

FORESTRY COMMISSION.

REPORT

ON

CENSUS OF WOODLANDS

AND

CENSUS OF PRODUCTION OF HOME-GROWN TIMBER. 1924.

LONDON:

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CONTENTS.

Part I.—Census of Woodland	s						PAGE 5
Former Surveys			••	• •	••	• •	6
Total Woodland Area	••	• •	••	• •	• •	••	6
Distribution by Catego	··	••	• •	• •	• •	••	
A 1:		••	••	• •	• •	• •	7
•	••	• •	• •	• •	٠٠.	• •	14
Contents of British Woodla	nds	• •	• •	••	• •	• •	15
Summary and Conclusions	• •	• •	• •	• •		• •	15
Appendix 1.—List of Count in connexion with the	ty Org Censu	ganisers s of Wo	who re oodland	endered ds	l assist	ance	18
Appendix 2.—Form of Retu	ırn						19
Appendix 3.—Acreage unde	er Woo	odlands	in eac	h Coun	ty		22
Maps	• •	••	••	••	Fa	cing	46
Part II.—Census of Home-gr	own '	Timbe	r Prod	luction	1		47
Method of Collecting Data							47
Production of Timber							48
By Types of Woodland		• •	• •				48
By Classes of Material							49
Prices of Timber							60
Miscellaneous Produce							60
Number of Persons employe	ed in	Forestr	y Oper	ations			61
Home Production compared	l with	Incren	nent				62
Home Production compared	l with	Total	Timber	Consu	mption	ı	62
Appendix—Form of Return	٠						63
(B 12/223)Q							A 2

REPORT

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PART I. CENSUS OF WOODLANDS.

The form of return and method of collecting the statistics were adopted at a conference held in 1921 between the Forestry Commissioners and representatives of the Ministry of Agriculture and Fisheries, the Land Valuation Department and the Forestry Consultative Committees.

In England and Wales most of the work of collection was done on a voluntary basis by private individuals ("County Organisers") selected for their extensive knowledge of the woodlands in their particular districts. The Commissioners desire to place on record their thanks to those who assisted in this way; a list of their names is given in Appendix 1 (p. 18). The County Organisers were supplied with copies of 6-inch ordnance sheets on which were marked the acreage and ownership of each individual wood exceeding two acres in extent. These maps were then forwarded to woodland owners who were asked to indicate on them the types and age-classes of their woods. The areas were subsequently scaled off in the Commission's offices and the data tabulated.

In Scotland the information was similarly recorded on 6-inch ordnance sheets, but the work was done partly by the Commissioners' regular Local Correspondents and partly by the technical staff.

A copy of the form of return and the schedule of instructions for marking ordnance sheets are given in Appendix 2 (p. 19).

The census was commenced on a trial basis in the autumn of 1921, but was not completed until the end of 1926. As most of the work was done during 1924, however, that year has been adopted as the date of the census and adjustments have been made in statistics collected in other years.

In the present returns the woodlands have been divided into two main categories:—

(1) Economic or potentially productive—i.e., woods maintained or capable of being maintained for the production of timber for commercial purposes.

(2) Uneconomic—i.e., woods which are not maintained for timber production, but primarily serve some other purpose.

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The first category is divided into high forest, coppice and coppice-with-standards, scrub and felled or devastated woods. The second category includes amenity woods, shelter belts and park timber. The high forest is subdivided into age-classes, viz., 1 to 10 years old, 11 to 20, 21 to 40, 41 to 80 and over 80.

Former Surveys.

Statistics of the area under woodland were collected for Great Britain in 1905 by the Board of Agriculture; in 1913 for England and Wales by the Board of Agriculture, and in 1914 for Scotland by the Board of Agriculture for Scotland. (Agricultural Statistics—Great Britain 1905, Cd. 3061; England and Wales 1913, Cd. 7325; Scotland 1914, Cd. 7958.) In each case schedules were distributed by local officers of the Board of Customs and Excise to woodland owners who gave particulars under the headings (a) coppice including coppice-with-standards, (b) plantations under ten years old and (c) other woods.

In order to obtain more detailed information than was provided by the agricultural returns of 1914, a survey of Scottish woodlands was undertaken by the Timber Supply Department in February, 1918, and completed in the following year. The primary object was to obtain information in connexion with the supply of timber for war purposes. As in the case of the present census, the data were recorded on 6-inch ordnance sheets. A similar survey was commenced in England and Wales but was not completed.

Total Woodland Area.

The total woodland area is 2,958,672 acres, including 478,106 acres bare of timber and included in the category "felled or devastated." The areas returned in the censuses of 1905 and 1913-14 are given in Table I.

Table I.—Total Area of Woodland returned in the Censuses of 1905, 1913-14 and 1924.

		England.	Wales (including Monmouth).	Scotland.	Total.
1905 1913–14 1924	 • •	Acres. 1,683,324 1,667,574 1,630,987	Acres. 216,510 216,494 253,461	Acres. 868,409 852,120 1,074,224	Acres. 2,768,243 2,736,188 2,958,672

From the above table it would appear that whereas the total area of woodland decreased by 32,055 acres between 1905 and 1913–14 there was an increase of 222,484 acres between 1913–14 and 1924, the increases being, in Wales 36,967 acres and in Scotland 222,104

acres. England shows a decrease of 36,587 acres. There has been no actual increase in the area of woodland; if there had been it could have occurred only in the 1 to 10 year age-class for which the 1924 return shows 15,374 acres in Wales and 38,995 acres in Scotland.

The apparent increase in area is the result of different, and particularly of more intensive, methods of survey and is more especially due to the inclusion of "scrub" in the present census. Scrub usually consists of either a poor cover of dwarfed oak, such as is common in the west of Wales, or sparse stands of birch, such as occur over considerable areas in the Highlands of Scotland. Most of these scrub areas were omitted from previous returns, but some of them appear to have been entered as coppice. 330,000 acres now appear under the category of scrub the effect of this new item on the statistics will be realised. A further discrepancy is caused by the inclusion in the 1924 census of "felled or devastated " (478,106 acres); it is not known how similar woodland was dealt with in 1905 and 1913–14, but it was probably excluded wholly or in part. A case may be made for excluding from the total area of woodland the woods felled at the time of the census. This course presupposes that they will not be replanted, which is not wholly true, since even in a normal forest a proportion of the area will be bare at any moment and merely awaiting its turn for replanting. In the exceptional circumstances arising out of the war fellings the felled area was naturally far greater than the normal proportion. This difficulty in classification will be met in future censuses by requesting information as to the year of felling, thus obtaining some guide as to the probability of re-planting taking place.

DISTRIBUTION BY CATEGORIES.

The distribution of the total woodland area by categories is given in Table II.

Table II.—Distribution of Woodlands by Categories, 1924.

England Wales Scotland Great of total						
I. ECONOMIC OR POTENTIALLY PRODUCTIVE. High forest— Conifers 195,231 46,940 429,670 671,841 — Hardwoods 338,456 43,957 60,941 443,354 — Mixed conifers and hardwoods 220,390 22,106 59,199 301,695 — Total high		England.	Wales.	Scotland.		Woodland
Conifers 195,231 46,940 429,670 671,841 — Hardwoods 338,456 43,957 60,941 443,354 — Mixed conifers and hardwoods 220,390 22,106 59,199 301,695 — Total high — — — —	POTENTIALLY PRODUCTIVE.	Acres.	Acres.	Acres.	Acrès.	
woods 220,390 22,106 59,199 301,695 — Total high	Conifers Hardwoods Mixed conifers					
1 1 1		220,390	22,106	59,199	301,695	
	forest	754,077	113,003	549,810	1,416,890	47.9

Table II.—Distribution of Woodlands by Categories, 1924—contd.

	England.	Wales.	Scotland.	Great Britain.	Percentage of total Woodland Area.
I. ECONOMIC OR POTENTIALLY PRODUCTIVE— contd. Coppice and coppice with- standards	Acres. 485,229	Acres.	Acres.	Acres.	17.0
standards	485,229	35,331	8,120	528,680	17.9
Scrub	87,410	34,934	208,359	330,703	11.2
tated	194,742	62,182	221,182	478,106	16.1
Total scrub and felled or devastated	282,152	97,116	429,541	808,809	27 · 3
II. UNECONOMIC (including amenity woods and shelterbelts)	109,529	8,011	86,753	204,293	6.9
GRAND TOTAL	1,630,987	253,461	1,074,224	2,958,672	100 • 0
Total land area Woodland area as	32,037,243	5,098,762	19,069,728	56,205,733	
percentage of land area	5 · 1	5.0	5.6	5.3	

Territorial Distribution.—The average proportion of Great Britain under woodland is $5 \cdot 3$ per cent. (England $5 \cdot 1$, Wales $5 \cdot 0$ and Scotland $5 \cdot 6$). Details of the woodland area in each county are given in Appendix 3 (p. 22). The most heavily wooded portion of England is that immediately south of London including the counties of Sussex (14·0 per cent.), Surrey (12·3), Kent (11·1) and Hampshire (11·6). In practically all the counties north of the line from London to Liverpool, the proportion is well below the average. Cambridge with $1 \cdot 0$ per cent. is the lowest.

The woodland area in Wales is fairly evenly distributed apart from Monmouth, which has 12.8 per cent., only two counties (Montgomery 6.6 per cent. and Brecon 6.0) have more than 5 per cent. under timber. Anglesey has only 1.2 per cent. and Pembroke 2.4.

The most densely wooded part of Scotland is the corner between the Moray Firth and the Firth of Tay containing Nairn (17.0 per cent.), Elgin (16.3), Kincardine (12.6) and Aberdeen (10.1). Only two

counties (Caithness $0\cdot 4$ per cent. and Sutherland $2\cdot 0$) have less than 3 per cent.

Maps showing the distribution of the woodland area are appended. (Facing p. 46.)

High Forest.

The total area of high forest is 1,416,890 acres or $47\cdot 9$ per cent. of the whole woodland area. The acreage under each age-class is given in Table III.

Table III.—Distribution of High Forest by Age-Classes.

		<u> </u>						
	Engla	ınd.	Wal	es.	Scotla	ınd.	Great B	ritain.
Type and Age-class.	Acres.	Per cent.	Acres.	Per cent.	Acres.	Per cent.	Acres.	Per cent.
Conifers—								
1-10 years 11-20 ,, 21-40 ,, 41-80 ,,	52,552 31,253 52,139 48,139 11,148	7·0 4·1 6·9 6·4 1·5	14,059 17,814 8,337 5,308 1,422	12·4 15·8 7·4 4·7 1·2	38,409 48,960 93,466 191,077 57,758	7·0 8·9 17·0 34·7 10·5	105,020 98,027 153,942 244,524 70,328	$\begin{array}{c c} 6.9 \\ 10.9 \\ 17.2 \end{array}$
Over 80 ,,			1,722	·	37,738	10.3	70,326	
Total	195,231	25.9	46,940	41.5	429,670	78 · 1	671,841	47 · 4
Hardwoods— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,	4,425 8,598 29,680 137,966 157,787	0·6 1·2 3·9 18·3 20·9	352 1,627 6,326 17,794 17,858	0·3 1·4 5·6 15·8 15·8	169 252 3,156 24,781 32,583	0·0 0·1 0·6 4·5 5·9	4,946 10,477 39,162 180,541 208,228	$\begin{array}{c c} 0.7 \\ 2.8 \\ 12.7 \end{array}$
Total	338,456	44.9	43,957	38.9	60,941	11.1	443,354	31.3
Mixed conifers and hard- woods— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,	9,347 13,796 51,547 96,264 49,436	1·2 1·8 6·8 12·8 6·6	963 1,290 5,399 10,205 4,249	0·9 1·1 4·8 9·0 3·8	417 861 6,487 27,938 23,496	0·1 0·1 1·2 5·1 4·3	10,727 15,947 63,433 134,407 77,181	1 · 1 4 · 5 9 · 5
Total	220,390	29 · 2	22,106	19.6	59,199	10.8	301,695	21.3
All types— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,	66,324 53,647 133,366 282,369 218,371	8·8 7·1 17·7 37·4 29·0	15,374 20,731 20,062 33,307 23,529	13 · 6 18 · 3 17 · 8 29 · 5 20 · 8	38,995 50,073 103,109 243,796 113,837	7·1 9·1 18·8 44·3 20·7	120,693 124,451 256,537 559,472 355,737	8 5 8 8 18 1 39 5 25 1
Total High Forest	754,077	100 · 0	113,003	100 · 0	549,810	100.0	1,4 16,890	100.0

Conifers occupy 671,841 acres (47.4 per cent. of the high forest area), hardwoods 443,354 acres (31.3 per cent.), and the remaining area of 301,695 acres (21.3 per cent.) consists of mixed stands of conifers and hardwoods.

Of the high forest in England 25.9 per cent. consists of conifers, 44.9 of hardwoods and 29.2 of mixed woods. In Wales the proportion of conifers and hardwoods is more even, being 41.5 and 38.9 per cent. respectively. In Scotland, conifers largely predominate, amounting to 78.1 per cent. as compared with 21.9 per cent. of hardwoods and mixed woods.

In order to appreciate the significance of the areas falling into the various age-classes, it is necessary to assume an average rotation (or age for felling) for each of the main categories of high forest. In Table IV it has been assumed that, on the average, conifers will be felled at 80 years of age, mixed conifers and hardwoods at 100 years and hardwoods at 120 years. The actual areas are then compared with the normal for each age-class.

T_{ℓ}	Table IV.—High Forest: Actual compared with the "Normal" Age-Class Areas.	High For	est: Acı	tual comp	ared with	t the "N	ormal "	Age-Clas	s Areas.		
	Total	1 to 10 years.	years.	11 to 20 years.	years.	21 to 40 years.	years.	41 to 80 years.	years.	Over 80 years.	years.
	Area.	Normal.	Actual.	Normal, Actual, Normal, Actual, Normal, Actual, Normal, Actual, Normal, Actual,	Actual.	Normal.	Actual.	Normal.	Actual.	Normal.	Actual.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres. Acres.	Acres.	Acres.	Acres.
tion)	671,841	83,980	83,980 105,020	83,980	98,027	98,027 167,960 153,942 335,920 314,852*	153,942	335,920	314,852*	1	!
Hardwoods (120 year rotation)	443,354	36,946	4,946	36,946	10,477	73,892		39,162 147,785 180,541 147,785	180,541	147,785	208,228
Mixed (1 0 0 year rotation)	301,695	30,170	10,727	30,170	30,170 15,947	60,339	63,433	63,433 120,678 134,407	134,407	60,339	77,181
Total	1,416,890 151,096 120,693 151,096 124,451 302,191 256,537 604,383 629,800 208 124 285,409	151,096	120,693	151,096	124,451	302,191	256,537	604,383	629,800	208 124	285,409

* Including 70,328 acres over 80 years.

The table brings out the following facts:—

- (1) Conifers.—Apart from the adequacy or inadequacy of the total area (671,841 acres) of conifers, the age-classes in 1924 were not very badly out of adjustment. There should therefore be forthcoming a small but steady supply of softwood timber. As the Commissioners' afforestation programme progresses and as felling with replanting takes place the youngest age-class will gradually predominate, but can have little effect for 20-30 years in augmenting the annual supply and reserves of timber.
- (2) Hardwoods.—The age-class constitution of the 443,354 acres of hardwoods is wholly abnormal. For the last 40 years less and less attention has been paid in successive decades to hardwoods so that the total area planted in the decade 1914-24 was less than 5,000 acres. The area under mature and semi-mature hardwoods (208,228 acres) is well above the normal as is that of 41-80 years of age (180,541 acres). There should be no difficulty therefore in maintaining for some time the existing output of hardwoods, but at the present rate of planting the supply must inevitably decline in due course to an insignificant quantity.
- (3) Mixed Woods.—The age-classes in the mixed conifers and hardwoods are abnormal in the same direction as the hardwoods.
- (4) Rate of Planting.—Assuming that none of the age-classes 1 to 10, 11 to 20 and 21 to 40 years has as yet been diminished by fellings, it follows that planting during the past 40 years has taken place at the following rates:—

```
1914 to 1924 ... 120,693 acres or 12,069 acres per annum.
1904 to 1914 ... 124,451 ,, ,, 12,450 ,, ,,
1884 to 1904 ... 256,537 ,, ,, 12,827 ,, ,,
```

The censuses of 1905 and 1913–14 give the areas of plantations under 10 years old at 103,683 acres and 119,155 acres respectively. These figures presumably cover the areas planted in the previous nine years and correspond with average annual areas of 11,520 and 13,240 acres respectively.

Having regard to the different methods of conducting the censuses, the figures coincide as closely as can be expected and warrant the general statement that the rate of planting in Great Britain has been fairly constant at about 12,000 acres per annum; with a woodland area estimated in 1905 at 2,191,000 acres (viz., the total area, 2,768,000 less coppice 577,000) this corresponded with an average rotation of 180 years. In point of fact the average age at which the trees were felled was much less, and there is every indication therefore that even before the war the woodlands were in a state of retrogression.

Two new factors enter into the decade 1914 to 1924, namely, the war, which cut the planting period down by about 50 per cent. and the operations of the Commissioners which accounted for 37,763 acres.

Plantations formed in the 40 years 1844 to 1884 and still surviving, had an area of 629,800 acres, equivalent to an average of 15,770 acres per annum. Actually the average annual planting area must have been considerably larger as war fellings are known to have been heavy in this class which provided much pit-wood.

No useful deductions can be drawn from the over 80 years age-

class figures.

It would appear that following a revival of planting in the last stages of, and after, the Napoleonic wars, the rate gradually slowed down during the 19th century to revive again in the first decade of the 20th century. Concurrently with the general slowing down there has been a marked displacement of hardwoods (mainly oak) by conifers.

Coppice and Coppice-with-Standards.

The area under coppice and coppice-with-standards is 528,680 acres or 17.9 per cent. of the total area of woodlands; of this, 99,800 acres are estimated to be coppice and 428,880 acres coppice-with-standards. Most of this area occurs in England which has 485,229 acres of coppice and coppice-with-standards (91.8 per cent.) as compared with 35,331 acres in Wales (6.7) and 8,120 acres (1.5) in Scotland. Forty-five per cent. of woods of this description in Great Britain are found in a few counties in the south-east of England—Kent, Surrey, Sussex and Hampshire having between them 239,000 acres. Corresponding figures for the censuses of 1905 and 1913/14 are given in Table V:—

	Year.	England.	Wales.	Scotland.	Great Britain.
1905 1913–14 1924		 Acres. 538,123 520,715 485,229	Acres. 15,733 20,255 35,331	Acres. 23,015 27,395 8,120	Acres. 576,871 568,365 528,680

Table V.—Area under Coppice and Coppice-with-Standards.

These figures are not strictly comparable owing to changes in classification.

Scrub.

The area under scrub amounts to 330,703 acres or 11·2 per cent. of the total woodland area. Much the greatest proportion occurs in Scotland where 208,359 acres (63·0 per cent.) are found, mainly in Argyll and Inverness. In England the area is 87,410 acres and in Wales 34,934 acres.

Scrub was not differentiated in the censuses of 1905 and 1913-14.

Felled or Devastated Woods.

Of the total woodland area $16\cdot 1$ per cent. is shown as having been felled or devastated at the end of the period under review, the area being 478,106 acres. Of this, 221,182 acres (46·3 per cent.) occur in Scotland, 194,742 acres (40·7 per cent.) in England and 62,182 (13·0 per cent.) in Wales.

In England there are no counties with over 30 per cent. felled area, but Rutland, Cumberland and Durham each have between 25 and 29 per cent. The proportion is much higher in Wales, being 50·4 per cent. in Cardigan, 43·8 in Pembroke, 35·6 in Carmarthen and 34·9 in Montgomery. Four counties in Scotland have between 30 and 37 per cent. felled (Clackmannan 36·9, Kinross 34·9, Aberdeen 31·8 and Fife 30·5). Maps showing the distribution of the felled areas are appended. (Facing p. 46.)

It may be of interest to enquire what area was brought under the axe during and immediately after the war. The data are not sufficient to enable a close estimate to be made, but it is believed that it is possible to make a reasonable approximation to the facts. The total area now classified as "felled or devastated" (478,000 acres) was felled partly before and partly during and after the war. Pre-war fellings were differentiated for Scotland and amount to 72,000 acres out of the 221,000 acres; they were not kept separate for England and Wales but were known to be proportionately very much smaller. It is believed that 85,000 acres is a fair estimate for the whole of Great Britain. This indicates that of the area returned in 1924 as felled or devastated 393,000 acres were cut over subsequently to 1914.

On the other hand a proportion of the area appearing in the 1 to 10 age-class represents areas felled during or after the war but replanted. This proportion is estimated roundly at 51,000 acres, and is obtained by deducting from the total area of the 1 to 10 age-class (121,000 acres) the area of new ground afforested (estimated at 35,000 acres) and also the area of pre-war fellings which has been replanted (estimated also at 35,000 acres). On these bases (and excluding coppice areas which were cut over and have simply reverted to coppice) the total area cut during and immediately after the war comes out at 444,000 acres.

Uneconomic Woods.

The area of uneconomic woods (including shelter belts and amenity woods) is 204,293 acres or $6\cdot 9$ per cent. of the total area of woodlands. The distribution is as follows: England 109,529 acres, Wales 8.011 acres, Scotland 86,753 acres.

Ownership.

Of the total woodland area of the country, 2,720,000 acres (91.9 per cent.) belong to private individuals, 40,000 acres (1.4 per

cent.) to corporate bodies and 199,000 acres (6.7 per cent.) to the State.

The State-owned forest areas include the total plantable ground acquired by the Forestry Commission up to 30th September, 1924.

Contents of British Woodlands.

The census did not include a systematic estimate of the contents of the woodlands nor of the area occupied by different species of trees, although some reporters indicated the approximate density of stocking and the predominant species.

In order to arrive at a rough approximation of contents, a number of independent estimates were made of the quantities of timber of saw-mill size and of pitwood size in the types of woodland classified as "economic or potentially economic." While the estimates varied considerably in details the totals were all of the same order of magnitude.

Estimate of Contents of British Woodlands, 1924.

					Millions of cu. ft quarter-girth measurement.		
Saw Timber Size	:S						
Coniferous		•••	•••	•••	748		
Hardwood	•••	3	•••	•••	798		
		•				1,546	
Pitwood Sizes-							
Coniferous			•••		374		
Hardwood			•••	•••	342		
iiui awood	•••	•••	•••	***		716	
			7	otal	•••	2,262	

The estimate is for timber and pitwood sizes only and excludes branchwood; further, no account is taken of hedgerow timber or of the contents of the 204,293 acres of woodland classified as uneconomic (amenity woods, etc.).

Summary and Conclusions.

1. The total area, which is now, or was in recent years, woodland of one kind or another, amounted in 1924 to 2,958,672 acres, equivalent to 5.3 per cent. of the total land area of Great Britain.

2. The woodlands were constituted as follows:—

III I Franci				Acres.	Acres.	Per cent.
High Forest—			λO	051 011		22.7
Conifers	• • •	•••	4.1	671,841		-
Hardwoods	•••	•••	34.	443,354		120
\mathbf{Mixed}	•••	•••	າລ	301,695		10.5
			1	. <u> </u>	1,416,890	= 47.9
Coppice-with-sta	ndard	s	100	428,880	10.15	
Coppice	•••	•••		99,800	3.4	
* *					528,680	= 17.9
Scrub	•••	•••	•••			= 11.2
Felled or devasta	ated	•••	•••			$= 16 \cdot 1$
Total econor	mic or	potent	tially			
productiv	e	• • • • •	•••		2,754,379	$= 93 \cdot 1$
Other woods not commercial pro					204,293	= 6.9
			7	Total	2,958,672	=100.0

3. The high forest (1,416,890 acres) is reasonably, but by no means fully, productive. The best timber was felled during and immediately after the war.

The coppice and coppice-with-standards (528,680 acres) repre-

sents under modern conditions a poor form of silviculture.

Scrub, 330,703 acres, and felled woodlands, 478,106 acres (in all 808,809 acres) represent over a quarter of the nominal woodland area and are producing nothing.

There remain 204,293 acres of amenity woods and shelter belts, park timber, etc., which primarily serve some purpose other than timber production.

- 4. The economic or potentially productive woodlands are estimated to contain in all about 2,262 million cubic feet of timber and pitwood.
- 5. The area cut over during and immediately after the war is estimated at rather less than 450,000 acres and the volume of timber felled at approximately 1,000 million cubic feet. This is equivalent to roughly one-third of the total volume standing in 1914.
- 6. At the present time and in consequence of the war fellings. reserves of mature coniferous timber are very low and equivalent to not more than six months' consumption. The younger crops are on the same scale but are well distributed through the various age-classes.

The reserves of mature hardwoods (mainly oak), which were not drawn on to the same extent during the war, are considerable although the average quality is not good. There is a great lack of young hardwood plantations. Oak planting in particular has gone out of fashion in favour of conifers. When the existing mature and semi-mature oak woods have disappeared, as they are steadily doing, the supply of home-grown oak will become negligible.

- 7. There was distinct evidence in the woodland censuses of 1905 and 1913-14, that the total area of woodland was steadily diminishing. The average rate of planting from 1884 onwards had been about 12,000 acres per annum, which was roughly about 50 per cent. of the rate required to maintain the nominal woodland area in a good state of productivity. The unprecedented war fellings swept away the bulk of the best coniferous timber, the best ash and much good oak.
- 8. As regards the future, it is certain that fellings will go on steadily to provide revenue and that private planting at best will do no more than replace current fellings. Further, landowners are less and less inclined to plant hardwood trees, such as oak, which are unremunerative to grow. At the same time a gradual degeneration may be looked for in the stocking of coppice-with-standards and coppice woods. It is unlikely, therefore, that the area of effectively productive woodland in private ownership will in the future exceed 1½ million acres, if indeed it reaches that figure. Any acreage over this figure which is deemed necessary for the welfare of the country will have to be planted by the State.

APPENDIX 1.

LIST OF COUNTY ORGANISERS WHO RENDERED ASSISTANCE IN CONNEXION WITH THE CENSUS OF WOODLANDS.

P. C. Ackers, Esq. A. Arnold, Esq. S. R. Bagnell, Esq. K. Bagnen, Esq. H. Bailey, Esq. H. A. Benyon, Esq. G. B. Bovill, Esq. F. Brown, Esq. F. V. Bruce.
W. E. Candy, Esq.

W. E. Candy, Esq.
M. C. Connolly, Esq.
E. Davidson, Esq.
W. Dawson, Esq.
Lt.-Col. Sir F. D. W. Drummond.
Captain J. D. D. Evans.
L. Evers-Swindell, Esq.
C. Fane, Esq.
F. W. Fleet, Esq.
F. W. Forbes, Esq.
L. Fosbrooke, Esq.
S. Gilbert, Esq.

S. Gilbert, Esq.
J. C. Harford, Esq.
J. Harris, Esq.

R. A. Hobbs, Esq. H. Jacobs, Esq.

John Jones, Esq.

Brigadier-General H. G. J.

de Lotbinière.

J. Marsden-Smedley, Esq. Rear-Admiral H. T. O. Marshall.

L. H. Marshall, Esq.

A. C. P. Medrington, Esq. Hon. N. A. Orde-Powlett. Colonel B. J. Petre.

J. S. Rutherford, Esq.

J. M. Simpson, Esq.

Colonel A. H. Smith. C. F. Stone, Esq.

J. I. Storrar, Esq. Thomas Thomson, Esq.

Colonel Sir H. L. Watkin Williams

Wynn, Bart. H. J. Watson, Esq. M. L. Wheldon, Esq. E. B. Whish, Esq.

Percy Wilkinson, Esq. Captain A. D. Wingate.

Leslie S. Wood, Esq. W. H. Yeo, Esq.

APPENDIX 2 (a).

		nsus of \lassification				
	(0)	assincan	ni by Alea	•	iiry No	
County			Estate .	• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	
Parish						
Wood		• • • • • •	Owner.	• • • • • • • •		• • • • • • • •
		AG	E CLASS	ES.		
	1 to 10 Years.	11 to 20 Years.	21 to 40 Years.	41 to 80 Years.	Over 80 Years.	TOTAL.
I. Economic or potentially productive:— Conifers Mixed conifers and hardwoods	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Total						
Coppice, and copscrub Felled, and/or d	•••	••	ls	•••		
II. Uneconomic (timber, et	including c.)		woods, s	helter be	lts, park	
		T	OTAL	••		
III. Optional inform (b) half so devastated	stocked,	to whethe (c) less t	r the area han half	is (a) fully stocked	stocked, but not	
••••••	• • • • • • • •	•••••	• • • • • • • •		• • • • • • • •	• • • • • • • • •
• • • • • • • • • • • • • • • • • • • •	· · · · · · · · · ·	• • • • • • • • • •	• • • • • • •			
••••••	• • • • • • • • • •	• • • • • • • • •	• • • • • • •		• • • • • • • • • • • • • • • • • • • •	<i></i>
••••••	• • • • • • • •					• • • • • • • • •
Signature			Describ	tion		
Date			•		•••••	

APPENDIX 2 (b).

INSTRUCTIONS FOR MARKING ORDNANCE SHEETS.

CENSUS OF WOODLANDS.

1. Classification.—All woodlands of 2 acres and upwards will be classified under the following heads:—

CLASSIFICATION OF WOODS.

		AG	E CLASS	ES.		
	1 to 10 Years.	11 to 20 Years.	21 to 40 Years.	41 to 80 Years.	Over 80 Years.	TOTAL.
I. Economic or potentially productive:— (a) Conifers (b) Mixed conifers and	A	В	С	D	E	
hard- woods	F	G	Н	J	K	
(c) Hard - woods	L	M	N	o	Р	
(d) Coppice and (e) Scrub (f) Felled, and/						Q R S
II. Uneconomic (in timber, etc.			woods, sl	nelter bel	ts, park	Т

2. Marking Ordnance Sheets. Essential Information.—Neglecting variations embracing areas of less than 2-acre extent, the boundaries of the different types stated in paragraph 1 above should be marked on the Ordnance Sheet, and the corresponding letter placed in the sub-division. Thus, the letter H in a sub-division would indicate that the crop therein was "Mixed conifers and hardwoods aged 21 to 40 years." The success of the survey will depend primarily on the way in which the Ordnance Sheets are marked and lettered.

Where the density of stocking of the crop can be given, such information will be useful. The following figures should be used in indicating density of stocking:—

Thus the 5-acre coniferous wood 41 to 80 years old, if half stocked, would be

indicated by
$$\begin{cases} \mathbf{D} \\ \mathbf{5} \text{ ac} \\ \mathbf{0.5} \end{cases}$$

3. **Definitions.**—By "Economic Woods" are meant areas which are maintained for timber production, or, in virtue of the fact that they are not devoted primarily to any other purpose, may be regarded as potentially available for timber production.

By "Uneconomic Woods" are meant those areas which are not maintained for timber production, but primarily serve some other purpose.

"Mixed Conifers and Hardwoods."—This category will only be used where it is difficult to classify a wood as "Conifers" or "Hardwoods." Woods predominantly coniferous will be classified as conifers, and woods predominantly hardwoods as hardwoods.

By "Coppice and Coppice-with-Standards" are meant areas on which the underwood is regularly cut over. Overgrown oak and other coppice should be classified either as (a) Hardwoods where the crop is sufficiently good to give promise of growing into commercial timber, or (b) Scrub where it shows no such promise.

FORESTRY COMMISSION,

22, Grosvenor Gardens, S.W.1. 1921.

		BEDF	ORD.	Berks	HIRE.	Вискім	GHAM.
	Type of Woodland.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	HIGH FOREST :-	Acres.		Acres.		Acres.	
1 2 3 4 5	Conifers— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,	104	=	1,766 855 1,532 771 225		778 534 1,078 481 144	- - -
	Total	1,688		5,149		3,015	<u> </u>
6 7 8 9	Hardwoods— 1-10 years	43 66 310 1,329 2,158	Ξ	54 209 1,218 2,661 3,918		66 349 692 10,374 7,453	_ -
	Total	3,906		8,060		18,934	
11 12 13 14 15	Mixed conifers and hard-woods— 1-10 years	44 19 119 756 602	_ _ _ _	305 268 837 1,000 1,203	_ _ _ _	78 173 379 1,171 669	=
	Total	1,540	_	3,613	_	2,470	
16 17 18 19 20	Total High Forest— 1-10 years	997 219 603 2,221 3,094		2,125 1,332 3,587 4,432 5,346		922 1,056 2,149 12,026 8,266	=
	High Forest—Grand Total	7,134	54 · 3	16,822	42.2	24,419	70 · 7
21 22 23 24 25	COPPICE COPPICE-WITH-STANDARDS SCRUB FELLED OR DEVASTATED UNECONOMIC	214 3,489 46 1,363 893	1·6 26·6 0·3 10·4 6·8	1,548 11,088 1,955 6,891 1,560	3·9 27·8 4·9 17·3 3·9	225 3,417 2,164 1,519 2,788	0·6 9·9 6·3 4·4 8·1
	TOTAL	13,139	100	39,864	100	34,532	100
26 27 28	Total woodland area as shown in returns of 1913 Total land area of County Woodland area (1924) as	12,800 301,829	_	37,700 460,730	=	35,900 477,308	_
	percentage of total land area		4 · 4	_	8.7	_	7.2

IN EACH COUNTY OF ENGLAND.

	Cambridg	Е.	Снеѕте	R.	Cornwa	LL.	Cumberla	AND.
	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	Acres.		Acres.		Acres.		Acres.	
1 2 3 4 5	18 126 223 139	_ _ _ _	744 379 853 535 320		820 332 776 952 201	_ _ _ _	1,526 998 2,029 1,937 203	_ _ _ _
	506		2,831		3,081		6,693	
6 7 8 9 10	9 3 7 734 143	_ _ _ _	137 159 586 1,196 2,425		179 164 567 1,470 2,642		71 205 498 2,669 3,700	
	896	_	4,503		5,022	_	7,143	
11 12 13 14 15	7 42 189 728 159		137 635 1,001 2,113 2,625		221 101 499 2,495 1,784		158 308 1,324 2,853 825	
	1,125		6,511		5,100		5,468	<u> </u>
16 17 18 19 20	34 171 419 1,601 302		1,018 1,173 2,440 3,844 5,370	- - - -	1,220 597 1,842 4,917 4,627	- - -	1,755 1,511 3,851 7,459 4,728	_ _ _ _
	2,527	45.6	13,845	62.6	13,203	47 · 2	19,304	55.3
21 22 23 24 25	454 1,114 42 511 897	8·2 20·1 0·7 9·2 16·2	330 388 1,906 3,238 2,393	1·5 1·8 8·6 14·7 10·8	6,183 1,930 2,580 2,468 1,621	22·1 6·9 9·2 8·8 5·8	654 1,161 2,815 9,883 1,104	1·9 3·3 8·0 28·3 3·2
	5,545	100	22,100	100	27,985	100	34,921	100
26 27	6,800 551,466	=	24,800 647,559	_	32,600 866,320	_	35,200 961,544	_
28	_	1.0		3 · 4		3.2		3.6

			DER	BY.	Dev		Dor	SET.
	Type of Woodland.		Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
			Acres.		Acres.		Acres.	
1 2	HIGH FOREST:— Conifers— 1-10 years 11-20	••	303 413	_	4,348 2,265		1,101 405	
3 4 5	21–40 ,, 41–80 ,, Over 80 ,,		895 571 255	=	3,170 2,621 554	_	915 1,445 84	
	Total		2,437	_	12,958		3,950	
6 7 8 9 10	Hardwoods— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,		56 147 805 2,449 2,497	=	198 256 1,220 10,283 6,626		2 60 343 2,642 3,027	
	Total		5,954		18,583		6,074	_
11 12 13 14 15	Mixed conifers and har woods— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,	:d-	175 497 1,700 1,939 675		304 379 2,591 7,646 2,957	_	82 140 1,180 1,274 388 3,064	
16 17 18 19 20	Total High Forest— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,		534 1,057 3,400 4,959 3,427		4,850 2,900 6,981 20,550 10,137	-	1,185 605 2,438 5,361 3,499	
	High Forest—Grand Tot	al	13,377	62 · 3	45,418	56.3	13,088	33 · 4
21 22 23 24 25	COPPICE COPPICE-WITH-STANDARD SCRUB FELLED OR DEVASTATED UNECONOMIC		262 443 2,225 3,280 1,864	1·2 2·1 10·4 15·3 8·7	8,599 6,963 5,980 11,344 2,306	10·7 8·6 7·4 14·1 2·9	1,873 14,820 1,764 3,984 3,673	4·8 37·8 4·5 10·1 9·4
	Total		21,451	100	80,610	100	39,202	100
26 27 28	Total woodland area shown in returns of 191: Total land area of Count Woodland area (1924)	as	26,700 646,168		88,500 1,666,797		38,200 624,031	_
	percentage of total la	nd		3.3	_	4.8	_	6.3

IN EACH COUNTY OF ENGLAND—continued.

	DURHAN	vI.	Essex		GLOUCEST	ER.	Намрѕн	IRE.
	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood-, land Area.
	Acres.		Acres.		Acres.		Acres.	
1 2 3 4 5	1,205 947 1,511 2,559 254	 	128 162 105 60 24	 	3,428 1,978 1,855 738 36	 	4,849 1,773 4,234 5,050 1,310	
	6,476		479		8,035		17,216	
6 7 8 9 10	31 57 38 2,817 5,189	_ _ _ _	46 409 691 2,289 2,214	— — —	827 1,146 2,133 4,164 11,740		227 214 1,170 7,677 6,685	
	8,132		5,649		20,010		15,973	
11 12 13 14 15	272 594 1,457 2,956 1,274		63 28 394 637 216		484 830 1,803 1,673 977		93 204 3,365 8,437 5,081	
	6,553		1,338		5,767		17,180	
16 17 18 19 20	1,508 1,598 3,006 8,332 6,717		237 599 1,190 2,986 2,454		4,739 3,954 5,791 6,575 12,753		5,169 2,191 8,769 21,164 13,076	
	21,161	64 · 2	7,466	24.5	33,812	58 · 1	50,369	41.3
21 22 23 24 25	39 1,834 8,398 1,530	$ \begin{array}{r} - \\ 0 \cdot 1 \\ 5 \cdot 6 \\ 25 \cdot 5 \\ 4 \cdot 6 \end{array} $	686 12,199 2,254 1,516 6,325	2·2 40·1 7·4 5·0 20·8	1,273 15,085 1,553 5,507 976	2·2 25·9 2·7 9·4 1·7	2,665 50,554 2,260 9,657 6,533	2·2 41·4 1·8 7·9 5·4
	32,962	100	30,446	100	58,206	100	122,038	100
26 27	30,300 645,739		35,500 976,125		56,300 803,246	_	119,500 1,048,954	_
28	_	5 · 1	-	3.1	_	7.2		11.6

		Here	FORD.	Herte	ord.	Huntii	NGDON.
	Type of Woodland.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	HIGH FOREST:— Conifers—	Acres.		Acres.		Acres.	
1 2 3 4 5	1-10 years 11-20 ,, 21-40 ,, 41-80 ,,	1,628 438 382 73		58 193 390 263 303		 8 293 28 	
	Total	. 2,535	_	1,207	_	329	
6 7 8 9 10	11-20 ,, 21-40 ,, 41-80 ,,	. 292 . 258 . 1,433 . 2,238 . 1,948		13 9 126 1,334 4,014	=		
	Total	. 6,169	_	5,496	_	868	
11 12 13 14 15	11-20 ,, 21-40 ,, 41-80 ,,	374 415 1,001 1,242 292		51 239 526 914 690		5 — 61 139	
	Total	. 3,324	-	2,420	_	205	
16 17 18 19 20	11-20 ,, 21-40 ,, 41-80 ,,	. 2,294 . 1,111 . 2,816 . 3,553 . 2,254		122 441 1,042 2,511 5,007		5 8 354 970 65	
	High Forest—Grand Tota	1 12,028	27.8	9,123	35 · 2	1,402	31.0
21 22 23 24 25	COPPICE COPPICE-WITH-STANDARDS SCRUB FELLED OR DEVASTATED UNECONOMIC	6,793 13,568 2,129 8,381 344	15·7 31·4 4·9 19·4 0·8	} 12,086 420 1,824 2,459	46·7 1·6 7·0 9·5	37 1,598 52 393 1,043	0·8 35·3 1·1 8·7 23·1
	Total	. 43,243	100	25,912	100	4,525	100
26 27 28	Total woodland area as shown in returns of 1913. Total land area of County. Woodland area (1924) as	. 42,400 . 536,071	_	21,000 402,861	_	5,000 233,221	=
	percentage of total land area	-	8 · 1	_	6.4		1.9

IN EACH COUNTY OF ENGLAND—continued.

	KENT.		Lancashi	RE.	Leicesti	ER.	Lincol	n.
	Area.	Percentage of Total Wood- land Area.	. Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	Acres.		Acres.		Acres.	Ì	Acres.	
1 2 3 4 5	670 514 603 368 10	_ _ _ _	90 318 488 2,491 45		100 77 277 30 51	_ _ _ _	479 463 1,508 274 156	
	2,165		3,432		535		2,880	
6 7 8 9 10	111 260 609 2,776 1,186	_ _ _ _	4 422 4,239 1,255		54 15 196 2,219 1,882	_ 	72 408 2,813 4,776 7,814	
	4,942		5,920		4,366		15,883	
11 12 13 14 15	125 71 922 919 331	— — —	491 202 941 5,427 720		462 135 951 1,095 1,443		871 1,111 3,283 1,935 560	
	2,368		7,781		4,086		7,760	<u></u>
16 17 18 19 20	906 845 2,134 4,063 1,527		581 524 1,851 12,157 2,020		616 227 1,424 3,344 3,376		1,422 1,982 7,604 6,985 8,530	=
	9,475	8.8	17,133	43.3	8,987	67 · 3	26,523	64.9
21 22 23 24 25	9,339 72,010 5,142 6,464 5,825	8·6 66·5 4·7 6·0 5·4	2,938 4,621 1,935 3,197 9,754	7·4 11·7 4·9 8·1 24·6	419 1,883 935 872 257	3·2 14·1 7·0 6·5 1·9	441 2,933 1,315 7,291 2,369	1·1 7·2 3·2 17·8 5·8
	108,255	100	39,578	100	13,353	100	40,872	100
26 27	95,000 972,940	_	41,800 1,182,432	_	14,200 530,642	_	44,900 1,700,844	=
28		11.1		3.3	_	2.5		2.4

		MIDDLE	ESEX.	Norfo	olk.	Northa	MPTON.
	Type of Woodland.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	HIGH FOREST:	Acres.		Acres.		Acres.	
1 2 3 4 5	Conifers— 1-10 years			6,785 1,202 1,754 1,592 1,089	<u>-</u>	736 217 219 24 24	_
1	Total	27	_	12,422		1,220	
6 7 8 9 10	Hardwoods— 1-10 years	 161 94		43 362 847 1,492 2,826		135 199 367 2,963 4,082	=
	Total	255		5,570	_	7,746	
11 12 13 14 15	Mixed conifers and hard- woods— 1-10 years	 		414 748 1,222 5,456 3,967		65 82 448 249 106	
	Total	215	_	11,807		950	
16 17 18 19 20	Total High Forest— 1-10 years	154 239 104		7,242 2,312 3,823 8,540 7,882	=	936 498 1,034 3,236 4,212	— — —
	High Forest—Grand Total	497	26 · 2	29,799	60.9	9,916	39.5
21 22 23 24 25	COPPICE	17 504 42 383 454	26·5 2·2 20·2	1,707 4,556 1,843 5,878 5,138	9·3 3·8 12·0	524 11,993 444 1,553 657	47·8 1·8 6·2
	TOTAL	1,89.7	100	48,921	100	25,087	100
26 27 28	Total woodland area as shown in returns of 1913. Total land area of County. Woodland area (1924) as	3,400 219,992		58,100 1,308,156	_	28,600 636,123	<u> </u>
	percentage of total land area	1	0.9		3.7		3.9

IN EACH COUNTY OF ENGLAND—continued.

N	ORTHUMBERL	AND.	Nottinge	IAM.	Oxfor	D.	Rutla	ND.
	Area. ·	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	Acres.		Acres.		Acres.		Acres.	
1 2 3 4 5	2,739 2,370 5,796 6,928 823		1,132 1,088 1,966 497 218	_ _ _	142 301 456 151 98	_ _ _ _	3 13 22 47 —	
	18,656		4,901	_	1,148		85	
6 7 8 9 10	10 28 687 3,615 3,018		102 261 401 3,700 7,849		170 131 1,000 6,331 4,846	_ _ _	 10 134 68 920	
	7,358		12,313		12,478	_	1,132	
11 12 13 14 15	210 364 1,573 5,049 2,652		218 505 1,678 1,202 1,533		39 506 463 311 270		20 15 207 47 56	
	9,848		5,136		1,589	_	345	_
16 17 18 19 20	2,959 2,762 8,056 15,592 6,493		1,452 1,854 4,045 5,399 9,600		351 938 1,919 6,793 5,214	_ _ _	23 38 363 162 976	
	35,862	64 · 4	22,350	73.9	15,215	60.5	1,562	57.9
21 22 23 24 25	17 208 4,036 11,433 4,144	0·0 0·4 7·3 20·5 7·4	390 1,751 1,361 3,703 698	1·3 5·8 4·5 12·2 2·3	513 3,478 1,819 1,887 2,231	2·1 13·8 7·2 7·5 8·9	22 223 54 780 58	0·8 8·3 2·0 28·9 2·1
	55,700	100	30,253	100	25,143	100	2,699	100
26 27	55,900 1,284,189	_	31,300 536,678	_	26,100 476,663	_	3,800 97,087	=
28		4.3	_	5.6	_	5.3		2.8

		SALO	P.	Somer	SET.	Staff	ORD.
	Type of Woodland.	Агеа.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	High Forest:— Conifers—	Acres.		Acres.		Acres.	
1 2 3 4 5	1-10 years	1,267 1,842		3,109 1,365 2,023 2,068 14		2,886 480 797 1,481 1,138	=
	Total	5,840		8,579		6,782	
6 7 8 9 10	Hardwoods— 1-10 years	410 347		120 149 613 4,451 1,761		43 57 829 3,305 4,046	
	Total	15,148	_	7,094		8,280	
11 12 13 14 15	Mixed conifers and hard- woods— 1-10 years	615 1,797 4,498		89 508 1,290 2,231 585		481 336 1,776 2,968 1,402	
	Total	8,912	_	4,703		6,963	
16 17 18 19 20	Total High Forest— 1-10 years	2,292 3,986 12,108		3,318 2,022 3,926 8,750 2,360		3,410 873 3,402 7,754 6,586	=
	High Forest—Grand Total	29,900	59 · 4	20,376	44 · 8	22,025	58.3
21 22 23 24 25	COPPICE COPPICE-WITH-STANDARDS SCRUB FELLED OR DEVASTATED UNECONOMIC	1,543 3,774 2,942 10,647 1,576	3·1 7·5 5·8 21·1 3·1	4,742 10,353 4,154 4,820 1,055	10·4 22·8 9·1 10·6 2·3	1,504 1,674 2,555 4,878 5,153	4·0 4·4 6·8 12·9 13·6
	Total	50,382	100	45,500	100	37,789	100
26 27 28	Total woodland area as shown in returns of 1913 Total land area of County Woodland area (1924) as percentage of total land	53,000 856,623	_	46,900 1,034,720	_	38,900 734,920	=
	area	<u> </u>	5.9		4 · 4		5.1

31
IN EACH COUNTY OF ENGLAND—continued.

	Suffolk	:.	Surrey	·.	Sussex		Warwic	
	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	Acres.		Acres.		Acres.		Acres.	
1 2 3 4 5	387 1,704 1,317 1,727 794	1 — — — — — — — — — — — — — — — — — — —	738 465 1,888 3,325 .327		2,217 1,282 1,403 1,179 591	— — —	169 109 254 155	_ _ _ _
	5,929	-	6,743		6,672		687	
6 7 8 9 10	154 177 472 2,399 5,193	7 -	50 161 526 1,972 3,751		74 584 1,927 3,128 7,601		8 324 704 3,785 2,682	
	8,39	5 —	6,460	_	13,314		7,503	
11 12 13 14 15	45 60 77; 1,31; 2,53;	8 —	176 273 996 3,136 1,757		263 439 2,154 2,251 2,679		48 87 956 1,141 265	
	5,68	5	6,338		7,786		2,497	_
16 17 18 19 20	99 2,48 2,56 5,44 8,51	9 — 1 — 4 —	964 899 3,410 8,433 5,835	_ _ _ _	2,554 2,305 5,484 6,558 10,871		225 520 1,914 5,081 2,947	
	20,00	9 55.0	19,541	34.6	27,772	21.3	10,687	55 · 3
21 22 23 24 25	} 10,71 97 2,87 1,80	7 2·7 2 7·9	2,673 20,413 3,380 7,489 2,963	4·7 36·2 6·0 13·3 5·2	7,642 74,034 4,698 9,132 6,840	5·9 56·9 3·6 7·0 5·3	1,144 4,752 1,210 962 565	5-9 24-6 6-3 5-0 2-9
	36,37	1 100	56,459	100	130,118	100	19,320	100
26 27	39,30 945,41		55,900 458,211	=	127,600 928,735	=	19,800 601,451	=
28		3.8	_	12.3	-	14.0		3.2

		Westmo	RLAND.	WILTS		Worce	STER.
***************************************	Type of Woodland.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	HIGH FOREST:— Conifers—	Acres.		Acres.		Acres.	
1 2 3 4 5	1-10 years 11-20 ,,	184 912 576 737 152		962 1,039 1,371 847 113		364 544 399 84 —	
	Total	2,561		4,332	_	1,391	
6 7 8 9 10	Hardwoods— 1-10 years	7 		276 498 1,216 5,136 3,091		119 6 394 1,028 969	
	Total	2,056	_	10,217		2,516	
11 12 13 14 15	Mixed conifers and hard- woods— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,	4 48 765 2,146 405		319 242 1,442 2,354 1,770		85 179 1,132 756 224	
	Total	3,368	_	6,127	_	2,376	
16 17 18 19 20	Total High Forest— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,	195 960 1,405 3,357 2,068		1,557 1,779 4,029 8,337 4,974		568 729 1,925 1,868 1,193	
	High Forest—Grand Total	7,985	50 · 1	20,676	40.5	6,283	30.7
21 22 23 24 25	COPPICE COPPICE-WITH-STANDARDS SCRUB FELLED OR DEVASTATED UNECONOMIC	839 1,413 1,734 2,700 1,262	5·3 8·9 10·9 16·9 7·9	2,007 18,600 2,310 2,934 4,536	3·9 36·4 4·5 5·8 8·9	2,027 9,801 557 1,049 786	9·9 47·8 2·7 5·1 3·8
	Тотац	15,933	100	51,063	100	20,503	100
26 27 28	Total woodland area as shown in returns of 1913 Total land area of County Woodland area (1924) as percentage of total land	17,300 496,464		51,900 861,366	_	21,800 455,214	_
	area		3.2		5.9		4.5

33

IN EACH COUNTY OF ENGLAND—continued.

Yorkshire, E.R.		Yorkshire, N.R.		Yorkshire,	W.R.	Total, England.	
Percentage of Total Wood-land Area		Percentage of Total Wood-land Area.		Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area,
Acres.		Acres.		Acres.		Acres.	
794 724 1,444 672 52	_ _ _ _	1,641 1,640 3,123 2,383 793		988 1,219 2,198 1,633 355	 	52,552 31,253 52,139 48,139 11,148	
3,686		9,580		6,393		195,231	
21 107 341 1,260 2,053	_ _ _	30 129 1,075 4,002 5,819		166 607 1,859 11,017 9,652		4,425 8,598 29,680 137,966 157,787	
3,782	'	11,055	_	23,301		338,456	
316 495 1,845 1,956 571		206 767 3,429 6,603 2,850		554 588 2,925 5,182 922		9,347 13,796 51,547 96,264 49,436	
5,183		13,855		10,171		220,390	
1,131 1,326 3,630 3,888 2,676		1,877 2,536 7,627 12,988 9,462		1,708 2,414 6,982 17,832 10,929		66,324 53,647 133,366 282,369 218,371	
12,651	71.5	34,490	58 · 1	39,865	64 · 2	754,077	46.2
7 478 3,805 743	$ \begin{array}{c c} & -1 \\ & 0 \cdot 1 \\ & 2 \cdot 7 \\ & 21 \cdot 5 \\ & 4 \cdot 2 \end{array} $	214 484 6,174 13,258 4,706	$ \begin{array}{c c} 0.4 \\ 0.8 \\ 10.4 \\ 22.4 \\ 7.9 \end{array} $	1,223 1,430 5,336 6,598 7,648	$ \begin{array}{c c} 2 \cdot 0 \\ 2 \cdot 3 \\ 8 \cdot 6 \\ 10 \cdot 6 \\ 12 \cdot 3 \end{array} $	} 485,229 87,410 194,742 109,529	29·8 5·4 11·9 6·7
17,684	100	59,326	100	62,100	100	1,630,987	100
18,500 748,263	_	56,500 1,356,846		67,600 1,763,304		1,667,300 32,037,243	
	2.4	_	4 · 4		3.5		5 · 1
	Area. Acres. 794 724 1,444 672 52 3,686 21 107 341 1,260 2,053 3,782 316 495 1,845 1,956 571 5,183 1,131 1,326 3,630 3,888 2,676 12,651 7 478 3,805 743 17,684	Acres. 794 724 1,444 672 52 3,686 21 107 341 1,260 2,053 3,782 316 495 1,845 1,956 571 5,183 1,131 1,326 3,630 3,888 2,676 12,651 71.5 7 0.1 478 2.7 3,805 21.5 743 4.2 17,684 100	Area. September Area. Area. September Area. Acres. A	Area.	Area. $\begin{vmatrix} 5 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 &$	Area.	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

34

		Anglesey.		Brecon.		Cardigan.	
	Type of Woodland.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	High Forest : Conifers	Acres.		Acres.		Acres.	
1 2 3 4 5	1-10 years	3 15 7 76 —	_ _ _	864 637 717 244 27	 	774 86 696 361 285	_ _ _ _
	Total	101	_	2,489		2,202	
6 7 8 9	Hardwoods— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,	14 - 3 86 170		79 450 777 2,129 2,169		10 86 141 358	
	Total	273	_	5,604	_	595	
11 12 13 14 15	Mixed conifers and hard- woods— 1-10 years 11-20 , 21-40 , 41-80 ,	8 	_ _ _ _	56 57 405 598 101	 	98 65 147 116 18	
	Total	456		1,217	_	444	_
16 17 18 19 20	Total High Forest— 1-10 years	25 15 26 444 320		999 1,144 1,899 2,971 2,297		872 161 929 618 661	
	High Forest—Grand Total	830	40 · 1	9,310	33 · 1	3,241	24 · 7
21 22 23 24 25	COPPICE COPPICE-WITH-STANDARDS SCRUB FELLED OR DEVASTATED UNECONOMIC	40 28 112 48 1,010	1·9 1·4 5·4 2·3 48·9	} 2,974 7,869 7,388 609	10·6 27·9 26·2 2·2	1,822 202 919 6,617 325	13·9 1·5 7·0 50·4 2·5
	TOTAL	2,068	100	28,150	100	13,126	100
26 27 28	Total woodland area as shown in returns of 1913. Total land area of County Woodland area (1924) as	2,400 175,695	=	14,300 466,347		18,400 441,237	=
	percentage of total land area	_	1.2	_	6.0	_	3.0

IN EACH COUNTY OF WALES.

Carmarthen.		Carnarvon.		Denbio	н.	FLINT.		
	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood-land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	Acres.		Acres.		Acres.		Acres.	
1 2 3 4 5	806 510 409 120 40		1,788 222 395 332 142		758 524 1,200 1,220 72	_ _ _ _	238 157 253 196 29	
-	1,885		2,879		3,774		873	
6 7 8 9	51 82 617 880 806		9 185 20 1,105 1,192	——————————————————————————————————————	6 30 271 1,527 2,006	 	20 368 1,283 721	
	2,436		2,511	_	3,840		2,392	
11 12 13 14 15	35 91 664 337 463	_	33 10 738 1,156 605	_	93 56 818 2,355 958	 	30 136 336 861 453	
	1,590	_	2,542		4,280		1,816	
16 17 18 19 20	892 683 1,690 1,337 1,309		1,830 417 1,153 2,593 1,939		857 610 2,289 5,102 3,036		268 313 957 2,340 1,203	
	5,911	25.8	7,932	60.3	11,894	68 · 2	5,081	70.9
21 22 23 24 25	2,974 2,589 2,473 8,154 819	13·0 11·3 10·8 35·6 3·5	— 11 1,429 3,127 646	$ \begin{array}{c} - \\ 0 \cdot 1 \\ 10 \cdot 9 \\ 23 \cdot 8 \\ 4 \cdot 9 \end{array} $	836 636 634 3,055 392	4·8 3·6 3·6 17·5 2·3	204 122 555 1,035 173	2·9 1·7 7·7 14·4 2·4
 	22,920	100	13,145	100	17,447	100	7,170	100
26 27	22,900 586,152	_	16,000 360,306		19,000 426,186	_	7,600 163,041	_
28		3.9	_	3.6		4 · 1		4 · 4

		GLAMORGAN.		MERIONETH,		Monmouth.	
-	Type of Woodland.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	High Forest:—	Acres.		Acres.		Acres.	
1 2 3 4 5	Conifers— 1-10 years	3,060 2,436 682 74 5	_ _ _ _	385 231 565 866 5 30		3,467 10,041 744 177	_ _ _ _
	Total	6,257	-	2,577	_	14,429	
6 7 8 9 10	Hardwoods— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,	29 181 796 1,491 382	 	47 506 2,691 2,274		73 508 1,289 2,157 1,013	
	Total	2,879		5,518		5,040	
11 12 13 14 15	Mixed conifers and hard- woods— 1-10 years 11-20 , 21-40 , 41-80 , Over 80 ,	136 459 438 1,078 298	— — —	100 9 159 888 260		258 108 238 493	
	Total	2,409	_	1,416	_	1,097	
16 17 18 19 20	Total High Forest—	3,225 3,076 1,916 2,643 685		532 240 1,230 4,445 3,064		3,798 10,657 2,271 2,827 1,013	
	High Forest—Grand Total	11,545	39.6	9,511	51.0	20,566	46.2
21 22 23 24 25	COPPICE	2,376 2,558 4,855 6,202 1,641	8·1 8·8 16·6 21·3 5·6	68 269 4,314 3,398 1,079	0·4 1·4 23·2 18·2 5·8	5,958 9,916 3,441 4,449 167	13·4 22·3 7·7 10·0 0·4
	Total	29,177	100	18,639	100	44,497	100
26 27 28	Total woodland area as shown in returns of 1913 Total land area of County Woodland area (1924) as percentage of total land area	25,800 516,194	5.7	15,300 418,475 —	4.5	29,800 347,486 —	12.8

37

IN EACH COUNTY OF WALES-continued.

	Montgom	Pembro	KE.	RADNO	or.	TOTAL, V	VALES.	
	Percentage of Total Wood-land Area.		Area.	Percentage of Total Wood-land Area.		Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood-land Area.
	Acres.		Acres.		Acres.		Acres.	
1 2 3 4 5	1,361 1,974 1,964 906 179	 	18 167 254 169 41		537 814 451 567 72		14,059 17,814 8,337 5,308 1,422	
	6,384	_	649		2,441	_	46,940	
6 7 8 9 10	24 45 577 2,003 4,443	 	15 84 688 606 421		5 32 328 1,695 1,903		352 1,627 6,326 17,794 17,858	- - - -
	7,092		1,814		3,963		43,957	_
11 12 13 14 15	57 234 676 1,028 400		7 32 660 688 409		52 33 104 325 134		963 1,290 5,399 10,205 4,249	
	2,395		1,796		648		22,106	
16 17 18 19 20	1,442 2,253 3,217 3,937 5,022	_ _ _ _	40 283 1,602 1,463 871	 	594 879 883 2,587 2,109		15,374 20,731 20,062 33,307 23,529	
	15,871	47.9	4,259	45 · 2	7,052	48.5	113,003	44.6
21 22 23 24 25	455 4,754 11,558 503	1·4 14·3 34·9 1·5	212 265 274 4,133 288	2·2 2·8 2·9 43·8 3·1	365 451 3,305 3,018 359	2·5 3·1 22·7 20·7 2·5	35,331 34,934 62,182 8,011	13·9 13·8 24·5 3·2
.	33,141	100	9,431	100	14,550	100	253,461	100
26 27	23,900 505,738	_	10,300 392,384	_	10,800 299,521	_	216,500 5,098,762	_
28	-	6.6		2 · 4		4.9	·—	5.0
	(p. 19/992) o							

APPENDIX 3 (c).—ACREAGE UNDER WOODLANDS

		ABERDE	EEN.	Argyll Bute		Ayr	
	Type of Woodland.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area,
	High Forest :	Acres.		Acres.		Acres.	
1 2 3 4 5	Conifers— 1-10 years	2,456 4,725 13,257 27,236 13,380		4,168 4,622 4,531 7,273 1,839		1,291 2,016 3,408 1,665 121	
	Total	61,054		22,433]	8,501	
6 7 8 9 10	Hardwoods— 1-10 years	2 9 275 1,004 237		6 467 740 442		2 9 115 1,691 1,453	_
	Total	1,527		1,655		3,270	
11 12 13 14 15	Mixed conifers and hard-woods— 1-10 years	2 9 216 1,516 643	_	 48 502 1,869 992		37 81 496 1,140 617	=
	Total	2,386		3,411		2,371	
16 17 18 19 20	Total High Forest— 1-10 years	2,460 4,743 13,748 29,756 14,260		4,174 4,670 5,500 9,882 3,273		1,330 2,106 4,019 4,496 2,191	
	High Forest—Grand Total	64,967	50.9	27,499	30.5	14,142	45.7
21 22 23 24 25	COPPICE COPPICE-WITH-STANDARDS SCRUB FELLED OR DEVASTATED UNECONOMIC	} — 13,592 40,493 8,458	31.8	120 52,859 5,934 3,708	58·7 6·6	2,414 7,090 7,300	22.9
	TOTAL	127,510	100	90,120	100	30,95	4 100
26 27 28	Total woodland area as shown in returns of 1914. Total land area of County. Woodland area (1924) as percentage of total land	104,035 1,261,521		48,631 2,130,130		27,18 724,25	
	area		10.1	_	4.2		4.3

IN EACH COUNTY OF SCOTLAND.

	Banff.		Berwi	cĸ.	Саітніре	s s .	CLACKMAI	NNAN.
	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	Acres.		Acres.		Acres.		Acres.	
1 2 3 4 5	745 1,068 2,351 8,573 2,627	_ _ _ _	459 761 1,176 2,389 598		— 37 39 253 15	_	49 254 352 413 311	
	15,364		5,383		344		1,379	
6 7 8 9 10	 33 35 8	 	15 5 519 1,379		- - - 3	- - - -		
	76		1,918		9		415	
11 12 13 14 15	31 		5 84 385 761		- 5 8 2		 34 92 	
	331		1,235		15		126	
16 17 18 19 20	745 1,099 2,384 8,730 2,813		474 766 1,265 3,293 2,738		6 37 44 261 20		49 254 406 622 589	=
21 22 23 24 25	15,771 3,234 5,556 2,484 27,045	58·3 — 12·0 20·5 9·2	8,536 1,085 2,617 4,552 16,790	50·8 	368 975 13 524 1,880	19·6 	1,920 43 1,270 211 3,444	55·8 1·2 36·9 6·1 100
26 27	27,729 403,053		15,074 292,535		· 858 438,833		3,418 34,927	=
28	_	6.7	_	5 · 7		0.4		9.9

APPENDIX 3 (c).—ACREAGE UNDER WOODLANDS

			Dumba	i	Dumfr	IES.	Elgi	N.
Type of Woodland.			Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	HIGH FOREST:-		Acres.		Acres.		Acres.	
1 2 3 4 5	1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,		83 337 880 681 176	_ _ _ _	2,071 1,927 3,603 4,921 256		4,140 2,947 3,931 15,336 2,720	
	Total		2,157		12,778		29,074	
6 7 8 9 10	Hardwoods— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,		1 1 131 1,506 1,147		33 20 233 2,229 3,656	_	— 11 180 2,464	
	Total		2,786		6,171		2,655	
t	Mixed conifers	and hard-						
11 12 13 14 15	1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,	••••••	4 6 68 467 560	_	16 55 502 1,415 236		— 45 296 1,076	
	Total		1,105	_	2,224		1,417	
16 17 18 19 20	Total High For- 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,	est	88 344 1,079 2,654 1,883	_	2,120 2,002 4,338 8,565 4,148	_	4,140 2,947 3,987 15,812 6,260	
	High Forest—Gr	and Total	6,048	39.0	21,173	66.9	33,146	66.6
21 22 23 24 25	COPPICE COPPICE-WITH-ST SCRUB FELLED OR DEVA		5,536 1,490 2,420	9.6	30 2,367 5,432 2,617	7·5 17·2	 3,134 12,628 890	25.3
	TOTAL		15,494	100	31,619	100	49,798	100
26 27 28	Total woodland shown in return Total land area o Woodland area	s of 1914 f County	8,044		30,814 686,302		48,318 304,931	
_	percentage of area		_	9.9	-	4.6		16.3

41
IN EACH COUNTY OF SCOTLAND—continued.

	^Fife.		Forfar	ι.	Hadding	TON.	Inver	NESS.
	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	Acres.		Acres.		Acres.		Acres.	
1 2 3 4 5	1,170 1,910 2,261 2,200 113	— — — —	1,354 4,723 7,066 6,646 411	_ _ _	445 543 475 437 552	-	4,922 2,822 12,583 43,520 20,911	
	7,654		20,200		2,452		84,758	
6 7 8 9 10	10 54 70 587 3,270	_ _ _ _	4 10 183 1,832 1,441		$-rac{20}{4}$ 106 403		 5 3 1,631 334	
	3,991		3,470		533		1,974	
11 12 13 14 15	5 16 330 2,508 1,125	 	6 18 607 2,018 584	 	79 54 528 1,954		— 31 99 1,028 1,747	
	3,984		3,233	_	2,615		2,905	
16 17 18 19 20	1,185 1,980 2,661 5,295 4,508	 	1,364 4,751 7,856 10,496 2,436		544 543 533 1,071 2,909		4,922 2,858 12,685 46,180 22,992	
01	15,629	48.9	26,903	65 · 7	5,600	41.2	89,637	51.0
21 22 23 24 25	920 9,747 5,561	0·3 2·9 30·5 17·4	2,861 9,169 1,955	0·1 7·0 22·4 4·8	182 1,050 1,454 5,295	1·4 7·7 10·7 39·0	56,021 28,657 1,324	31·9 16·3 0·8
	31,966	100	40,932	100	13,581	100	175,639	100
26 27	23,106 322,844	_	32,510 559,037	_	10,643 170,971	_	139,669 2,695,094	
28		9.9		7.3		7.9		6.5

APPENDIX 3 (c).—ACREAGE UNDER WOODLANDS

		Kincar	DINE.	Kinr	oss.	Kirk Brio		
Type of Woodland.			Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	HIGH FOREST :		Acres.		Acres.		Acres.	
1 2 3 4 5	11-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,		1,101 1,917 4,196 8,286 577		— 160 58 66 —	 	969 801 1,713 2,648 81	_
	Total		16,077	_	284	_	6,212	_
6 7 8 9 10	Hardwoods— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,				 11		 47 381 2,727 1,525	
	Total		207		11	_	4,680	
11 12 13 14 15	Mixed conifers a woods— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,		11 21 224 657 611		 		18 23 138 790 275	
	Total	••	1,524	-	182	_	1,244	
16 17 18 19 20	Total High Fore 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,		1,112 1,943 4,426 9,132 1,195		160 58 248 • 11	- - - - -	987 871 2,232 6,165 1,881	
	High Forest—Gra	nd Total	17,808	58.0	477	11.3	12,136	49 · 4
21 22 23 24 25	COPPICE COPPICE-WITH-STA SCRUB FELLED OR DEVAS UNECONOMIC		} — 1,944 7,684 3,292	$-6 \cdot 3$ $25 \cdot 0$ $10 \cdot 7$	593 1,466 1,672	 14·1 34·9 39·7	1,310 3,585 4,153 3,367	5·4 14·6 16·9 13·7
	TOTAL		30,728	100	4,208	100	24,551	100
26 27 28	Total woodland shown in returns Total land area of Woodland area (of 1914 County 1924) as	25,2 7 5 244,482	_	2,790 52,410		21,687 575,832	
	percentage of to	otal land	_	12.6		8.0		4.3

43

IN EACH COUNTY OF SCOTLAND—continued.

	Lanark.		Linlithgo	w.	Мідьотні	AN.	Naire	٧.
,	Percentage of Total Wood-land Area.		Percentage of Total Wood-land Area.		Area.	Percentage of Total Wood- land Area.	Агеа.	Percentage of Total Wood- land Area.
	Acres.		Acres.		Acres.		Acres.	
1 2 3 4 5	601 1,873 4,157 3,590 165		122 214 318 114		196 286 259 1,221 230	— — —	219 656 954 7,246 375	_ _ _
	10,386		768		2,192		9,450	
6 7 8 9	12 99 2,401 2,266		 6 92 984		23 		— — — — — 99	
	4,778		1,082	_	2,410	_	99	_
11 12 13 14 15	3 13 347 1,420 576		$-\frac{^{30}}{^{28}}_{\overset{31}{16}}$	= = = = = = = = = = = = = = = = = = = =	14 52 14 202 672		16 298 1,143	
	2,359		105		954	_	1,457	_
16 17 18 19 20	604 1,898 4,603 7,411 3,007		152 214 352 237 1,000		210 361 273 1,612 3,100		235 656 954 7,544 1,617	
21 22 23 24 25	17,523 } 64 2,207 6,374 4,193 30,361	57·7 0·2 7·3 21·0 13·8	1,955 — 379 1,070 1,056 4,460	43·8 8·5 24·0 23·7	5,556 	37·7 — 3·9 12·1 46·3	11,006 — 2,359 4,067 252 17,684	62·3 — 13·3 23·0 1·4 100
26 27	20,727 564,567	=	5,629 76,861	=	12,228 234,325		12,566 104,252	=
28	_	5.4	_	5.8	_	6.3	_	17.0

APPENDIX 3 (c).—ACREAGE UNDER WOODLANDS IN

		Рееві	ŒS.	Per	гн.	Renfr	EW.
	Type of Woodland.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Агеа.	Percentage of Total Wood- land Area.
	High Forest:— Conifers—	Acres.		Acres.		Acres.	
1 2 3 4 5	1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,	871 1,256 1,211 2,624 66	-	6,480 6,176 9,078 12,323 5,164	_ _ _	348 486 1,213 590 6	
	Total	6,028		39,221	_	2,643	
6 7 8 9 10	Hardwoods— 1-10 years	3 239 56		29 24 720 2,639 4,271		7 6 110 517 526	
	Total	298		7,683		1,166	
11 12 13 14 15	Mixed conifers and hard- woods— 1-10 years 11-20 ,, 21-40 ,, 41-80 ,, Over 80 ,,			82 236 1,805 4,855 5,393	_	18 20 108 267 74	
	Total	1,106		12,371		487	_
16 17 18 19 20	Total High Forest— 1-10 years	871 1,256 1,228 3,906 171		6,591 6,436 11,603 19,817 14,828	_	373 512 1,431 1,374 606	
	High Forest—Grand Total	7,432	61.8	59,275	50.7	4,296	45.0
21 22 23 24 25	COPPICE COPPICE-WITH-STANDARDS SCRUB FELLED OR DEVASTATED UNECONOMIC	75 2,577 1,946	0·6 21·4 16·2	2,841 22,506 27,615 4,607		 860 1,669 2,715	9·0 17·5 28·5
	Total	12,030	100	116,844	100	9,540	100
26 27 28	Total woodland area as shown in returns of 1914 Total land area of County Woodland area (1924) as	11,333 222,240	_	90,151 1,595,802		6,922 151,626	_
	percentage of total land area		5.4	-	7.3	_	6.3

EACH COUNTY OF SCOTLAND—continued.

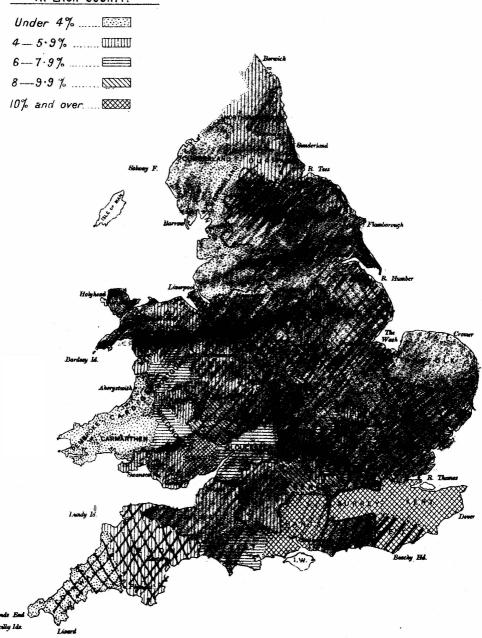
	Ross an Cromari		Roxbur	GH.	Selkir	ıĸ.	Stirlii	NG.
	Атеа.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Агеа.	Percentage of Total Wood- land Area.
	Acres.		Acres.		Acres.		Acres.	
1 2 3 4 5	1,881 2,831 9,933 18,980 4,423		706 1,152 1,346 3,139 766	<u>-</u>	276 390 436 259 274		519 744 590 967 164	
	38,048		7,109		1,635		2,984	
6 7 8 9 10	 1 11 666 834		 6 1,231 1,098		12 16 11 81 588	- '	11 195 449 670	
	1,512		2,335		708		1,325	
11 12 13 14 15	10 119 225 1,250 824	 	7 7 98 1,330 385		10 8 52 237 1,271			
	2,428		1,827		1,578		1,439	
16 17 18 19 20	1,891 2,951 10,169 20,896 6,081		713 1,165 1,444 5,700 2,249		298 414 499 577 2,133		530 744 902 1,630 1,942	
	41,988	55.6	11,271	60 · 1	3,921	63 · 1	5,748	35.7
21 22 23 24 25	15,589 17,243 765	20·6 22·8 1·0	3 599 3,140 3,737	0·0 3·2 16·8 19·9	109 349 742 1,088	1·8 5·6 12·0 17·5	3,201 2,015 3,149 1,974	19·9 12·5 19·6 12·3
	75,585	100	18,750	100	6,209	100	16,087	100
26 27	58,781 1,977,248	-	16,655 426,028	· <u>-</u>	5,410 170,793	<u> </u>	13,593 288,842	-
28		3.8		4 · 4	().	3.6	interven co cal ler o brothod	5.6

APPENDIX 3 (c).—ACREAGE UNDER WOODLANDS IN EACH COUNTY OF SCOTLAND—continued.

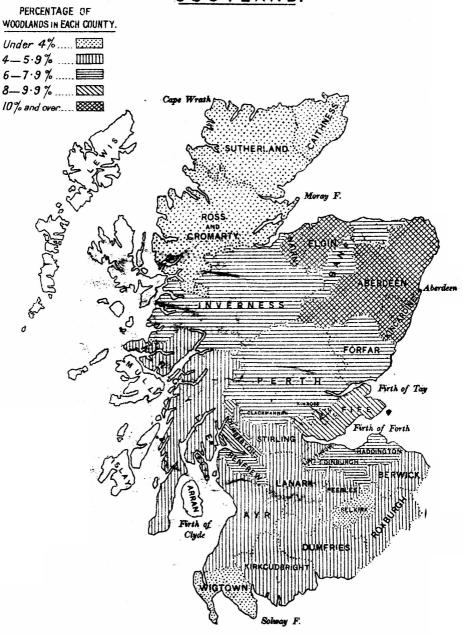
	County	-continued.					
		Suther	LAND.	Wigto	own.	Total Scotlai	
,	Type of Woodland.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.	Area.	Percentage of Total Wood- land Area.
	High Forest:-	Acres.		Acres.		Acres.	
1 2 3 4 5	Conifers— 1-10 years 11-20 ,	448 647 1,303 6,858 1,409		319 679 788 623 28	_	38,409 48,960 93,466 191,077 57,758	_ _ _ _
	Total	10,665		2,437	_	429,670	
6 7 8 9	Hardwoods— 1-10 years 11-20 21-40 41-80 Over 80 ,			11 4 9 1,163 928		169 252 3,156 24,781 32,583	<u>-</u> - -
	Total	82		2,115	_	60,941	
11 12 13 14 15	Mixed conifers and hard- woods— 1-10 years 11-20 ,, 21-40 ,, Over 80 ,,	26 450 295		23 62 275 1,320 329		417 861 6,487 27,938 23,496	
	Total	771	-	2,009		59,199	
16 17 18 19 20	Total High Forest— 1-10 years 11-20 21-40 41-80 Over 80 High Forest—Grand Total	474 647 1,358 7,328 1,711	45.5	353 745 1,072 3,106 1,285	_	38,995 50,073 103,109 243,796 113,837	<u>-</u>
٠:(High Forest—Grand Total	11,016	43.3	0,301	03.0	343,610	31-2
21 22 23 24 25	CORPICE COFFEE WIFE STANDARDS SCRUB FELLED OR DEVASTATED UNECONOMIC	} — 7,762 5,935 133	30·6 23·4 0·5	107 877 960 1,826		8,120 208,359 221,182 86,753	20.6
	Total	25,348	100	10,331	100	1,074,224	100
26 27 28	Total woodland area as shown in returns of 1914 Total land area of County Woodland area (1924) as	18,647 1,297,914		9,675 311,984	_	852,120 1 9, 069,728	
	percentage of total land area	_	2.0	_	3.3	_	5.6

ENGLAND & WALES.

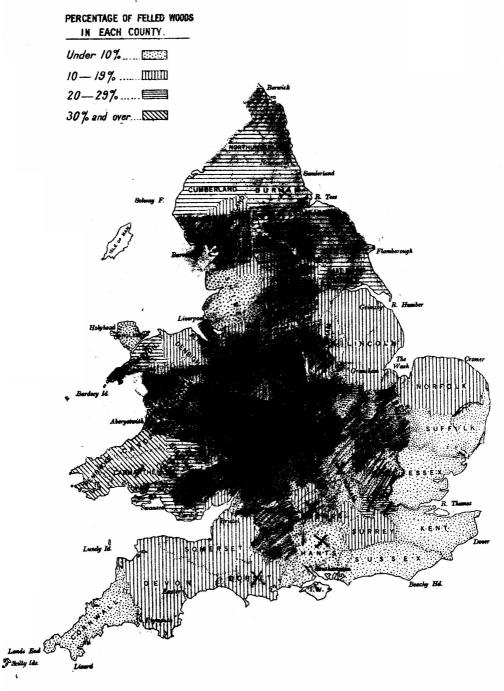
PERCENTAGE OF WOODLANDS IN EACH COUNTY.



SCOTLAND.



ENGLAND & WALES.



SCOTLAND.

PERCENTAGE OF FELLED WOODS IN EACH COUNTY. Under 10% 10 - 19% 20-29 % 30% and over.... Clyde

PART II.

CENSUS OF HOME-GROWN TIMBER PRODUCTION.

This census was undertaken by the Forestry Commissioners at the request of the Board of Trade as part of the general Census of Production for Great Britain for the year 1924. Previous censuses were conducted in 1908* and 1913 by the Board of Agriculture, but owing to the outbreak of war the latter census was not completed. In both cases schedules were issued by the Board to all occupiers of woodlands, who were requested to state the number, quantity in cubic feet and value of trees felled or sold standing during the twelve months. This procedure was found to be unsatisfactory as a large proportion of the forms were either not returned or were incompletely filled up.

Method of Collecting Data.

It was felt that better results might be obtained if a relatively small number of completed schedules were obtained and at the same time the production were related more closely to the actual types of woodland in each case. It was decided, accordingly, to proceed on a sample basis and to issue schedules only to selected woodland owners. The method of applying the samples to the woodlands of the country as a whole is described below.

In accordance with the Commissioners' undertaking that any information supplied would be regarded as strictly confidential, the names of estates from which returns were obtained are not inserted in this report. The Commissioners desire, however, to place on record their thanks for the assistance rendered by owners and others.

The schedule, which is reproduced in the Appendix, is in four sections, namely:—

Section 1.—Distribution of Total Woodland Area.—Stating the area of each type of woodland on the estate.

Section 2.—Production of Timber, 1923-24.—Stating the cubic contents and value of trees felled for sale or for home use, or sold for felling, during the twelve months ending 30th September, 1924, and classified in—

Part A.—By types of woodland corresponding with the areas given in Section 1;

and in

Part B.—By classes of material, separately for each species.

Section 3.—Miscellaneous Produce, including bark and charcoal. Section 4.—The Number of Persons Employed in Forestry Operations.

^{*} The Agricultural Output of Great Britain. Report by the Board of Agriculture and Fisheries, 1912.

As far as possible the estates selected as samples represented average conditions of management. Returns were received from every county. The completed schedules were examined for possible discrepancies and, where necessary, doubtful points were taken up with the estates concerned. A number of the returns had to be rejected as the questions did not appear to have been understood. The returns on which the statistics are based amounted to 262, distributed as follows:—

				No. of Returns.	Percentage of total Woodland Area sampled.
England .		•••		149	11.5
Wales .		• • •	•••	44	12.2
Scotland .		•••	• • •	69	10.8
Great Brit	ain	•••	• • •	262	11.3

Production of Timber.

A.—PRODUCTION BY TYPES OF WOODLAND.

The data accepted for the purpose of estimating the total

In order to obtain the total production for Great Britain

production are summarised in Table I (pp. 50 and 51).

each type of woodland was considered separately for England, Wales, and Scotland respectively, the procedure being to raise the production as disclosed by the sample areas in the proportion total area of the type in the country total area of the type in the samples. The production from the Crown Woods was excluded from these calculations and added subsequently. Thus the area of conifers 0-20 years in the sample areas in England was 14,460 acres and the production 46,547 cu. ft. (Table I). The total area of conifers of this age-class in England as disclosed by the census of woodlands was 83,805 acres from which fall to be deducted 4,719 acres in respect of Crown Woods. The production for England, apart from Crown Woods, was therefore taken at

$$46,547 \times \frac{79,086}{14,460} = 254,569$$
 cu. ft.

to which has to be added 84,986 cu. ft. in respect of the Crown Woods, giving a total of 339,555 cu. ft. Values were estimated by the same method. The detailed results are given in Table II (pp. 52 and 53). The production of hedgerow timber was estimated by raising the quantities returned by the sample estates proportionately to the land area (exclusive of woodland).

The total amount of timber felled or sold for felling was 55,985,000 cu. ft., valued at £2,036,000, and distributed as follows:—

England Wales Scotland			Quantity. cu. ft. 30,058,000 3,799,000 22,128,000	Value. £ 1,330,000 144,000 562,000
Great Brita	ain	•••	55,985,000	2,036,000

These figures include both material sold and material used on the estate. They also include, besides saw-timber, all classes of wood such as pitwood, firewood, &c.

The coniferous woods produced in all 24,501,000 cu. ft. (£702,300), of which England provided 5,141,000 cu. ft. (£212,860), Wales 765,000 cu. ft. (£33,760) and Scotland 18,594,000 cu. ft. (£455,670); the hardwoods produced 12,755,000 cu. ft. (£621,800), of which England provided 10,009,000 cu. ft. (£509,100), Wales 1,659,000 cu. ft. (£67,700) and Scotland 1,088,000 cu. ft. (£45,000); the mixed woods produced 6,065,000 cu. ft. (£273,500), of which England provided 4,152,000 cu. ft. (£215,900), Wales 850,000 cu. ft. (£24,400) and Scotland 1,063,000 cu. ft. (£33,200). Among the miscellaneous types of woodland the most noticeable figures are 6,767,000 cu. ft. (£241,400) from coppice-with-standards and 1,563,000 cu. ft. (£73,300) of hedgerow timber in England.

The total production, exclusive of hedgerow timber, is equivalent to 18 cu. ft. or 13s. per acre, calculated on a total woodland area of 2,958,672 acres, but it should be borne in mind that a large part of that area is unproductive. The production from high forest averaged 31 cu. ft. (23s.) per acre and that from coppice and coppicewith-standards 16 cu. ft. (11s.) per acre.

B.—PRODUCTION BY CLASSES OF MATERIAL.

In order to obtain the classes of material comprising the total production of 55,985,000 cu. ft., it was assumed that the production for England, Wales and Scotland respectively was made up of the classes of material in the same proportion as were the samples of those countries. Thus the total production in England (apart from Crown woods and hedgerow timber—calculated separately) was 27,765,105 cu. ft. and the production of the sample areas 3,390,457 cu. ft. containing inter alia 102,482 cu. ft. of spruce saw-The production of spruce saw-timber in England was then estimated as $102,482 \times \frac{27,765,105}{2000}$ = 839,244 cu. ft. plus the 3:390.457 production from Crown woods and hedgerow timber (2,107 cu. ft.), giving a total of 841,351 cu. ft. Details of the production by classes of material are given in Table III.

TABLE I.—PRODUCTION

-		H	England.		v	VALES.	
	Type of Woodland.		Produ	ction.		Produ	ction.
		Агеа.	Volume.	Value.	Area.	Volume.	Value.
	High Forest :	Acres.	Cu. ft.	£	Acres.	Cu. ft.	£
1 2 3 4	Conifers— 0-20 years	14,460 8,026 7,926 2,183	102,009 475,720	3,767 17,956	2,319 2,200	32,316 138,079	375 1,422 7,525 757
	Total	32,595	866,250	36,416	8,393	205,989	10,079
5 6 7 8	Hardwoods— 0-20 years 21-40 ,, 41-80 ,, Over 80 ,,		9,387	351 15,624 55,344	297 2,699 3,419	2,867 139,241	69 5,330 5,282
9 10 11 12	Mixed conifers and hardwoods 0-20 years	5,596 4,912 6,160 7,726 24,394	9,391 34,070 115,860 293,841	340 1,564 6,084 15,805	184 652 1,962 1,605	5,125	119 1,508 5,889 7,516
	Total High Forest	98,332	2,682,891	131,542	19,247	657,751	28,276
13 14	Coppice (underwood) Coppice (underwood)- with-Standards	3,576 33,026	547,365	19,548	190 1,598		20 975
15 16	SCRUB FELLED OR DEVASTATED	3,983 11,745			1,078 3,463	486	
17 18	Amenity Woods, Parks, etc Hedgerow Timber	10,555	92,232 78,544		1,345 —	2,737 11,859	165 361
	Total	161,217	3,469,001	160,689	26,921	698,571	29,808

^{*} This table does not include

FROM SAMPLE ESTATES.*

	Ş	SCOTLAND.			GREAT BRITAIN	4.
		Produc	tion.		Produ	ction.
	Area.	Volume.	Value.	Area.	Volume.	Value.
	Acres.	Cu. ft.	£	Acres.	Cu. ft.	£
1 2 3 4	20,036 9,347 28,460 8,234	40,342 138,857 2,103,881 414,087	827 3,330 48,391 13,382	38,182 19,692 38,586 10,605	102,605 273,182 2,717,680 675,939	2,755 8,519 73,872 27,279
	66,077	2,697,167	65,930	107,065	3,769,406	112,425
5 6 7 8	213 171 2,487 9,540	159 270 57,714 148,520	4 13 2,509 5,782	1,729 2,868 17,468 38,140	459 12,524 508,076 1,281,397	18 433 23,463 66,408
	12,411	206,663	8,308	60,205	1,802,456	90,322
9 10 11 12	239 553 2,281 5,087	2,738 60,589 62,470 125,797	68 1,583 2,807	6,019 6,117 10,403 14,418 36,957	9,391 41,933 270,633 476,450	340 1,751 9,175 24,501
ļ	86,648	3,029,627	78,696	204,227	6,370,269	238,514
13	1,381	1,520	46	5,147	64,398	1,305
14 15 16	1,018 6,264 15,741	18,075 23,170 528	162 358 17	35,642 11,325 30,949	590,218 29,487 748	20,685 515 19
17 18	5,365	31,574 2,375	949 47	17,265	126,543 92,778	5,643 4,091
1.0	116,417	3,106,869	80,275	304,555	7,274,441	270,772

returns from Crown Woods,

TABLE II.—TOTAL PRODUCTION (VOLUME

			England.			Wales.	
	TYPE OF WOODLAND.		Produ	ction.		Produ	ction.
		Area.	Volume.	Value.	Area.	Volume.	Value.
	High Forest :—	Acres.	Cu. ft.	£	Acres.	Cu. ft.	£
	Conifers—						
1: 2 3, 4	0-20 years 21-40 ,, 41-80 ,, Over 80,,	52,139 48,139	686,648 2,883,168	11,994 25,141 108,835 66,894	31,873 8,337 5,308 1,422	119,125 365,497	3,117 5,176 19,744 5,726
	Total	195,231	5,141,224	212,864	46,940	765,172	33,763
,		,				i -	
1	Hardwoods						
5 6 7 8	0-20 years 21-40 ,, 41-80 ,, Over 80,,	29,680	153,700	891 5,472 175,041 327,744	1,979 6,326 17,794 17,858	216,261 972,404	4,594 35,533 27,542
. ,	Total		10,008,824	509,148	43,957	1,659,034	67,669
	Mixed conifers and hardwoods—						
9	0-20 years		38,878	1,406	2,253		
10 11	21–40 ,, 41–80 ,,	96,264		16,406 96,102	5,399 10,205	42,438 489,882	985 7,844
12	Over 80,,	49,436	1,916,474	101,983	4,249	318,050	15,590
٠	Total	220,390	4,152,205	215,897	22,106	850,370	24,419
	Total High Forest	754,077	19,302,253	937,909	113,003	3,274,576	125,851
						:	
13 14	COPPICE	77,313	1,338,370	26,781	16,452	83,126	1,732
15 16	ARDS SCRUB FELLED OR DEVAS-	407,916 87,410		241,443 3,203	18,879 34,934		11,421 356
17 18	TATED UNECONOMIC HEDGEROW TIMBER	194,742 109,529 —		33 46,983 73,267	62,182 8,011 —	16,251 117,151	980 3,568
-		1,630,987	30,058,182		253,461		143,908

AND VALUE) BY TYPES OF WOODLAND.

	S	SCOTLAND.		(Great Britaii	N.
		Produc	tion.		Produ	ction.
	Area.	Volume.	Value.	Area.	Volume.	Value.
	Acres.	Cu. ft.	£	Acres.	Cu. ft.	£
1 2 3 4	87,369 93,466 191,077 57,758	175,915 1,388,510 14,125,200 2,904,640	3,606 33,299 324,891 93,869	203,047 153,942 244,524 70,328	645,666 2,194,283 17,373,865 4,286,847	18,717 63,616 453,470 166,489
	429,670	18,594,265	455,665	671,841	24,500,661	702,292
_						
5 6 7 8	421 3,156 24,781 32,583	314 4,983 575,075 507,256	240 25,000 19,748	15,423 39,162 180,541 208,228	26,896 374,944 5,067,635 7,286,011	899 10,306 235,574 375,034
	60,941	1,087,628	.44,996	443,354	12,755,486	621,813
9 10 11 12	1,278 6,487 27,938 23,496	32,118 742,102 288,538	798 19,389 12,965	26,674 63,433 134,407 77,181	38,878 431,977 3,071,416 2,523,062	1,406 18,189 123,335 130,538
	59,199	1,062,758	33,152	301,695	6,065,333	273,468
•	549,810	20,744,651	533,813	1,416,890	43,321,480	1,597,573
13 14 15 16 17	8,120 208,359 221,182 86,753	66,829 770,702 7,419 510,557	708 11,908 239 15,345	528,680 330,703 478,106 204,293	8,547,629 914,358 11,064 1,483,609	282,085 15,467 272 63,308
18	1,074,224	27,623	550 562,563	2,958,672	1,707,281 55,985,421	2,036,090

Table III (a).—Production by Classes

	Species.		f Sawmill ze.	Pitprop Material.		
		Quantity.	Value.	Quantity.	Value.	
	Conifers :		Cu. ft.	£	Cu. ft.	£
1	Pine (chiefly Scots pine)		13,860,248	342,766	2,116,737	34, 2 83
2	Larch			298,803	1,498,973	53,791
3	Spruce			93,847	373,676	12,581
4	Other conifers	٠.	2,138,356	45,552	139,114	2,883
	Total conifers		24,710,416	780,968	4,128,500	103,538
	HARDWOODS:—					
5	Oak		7,446,656	553,142	524,584	12,440
6	Beech			104,279	40,600	1,004
7	Ash	٠.		129,967	30,133	1,211
8	Elm	٠.		71,234	28,763	250
9	Other hardwoods	• •	1,578,963	64,372	122,581	3,224
	Total hardwoods		14,600,415	922,994	746,661	18,129
	GRAND TOTAL		39,310,831	1,703,962	4,875,161	121,667

Table III (b).—Production by Classes

	Species,		f Sawmill ze.	Pitprop Material.	
		Quantity.	Value.	Quantity.	Value.
	Conifers:— 1,43	Cu. ft.	£	Cu. ft.	£
1	Pine (chiefly Scots pine)	3,003,399	86,621	321,091	11,014
2	Larch	2,658,961	171,313	760,429	31,491
3	Sprace b. 15.	041,001	28,932	125,696	6,043
4	Other conifers	141,128	5,445	110,792	2,134
	Total conifers	6,644,839	292,311	1,318,008	50,682
	HARDWOODS:—		19.0		
5	O-1-	6,142,009	485,750	219,412	6.491
6	Beech 10-85.	1,981,300	89,552		
7	Ash 23.2.	1,185,205	114,360	18,851	945
8	Elm	1,539,787	67,209		
9	Other hardwoods	966,914	42,881	83,275	2,320
	Total hardwoods	11,815,215	799,752	321,538	9,756
	Grand Total	18,460,054	1,092,063	1,639,546	60,438

OF MATERIAL: GREAT BRITAIN.

	Firewo	op.	Other V	Vood.	Total.		
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
-	Cu. ft.	£	Cu. ft.	£	Cu. ft.	£	
1 2 3 4	665,776 270,112 74,003 237,198	9,406 2,935 944 4,867	92,301 598,801 52,714 61,265	3,206 20,056 1,837 2,846	16,735,062 7,906,362 3,673,729 2,575,933	389,661 375,585 109,209 56,148	
	1,247,089	18,152	805,081	27,945	30,891,086	930,603	
5 6 7 8 9	3,265,508 988,747 515,455 509,581 986,238	39,348 16,070 6,961 6,701 16,898	1,549,385 28,641 78,898 17,146 1,807,660	36,495 816 3,634 831 36,610	12,786,133 3,558,900 2,043,981 2,209,879 4,495,442	641,425 122,169 141,773 79,016 121,104	
	6,265,529	85,978	3,481,730	78,386	25,094,335	1,105,487	
	7,512,618	104,130	4,286,811	106,331	55,985,421	2,036,090	

OF MATERIAL: ENGLAND.

	Firewo	OOD.	OTHER W	700D.	TOTAL.		
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
	Cu. ft.	£	Cu. ft.	£	Cu. ft.	£	
1 2 3 4	357,042 256,764 72,196 122,983	4,082 2,568 907 3,387	75,896 414,869 46,400 55,466	2,739 13,187 1,682 2,676	3,757,428 4,091,023 1,085,643 430,369	104,456 218,559 37,564 13,642	
	808,985	10,944	592,631	20,284	9,364,463	374,221	
5 6 7 8 9	3,012,082 846,691 466,535 439,283 559,301	36,239 13,205 6,136 5,743 10,148	1,496,713 26,071 73,538 15,404 1,621,348	35,183 798 3,383 696 34,359	10,870,216 2,854,062 1,744,129 1,994,474 3,230,838	563,663 103,555 124,824 73,648 89,708	
	5,323,892	71,471	3,233,074	74,419	20,693,719	955,398	
	6,132,877	82,415	3,825,705	94,703	30,058,182	1,329,619	

TABLE III (c).—PRODUCTION BY

	Species.	Timber of Sawmill Size.		Pitprop Material.		
		Quantity.	Value.	Quantity.	Value.	
	Conifers :—		Cu. ft.	£	Cu. ft.	£
1	Pine (chiefly Scots pine)		226,443	7,431	5,107	161
2	Larch	• •	879,470	42,683	275,789	13,221
3	Spruce	• •	226,546	9,128	63,440	2,462
4	Other conifers	• •	6,067	446	2,303	83
	Total conifers		1,338,526	59,688	346,639	15,927
	Hardwoods :—					
5	Oak		805,045	35,419	304,930	5,937
6	Beech		289,248	7,938	40,600	1,004
7	Ash	• •	47,150	2,944	10,997	252
8	Elm	• •	34,696	911	28,763	250
9	Other hardwoods	• • •	80,985	3,826	29,660	676
	Total hardwoods	••	1,257,124	51,038	414,950	8,119
	GRAND TOTAL		2,595,650	110,726	761,589	24,046

Table III (d).—Production by Classes

	Species.	Timber of Siz		Pitprop Material.		
		Quantity.	Value.	Quantity.	Value.	
******	Conifers:—		Cu. ft.	£	Cu. ft.	£
1	Pine (chiefly Scots pine)		10,630,406	248,714	1,790,539	23,108
2	Larch		2,000,045	84,807	462,755	9,079
3	Spruce		2,105,439	55,787	184,540	4,076
4	Other conifers		1,991,161	39,661	26,019	666
	Total conifers		16,727,051	428,969	2,463,853	36,929
	Hardwoods :—					
5	Oak		499,602	31,973	242	12
6	Beech		230,364	6,789	_	
7	Ash	٠.	187,140	12,663	285	14
8	Elm		79,906	3,114		
9	Other hardwoods	• •	531,064	17,665	9,646	228
	Total hardwoods		1,528,076	72,204	10,173	254
	GRAND TOTAL		18.255,127	501,173	2,474,026	37,183

Classes of Material: Wales.

	Firewo	OD.	OTHER W	700р.	Total.		
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
	Cu. ft.	£	Cu. ft.	£	Cu. ft.	£	
1	25,050	416	4,616	190	261,216	8,198	
$\begin{vmatrix} 2 \\ 3 \end{vmatrix}$	7,431	199	60,315	3,221	1,223,005	59,324	
	640	9	1,152	28	291,778	11,627	
4	4,921	59	1,962	58	15,253	646	
	38,042	683	68,045	3,497	1,791,252	79,795	
5	168,493	1,741	48,827	1,217	1,327,295	44,314	
6	36,099	476	2,570	18	368,517	9,436	
7	17,817	279	1,942	146	. 77,906	3,621	
8	15,832	283	1,742	135	81,033	1,579	
9	33,434	270	9,376	391	153,455	5,163	
	271,675	3,049	64,457	1,907	2,008,206	64,113	
ľ	309,717	3,732	132,502	5,404	3,799,458	143,908	

OF MATERIAL: SCOTLAND.

	Firewo	op.	Other W	OOD.	Total.		
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
	Cu. ft.	£	Cu. ft.	£	Cu. ft.	£	
1 2 3 4	283,684 5,917 1,167 109,294	4,908 168 28 1,421	11,789 123,617 5,162 3,837	277 3,648 127 112	12,716,418 2,592,334 2,296,308 2,130,311	277,007 97,702 60,018 41,860	
	400,062	6,525	144,405	4,164	19,735,371	476,587	
5 6 7 8	84,933 105,957 31,103 54,466	1,368 2,389 546 675	3,845 — 3,418 —	95 — — — — — —	588,622 336,321 221,946 134,372	33,448 9,178 13,328 3,789	
9	393,503 669,962	6,480	176,936	2,060	2,392,410	26,233 85,976	
	1,070,024	17,983	328,604	6,224	22,127,781	562,563	

TABLE IV.—VALUE PER CUBIC

				Eı	NGLAI	۷D.		Wales.				
	Species,		Timber of Sawmill Size.	Pitprop Material.	Firewood.	Other Wood.	Average.	Timber of Sawmill Size.	Pitprop Material.	Firewood.	Other Wood.	Average.
			d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
1	CONIFERS:— Pine (chiefly Scots pine)		7	8	2 1	8 1	6 <u>1</u>	8	7 <u>1</u>	4	10	7 1
2	Larch		15 <u>1</u>	10	$2\frac{1}{2}$	7 <u>1</u>	13	11 1	111	6 <u>1</u>	13	111
:3	Spruce		8 1	111	3	81	8 <u>‡</u>	91	91	31	6	9 1
4	Other conifers		9 <u>1</u>	41/2	6 <u>1</u>	111	71	17 <u>‡</u>	81	3	7	10
	Conifers: Average	••	101	9	3	8	91	10 1	- 11	41/2	121	101
	Hardwoods :											
5	Oak		19	7	3	5 <u>1</u>	12 1	10 1	41/2	21/2	6	8
6	Beech		11	-	31	71	8 <u>1</u>	6 <u>1</u>	6	3	11	6
7	Ash	• •	23	12	3	11	17	15	5 1	4	18	11
8	Elm	• •	10½		3	11	9	6 <u>‡</u>	2	41	18 1	4 -
9	Other hardwoods	$\cdot \cdot $	10 1	61	41/2	5	$6\frac{1}{2}$	111	5 ½	2	10	8
	Hardwoods: Average.		16	7 <u>1</u>	3	5 <u>1</u>	11	91	41/2	21/2	7	71
	Conifers and Hard- woods: Average	-	14	9	3	6	10½	10	71	3	10	9

FOOT OF CLASSES OF MATERIAL.

		Sco	OTLAND.			GREAT BRITAIN.					
	Timber of Sawmill Size.	Pitprop Material.	Firewood.	Other Wood.	Average.	Timber of Sawmill Size.	Pitprop Material.	Firewood.	Other Wood.	Average.	
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	
1	5 <u>1</u>	3	4	5 <u>1</u>	5	6	4	3 1	8 1	5 <u>‡</u>	
2	10	41/2	7	7	9	13	81	$2\frac{1}{2}$	8	11½	
3	$6\frac{1}{2}$	5 1	6	6	6 1	7	8	3	81	7	
4	5	6	3	7	41/2	5	5	5	11	5	
	6	31/2	4	7	6	7 1	6	31/2	81/2	7	
5	15½	12	4	6	13 1	18	5 1	3	5 1	12	
6	7		5 <u>1</u>		61/2	10	6	4	7	8	
7	16	12	4	7 1	14 1	22	9 1	3	11	16 1	
8	9 1		3		7	10 1	2	3	11 1	81/2	
9	8	5 1	4	$2\frac{1}{2}$	5 1	10	6 <u>1</u>	4	5	$6\frac{1}{2}$	
	11½	6	4	21/2	81/2	15	6	31/2	51/2	101	
	6 1	3 1	4	4 1	6	10 1	6	31	6	8 1	

59

It would appear that of the total volume of 55,985,000 cu. ft., 39,311,000 cu. ft. (70.2 per cent.), valued at £1,703,962, was timber of sawmill size; 4,875,000 cu. ft. (8.7 per cent.), valued at £121,667, was of pitprop size; 7,513,000 cu. ft. (13.4 per cent.), valued at £104,130, firewood and 4,287,000 cu. ft. (7.7 per cent.), valued at £106,331, was "other wood."

Of the saw-mill timber, 24,710,000 cu. ft. (£781,000) was softwoods (pine 56·1 per cent., larch 22·4 per cent. by volume), and 14,600,000 cu. ft. (£923,000) hardwoods (oak 51·0 per cent. by volume). The pitprop material was predominantly softwoods and the firewood and "other wood" mostly hardwoods. Of the total production, Scotland produced 76·0 per cent. of the pine and 32·8 per cent. of the larch and England 85·0 per cent. of the oak.

Prices of Timber.

The average prices to the nearest halfpenny for the various species of timber and classes of material reckoned as standing in the forest, are stated in Table IV.

Among conifers, larch saw-timber at 1s. 1d. per cu. ft., and among hardwoods ash at 1s. 10d. per cu. ft., are the most outstanding prices. With a few exceptions, prices ruled higher in England than in Scotland and Wales.

Miscellaneous Produce.

The total production under this head is shown below and amounts to $\pounds 14,000$. The amount is surprisingly small and indicates the insignificant part which produce such as oak bark now plays in the economy of British woodlands.

Miscellaneous Produce: (Bark, Christmas Trees, Pea Sticks, etc.).

England		•••			£ 13,273
Wales Scotland	•••	•••	•••	•••	207 529
Great Brit	ain	•••		. 	14,009

Number of Persons Employed in Forestry Operations.

The total number of persons permanently employed was 19,220. As regards temporary employees the maximum was 10,000 and the minimum 4,090. This suggests that the number employed fluctuate between about 23,000 and 29,000, according to the season of the year. Details are given in Table V.

Table V.—Number of Persons Employed in Forestry Operations.

	England.	WALES.	SCOTLAND.	GREAT BRITAIN.
Permanent or principal occu- pation—				
Men Women Juveniles (under 18 years of age)—	10,560 140	1,630	5,840	18,030 180
Male Female	400 50	10	540 10	950 60
Total	11,150	1,640	6,430	19,220
Temporary or occasional occupation— Minimum during year—				
Men	1,880 30	540 —	1,410 20	3,830 50
Male Female	90		110	21 0
TOTAL	2,000	550	1,540	4,090
Maximum during year— Men Women Juveniles (under 18	4,850 90	1,110	3,280	9,240 100
years of age)— Male Female	190	40	430	
Total	5,130	1,150	3,720	10,000

Home Production Compared with Increment.

In order to arrive at an estimate of the current annual increment each type of woodland and age-class was considered separately and the following approximation was made:—

	Incre	ement.	Production.			
	Million cu. ft.	Cu. ft.	Million cu. ft.	Cu. ft. per acre.		
High Forest—		1 1		1		
Čonifers	$26 \cdot 0$	31.6	27.6	33.5		
Hardwoods	11.5	19.4	15.8	26.6		
Coppice, coppice-with-						
standards and un-				į		
economic	6 · 1	8.3	10.0	13.6		
Other types of woodland			$2 \cdot 6$	$3 \cdot 2$		
Total	43.6	14.7	56.0	18.9		

From these figures it would appear that as regards high forest the annual increment of conifers amounts to 31.6 cu. ft. per acre and compares with a production of 33.5 cu. ft. per acre. The increment on hardwoods is shown as 19.4 cu. ft. as compared with a production of 26.6 cu. ft. Coppice, coppice-with-standards and "uneconomic" woodlands are estimated to have an increment of 8.3 cu. ft. which compares with a production of 13.6 cu. ft. from woodlands of these types. The total increment on woodlands of all descriptions including the scrub and felled areas is 43,600,000 cu. ft. (14.7 cu. ft. per acre), as compared with a production of 55,985,000 cu. ft. (18.9 cu. ft. per acre).

Home Production Compared with Total Timber Consumption.

In the following table the quantity of timber produced at home is compared with the figures for imported timber and pulp of wood for 1924. In order to facilitate comparison both the home production and the imports are expressed in terms of standing timber. Imports of wood manufactures are not included in the table. It will be observed that the home production amounts to only 5.4 percent. of the total consumption:—

	Conifers.	Hardwoods.	Total.
	Million cu. ft.	Million cu. ft.	Million cu. ft.
Net imports of timber and pulp of wood (in terms of standing timber) Home production of wood of all	906 • 4	74 - 7	981 · 1
descriptions	30.9	25 · 1	56.0
TOTAL CONSUMPTION	937 · 3	99.8	1,037 · 1
Home production as percentage of total consumption	3.3	25 · 2	5.4

APPENDIX.

Home-grown Timber. (Census of Production Act, 1906.)

FORESTRY COMMISSION, 22, GROSVENOR GARDENS, LONDON, S.W.1.

April, 1925.

SIR,

I am directed by the Forestry Commissioners to state that in connection with the Census of Production (1924) of all industries in Great Britain, they have been requested to conduct an enquiry into the production of homegrown timber. They will be obliged therefore if you will be good enough to furnish particulars of your woodlands on the form overleaf.

I am to assure you that any information supplied by you will be regarded as strictly confidential, and will be used only for the preparation of statistical

returns.

The schedule, when completed, should be returned to the Assistant Commissioner, who will be pleased to answer any enquiries if difficulty is experienced in interpreting the schedule.

Communications should be addressed as follows:-

ENGLAND AND WALES.—The Assistant Commissioner for England and Wales, Forestry Commission, 1, Whitehall, London, S.W.1.

Scotland.—The Assistant Commissioner for Scotland, Forestry Commission, 25, Drumsheugh Gardens, Edinburgh.

Lam Sir

	Your obedient A. G.	Servant, HERBERT, Secretary.
To		
Esta te		

Forestry Commission. (Census of Production Act, 1906.)

(Attention is directed to the Explanatory Notes on the last page of this Schedule.)

County Owner Total area of v SECTION 1.—Di (Please give a	woodlands	Total a	Woodland	ateacres. Area.		
		Age	Classes.			
Type of Woodland.	0-20 years.	21–40 years.	41–80 years.	Over 80 years.	Total.	
High Forest— Mainly conifers Mainly hardwoods Mixed conifers and hardwoods woods	Acres.	Acres.	Acres.	Acres.	Acres.	
Coppice (underwood) Coppice (underwood)-with-sta Scrub						

Section 2.—Production of Timber, 1923-24.

Trees felled for sale or home use, or sold for felling, during the twelve months ended 30th September, 1924.* Part A.—By Types of Woodland.

	,	Total.	Quantity. Value. Quantity. Value. Quantity. Value. Quantity. Value. Quantity. Value.	ft.						,	
			Quan	Cu. ft.	*	*	*				
		years.	Value.	7	. acres	acres	acres	::	:	:	
		Over 80 years.	Quantity.	Cu. ft.				::	:	•	
		ars.	Value.	F		:	: :	::	:	Total	
oodland.	es.	41–80 years.	Quantity.	Cu. ft.	r felling)	r felling)	Area cleared	::	:	Tc	
bes of W	Age Classes.	ars.	Value.	7	r sold fo	r sold fo	∵:	::	:		
Part A.—By Types of Woodland.	A	21–40 years.	Quantity.	Cu. ft.	Area felled (or sold for felling)acres	Area felled (or sold for felling)	::	::	:		* See Explanatory Note 5.
Part		rs.	Value.	3	A	: A	::	::	:		xplanate
		0-20 years.	Quantity.	Cu. ff.			::	: : : :	:		* See E
		Type of Woodland.		High Forest— Mainly consfers Mainly hardwoods Mixed consfers and hardwoods	Coppice (underwood)	Coppice (underwood)	Scrub	Amenity woods, parks, etc.	Hedgerow timbert		
12/2	223) _Q		'			•	J, F	, 1			•

^{**} No need to state quantity but please give value.

† Please give quantity produced and value.

Section 2.—Production of Timber, 1923-24—continued.

Part B.—By Classes of Material.

	Value.	73	
Total.	Quantity. Value.	Cu. ff.	
/ood.	Value.	₩	
Other Wood.	Quantity.	Cu. ff.	
od.	Value.	R	
Firewood.	Quantity. Value. Quantity. Value. Quantity. Value. Quantity. Value.	(See note 2)	
op al.	Value.	A 2	
Pitprop Material.	Quantity.	Cu. ff.	
of Size.	Value.	R	
Timber of Sawmill Size.	Quantity.	Cu. ff.	
		CONIFERS— Scots Pine Larch Spruce. Spruce. Douglas Fir Silver Fir Others (please specify kinds if possible) HARDWOODS— Oak Bech Birch Birch Elm Chestnut Sycamore Others (please specify kinds if possible)	TOTAL

Section 3.—Miscellaneous Produce. (Bark, Charcoal, etc.)

	(arima)	(· · · · · · · · · · · · · · · · · · ·				
Kind of Product.		Quantity.	tity.		Value.	
					37	
Section 4	Section 4.—Number of Persons Employed in Forestry Operations.	sons Employed in	Forestry Operati	ions.		
			Juveniles	Juveniles under 18.		t.
	Men.	Women.	Male.	Female.	de.	10tal.
Permanent or principal occupation— Number as at 30th September, 1924						
Temporary or occasional occupation— Minimum during year						
		Signature	Signature	D	Date 1925.	1925.

EXPLANATORY NOTES.

- 1. Fellings.—All trees sold for felling should be included, even if they were not actually felled in the year of return. Trees sold standing in a previous year, even if felled during 1923–24, should not be entered. Thinnings, if utilised or sold, should be included in the return.
- 2. Quantity.—Quantities by cubic feet should be given on the basis of quarter-girth over-bark measurement. Where timber or other produce has not been sold by volume and the number of cubic feet cannot be given, the quantity may be expressed in tons, cords, number of trees, etc., the unit of measurement used being stated.
- 3. Value.—For the sake of uniformity, all values should be expressed as for timber standing, the necessary adjustment being made if the timber has been disposed of otherwise. Values should also be assigned to timber, etc., used on the estate, any felling or conversion charges being excluded.
- 4. Species.—Under Part B of Section 2, while it is desirable that production should be classified by individual species, there may be cases where such details cannot be given. If so, it is hoped that differentiation may at least be made between conifers and hardwoods.
- 5. Period of Return.—The figures in the return should be confined to the twelve months from 1st October, 1923, to 30th September, 1924, or alternatively (if more convenient) to the last complete estate accounting year if this ends within the second half of 1924; in the latter case the date on which the twelve months terminated should be stated.

Where accurate figures are not available, the best estimates practicable should be furnished.

If the answer to any question is None, please write "None" in the space provided. This is important for compiling the statistics.

If the particulars are not known, please write "Not known."

PUBLICATIONS OF THE FORESTRY COMMISSION.

BRITISH EMPIRE FORESTRY CONFERENCE, 1920		Post Price free. s. d. s. d. 7 6 7 10½
BRITISH YIELD TABLES (Reprinted from Bull. No. 3)		Out of Print.
Bulletins:—		
1. Collection of Data as to the Rate of Growth Timber		0 4 0 5
2. Survey of Forest Insect Conditions		
3. Rate of Growth of Conifers in the British Isles		Out of Print.
4. The Douglas Fir Chermes (Chermes Cooleyi)		2 0 2 1
5. Poplars		1 6 1 7
6. The Phomopsis Disease of Conifers		1 6 1 7
7. The Silver Fir Chermes		1 6 1 7
8. British Bark-Beetles		2 6 2 7
9. Beetles Injurious to Timber		1 3 1 4
10. Growth and Yield of Conifers in Great Britain		In the Press.
11. Nursery Investigations		3 6 3 9
Annual Reports of the Forestry Commissioners		
Year ending September 30th, 1920—H.C. 128		Out of Print.
,, ,, ,, 1921—H.C. 108		1 0 1 1
,, ,, 1922—H.C. 50		1 0 1 1
", " " 1923—Н.С. 93		1 0 1 1
", " " 1924—H.C. 107		1 0 1 1
,, ,, 1925—H.C. 89		0 9 0 10
,, ,, 1926—H.C. 72		1 0 1 1
" " " 1927—H.C. 85		In the Press.
Copies of the above publications may be purchased	thro	ough any book-

Copies of the above publications may be purchased through any bookseller or directly from H.M. Stationery Office, Adastral House, Kingsway, London, W.C.2. They cannot be obtained from the Forestry Commission.

LEAFLETS.

1.	Pine Weevils.	13. The Larch Longicorn Beetle.
2.	Chermes Cooleyi.	14. The Phomopsis Disease of Coni-
3.	The Pine Shoot Beetle.	fers.
4.	The Black Pine Beetle.	15. The Felted Beech Coccus.
5.	Conifer Heart Rot.	16. Larch Canker.
	Honey Fungus.	17. Chafer Beetles.
7.	Chermes attacking Spruce and	18. Douglas Fir Leaf-cast Disease.
	other Conifers.	Published by the Ministry of Agri-
8.	Douglas Fir Seed Fly.	culture and now issued by the
9.	Forest Fires.	Forestry Commission.
10.	Defoliation of Oak.	103. The Pine Sawfly.
11.	Larch-shoot Moths.	186. The Large Larch Sawfly
12.	Income Tax and Death Duties	

Copies of the leaflets may be obtained free of charge on application to the Secretary, Forestry Commission, 22, Grosvenor Gardens, London, S.W.1.