WORKER?

Like the joke about the elephant who painted his toenails red so that he could hide in a strawberry patch, it is often the case that the obvious is overlooked. The most obvious feature of the workforce is that it is not one large group of employees, but rather a series of small businesses. This feature in itself is not that unusual in that a large proportion of the fishing, plumbing and building industries, for example, are also made up of small businesses. What makes the difference is that for the logging contractor there is only one customer, the forest owner, that buys the small businesses' product.

While it is dangerous to stereotype people, it can't be ignored that the nature of logging as an occupation selects certain features in its workers.

Logging is a rural, primary industry, so it is not surprising, that the backgrounds of the workers reflects this. The logging workforce survey found that the fathers of 61% of those interviewed were employed in either Logging, Forestry or other rural industries. Likewise 55% of the loggers' first jobs were in one of these three areas. In Fielder's (1979) Bay of Plenty sample the last job of 83% of the sample and for 61% the job prior to that was in either Logging, Forestry or another rural industry. On a national level, the 1986 census found that only 16% of the population are living in rural areas and about 11% are involved in rural type occupations. Which would suggest that the population from which the logging workforce is being drawn is rather small.

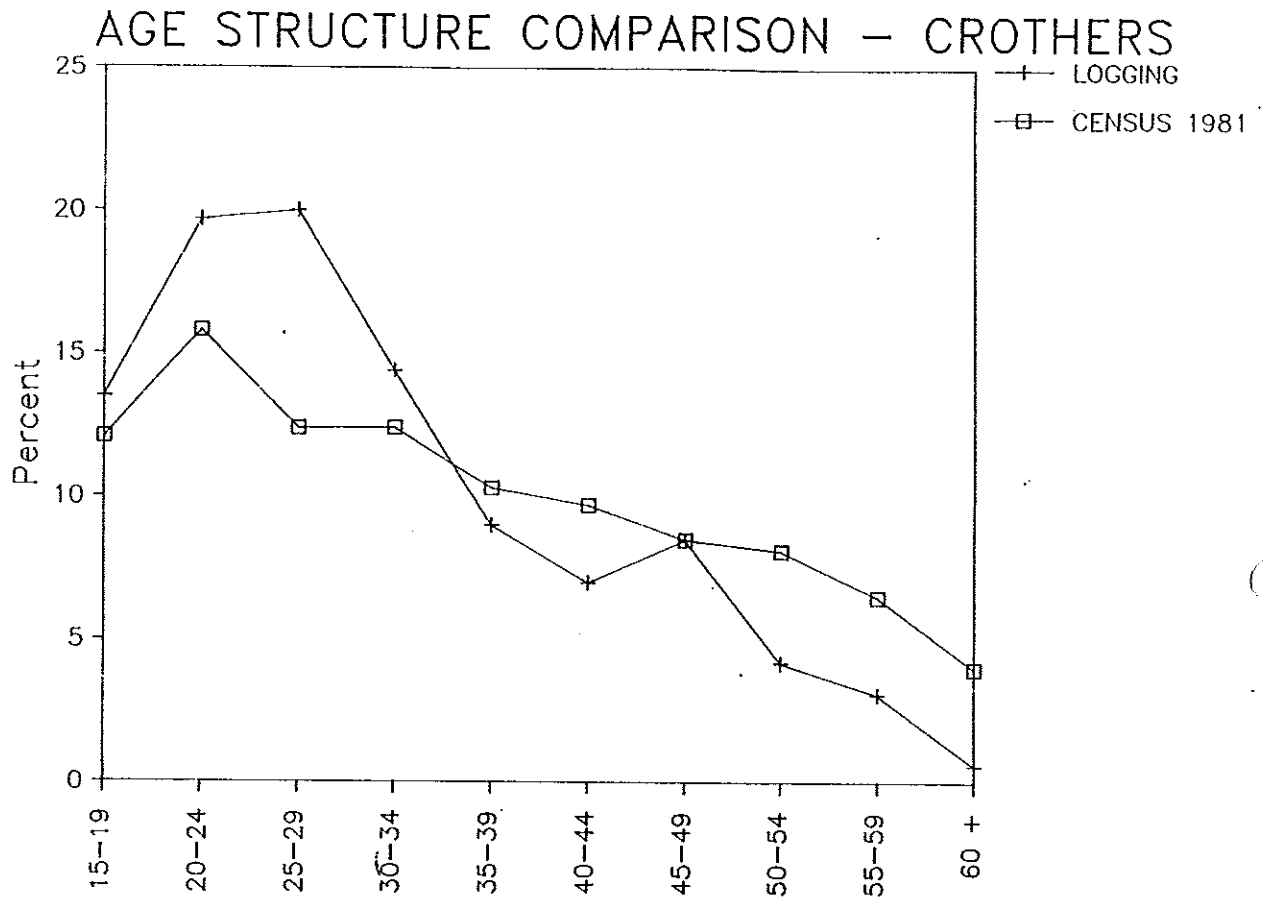


Figure 1

The Logging Workforce Survey and Fielder (1979) asked their samples what their reason was for working in the industry and both studies found that loggers were attracted to the outdoor environment.

Given that logging requires more practical rather than academic skill it is not surprising to find that the majority of the workforce has spent about 1 - 3 years at high school. This feature of the workforce was identified in the studies by Fielder, Crothers and McPherson and the LIRA Logging Workforce Survey.

#### AGE, MARITAL AND ETHNIC STATUS

The rural backgrounds of the workers and their levels of secondary school education are the first of several areas where there are similarities between the Fielder,

Crothers and McPherson and LIRA surveys.

Take, for example, the age structure of the workforce. Figure 1 shows the age structure of the logging workforce, in 1981, from Crothers and McPherson, compared with the New Zealand workforce at that time. Notably there is a sharp peak between the ages of 20 - 34. Figure 2 shows the results of the LIRA absenteeism and turnover study from 1989 compared with the most recent census data from 1986. Again the peak is evident. If a comparison is made between the Crothers and McPherson distribution and the LIRA 1989 results (Figure 3) it can be seen why both of these studies found a mean age of 31 years. This average age may sound a bit high, but it has been caused by the long tail on the distribution. It is probably more useful to look at where the peak lies which is between the ages of 20 and 34.

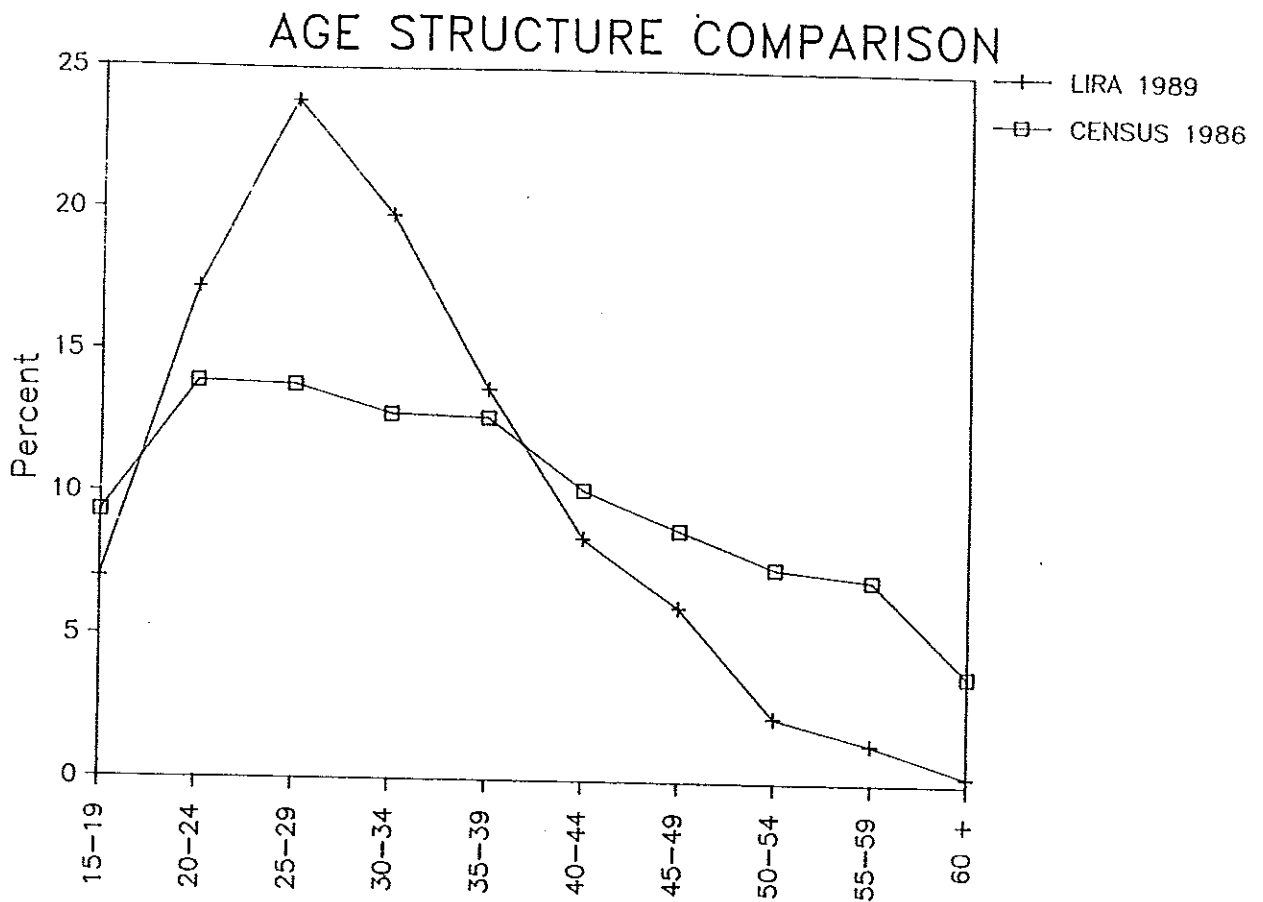


Figure 2

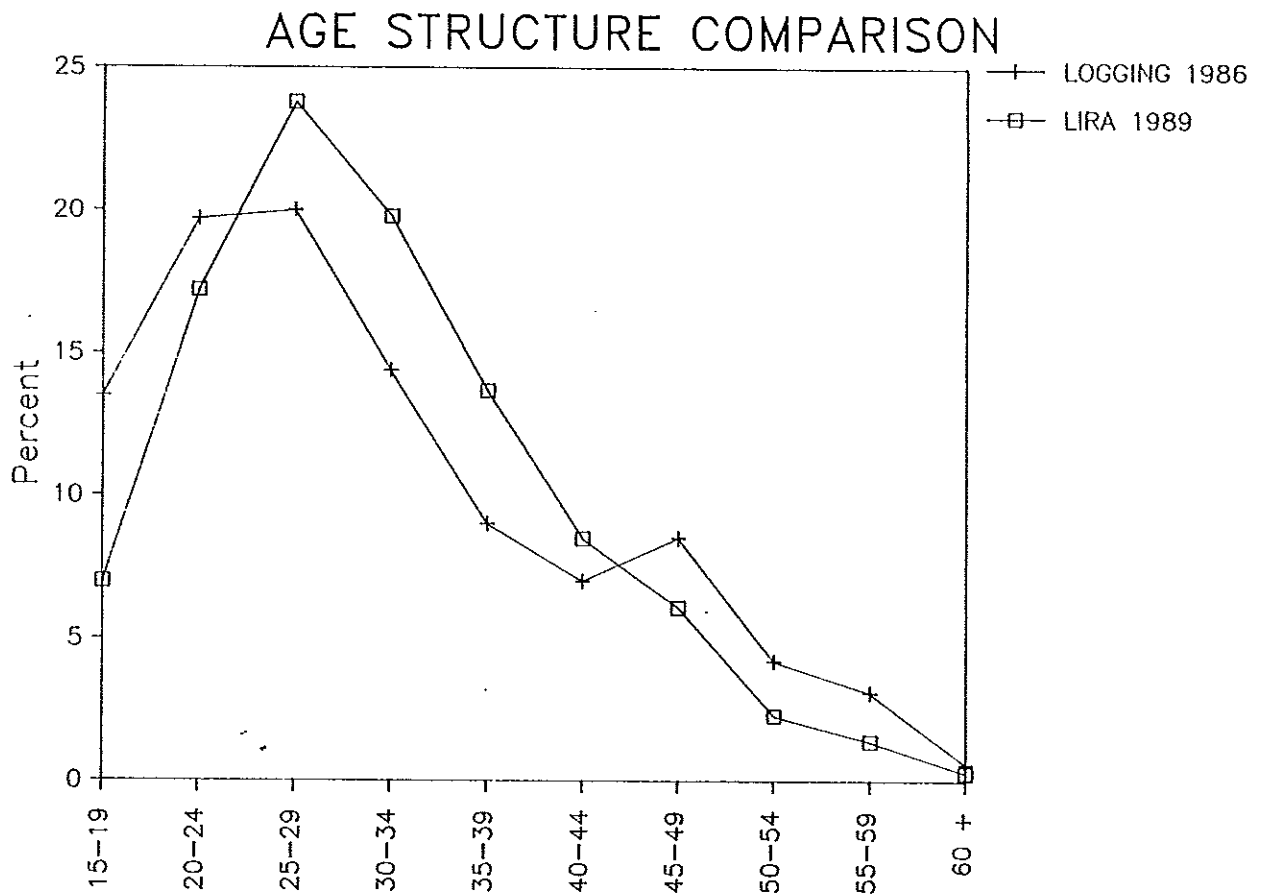


Figure 3

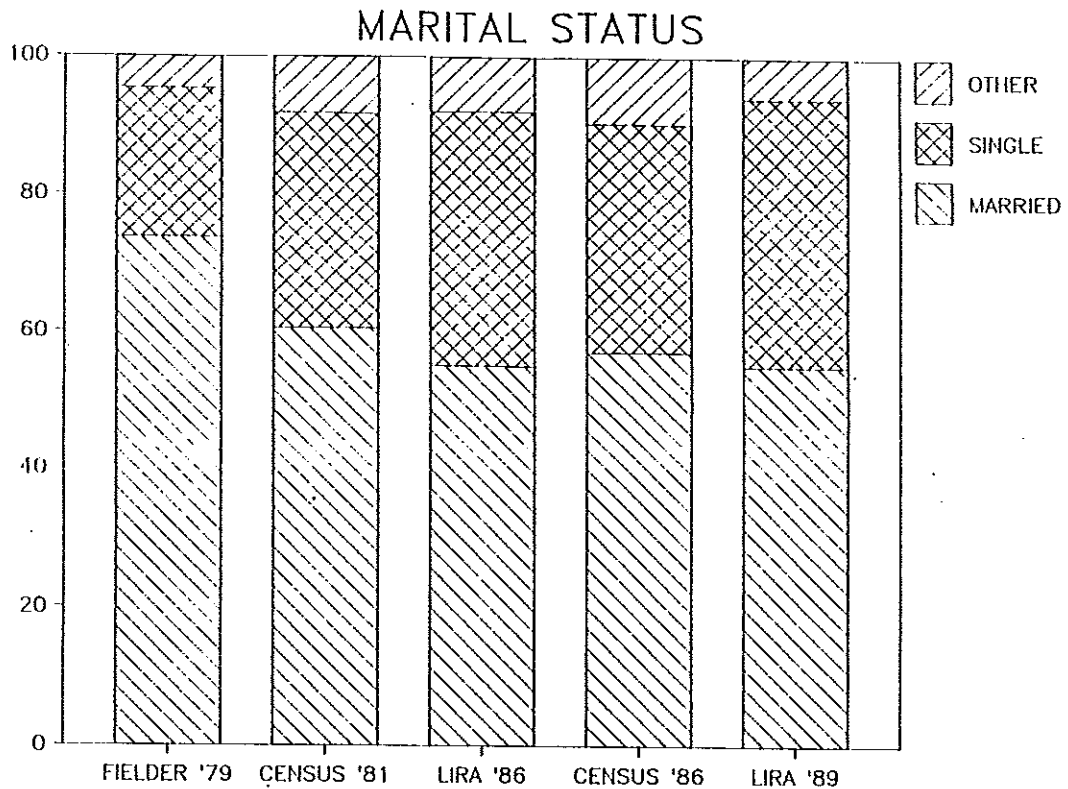


Figure 4

Marital status is another feature which does not appear to have changed greatly over the last few years at least. Figure 4 shows the percentage breakdown of the logging workforce's marital status and also the marital status of the New Zealand male workforce from the 1981 and the 1986 census. The Crothers and McPherson data on this issue is not shown because the authors included all those who did not specify whether or not they were married under the category of single, thus distorting the actual figures.

Fielder's results stand out as being different with 74% of the workforce being married. The census data has, however, remained stable and likewise the LIRA data has also remained stable with the logging workforce having a slightly larger proportion of single men than the national figure. It is possible then that the Fielder result was due to chance sampling variance, given the stability of the other figures.

One interesting feature which does set the New Zealand logging workforce apart concerns its ethnic composition. Figure 5 shows the ethnic breakdown of the logging workforce and the New Zealand workforce from the Crothers and McPherson study. There is clearly a higher proportion of Maoris and European-Maoris in the logging workforce than in the national workforce as a whole. This trend has continued over time, as can be seen in Figure 6, where 31% of the logging workforce is maori but only 9% of the nation is of maori origin.

Looking at the ethnic composition of the workforce on a national level also presents an interesting picture. In Figure 7 the percentage of maoris in the workforce in the five areas studied for the absenteeism and turnover study is compared with the 1986 census data describing the geographical distribution of maoris as a whole. In this figure it can be seen that maoris are highly

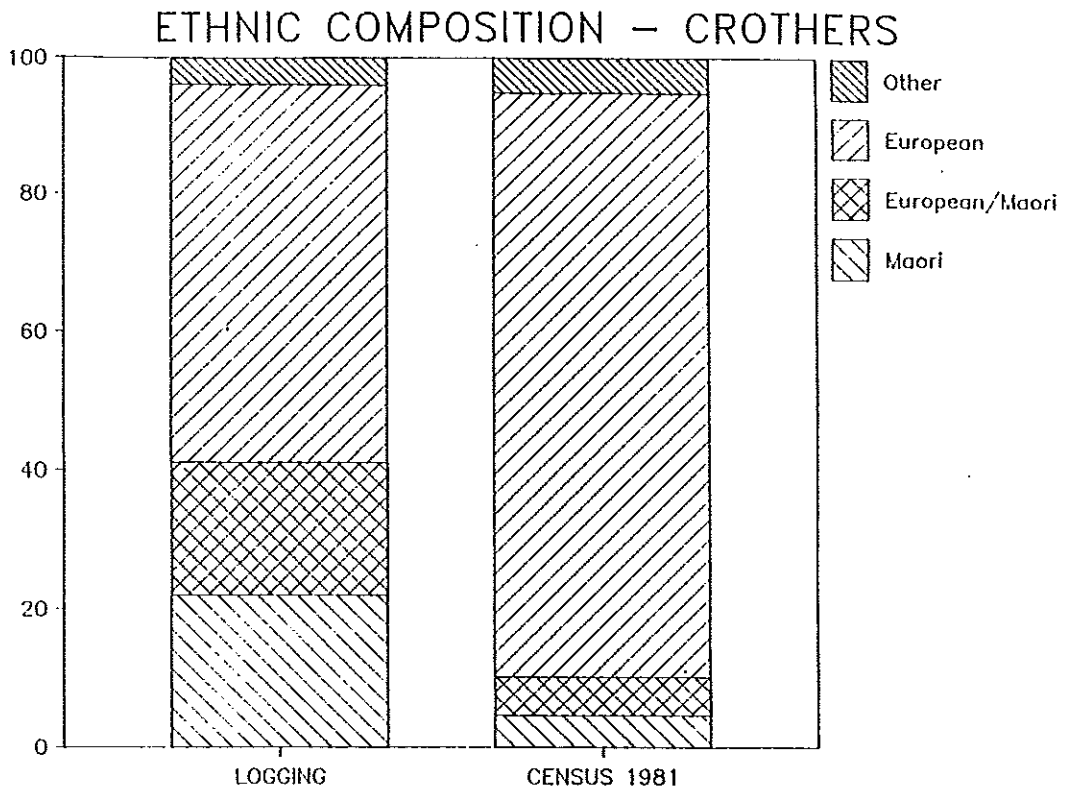


Figure 5

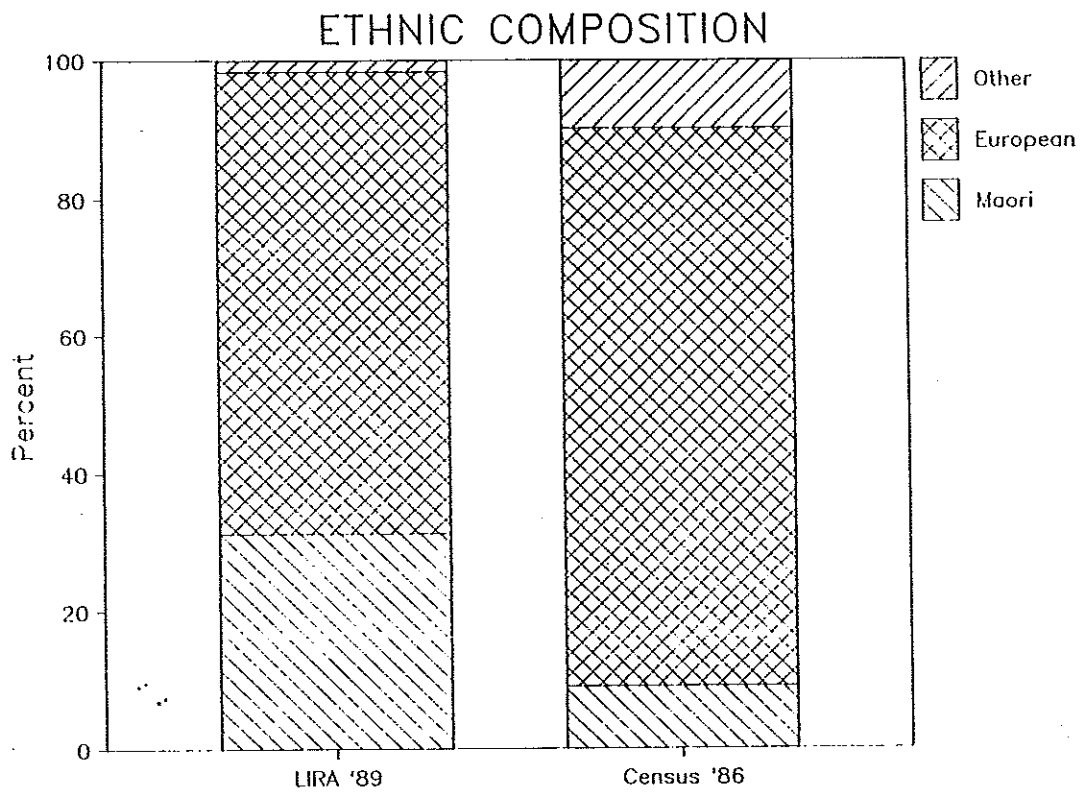


Figure 6

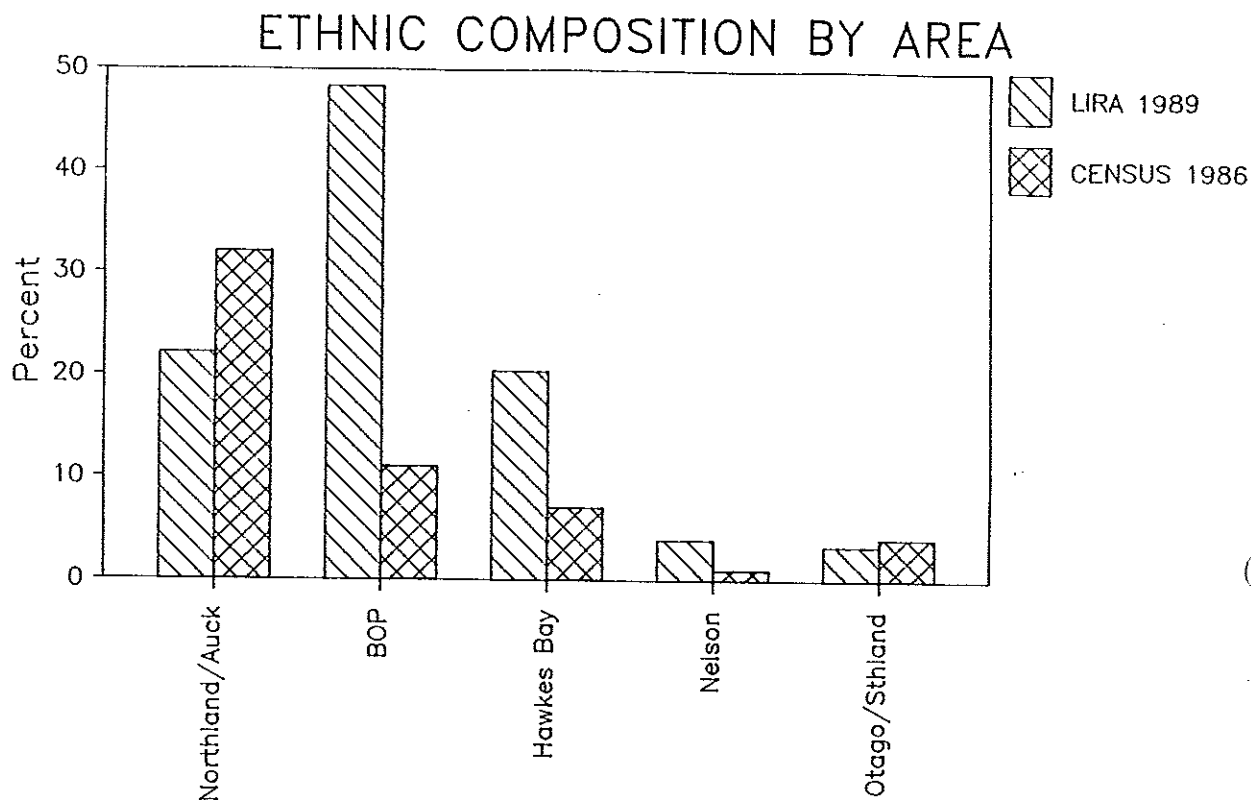


Figure 7

represented in the Bay of Plenty and Hawkes Bay, but this is not so for the Auckland/Northland region where 32% of the maori population live yet only 22% of all loggers there are maori. This may be, in part, due to a wider variety of employment opportunities in Auckland itself because such a large amount of industry is located there.

#### TRAINING AND EXPERIENCE

This brings us to the issues which are probably of the most concern to the industry, that of the length of service in logging and in any one gang and the levels of logger certification.

Figure 8 shows the percentages of people who hold some form of L&FITB certification in the sample used for the absenteeism and turnover study. There is a marked regional variation, with the Bay of Plenty having the highest levels of certification at 57% down to the Auckland and Northland area where only 11% hold some form of certificate. When the gangs in Northland

were visited it was disturbing to find that some loggers did not even know what the letters "L&FITB" stood for. The contractors were not, at all, negative towards the principle of formal training but they did express a reluctance to lose workers from the operation for the time it took to attend courses.

Figure 9 shows the number of years that each person in the absenteeism and turnover study indicated they had been in the logging industry and with their present contractor. Nelson has, clearly, the longest serving loggers but it also must be noted that they are the oldest population, with an average age of 35 years where the national average is 31. On average each logger has spent about one third of their working careers with one contractor. These two features do appear to have changed since the logging workforce survey was completed. In Figure 10, the results of the Logging Workforce Survey are shown as black bars and superimposed over the data from Figure 9. It can be seen quite clearly that the length of time in logging and in each gang has increased.

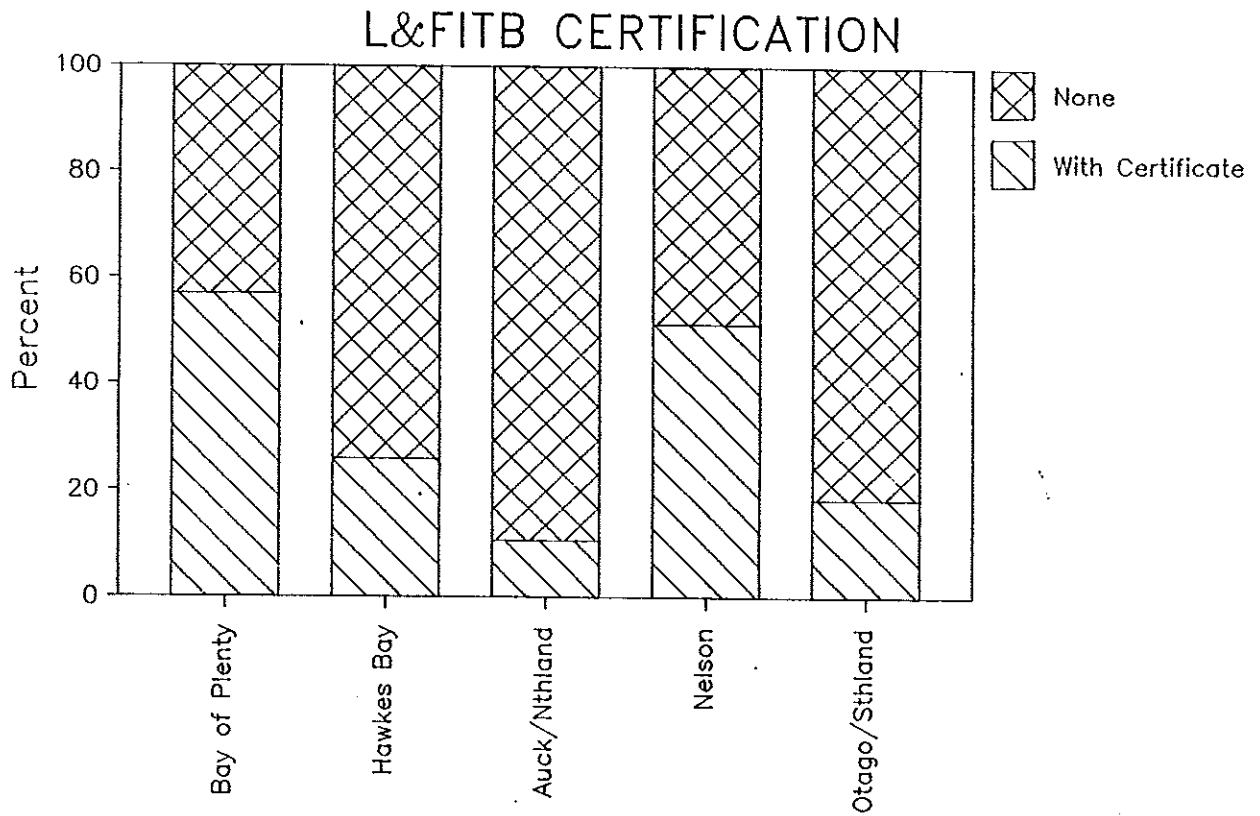


Figure 8

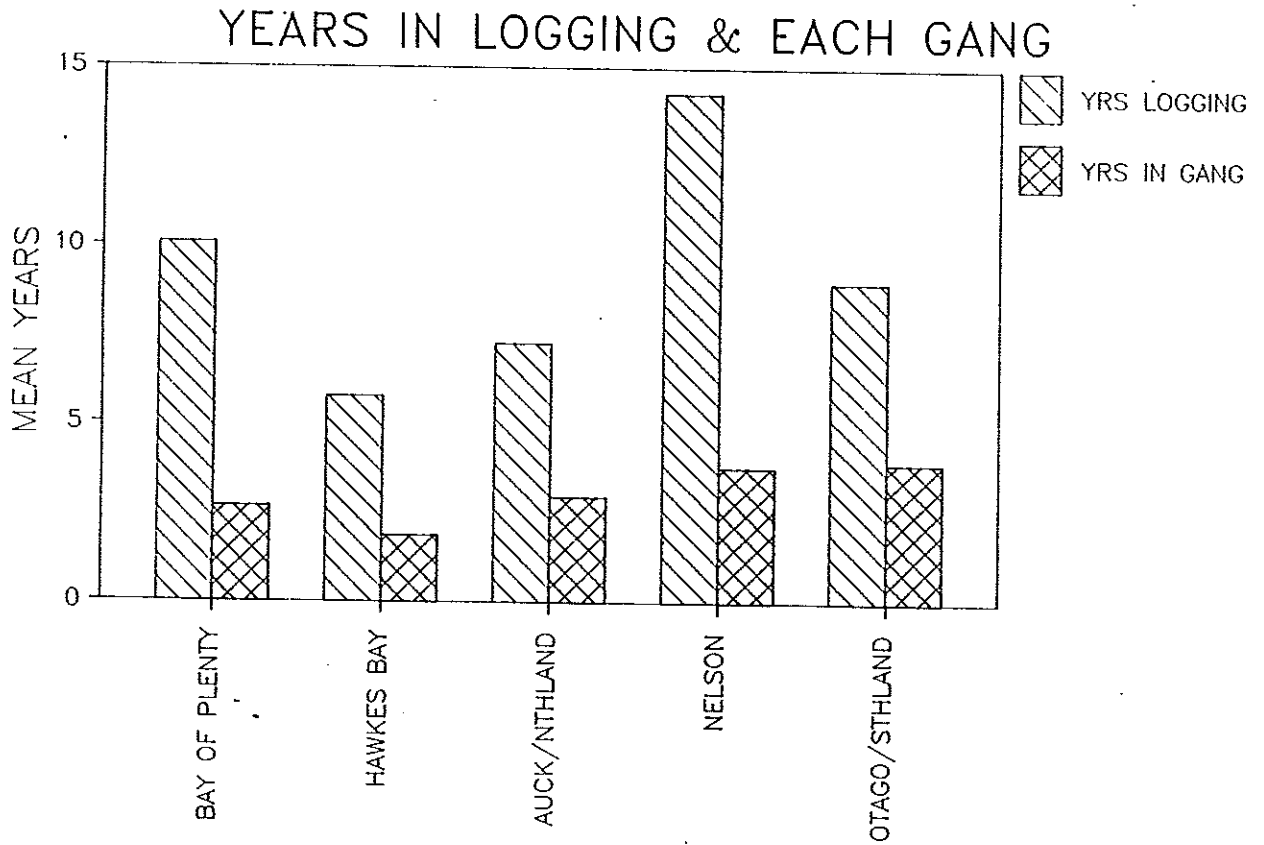
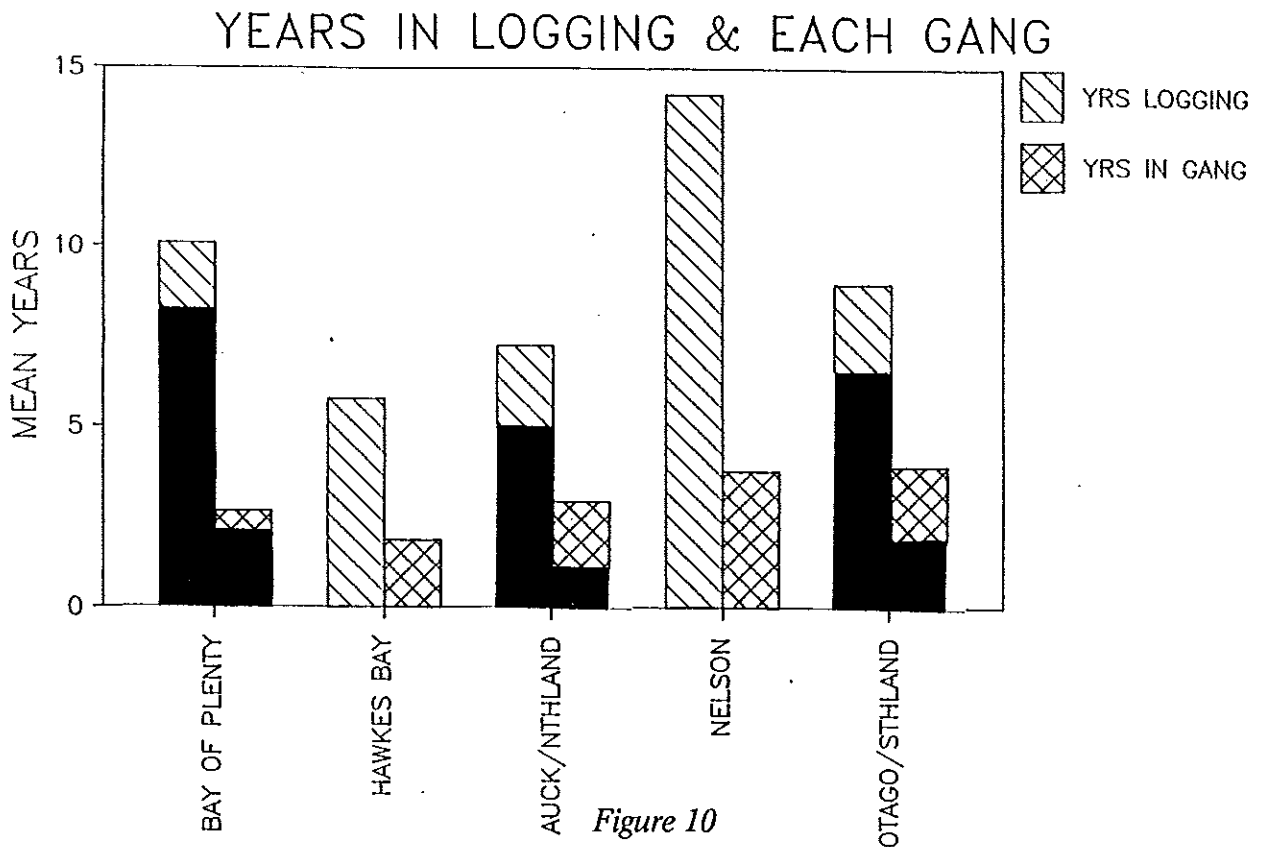


Figure 9



A longer serving and more stable workforce is a positive thing for the industry but unfortunately there is no data available to explain why this result. It may be merely a function of the lack of alternative employment in the present economic climate.

### CONCLUSION

So, out of all of these percentages and averages how can the characteristics of logging workers be summarised. First and foremost they are generally from rural backgrounds, attracted to outdoor work. There is also a high representation of maoris in the workforce as a whole. The population is, quite young with the majority being aged between 20 and 34. This youthfulness explains why there is a slightly higher proportion of single men. The average number of years of experience is about nine years and about one third of this is spent with one employing contractor. While many statistics are similar between regions, the levels of L&FITB certification does differ quite widely. Finally, the in-

dustry is made up of small businesses contracted to one customer.

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