

FOREST EMPLOYMENT SURVEY 1993-94

Employment in Forestry and Primary Wood Processing

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ABSTRACT

A survey of employment in forestry and primary wood processing in Great Britain, carried out in 1993-94, showed that there were about 35,000 jobs within the industry. Over half of the jobs were in England, with a third in Scotland and the remainder in Wales.

Just over half of the total number of jobs were provided within the forests, with a quarter of the total involved in harvesting and extraction. Nearly 40% of the total jobs were provided by timber haulage and primary wood processing. Just under 10% of the jobs were in "other non-forest" activities, such as management and research.

SUMMARY

This report gives the results of the Forest Employment Survey carried out in 1993-94 by the Forestry Commission, with assistance from industry associations.

The figures are in work-years, representing whole jobs, or full-time equivalents. This means that the results show the number of years work carried out in the year 1993-94 and not the total number of people who worked within the industry.

The main conclusion is that employment in the industry amounted to about 35,000 work-years in 1993-94. Jobs were categorised by sector (that is, type of employer) and by activity.

Around 55% of the total jobs were in England, around 30% in Scotland and just under 15% in Wales. Over half of the jobs were within forests, with a quarter of the total provided by harvesting and extraction. Nearly 40% of the total jobs were provided in the haulage of timber and primary wood processing activities. The balance of employment (just under 10%) was found in "other non-forest" activities such as management and research.

Total employment has fallen from the figure of 41,000 shown by the 1988-89 Survey. This is a function of increased productivity, and reduced work programmes in some areas, such as planting.

The use of contractors by the Forestry Commission, privately owned estates and forest management companies increased from 33% of employment in 1988-89 to 39% in 1993-94. Contractors tended to travel further to work than direct labour; 92% of direct employees and 64% of contractors worked within 20 miles of home.

Forest Employment Survey 1993-94

Employment in Forestry and Primary Wood Processing

1. INTRODUCTION

This was the first full survey of employment in the forestry and wood processing sector since 1989. It was carried out with the assistance of the Timber Growers Association, the Country Landowners Association, the National Farmers Union, the Supply and Demand Sub-Committee of the Home Grown Timber Advisory Committee, (HGTAC - SSD), the British Timber Merchants Association, the Association of Professional Foresters and the Horticultural Trade Association.

Similar surveys were carried out in 1985-86 and 1988-89. Results from the 1988-89 survey and a brief account of earlier work are given in FC Occasional Paper 27: Forest Employment Survey 1988-89 (*Jean Thompson*, 1990).

Data were collected from the following sectors of the forestry industry.

Private estate owners: a sample survey described in greater detail in Section 2.1, and data for private nurseries.

Forest Management Companies: a complete enumeration of the three largest companies, and a sample survey of smaller companies - see Section 2.2.

Timber Harvesting Companies: a sample survey carried out with the assistance of organisations representing firms in this sector - see Section 2.3.

Primary Wood Processing Industries: data obtained from the HGTAC-SSD's full Sawmill Survey for the year ending December 1993, and from personal communications with firms in the pulp, paper and board industries - see Section 2.4.

Forestry Commission: a complete enumeration of all industrial and non-industrial employees, and of directly engaged contractors and those employed by timber merchants on standing sales - see Section 2.5.

2. SURVEY METHODOLOGY

The questionnaire forms covered as many aspects of forest employment as possible, without excessively burdening potential respondents. The questionnaires (copies of which can be found in the appendices) were based on those used in the previous survey, but with some reduction in detail and changes in the layout. The questionnaire gave respondents the option of using imperial or metric units.

2.1 Private Estate Owners

The term "private" is used here to mean all woodland that does not form part of the Forestry Commission estate. This large area of about 1.5 million hectares is owned by a variety of individuals and organisations, some of which are public bodies (eg Department of Transport, Ministry of Defence).

Ideally, the survey would have been based on a sample derived from a geographical and size stratification of all private woodland owners. However, there is no comprehensive register of private owners, so it was necessary to use a combination of several sampling frames. The Timber Growers Association (TGA), the Country Landowners Association (CLA), and the National Farmers Union (NFU) provided valuable assistance. A copy of the questionnaire and covering letter are included in Appendix 1.

For the TGA sample, the membership was split into five bands, depending on the area of woodland owned: 1-10 ha, 11-50 ha, 51-100 ha, 101-500 ha; and over 500 ha. Larger proportions were selected from the larger size categories; the sampling fractions were 10%, 20%, 50%, 50% and 100% respectively, giving a total sample size of about 1800. The Forestry Commission carried out the survey and one reminder was sent to non-respondents. To preserve confidentiality no records were kept showing the identity of TGA members selected. The response rates were 25%, 29%, 36%, 35% and 40% respectively for the five size categories.

For the NFU, a sample of 500 owners was selected, from members who had recorded an interest in trees. This extract from the NFU mailing list, provided by the NFU's agents R R Donnelley UK, was split into three size categories: farms of over 800 acres, 100 to 800 acres, and less than 100 acres. Questionnaires were sent to half the farmers in the largest size category, and 6% in the smaller categories. Although no reminders were sent, the response rate was quite high, at 45%. This includes those who, although they had expressed an interest in trees, did not actually own or manage any woodland. The NFU covers England and Wales only; this part of the survey did not collect data for Scotland.

The CLA dealt with the mailing to their own membership. They sent out 500 questionnaires but did not send out reminders to those who did not return their questionnaires. The response rate was 25%.

For each of the three organisations the figures were rated up for non-response. The TGA and NFU results were uprated within the size categories described above, by an amount equal to the number of owners within each category divided by the number of respondents. This assumes that the respondents were typical of all members in that size category, and adjusts for the different sampling fractions and response rates in the various

size categories. For the CLA there was no such size stratification, and the uprating assumed that the respondents were typical of all members.

This resulted in estimated employment figures for members of the three organisations, who collectively own 600,000 hectares of private woodland. This left about 900,000 hectares, or 60% of private woodland, not covered by owners' questionnaires.

Returns from the Forest Management Companies showed that they managed an area of almost 390,000 hectares, much of which was in Scotland. This was adjusted to take account of the estimated area of overlap with woodland owned by association members, by deducting the area for which the owners' returns suggested that work had been carried out in the woods but no direct or contract employment was reported. This gave an adjusted area of 315,000 hectares, for which it could be assumed that there was no employment by the owners. For the balance of 585,000 hectares, it was assumed that employment per hectare was the same as the average employment per hectare for the area covered by the survey. Separate rating factors were used for England, Wales and Scotland.

The Horticultural Trade Association carried out an employment survey of their members who are forest nurseries. The results for the private nurseries have been included in the Private Estate Owners figures.

2.2 Forest Management Companies

The largest Forest Management Companies are Fountain Forestry Limited, Scottish Woodlands Limited and Tilhill Economic Forestry. These companies distributed Forest Management Company questionnaire forms (see Appendix 2) within their organisations. It was assumed that the response rate was 100%. A list of the smaller Forest Management Companies was drawn from the membership list of the Institute of Chartered Foresters; one reminder letter was issued and the response rate was nearly 55%.

To avoid double counting (for example, where a Forest Management Company simply acted as a selling agent), Forest Management Companies were asked to enter separately the amount of labour used by other companies. Problems arose when a contractor was reported as being employed "directly" by the Forest Management Company, but was also reported as being employed "directly" by the client of the company; or, when the Forest Management Company acted on behalf of the owner who sold "direct" to the timber merchant, resulting in a legal contract between the owner and the merchant. It was decided that any such work should be included in the Company's employment figures.

2.3 Timber Harvesting Companies

The British Timber Merchants Association (BTMA) and the Association of Professional Foresters (APF) helped in this part of the survey. Questionnaires (see Appendix 3) were sent to all BTMA members, to all companies in the APF, to a 30% random sample of APF individual members, and also to Forest Management Companies if requested. The response rates were 40% for BTMA, 26% for APF companies and 24% for APF individual members.

Questionnaires were also sent to Timber Harvesting Companies that did not belong to either the BTMA or the APF but could be identified from other records held by the Forestry Commission. The response rate for these was 62%.

The uprating of employment for the Timber Harvesting Companies was based on the volume of timber harvested. The rating factor was calculated as the estimated total volume of timber felled by Timber Harvesting Companies, divided by the total volume reported by survey respondents.

2.4 Primary Wood Processing Industries

In 1994 the HGTAC-SSD carried out a Sawmill Survey for the year ending December 1993. This survey, which also collected employment data, covered all sawmills with production of at least 1,000 m³ per year. The response rate for this survey was almost 60%. Previous returns were used to estimate production by mills that did not reply this time. Rating factors were applied to estimate figures for other non-responses and for smaller sawmills. The accuracy of these factors was confirmed by a later survey, carried out for the year ending December 1994; this achieved a response rate of almost 100% and gave similar consumption and production figures to the rated results for 1993.

The HGTAC-SSD also carried out a survey of roundwood fencing manufacturers for 1993, focused mainly upon the softwood fencing market, with a response rate of 60%. This included an employment question. Members of the HGTAC-SSD also supplied employment data for other parts of the industry, namely the board industry and the pulp and paper industry.

2.5 Forestry Commission

It was possible to calculate the employment figures for the Forestry Commission based on three sources of information. First, there were directly employed non-industrial personnel, who were all considered to be "other non-forest based". Second, there were directly employed industrial personnel, whose employment was analysed using payment records that gave the total wages paid in the financial year ending March 1994, divided by the average wage a direct employee would have received for the job, to estimate the numbers employed on different activities. Third, the amount of contractor employment in work-years was calculated using a statistical return for 1993-94 completed by all parts of the Forestry Commission.

3. RESULTS

All the figures are expressed in work-years. It is quite common to have employees or contractors who work in forestry for only part of the year, so the actual number of people who worked in forestry would have been greater than the number of work-years shown. Direct and contract employment were recorded separately.

3.1 Overall Totals and Types of Forestry Employer

The 1993-94 Survey results indicate that the total number of people employed in the forestry and wood processing industries is about 35,000. The breakdown by sector (that is, type of employer) is shown in Figure 1 and Table 1. More detailed data showing employment by sector and activity are given in Appendix 4.

Figure 1

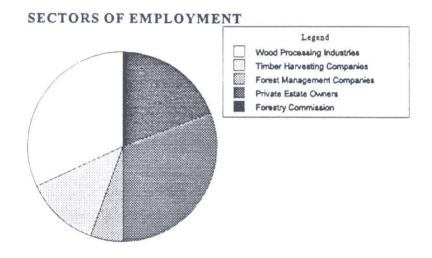


Table 1 Employment in Forestry and Primary Wood Processing

	England	Wales	Scotland	GB
Forestry Commission	2,570	1,270	2,810	6,650
Private Estate Owners	7,525	1,100	2,125	10,750
Forest Management Companies	735	125	1,050	1,910
Timber Harvesting Companies	2,135	515	1,645	4,295
Wood Processing Industries	6,445	1,740	3,030	11,215
Total	19,410	4,750	10,660	34,820

Compared with the figure of 41,050 obtained in the 1988-89 Survey, this represents a drop of 15% in the numbers of people employed in forestry. This comparison is discussed in Section 4. Around 55% of people employed in the forestry and wood processing industries are in England, around 30% in Scotland and just under 15% in Wales.

3.2 Employment by Activity

Figure 2 and Table 2 give the breakdown into activities for the industry as a whole. There are more detailed figures in Appendix 4.

Figure 2

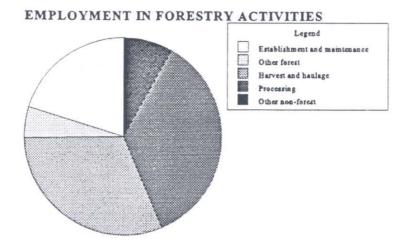


Table 2 Employment by Activity

	England	Wales	Scotland	GB
Forest nurseries	380	0	200	580
Establishment	1,790	260	720	2,770
Maintenance	2,530	400	795	3,725
Harvesting / extraction	4,220	1,855	3,215	9,290
Road construction	285	90	255	630
Other forest	1,200	175	360	1,735
FOREST total	10,405	2,780	5,545	18,730
Haulage of timber	325	215	445	985
Processing	7,555	1,470	3,290	12,315
Other non-forest	1,125	285	1,380	2,790
NON-FOREST total	9,005	1,970	5,115	16,090
TOTAL	19,410	4,750	10,660	34,820

Establishment includes ground preparation, planting, beating up and other operations carried out in the first 10 years after planting. The category "other forest based" is for activities such as recreation, conservation and sporting. "Other non-forest based" includes all non-industrial Forestry Commission employees and managerial and clerical employees from other sectors.

3.3 Direct and Contract Employment

Figures 3 and 4 illustrate the data in Tables 3 and 4, showing the breakdown between direct employees and contractors, by both sector and activity.

Figure 3 DIRECT AND CONTRACT EMPLOYMENT

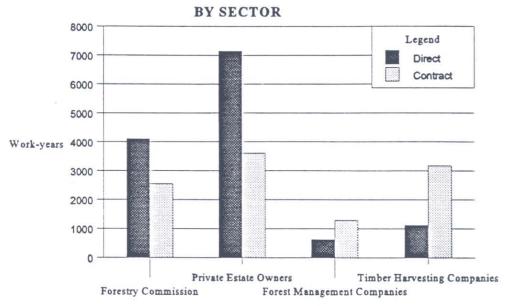
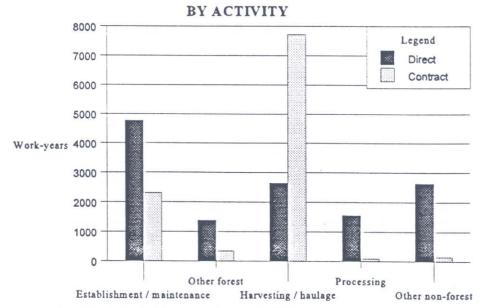


Figure 4 DIRECT AND CONTRACT EMPLOYMENT



Tables 3 and 4 show separate figures for direct workers and contractors (the 1988-89 Survey did not record this split for the timber harvesting companies).

Table 3 Direct Employment

	Forestry Commission	Private Estate Owners	Forest Management	Timber Harvesting Companies
Nurseries	75	410	65	5
Establishment	220	1,015	105	90
Maintenance	410	1,965	85	320
Harvesting	540	985	40	460
Road Construction	195	175	0	20
Other forest	660	650	60	15
FOREST total	2,100	5,200	355	910
Haulage	0	70	5	150
Processing	0	1,550	10	0
Other non-forest	2,005	320	255	55
NON-FOREST total	2,005	1,940	270	205
TOTAL	4,105	7,140	625	1,115

Table 4 Contract Employment

	Forestry Commission	Private Estate Owners	Forest Management Companies	Timber Harvesting Companies
Nurseries	0	0	20	5
Establishment	155	790	260	135
Maintenance	70	565	180	130
Harvesting	1,910	1,795	655	2,360
Road Construction	0	175	20	45
Other forest	270	45	20	15
FOREST total	2,405	3,370	1,155	2,690
Haulage	85	120	85	470
Processing	0	75	10	0
Other non-forest	55	45	35	20
NON-FOREST total	140	240	130	490
TOTAL	2,545	3,610	1,285	3,180

3.4 Travel to Work

Figure 5 and Table 5 show the percentages of employees and contractors living within the stated distance of place of work (this information was not recorded for the Forestry Commission or the Wood Processing industries).

Figure 5

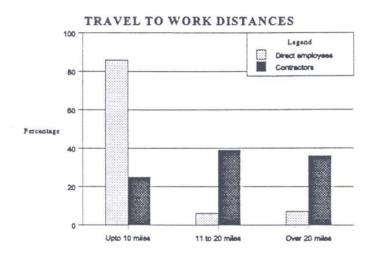


Table 5 Travel Distances (percentage breakdown for each category of employer)

DIRECT EMPLOYEES

Distance	Up to 10 miles	11 to 20 miles	Over 20 miles
Private Estate Owners	96%	3%	1%
Forest Management Companies	52%	22%	26%
Timber Harvesting Companies	48%	16%	36%
All	86%	6%	7%

CONTRACTORS

Distance	Up to 10 miles	11 to 20 miles	Over 20 miles
Private Estate Owners	38%	29%	33%
Forest Management Companies	13%	34%	53%
Timber Harvesting Companies	16%	52%	32%
All	25%	39%	36%

The place of work means the point at which the employees or contractors begin their working day, and the distance they travel is from home to this point. It does not include the distance they have to travel once they are at the work site. For example, the distance an employee or contractor travels to a forest is included, but the distance within a forest is not. Almost all of the direct employees on Private Estates travel less than 10 miles to work. Contractors generally have to travel further to work than direct employees.

4. UNIT LABOUR REQUIREMENTS

Table 6 shows the implied labour productivity in 1993-94 calculated by dividing reported output by reported employment for particular activities. The figures for Great Britain are also compared with those from the 1988-89 Forest Employment Survey.

Table 6 Unit Labour Requirements

	England	Wales	Scotland	GB	
ESTABLISHMENT (w	1993-94	1988-89			
Forestry Commission	0.045	0.033	0.041	0.040	0.057
Private Estate Owners	0.136	0.218	0.049	0.108	0.145
Forest Management Companies	0.060	0.056	0.029	0.038	0.031
MAINTENANCE (work	k-years / '000	ha)			
Forestry Commission	0.708	0.641	0.462	0.551	1.507
Private Estate Owners	2.436	3.542	0.850	1.962	4.276
Forest Management Companies	1.065	0.960	0.401	0.581	1.331
HARVESTING (work-y	ears / '000m	³)		4	
Forestry Commission	0.556	0.770	0.499	0.574	0.961
Private Estate Owners	3.513	4.242	2.119	3.084	1.098
Forest Management Companies	0.654	1.015	0.748	0.828	1.176
Timber Harvesting Companies	0.478	0.332	0.477	0.454	1.351

These figures should be interpreted with some caution, because employment and output may not have been reported consistently particularly for Private Estate Owners, and because of the impact of sampling. However, they do provide generalised data about labour outputs that can be regarded as representing a "norm" for different activities in the three countries.

5. COMPARISONS WITH PREVIOUS SURVEYS

Figures 6 and 7 and Table 7 compare the results of this survey with the two previous surveys that were carried out in 1985-86 and 1988-89.

Figure 6

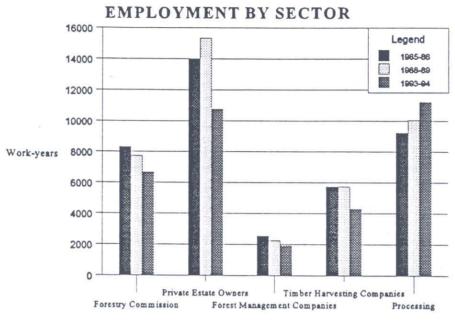


Figure 7

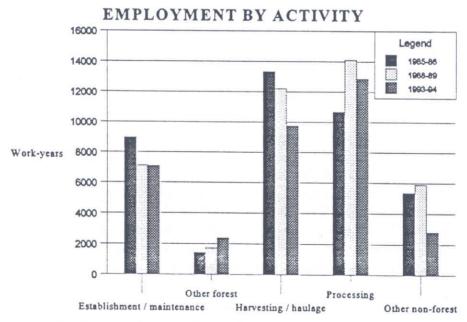


Table 7 Comparisons with Previous Surveys

BY SECTOR	1985-86	1988-89	1993-94
Forestry Commission	8,280	7,720	6,650
Private Estate Owners	13,970	15,325	10,750
Forest Management Companies	2,515	2,240	1,910
Timber Harvesting Companies	5,735	5,725	4,295
Wood Processing Industries	9,200	10,040	11,215
TOTAL	39,700	41,050	34,820

BY ACTIVITY	1985-86	1988-89	1993-94
Establishment / maintenance	8,950	7,110	7,075
Other forest	1,420	1,725	2,365
Harvesting / haulage	13,325	12,210	9,730
Processing	10,655	14,100	12,860
Other non-forest	5,350	5,905	2,790
TOTAL	39,700	41,050	34,820

Employment by the Forestry Commission, Private Estate Owners, Forest Management Companies and Timber Management Companies has fallen since 1988-89. Employment by the processing sector has risen, but employment in the processing activity has fallen. This apparent anomaly is due to a reported reduction in employment in processing on private estates (although some harvesting activity in 1988-89 may have been reported as processing).

Reasons for falling employment are potentially twofold: increased productivity and reduced levels of activity. For harvesting, haulage and processing, there has been an increase in activity - with wood production rising by over 15% from 1989 to 1994 - so the 15% fall in employment implies a productivity increase of over 25%. On the other hand, the level of planting has fallen, from nearly 43,000 hectares in 1988/89 to just under 34,000 hectares in 1993/94, so improvements in productivity and reduced levels of activity may both have had an impact on employment levels for establishment and maintenance activities. Further information about productivity is contained in Section 5.

In the 1988-89 Forest Employment Survey information about Private Estate Owners was collected solely from members of Timber Growers UK (TGUK, now Timber Growers Association - TGA). The sample was drawn from TGUK's membership list and a stratified sample was selected: 100% of all those over 500 hectares, reducing to 10% for those with

20 hectares or less. The sampling was distributed over twelve geographical regions. It was assumed that TGUK members who had a high representation of medium and large-sized estates were not representative of all Private Estate Owners. Therefore the results were rated up for each (pre-1992 reorganisation) Forestry Commission Conservancy based on the total amount of private woodland and the amount of woodland belonging to TGUK respondents, without regard to the size stratification of the TGUK members.

The 1993-94 Forest Employment Survey for TGA members used a different sampling strategy and method of uprating, but the previous methodology of unstratified uprating by Conservancy was also carried out to give an approximate comparison. The change in survey methodology for Private Estate Owners makes little difference to the total. If the previous survey's methodology were to be used, and private nurseries labour not included, then the total employment on Private Estates would have been estimated as 9,900 as opposed to 10,400, a difference of only 500.

Employment in "other forest" activities has risen; this category includes recreation, conservation and sport, (and also, for consistency with previous surveys, employment in road construction).

The table also shows comparisons with the survey run in 1985-86. The figures shown here for 1985-86 are slightly different from those reported for comparison in the 1988-89 Forest Employment Survey because the figures in the above table were taken from the original data source that separated processing from harvesting and haulage.

APPENDICES

APPENDIX 1: PRIVATE FOREST OWNERS QUESTIONNAIRE AND COVERING LETTER







22 September 1993

Dear Woodland Owner

NATIONAL SURVEY OF EMPLOYMENT IN FORESTRY

The Forestry Commission and the Forestry Industry Committee of Great Britain (FICGB) are jointly conducting a national survey of employment in forestry and related industries. The Country Landowners Association (CLA) is a constituent member of FICGB and fully supports this survey.

As part of the survey, questionnaires are being sent to a sample of CLA members with woodlands, excluding those who are also members of Timber Growers UK (TGUK members were covered by an earlier part of the survey). Similar information is also being collected from the Forestry Commission, other major woodland owners, forest management companies, timber merchants and harvesting companies, and from various sectors of the wood processing industry.

The scope of the Woodland Owners survey is everyone who owns a woodland, however large or small. The main aim of the survey is to find out how much employment results from forestry and woodland management. In addition to asking about employment, the questionnaire asks about the area of woodland and level of forestry activity, to enable the responses to be expanded to give estimates for all woodlands.

It is important that the survey includes information for woodlands with no employment, so that the results give a complete picture. If there is no employment for your woodland, you are only asked to complete whatever items are relevant on the first page, and make a nil return at questions 8 and 9.

The questionnaire should take no more than 30 minutes to complete. If precise figures are not readily available for any aspect, then estimates are perfectly acceptable. It is important that responses are received from as many woodland owners as possible, so we will be grateful for your participation.

The survey is completely anonymous. This mailing has been carried out by the CLA, on behalf of the Forestry Commission. The reference number is only included to enable the CLA to exclude those who have already responded from any later mailing of reminders. Your name and address will not be given to the Forestry Commission or anyone else connected with the survey, and can never be linked with the information that you supply.

Please complete the questionnaire and send it to the Forestry Commission Statistics Branch in the enclosed FREEPOST envelope, if possible within two weeks of receipt. No postage stamp is required. Thank you for your co-operation in this important survey.

Similar surveys were carried out in 1986 and in 1988-1989. Employment totals in the 1988-1989 survey, expressed as full-time man-year equivalents, were:

	England	Wales	Scotland	Great Britain
Forestry Commission	2,740	1.455	3,525	7.720
Private Estates	10,690	1,110	3,525	15,325
Forest Management Companies	700	195	1,345	2,240
Harvesting Companies	1.225	610	3,890	5,725
Wood Processing Industries	5,670	1,405	2,965	10,040
Total	21,025	4.775	15,250	41,050

Yours sincerely

G Dunn

Country Landowners Association

Cinan Cinan

S R Gillam Forestry Commission

or

A C S Jennings
Forestry Industry
Committee of GB

All enquiries should be addressed to :

Simon Gillam Statistics Branch Forestry Commission 231 Corstorphine Road Edinburgh

EB12 7AT

Tel. 031 334 0303

George Dunn

Country Landowners Association

16 Belgrave Square

London SW1X 8PQ

Tel. 071 235 0511



Ref:

Forest Employment Survey 1993 Private Owners

This national survey of employment in forestry and related industries is conducted by the Forestry Commission and the Forestry Industry Committee of Great Britain, with the full support of Timber Growers UK.

The survey is completely anonymous and most owners should find that it does not take more than thirty minutes to complete. If possible, it should be returned within two weeks of receipt.

If an owner holds a number of separate woodlands with separate workforces, a return for each would be appreciated.

Please pass this form to the managing agent for completion if appropriate. This sheet can be photocopied, or further copies obtained from the Forestry Commission at the address below.

Thank you for participating in this survey.

All enquiries concerning this questionnaire should be addressed to:

Dr. Helen Holt, Statistics Branch, Forestry Commission, 231, Corstorphine Road, Edinburgh, EH12 7AT.

Tel: 031 334 0303

01

Ben Gunneberg, Timber Growers UK, 5, Dublin Street Lane South, Edinburgh, EH1 3PX.

Tel: 031 557 ()944

In which county is the woodland (if in Scotland, district)? If the retione in which the major part of the woodland is located. If necessary, give nure than one county.	urn covers more than one county, give the
1. County (or Scottish district)):
EMPLOYMENT AND ACTIVITY Year - please supply data for the most recent complete 12-month period for wh	nich you have figures available
2. Period covered - 12 months endin	g:
AREA OF WOODLAND	
Areas in hectares or acres. If acres, please tick here	<i>,,</i> 🔲
3. Total area of woodland:	
4. Approximate age structure of woodland - Up to 10 years:	
• 11 to 40 year	S:
- Over 40 year	
(FGS) and Broadleaved Woodland Grant Scheme (B - Area unde Woodland Grant Scheme (WGS) - Area not under WGS but under previous scheme	
6. Area planted during period VOLUME OF TIMBER PRODUCED]:
Volume of timber produced during period, in cubic metres or hopp	rus feet.
If hoppus feet please tick her	e:
The category 'standing sales' covers all timber sold standing then harvested by a contractors. In the other three categories, the woodland owner pays for the labor and sells the harvested timber. 7. Total volume of timber:	the purchaser, his employees or his
of which: - By direct labour:	
- By contractors engaged directly by owner	
- By forest management	
- By standing sales direct to a timber merchant	

Count a fraction for those who spent part of the period Do not include labour managed by forest management		tal to the neurest man-year.
		araung sans.
8. Direct la who	bour (employees se wages are paid by the owner):	пшп-years.
cc	ors (individuals or empanies engaged	
carry	ly by the owner to out specific tasks):	man-years
DISTANCE TRAVELLED TO WORK - Please enter the number of direct employees and cont The place of work means the point at which they begin Do not count distance travelled within the woodland af If you do not know details for individuals working for a based on the contractor's address.	the working day. ter beginning work.	
10. Distance	e travelled to work:	
Direct I	Labour: - up to 10 miles:	
	-11 to 20 miles:	
	-over 20 miles:	
Contrac	etors:	
	- up to 10 miles:	
	-11 to 20 miles:	
	-over 20 miles:	

OPTIONAL SECTION - please complete this section if the information is readily available, or if you are able to give estimates.

BREAKDOWN OF EMPLOYMENT BETWEEN FOREST OPERATIONS -Please provide a breakdown between forest operations of labour employed, in man-years. The total of direct labour in Questions 11 and 12 should add up to the figure given at Question 8; the total of contractors to the figure given at Question 9. If the breakdown is not known exactly, please make the best estimate you can. Figures can be shown as decimals (eg 1.3) or fractions (eg 1 1/2), or rounded to the nearest whole number, whichever is more convenient. 11. Forest-based employment: ('Establishment' includes beating up and other operations in the first 10 years after planting -'Other forest-based' includes recreation and sport) Direct Labour: - Forest nurseries: - Establishment: - Maintenance: - Harvesting/extraction: - Road / bridge construction or maintenance: - Other forest-based: DL/4-1H-5L- Jun 93 - (Ver 2) Contractors: - Forest nurseries: - Establishment: - Maintenance: Dasign & Interpretation Branch, Public Information Division, Forestry Commission, Edinburgh. - Harvesting / extraction: - Road / bridge construction or maintenance: - Other forest-based: 12. Non-forest based employment: Direct Labour: - Haulage of timber: - Processing (on the estate): - Other non-forest-based: Contractors: - Haulage of timber: - Processing (on the estate):

- Other non-forest-based:

APPENDIX 2: FOREST MANAGEMENT COMPANIES QUESTIONNAIRE AND COVERING LETTER



FORESTRY INDUSTRY COMMITTEE OF GREAT BRITAIN

April 1994

NATIONAL SURVEY OF EMPLOYMENT IN FORESTRY

The Forestry Commission and the Forestry Industry Committee of Great Britain (FICGB) are jointly conducting a national survey of employment in forestry and related industries.

The main aim of the survey is to find out how much employment results from forestry and woodland management. In addition to asking about employment, the questionnaire asks about the area of woodland and level of forestry activity, to enable the responses to be expanded to give estimates for all types of woodland and forestry.

Similar information is also being collected from woodland owners, the Forestry Commission, timber merchant and harvesting companies. Information will be collected later from various sectors of the wood processing industry.

The questionnaire should take no more than 30 minutes to complete. If precise figures are not readily available for any aspect, then estimates are perfectly acceptable. It is important that responses are received from as many companies as possible, so we will be grateful for your participation.

The survey is completely anonymous in that the reference number used on the form is only included so that those who reply need not be bothered again by a reminder.

Please complete the questionnaire and send it back if possible within two weeks of receipt. Thank you for your co-operation in this important survey.

Similar surveys were carried out in 1986 and in 1988-1989. Employment totals in the 1988-1989 survey, expressed as full-time man-year equivalents, were :

	England	Wales	Scotland	GB
Forestry Commission Private Estates Forest Management Companies Harvesting Companies Wood Processing Industries	2,740 10,690 700 1,225 5,670	1,455 1,110 195 610 1,405	3,525 3,525 1,345 3,890 2,965	7,720 15,325 2,240 5,725 10,040
Total	21,025	4,775	15,250	41,050

Yours sincerely

A P S Johnson Forestry Commission

Alastain P.S. Idinson

A C S Jennings ____.
Forestry Industry Committee of GB

All enquiries should be addressed to :

Alastair Johnson Statistics Branch Forestry Commission 231 Corstorphine Road Edinburgh EH12 7AT

Tel. 031 334 0303



Ref:

Forest Employment Survey 1993 Forest Management Companies

This national survey of employment in forestry and related industries is conducted by the Forestry Commission and the Forestry Industry Committee of Great Britain.

The survey is completely anonymous and most companies should find that it does not take more than thirty minutes to complete. If possible, it should be returned within two weeks of receipt.

If the company has a number of separate locally managed units with separate workforces, a return for each would be appreciated.

This form can be photocopied, or further copies obtained from the Forestry Commission at the address below.

Thank you for participating in this survey.

All enquiries concerning this questionnaire should be addressed to:

Alastair Johnson, Statistics Branch, Forestry Commission, 231, Corstorphine Road Edinburgh, EH12 7AT

Tel: 031 334 0303

In which county is the woodland a covers more than one county, give the on activities is located. If neversary, give mo	nanaged by the company located (e in which the major part of your	if in Scotland, district)? If the return
1.	County (or Scottish district):	
PERIOD Year - please give the most recent compi	ete 12-month period for which you have	figures available.
	Period covered - 12 months ending:	
AREA OF WOODLAND MAN	NAGED -	
Areas in hectares or acres.	If acres, please tick here:	
3.	Area managed in full:	
4.	Additional area, not managed in full, where the company carried out some forestry operations.	
5.	Area already mentioned in (4) where harvesting was the only operation.	
6.	Area planted during the year: (new planting and restocking)	
VOLUME OF TIMBER PRO Volume of timber produced durin or sub-contractors which are not t volume produced by the direct empthe next page.) Please give the volume	g the 12 month period by the comp hemselves Forest Management Com ployees and contractors we ask yo	u about in questions 9 and 10 on
7.	By the forest management comp	any using own labour or
	contractors - Felled only	
	- Extracted only	
	- Felled and extracted	
8.	By standing sales direct to a timber merchant	
	- Felled only	
	- Extracted only	
	- Felled and extracted	

All the following questions are the Forest Management Comp Management Companies, plea sawmills or other wood proces	eany. It any of the work is cont se do not include their figures.	racted out to other Forest
EMPLOYMENT — Direct employees and contractors Please include management and administ	employed on forestry and related	operations, in man-years.
Round the total to the nearest man-year.	mande diaggi. Obani a fracability in incise to	no spem pure of the period on forestry.
9.	Direct employees (those whose wages are paid by the company):	man-years.
10.	Contractors (individuals or companies, which are not Forest Management Companies, engaged directly by the company to carry out specific tasks):	man-years.
DISTANCE TRAVELLED TO Please enter the number of direct emplo The place of work means the point at whit Do not count distance travelled within the If you do not know details for individuals based on the contractor's address. If location of work varies, please give ave	yees and contractors who live at differe ich they begin the working day. e woodland after beginning work. working for contractors, please provide	
	Number who travel:	
	Direct Employees:	
	- up to 10 miles:	
	-11 to 20 miles:	
	-over 20 miles:	
	Contractors:	
	- up to 10 miles:	
	-	
	-11 to 20 miles:	
	-over 20 miles:	·
		Continued overleaf:

OPTIONAL SECTION - please complete this section if the information is readily available, or if you are able to give estimates.

BREAKDOWN OF EMPLOYMENT BETWEEN FOREST OPERATIONS Please provide a breakdown between forest operations of employees and contractors employed, in man-years. If any of the jobs are contracted out to other forest management companies, please do not include their figures. The total of direct employees in Questions 12 and 13 should add up to the figure given at Question 9; the total of contractors to the figure given at Question 10. If the breakdown is not known exactly, please make the hest estimate you can. Figures can be shown as decimals (eg 1.3) or fractions (eg 1 1/2), or rounded to the nearest whole number, whichever is more convenient. 12. Forest-based employment: ('Establishment' includes ground preparation, planting, beating up and other operations in the first 10 years after planting - 'Other forest-based' includes recreation and sport) **Direct Employees:** - Forest nurseries: - Establishment: - Maintenance: - Harvesting/extraction: Road / bridge construction or maintenance: - Other forest-based: Contractors: - Forest nurseries: - Establishment: - Maintenance: - Harvesting/extraction: Road / bridge construction or maintenance: - Other forest-based: 13. Non-forest based employment: **Direct Employees:** - Haulage of timber: - Processing (on the estate): - Other non-forest-based: Contractors: - Haulage of timber:

- Processing (on the estate): - Other non-forest-based:

APPENDIX 3: TIMBER HARVESTING COMPANIES QUESTIONNAIRE AND COVERING LETTER



FORESTRY INDUSTRY COMMITTEE GREAT BRITAIN

April 1994

NATIONAL SURVEY OF EMPLOYMENT IN FORESTRY

The Forestry Commission and the Forestry Industry Committee of Great Britain (FICGB) are jointly conducting a national survey of employment in forestry and related industries.

The main aim of the survey is to find out how much employment results from forestry and woodland management. In addition to asking about employment, the questionnaire asks about the area of woodland and level of forestry activity, to enable the responses to be expanded to give estimates for all types of woodland and forestry.

Similar information is also being collected from woodland owners, the Forestry Commission and forest management companies. Information will be collected later from various sectors of the wood processing industry.

The questionnaire should take no more than 30 minutes to complete. If precise figures are not readily available for any aspect, then estimates are perfectly acceptable. It is important that responses are received from as many companies as possible, so we will be grateful for your participation.

The survey is completely anonymous in that the reference number used on the form is only included so that those who reply need not be bothered again by a reminder.

Please complete the questionnaire and send it back, if possible within two weeks of receipt. Thank you for your co-operation in this important survey.

Similar surveys were carried out in 1986 and in 1988-1989. Employment totals in the 1988-1989 survey, expressed as full-time man-year equivalents, were :

	England	Wales	Scotland	<u>GB</u>
Forestry Commission	2,740	1,455	3,525	7,720
Private Estates	10,690	1,110	3,525	15,325
Forest Management Companies	700	195	1,345	2,240
Harvesting Companies	1,225	610	3,890	5,725
Wood Processing Industries	5,670	1,405	2,965	10,040
Total	21,025	4,775	15,250	41,050

Yours sincerely

Alastair P.S. Johnson

A P S Johnson Forestry Commission

A C S Jennings Forestry Industry Committee of GB

All enquiries should be addressed to :

Alastair Johnson Statistics Branch Forestry Commission 231 Corstorphine Road Edinburgh EH12 7AT

Tel. 031 334 0303



Ref:

Forest Employment Survey 1993 Timber Harvesting Companies

This national survey of employment in forestry and related industries is conducted by the Forestry Commission and the Forestry Industry Committee of Great Britain.

The survey is completely anonymous and most companies should find that it does not take more than thirty minutes to complete. If possible, it should be returned within two weeks of receipt.

If the company has a number of separate locally managed units with separate workforces, a return for each would be appreciated.

This form can be photocopied, or further copies obtained from the Forestry Commission at the address below.

Thank you for participating in this survey.

All enquiries concerning this questionnaire should be addressed to:

Alastair Johnson Statistics Branch, Forestry Commission, 231, Corstorphine Road Edinburgh, EH12 7AT

Tel: 031 334 0303

LOCATION OF ACTIVITY In which county do you operate (i one in which the major part of your activ than one county.	f in Scotland, district)? If the return	covers more than one county, give the
1.	County (or Scottish district):	
PERIOD —	•	
	lete 12-month period for which you have j	ligures available.
2.	Period covered - 12 months ending:	
or sub-contractors which are not a column produced by the direct em	DUCED———————————————————————————————————	panies. (This should be the total s about in questions 7 and 8 on
3.	Harvesting work on contract to a woodland owner (including FC).	
	- Felled only	
	- Extracted only	
	- Felled and extracted	
4.	By standing sales from Forestry Commission.	
	– Felled only	
	- Extracted only	
	- Felled and extracted	
5.	By standing sales from other owners.	
	– Felled only	
	- Extracted only	
	- Felled and extracted	
AREA OF WOODLAND Area of woodland, in hectares or	acres,	
	If acres, please tick here:	
6.	Area where the company carried out some forestry operations other than harvesting.	

All the following questions are about direct employees and contractors engaged directly by the Timber Harvesting Company. If any of the work is contracted out to other Timber Harvesting Companies, please do not include their figures. Do not include employees in sawmills or other wood processing operations; they have been covered by a separate survey.

EMPLOYMENT			
Direct employees and cor	tractors em	ployed on forestry and related	operations, in man-years.
			ho spent part of the period on forestry.
Round the total to the nearest			
	7. [Direct employees	man-years.
	, ,	those whose wages are paid y the company):	
		Contractors (individuals or	
		ompanies, which are not	man-years.
	1 e	imber Harvesting Companies, ngaged directly by the	
		ompany to carry out specific	
		asks):	
DISTANCE TRAVEL	ED TO V	VORK —	
			ent distances from their place of work.
The place of work means the p	oint at which	they begin the working day	and unitarities from their place of work.
		modland after beginning work.	
		orking for contractors, please provide	an estimate
ased on the contractor's addr	ess. If location	of work varies, please give average d	istance travelled
	•	, and a second of the second o	
	^		
	a	Number who travel: Direct Employees:	
		Datet Employees.	
		- up to 10 miles:	
		-11 to 20 miles:	
		20 1	
		-over 20 miles:	
		Contractors:	
			Marie 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		- up to 10 miles:	
		-11 to 20 miles:	, in the second
		-over 20 miles:	ŀ
			•
4 × 1			
			Continued overleaf:

OPTIONAL SECTION - please complete this section if the information is readily available, or if you are able to give estimates.

BREAKDOWN OF EMPLOYMENT BETWEEN FOREST OPERATIONS -

Please provide a breakdown between forest operations of employees and contractors employed, in man-years. If any of the jobs are contracted out to other timber harvesting companies, please do not include their figures.

The total of direct employees in Questions 10 and 11 should add up to the figure given at Question 7; the total of contractors to the figure given at Question 8. If the breakdown is not known exactly, please make the best estimate you can. Figures can be shown as decimals (eg 1.3) or fractions (eg 1 1/2), or rounded to the nearest whole number, whichever is more convenient.

10. Forest-based employment: ('Establishment' includes ground preparation, planting, beating up and other operations in the first 10 years after planting - 'Other forest-based' includes recreation and sport) **Direct Employees:** - Forest nurseries: - Establishment: - Maintenance: - Harvesting/extraction: - Road / bridge construction or maintenance: - Other forest-based: Contractors: - Forest nurseries: - Establishment: - Maintenance: - Harvesting/extraction: - Road / bridge construction or maintenance: - Other forest-based: 11. Non-forest based employment: Direct Employees: - Haulage of timber: - Processing (on the estate): - Other non-forest-based: Contractors: - Haulage of timber:

- Processing (on the estate): - Other non-forest-based:

APPENDIX 4: DETAILED TABLES OF RESULTS

Work-years: whole job equivalents

FORESTRY COMMISSION	·											
		Direct Employment	ployment)	Contract Employment	nployment			Total Employment	loyment	
	Eng	Wales	Scot	GB	Eng	Wales	Scot	GB	Eng	Wales	Scot	GB
Nurseries	55	0	20	75	0	0	0	0	55	0	20	75
Establishment	09	40	120	220	99	25	99	155	125	65	185	375
Maintenance	130	65	215	410	30	15	25	70	160	80	240	480
Harvesting	061	75	275	540	999	290	655	1,910	855	999	930	2,450
Construction	20	35	140	195	0	0	0	0	20	35	140	195
Other	360	125	175	099	165	30	75	270	525	155	250	930
FOREST Total	815	340	945	2,100	925	099	820	2,405	1,740	1,000	1,765	4,505
26												
Haulage	0	0	0	0	20	25	40	85	20	25	40	85
Processing	0	0	0	0	0	0	0	0	0	0	0	0
Other	170	245	066	2,005	40	0	15	55	810	245	1,005	2,060
NON-FOREST Total	770	245	066	2,005	09	25	55	140	830	270	1,045	2,145
TOTAL	1,585	585	1,935	4,105	686	989	875	2,545	2,570	1,270	2,810	6,650

Work-years: whole job equivalents

PRIVATE ESTATE OWNERS	Sì											
		Direct Employment	ployment)	Contract Employment	nployment			Total Employment	loyment	
	Eng	Wales	Scot	GB	Eng	Wales	Scot	GB	Eng	Wales	Scot	GB
Nurseries	265	0	145	410	0	0	0	0	265	0	145	410
Establishment	785	85	145	1,015	595	55	140	790	1,380	140	285	1,805
Maintenance	1,605	180	180	1,965	285	105	175	\$95	1,890	285	355	2,530
Harvesting	745	85	155	586	1,125	170	200	1,795	1,870	255	655	2,780
Construction	135	15	25	175	85	20	70	175	220	40	95	355
Other	575	10	9	650	35	0	10	45	610	5	75	690
FOREST Total	4,110	375	715	5,200	2,125	350	895	3,370	6,235	725	1,610	8,570
Haulage	30	30	10	70	25	35	09	120	55	99	70	190
Processing	1,020	275	255	1,550	75	0	0	75	1,095	275	255	1,625
Other	120	35	165	320	20	0	25	45	140	35	190	365
NON-FOREST Total	1,170	340	430	1,940	120	35	85	240	1,290	375	515	2,180
TOTAL	5,280	715	1,145	7,140	2,245	385	086	3,610	7,525	1,100	2,125	10,750

Work-years: whole job equivalents

FOREST MANAGEMENT COMPANIES	OMPANIE	S										
		Direct Employment	oloyment)	Contract Employment	nployment			Total Employment	loyment	
	Eng	Wales	Scot	GB	Eng	Wales	Scot	GB	Eng	Wales	Scot	GB
Nurseries	40	0	25	99	10	0	10	20	90	0	35	85
Establishment	35	10	09	105	105	10	145	260	140	20	205	365
Maintenance	35	15	35	85	99	10	105	180	100	25	140	265
Harvesting	20	5	15	40	235	20	370	655	255	55	385	969
Construction	0	0	0	0	5	Ś	10	20	\$	8	10	20
Other	30	10	20	09	10	0	10	20	40	10	30	80
FOREST Total	160	40	155	355	430	75	929	1,155	290	115	805	1,510
				·								
Haulage	0	0	5	5	30	5	95	85	30	5	55	06
Processing	10	0	0	10	5	0	2	10	15	0	٠	20
Other	70	5	180	255	30	0	5	35	100	5	185	290
NON-FOREST Total	80	5	185	270	65	5	09	130	145	10	245	400
TOTAL	240	45	340	625	495	80	710	1,285	735	125	1,050	1,910

Work-years: whole job equivalents

TIMBER HARVESTING COMPANIES	MPANIES											
		Direct Employment	oloyment)	Contract Employment	nployment			Total Employment	loyment	
	Eng	Wales	Scot	GB	Eng	Wales	Scot	GB	Eng	Wales	Scot	GB
Nurseries	\$	0	0	\$	5	0	0	5	01	0	0	10
Establishment	20	30	10	06	96	5	35	135	145	35	45	225
Maintenance	265	10	45	320	115	0	15	130	380	10	09	450
Harvesting	215	70	175	460	1,025	265	1,070	2,360	1,240	335	1,245	2,820
Construction	20	0	0	20	20	15	10	45	40	15	10	65
Other	15	0	0	15	10	0	5	15	25	0	5	30
FOREST Total	570	110	230	910	1,270	285	1,135	2,690	1,840	395	1,365	3,600
										:		
Haulage	20	35	96	150	200	85	185	470	220	120	280	620
Processing	0	0	0	0	0	0	0	0	0	0	0	0
Other	55	0	0	55	20	0	0	20	75	0	0	75
NON-FOREST Total	75	35	95	205	220	85	185	490	295	120	280	695
TOTAL	645	145	325	1,115	1,490	370	1,320	3,180	2,135	515	1,645	4,295

COMPARISONS WITH 1988-89 SURVEY

Work-years: whole job equivalents

		1988	-89			1993		<u> </u>
	Eng	Wales	Scot	GB	Eng	Wales	Scot	GB
FORESTRY COMMISSION								
Establishment / Maintenance	465	260	780	1,505	340	145	445	930
Other Forest	325	55	180	560	545	190	390	1,125
Harvesting / Processing	1,185	865	1,520	3,570	875	690	970	2,535
Office	765	275	1,045	2,085	810	245	1,005	2,060
TOTAL	2,740	1,455	3,525	7,720	2,570	1,270	2,810	6,650
PRIVATE ESTATE OWNERS								
Establishment / Maintenance	3,075	470	1,100	4,645	3,535	425	785	4,745
Other Forest	685	50	360	1,095	830	45	170	1,045
Harvesting / Processing	5,550	485	1,640	7,675	3,020	595	980	4,595
Office	1,380	105	425	1,910	140	35	190	365
TOTAL	10,690	1,110	3,525	15,325	7,525	1,100	2,125	10,750
								· · · · · · · · · · · · · · · · · · ·
FOREST MANAGEMENT COMPANIES		-						· · · · · · · · · · · · · · · · · · ·
Establishment / Maintenance	235	105	620	960	290	45	380	715
Other Forest	25	0	45	70	45	15	40	100
Harvesting / Processing	285	60	470	815	300	60	445	805
Office	155	30	210	395	100	5	185	290
TOTAL	700	195	1,345	2,240	735	125	1,050	1,910

COMPARISON WITH 1988-89 SURVEY

Work-years: whole job equivalents

	1988-89				1993-94			
	Eng	Wales	Scot	GB	Eng	Wales	Scot	GB
TIMBER HARVESTING COMPANIES				·				
Establishment / Maintenance	0	0	0	0	535	45	105	685
Other Forest	0	0	0	0	65	15	15	95
Harvesting / Processing	990	535	2,685	4,210	1,460	455	1,525	3,440
Office	235	75	1,205	1,515	75	0	0	75
TOTAL	1,225	610	3,890	5,725	2,135	515	1,645	4,295
							1	
PROCESSING SECTOR								-
TOTAL	5,670	1,405	2,965	10,040	6,445	1,740	3,030	11,215
TOTALS ALL SECTORS								
Establishment / Maintenance	3,775	835	2,500	7,110	4,700	660	1,715	7,075
Other Forest	1,035	105	585	1,725	1,485	265	615	2,365
Harvesting / Processing	13,680	3,350	9,280	26,310	12,100	3,540	6,950	22,590
Office	2,535	485	2,885	5,905	1,125	285	1,380	2,790
TOTAL	21,025	4,775	15,250	41,050	19,410	4,750	10,660	34,820