

MANPOWER AND TRAINING IN THE SMALLWOOD HARVESTING INDUSTRY

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The sub-group charged with this topic has looked at present training systems operating within the forest industry, at the training needs and manpower requirements for the smallwood industry over the next decade, and has made recommendations on these.

Manpower Requirements

Over the next decade the forest industry is proposing to harvest 20.5 million m³ of smallwood.

- 13.3 million m³ from production thinning 165,000 hectares of radiata pine;
- 6.4 million m³ from clearfelling 25,000 hectares of minor species.
- 0.8 million m³ from salvaging 20,000 hectares of radiata pine cutover.

900-1000 men, or 30% of the logging labour force are estimated to be required to harvest this volume of wood, which represents approximately 20% of the total exotic cut.

Training Schemes

(i) N.Z. Forest Service.

The Woodsman course was aimed at producing skilled workers to use as front line supervisors. Unfortunately this course has now been abandoned and not replaced. The Ranger and Forest courses appear to have a pre-occupation with establishment and silviculture with only a limited consideration given to harvesting.

(ii) Company Training

The major companies have their own "in-house" training schemes which, I believe, are very successful.

(iii) L.I.F.T.B.

The Logging and Forest Industry Training Board cover the training of trainers, certification and standardisation of existing schemes.

Experienced trainers estimate that it takes approximately ten working days, spread over a period of several months, to adequately train a new worker in basic felling and delimiting techniques. There is no information available on the annual turnover of labour in the

smallwood industry, but 20% is considered to be a conservative figure. This would indicate about 180 men are starting each year and that it would require nine full-time trainers if all new entrants were to be trained to a desirable standard. It is understandable that the major company training schemes in liaison with L.I.F.T.B. are the only ones at present possible because of the concentration of a large workforce in a relatively small area. There are obvious practical difficulties in trying to maintain contact with small mobile smallwood logging operators in the new forest areas, without a tradition of harvesting. However, I personally believe that this must be a matter of prime concern and, indeed, a challenge to the industry to address itself and to rectify.

Workforce Characteristics

The human element plays a major role in the productivity and efficiency of forest operations. Smallwood harvesting is physically demanding and carried out in all weathers. Men working in smallwood operations rarely last beyond the age of 35 years and so to keep him in the industry he must have other prospects, otherwise labour turnover again becomes a problem due to the nature of the work.

Costs and Benefits of Training

There is little information readily available on this in New Zealand or overseas. One would expect :

- (i) Substantial reduction in the accident rate;
- (ii) Slight increase in productivity;
- (iii) Increase in job satisfaction and corresponding reduction in turnover;
- (iv) Reduction in residual crop damage.

The greatest gains from training will come from training new entrants to the industry, especially school leavers who will be young, enthusiastic and keen to learn. Retraining of older workers with fixed attitudes and techniques in the new methods is a more difficult and demanding assignment.

The direct cost of training a new entrant for two weeks was estimated at being around 1% of the cost of the roundwood that he will produce over the next two years in a normal thinning operation.

The U.K. Forestry Commission estimate the cost of a ten day training course for chainsaw operators to be recovered by a 1.7% increase in operator productivity. The overall level of investment in training within the New Zealand forest industry is substantially lower than in other countries such as Britain and Norway, with a comparable size forest industry. There appears to be a lot of lip service paid to training, but limited commitment when it comes to putting up the money.

It is difficult to determine where the responsibility for training lies within new forest regions. The beneficiaries of training are the obvious ones and include :

- (a) The forest owner who will hopefully receive a higher price for his wood;
- (b) The processor, who will receive lower cost wood;
- (c) The contractor, who will have a more profitable operation;
- (d) The individual, who will have a safer working environment and a higher level of job satisfaction;
- (e) The government, who would benefit from an increased tax take all along the line.

Presumably, all these organisations who benefit should also make some contribution to the cost of training. The L.I.F.T.B., who have the overall responsibility for training, have resources that limit their role to that of standardising existing training schemes.

Recommendations

1. That an examination of the achievements of training schemes, both New Zealand and overseas, be carried out and the results publicised.
2. That an examination of the costs and benefits of training schemes, both New Zealand and overseas, be carried out and the results publicised.
3. To examine the opportunity of modifying work conditions to bring it within the capabilities of the average worker over his entire working life, promoting safer working conditions, and reducing labour turnover.
4. To investigate the high turnover within the smallwood industry in order to :
 - (i) Identify the main reasons;
 - (ii) Quantify the costs, both direct and indirect;
 - (iii) Determine the destination of those leaving the industry.
5. Identify the training needs (manpower requirements and skill levels) for new regions with no recent tradition of harvesting and to identify means of meeting these needs.

I would like to expand on this last point in the recommendations, with reference to the New Zealand Farm Forestry Association and to my own experience. According to the 1981 Forestry Development Conference, a significant proportion of the future national forest estate should be established on privately owned land. The recently released CNIPS report has reinforced these aims. With a shift in emphasis from a traditional heavily stocked plantation to an open grown forest with stock grazing - a two tier system of forestry. As this idea of integrated forest-farming becomes accepted by the community as a viable and sustainable land use option, farm-forestry is going to undergo explosive growth.

With this type of open grown forest there may be little need for smallwood harvesting, but there will still be forests grown on traditional regimes which could supply smallwood.

Joint venture forestry is becoming a thing of today. Only last week a J.V. Seminar was held in Napier, organised by the N.Z.F.F.A., Forest Owners Association, and Federated Farmers. So, forestry is going to expand in regions without a forestry tradition. Consequently there are going to be many problems and difficulties with manpower and training in smallwood harvesting.

The 1981 Forestry Conference recognised that the high accident rates in forestry indicated that training was generally inadequate. It suggested a scheme was necessary to train and recognise the skills acquired and to promote safe, efficient and productive work methods. The training programmes carried out by the L.F.I.T.B. were acknowledged by that Conference as a good start.

These training schemes must be expanded to cover all regions. I am familiar with safety mitts, visors, and ear muffs. But what are these leggings and felling aids. What is this idea of the scarf top cut being made first and what is this new delimiting technique. From the available literature I see it is basically the same technique as I taught myself years ago - easy, safe and wood presentation is excellent. I am now trying this top cut in the scarf first idea and agree that it prevents scarf overcutting. But I only get to see and read these LIRA publications because I'm National Secretary of Farm Forestry, otherwise I'm totally self-taught and trained by nobody.

My introduction to logging was a production thin for export in 1971. I was to be the sole bushman with a dozer come loader driver mate. Our production target was to be about eight loads per week plus roundwood from the tops. The boss duly took me into the bush with my skid lid and chainsaw to be shown the art of felling. Put the bottom cut of the scarf in first and then the top cut followed by the back cut. Stand back he said while I drop a few and then show you how to trim. I stood back and watched as 20 trees were severed but I couldn't learn the art of delimiting that day - those trees were all hung up and he left me to it. Great training that was, and I survived with a few near misses.

Some eight years ago I'd had enough of bureaucracy and went contracting and eventually into a production thin for roundwood. That also was a nightmare - investing in machinery, trying to train a labour force to do a job they didn't want to learn about. Consequently there was a high labour turnover in that and subsequent jobs. The basic problem in those days was that forestry was non-traditional.

Eventually I gained a boy straight out of school who liked the work and was keen to learn. He stayed 2½ years, went away, gained a bit more experience and has since come back. He now needs an incentive like a certificate to stay in the industry, but I shudder to think of the time and cost of training him to his present ability. So in a small operation you can't afford to carry a person and it is also difficult to carry the cost of training, so you're caught in a catch 22 situation.

I would like to think that this seminar could go some way to providing some answers on manpower and training for the smallwood harvesting industry, especially as related to new regimes.