FORESTRY COMMISSION

ELEVENTH ANNUAL REPORT OF THE Forestry Commissioners YEAR ENDING SEPTEMBER 30th, 1930

(Presented pursuant to Act 9 & 10 Geo. V., c. 58, s. 8 (4).)

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ELEVENTH ANNUAL REPORT

of the

FORESTRY COMMISSIONERS.

Year ending September 30th, 1930.

Forest Policy.

There are no changes or developments to record in Forest Policy. The year under review is the first of the second decade and full details of the programme of planting and forming forest workers' holdings have already been given in the Tenth Annual Report. Apart from due attention to forestry education and research, and the promotion of planting by means of grants to local authorities and private owners, the main objectives of the Commissioners are to plant 353,000 acres and to establish 3,000 forest workers' holdings during the ten-year period.

Final sanction to proceed with the new programme was not received until 19th September, 1929, and operations in the year under review, which commenced on October 1st, have suffered somewhat owing to inadequate time for preparation.

Finance.

The balance in the Forestry Fund at the commencement of the forest year was £349,466. Receipts from Parliamentary votes and operations amounted to £1,086,137, payments to £808,237 and the balance at the end of the year was consequently £627,366 (see Table I, p. 6). Balances remaining in the Fund at 30th September are large because the forest year closes in the middle of the financial year.

In making a forecast of expenditure over the second decade the Commissioners estimated the payments and receipts year by year: on this basis payments during the year under review were £149,763 less and receipts from operations £3,337 greater than was anticipated at the time the 10-year estimate was compiled. Details are given below.

Forestry Fund: Payments and Receipts.

Year ending		Payments.			Receipts.		Net Payments.			
30th September.	Proposed.	Actual.	Excess (+) Deficit (-)	Proposed.	Actual.	Excess (+) Deficit (-)	Proposed.	Actual.	Excess (+) Deficit (-)	
	£	£	£	£	£	£	£	£	£	
First decade, 1920–29	_	4,502,018	_	<u> </u>	851,484	_	3,892,000	3,650,534	-241,466	
Second decade:	958,000	808,237	-149,763	145,000	148,337	+3,337	813,000	659,900	- 153,100	
						Total	4,705,000	4,310,434	-394,566	

In order to avoid confusion it should be borne in mind that the first decade covered 10½ financial years.

Land Acquisition.

Acquisitions during the year amounted to 58,482 acres, of which 34,508 acres were classified as plantable. Disposals amounted to 252 acres (148 acres plantable), thus reducing the net acquisition of plantable land to 34,360 acres. Net acquisitions to the end of the forest year 1930 are compared in the table below with the Commissioners' programme. The total area of plantable land acquired to the 30th September, 1930, amounted to 344,590 acres, or 97,410 acres less than the proposed area.

Acquisition of Plantable Land.

Year ending	Ву	Lease or Fo	eu.	В	y Purchas	e.	Total.			
30th September.	Proposed.	Actual.	Excess(+) Deficit(-)	Proposed.	Actual.	Excess(+) Deficit(-)	Proposed.	Actual.	Excess (+) Deficit (-)	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Асгев.	Acres.	
First decade, 1920-29	160,000	156,759	- 3,241	222,000	153,471	- 68,529	382,000	310,230	-71,770	
Second decade:	10,000	8,409	-1,591	50,000	25,951	-24,049	80,000	34,360	-25,640	
Total	170,000	165,168	- 4,832	272,000	179,422	- 92,578	442,000	344,590	- 97,410	

Note.-In addition, 4,866 acres were acquired in Ireland to 31st March, 1922.

Planting Programme.

STATE FORESTS.

The area planted during the year was 24,721 acres, or 279 acres less than the Commissioners' programme, as shown in the following table:—

Area Planted.

37 15		D1		Actually	Planted.	
Year ending 30th Septembe	,	Proposed to be Planted.	New Planting.	Replace- ments.	Total.	Excess (+) Deficit (-)
First decade, 1920-29:		Acres.	Acres.	Acres.	Acres.	Acres.
Conifers Hardwoods	•••	150,000 Un- specified	125,799 5,774	4,969 1,737	130,768 7,511	-19,232
Second decade:		1			138,279	
1930		25,000	21,499	3,222	24,721	-279
Total		_	153,072	9,928	163,000	

Note.—In addition, 1,697 acres were planted in Ireland to 31st March, 1922.

The total area planted to 30th September, 1930, was 163,000 acres, of which 153,416 acres consisted of conifers and 9,584 acres of hardwoods. New planting accounted for 153,072 acres and replacements 9,928 acres. Details are given below.

		$Conifers. \ Acres.$	$Hardwoods.\ Acres.$	$Total.\ Acres.$
New Planting Replacements		F 700	7,254 2,330	153,072 9,928
Total	•••	153,416	9,584	163,000

Assistance to Local Authorities and Private Owners.

Under the Commissioners' programme financial provision has been made for State assistance to local authorities and private owners for the planting of approximately 6,000 acres per annum. The area planted during the year was 6,702 acres as shown on page 27.

Education and Research.

A Committee was appointed in May, 1930, by the Secretary of State for the Colonies to enquire generally into the training in Great Britain of candidates and probationers for Government Forest Services, the composition and terms of reference of the Committee being as follows:—

Chairman: Sir James Irvine, C.B.E., F.R.S. (Principal of St. Andrews University).

Mr. G. E. S. Cubitt, C.B.E. (Late Conservator of Forests, Malaya).

Major R. D. Furse, D.S.O. (Private Secretary (Appointments) to the Secretary of State for the Colonies).

Sir Thomas Middleton, K.C.I.E., K.B.E., C.B. (Development Commissioner).

Mr. R. L. Robinson, O.B.E. (Vice-Chairman and Technical Commissioner, Forestry Commission).

Mr. F. W. H. Smith (Assistant Secretary, India Office).

Mr. C. G. Trevor (Late Vice-Principal and Professor of Forestry, Dehra Dun, India).

Secretary: Mr. G. H. Creasy (Colonial Office).

"To consider and report on the training of candidates and probationers for appointment as Forest Officers in the Government Service."

On Mr. C. G. Trevor's return to India in November, 1930, Sir Alexander Rodger, O.B.E., Inspector General of Forests, India, and President, Forest Research Institute and College, Dehra Dun, was appointed a member of the Committee.

Forest Workers' Holdings.

The number of holdings completed during the year was 159 against 350 proposed for each of the first five years of the second decade.

OPERATIONS-FOREST YEAR 1929-1930.

The Forestry Fund.

The position of the Forestry Fund at 30th September, 1930, and at the same date in previous years is shown in Table I.

Table I.—Forestry Fund Account.

	:		Receipts.			Balance
Year ending 30th September.	Balance from pre- ceding Year.	Parlia- mentary Votes.	From Forestry Operations, etc. (Table 11, Head Z).	Total.	Payments. (Table II, Heads A to L).	in Forestry Fund, 30th Sept- ember.
	(1)	(2)	(3)	(4)	(5)	(6)
First decade: Five years,	£	£	£	£	£	£
192024		1,734,000	192,600	1,926,600	1,428,420	498,180
1925 1926 1927 1928 1929	498,180 402,661 251,936 406,103 384,259	300,000 335,000 645,400 485,600 500,000	121,933 122,341 127,764 141,492 145,354	421,933 457,341 773,164 627,092 645,354	517,452 608,066 618,997 648,936 680,147	402,661 251,936 406,103 384,259 349,466
Total, 1925-29		2,266,000	658,884	2,924,884	3,073,598	-
Total, First decade	_	4,000,000	851,484	4,851,484	4,502,018	_
Second decade:	349,466	937,800	148,337	1,086,137	808,237	627,366
Grand Total	_	4,937,800	999,821	5,937,621	5,310,255	-

An analysis of payments and receipts by Parliamentary Heads of Accounts is given in Table II.

Table II.—Payments and Receipts by Parliamentary Heads of Account.

	Net Payments.	(14)	બ	1,235,820	395,519	485,725	491,233	507,444	534,793	2,414,714	3,650,534	659,900	4,310,434
	Receipts. Z.	(13)	બો	192,600	121,933	122,341	127,764	141,492	145,354	658,884	851,484	148,337	999,821
	Total.	(12)	લો	1,428,420	517,452	990'809	618,997	648,936	680,147	3,073,598	4,502,018	808,237	5,310,255
	L. Forest Workers' Holdings.	(11)	લો	5,036	42,175	63,939	73,354	64,726	76,225	320,419	325,455	96,418	421,873
	K. Special Services.	(10)	લ	13,960	2,850	3,403	483	1,276	1,370	9,382	23,342	493	23,835
	J. Agency and Advisory	Services.	33	91,776		ı	I	ı	1		91,776	1	91,776
	H. Research and Experi-	ment. (8)	3	12,682	2,601	3,981	4,424	5,872	7,367	24,245	36,927	6,901	43,828
PAYMBNTS.	G. Education.	(2)	अ	37,702	7,460	8,192	7,525	7,594	7,531	38,302	76,004	9,355	85,359
PAYN	F. Advances for Afforesta-	Furposes.	લા	127,430	31,166	12,012	14,024	10,776	12,407	80,385	207,824	14,102	221,926
	E. Forestry Operations.	(2)	વ	857,722	369,281	451,124	450,854	488,639	501,217	2,261,115	3,118,837	598,119	3,716,956
	D. Divisional Officers'		વ	32,659	7,643	8,685	8,455	8,107	8,885	41,775	74,434	9,418	83,852
-	C. Assistant Commis-	Sioners Charges. (3)	3	14,898	2,770	2,864	3,108	3,500	3,446	15,688	30,586	7,658	38,244
	B. Head- quarters'	Charges. (2)	31	10,271	2,315	2,097	2,934	2,256	2,803	12,405	22,676	2,571	25,247
	A. Salaries, Wages	Allow- ances. (1)	બ	224,275	49,191	51,769	53,836	56,190	58,896	269,882	494,157	63,202	557,359
	Year ending 30th September.		First decade:	1920-24	1925	1926	1927	1928	1929	Total, 1925–29	Total, First decade	Second decade: 1930	Grand Total

Compared with the previous year total payments rose by £128,090, from £680,147 to £808,237, mainly accounted for by increases of £96,902 on forestry operations and £20,193 on forest workers' holdings. Receipts rose by £2,983 and net payments were therefore £125,107 greater.

Table II is based on Parliamentary Heads of Accounts and shows cash transactions only. The subsequent tables are prepared on a commercial basis and differ from Table II as follows:—(a) outstanding receipts and payments are brought into account; (b) salaries, office charges, etc. (Heads A to D) are allocated to the appropriate objects of expenditure; (c) adjustments are made in respect of produce used for forest purposes and of land and buildings transferred from the forests to forest workers' holdings; (d) expenditure and income in respect of forestry operations conducted by the Commissioners in Ireland during the period 1919 to 1923 are omitted; expenditure amounted to £90,514 and income to £26,041, leaving a net expenditure of £64,473.

Expenditure and income accounted for on the basis stated above are shown in Table IIa.

Table IIa.—Expenditure and Income.

		NET	TORB.	(14)	બ	1,163,784	386,981	482,420	483,921	511,690	540,276	2,405,306	3,569,090 666,364	4,235,454	
			TOTAL.	(13)	લ	197,250	136,351	126,285	141,839	162,122	152,712	719,309	916,559	1,077,165	100
	ME.		Mis- cellaneous.	(12)	બા	4,601	850	727	379	185	194	2,335	6,936	7,342	0.7
	INCOME	Z5.	Forest Workers' Holdings.	(11)	વર	6 0	1,257	3,374	6,074	8,216	8,586	27,507	27,515	39,721	3.7
	, 	Z1.	Forestry Operations.	(10)	લ	192,641	134,244	122,184	135,386	153,721	143,932	689,467	882,108	1,030,102	9.56
			Total.	(6)	भ	1,361,034	523,332	608,714	625,780	673,821	692,988	3,124,615	4,485,649 826,970	6,312,619	100
	n 1).	L.	Forest Workers' Holdings.	(8)	લા	5,906	56,522	75,837	82,524	95,880	73,214	383,977	389,883 108,575	498,458	₽.6
	n of Colum	Ę.	Special Services.	3	4	36,142	8,178	4,409	3,151	5,758	3,661	25,157	61,299	63,396	1.2
1	ng Allocation	J.	Agency and Advisory.	9	લો	90,763	1,954	2,007	1,538	1,643	1,328	8,470	99,233	100,410	1.9
	Expending Allocation of Column 1).	Ħ.	Research and Experi- ment.	(2)	લો	34,482	6,404	7,437	8,337	10,769	12,221	45,168	79,650	91,988	1.7
	Expendito	G.	Education.	(4)	भ	52,510	9,915	10,600	9,470	9,426	9,392	48,803	101,313	111,521	2.1
		편.	Advances for Affores- tation. Purposes.	(3)	3	146,698	34,387	14,960	16,822	13,491	15,336	94,996	241,694	258,638	4.9
		Ħ	Forestry Operations.	(2)	બ	994,533	405,972	493,404	503,918	536,854	677,836	2,518,044	3,512,577	4,188,208	8.82
	A to D.	Super-		(1)	લા	245,930	60,206	65,091	67,776	70,606	72,570	336,248	582,178 83,414	665,592	
7.1	419	Year	30th 30th September.		First decade:	1920-24	1925	1926	1927	1928	1929	Total, 1925–29	Total, First decade Second decade: 1930	Grand Total	Percentage

Note.—For accounting reasons the following changes have been made in Table IIa above and the figures for the first decade consequently differ from those given in previous Annua Reports:—(a) salaries of Instructors and Research Officers have been included in Column (1), Heads A to D, and the whole of the amount in this column has been allocated to Heads E to L; (b) income from forestry operations no longer includes amounts transferred from Insurance Reserve in respect of the value of plantations destroyed by fire.

Subheads A to D—General Organisation. Expenditure, £83,414.

Compared with 1929, expenditure increased by £10,844, mainly accounted for by normal expansion and the purchase of property for the Commission's Edinburgh Office. During the year an officer of Divisional rank was added to Headquarters' staff and the number of District Officers was increased from 36 to 40.

Subhead E—Forestry Operations. Expenditure, £675,631; Income, £147,994.

Details of expenditure and income are given in Table E. Compared with 1929, gross expenditure increased by £97,795 and income by £4,062. Expenditure on acquisiton of land increased by £36,859, on cultural operations by £43,721, and on roads and buildings by £9,751. In May, 1930, the guaranteed minimum wage of adult male forest workers in regular or seasonal employment was raised to 35s. per week.

Overhead Charges, £29,413; Superior Supervision, £29,957 and Local Supervision, £36,674.—Overhead charges are in respect of salaries, allowances and other expenses in the offices of the Commissioners and Assistant Commissioners. Superior supervision represents similar expenditure in respect of the Deputy Surveyors, Divisional Officers and District Officers; and local supervision, the salaries, housing allowances and miscellaneous expenses of foresters and foremen. During the year the number of foresters and foremen was increased by six from 235 to 241.

Table E.—Forestry Operations.

	NET EXPEN- DITURE.	(15)	ડ ો	801,892	271,728	371,280	368,532	383,133	433,904	1,828,577	2,630,469	527,637	3,158,106	
	Total.	(14)	બ	192,641	134,244	122,184	135,386	153,721	143,932	689,467	882,108	147,994	1,030,102	100
INCOME (Table IIA, Column 10).	Other.	(13)	બ	40,407	16,389	19,698	14,375	16,502	15,268	82,232	122,639	16,219	138,858	13.5
Table IIA,	Forest Produce.	(12)	વા	96,753	54,862	44,005	72,111	72,552	66,311	309,841	406,594	63,949	470,543	45.7
INCOME (Rents.	(11)	44	42,902	39,367	42,086	45,483	49,116	55,137	231,189	274,091	65,184	339,275	32.9
	Sales of Land, Build- ings, etc.	(10)	भ	12,579	23,626	16,395	3,417	15,551	7,216	66,205	78,784	2,642	81,426	6.2
	Total.	(6)	भ	994,533	405,972	493,464	503,918	536,854	577,836	2,518,044	3,512,577	675,631	4,188,208	100
	Stores and Miscel- laneous.	(8)	43	94,997	45,129	69,851	54,711	78,426	68,563	316,680	411,677	63,154	474,831	11.3
	Roads and Build- ings.	(2)	भ	26,604	18,485	17,954	20,813	14,817	16,815	88,884	115,488	26,566	142,054	3.4
mn 2).	Prepartion and Sale of Produce.	(9)	બ	19,459	15,684	16,576	23,543	22,649	20,942	99,394	118,853	22,871	141,724	3.4
EXPENDITURE (Table IIA, Column 2).	Cultural Opera- tions.	(5)	બ	431,378	164,125	200,889	230,543	247,231	236,635	1,079,423	1,510,801	280,356	1,791,157	42.8
ITURE (Tak	Acquisi- tion of Land, etc.	(‡)	બો	220,573	101,471	118,607	298'66	97,210	149,781	566,936	787,509	186,640	974,149	23.3
EXPEND	Local Super- vision.	(3)	બ	41,049	18,433	24,224	27,430	29,407	33,587	133,081	174,130	36,674	210,804	5.0
	Superior Super- vision.	(3)	બ	76,249	23,943	24,522	24,041	24,519	27,848	124,873	201,122	29,957	231,079	5.5
	Over- head Charges.	.	બ	84,224	18,702	20,841	22,970	22,595	23,665	108,773	192,997	29,413	222,410	5.3
	Year ending 30th September.		First decade :	Five years, 1920-24	1925	1926	1927	1928	1929	Total, 1925-29	Total, First decade	Second decade: 1930	Grand Total	Percentage

Acquisition of Land, Buildings and Standing Timber.—Expenditure amounted to £186,640 of which £164,760 was in respect of purchases of land, including the standing timber and buildings thereon, and £21,880 was in respect of land held on long lease or feu.

The average rent or feu duty for land acquired for forestry operations during the year by lease or feu was approximately 1s. 7d. per acre and the average price for such land purchased, approximately £2 13s. per acre. If the whole outlay in respect of land, buildings, timber, etc., were charged against plantable land the figures would be 2s. 8d. and £4 6s. respectively. Land and buildings for forest workers' holdings are excluded.

Land acquired from 29th November, 1919, to 30th September, 1930.

		By Le	ase and	Feu.	Ву	Purchas	se.	Total by
		Plant- able (in- cluding planted).	Other Land.	Total.	Plant- able (in- cluding planted).	Other Land.	Total.	Lease, Feu and Pur- chase.
England and Wales—		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Finally completed Entry secured		97,573 —	13,487 —	111,060 —	105,330	22, 108	127,438 —	238,498
Total		97,573	13,487	111,060	105,330	22,108	127,438	238,498
Scotland— Finally completed Entry secured	•••	64,100 3,495	61,307 6,827	125,407 10,822	70,198 3,894	82,763 9,551	152,961 13,445	278,368 23,767
Total		67,595	68,134	135,729	74,092	92,314	166,406	302,135
Great Britain		165,168	81,621	246,789	179,422	114,422	293,844	540,633

Note.—In addition to the above-mentioned areas, 120,696 acres of Crown woodlands have been transferred to the Forestry Commissioners. Of this area, 62,554 acres carry timber or are under forestal treatment.

The total area acquired during the forest year 1929-30 amounted to 58,482 acres, of which 34,508 acres were classified as plantable. On the other hand disposals amounted to 252 acres (148 acres plantable).

The area in Great Britain in respect of which the legal formalities of acquisition by the Department had been completed by 30th September, 1930, was 516,866 acres, the corresponding figures in the two previous annual reports being 472,384 and 416,199 acres. In addition to these completed acquisitions, entry has been secured to a number of other properties. Details are given in the above table, which also shows the area of "plantable" and "other land", i.e., land which is either too poor to plant or is required for other purposes.

The net total area acquired in Great Britain to 30th September, 1930, is 540,633 acres of which 344,590 acres were classified at the time of acquisition as plantable. Of the plantable area 202,903 acres (59 per cent.) are situated in England and Wales and 141,687 acres (41 per cent.) in Scotland.

Cultural Operations.—Expenditure amounted to £280,356, details of which are given in Table E.5. Plantations absorbed £206,787 and nurseries £73,569.

Table E.5 —Cultural Operations (Table E, Column 5).

	_			PLANTATIONS.	TIONS.		,			Nurs	Nurseries.		
Year ending	<u> </u>				Weed-		Romet			Upk	Upkeep.		$\frac{\text{Grand}}{\text{Total}}$
30th September.	treparation of Ground.	Drain- age.	Fencing.	Plant- ing.	ing and Clean- ing.	Beating- up.		Total.	New Works.	Seed.	Labour and Other.	Total.	
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)	(10)	(11)	(12)	(13)
T	-F	43	ઋ	3	#	¥	43	ધર	₩	ઝ	લ્ય	ુર	વર
Fire years, 1920-24	. 56,251	15,415	53,085	81,531	27,147	12,464	15,113	261,006	10,718	23,081	136,573	170,372	431,378
1925	16,920	10,515	20,311	22,615	22,620	9,526	9,152	111,659	2,955	3,173	46,338	52,466	164,125
1926	. 18,052	9,125	26,684	28,621	28,262	13,071	13,527	137,342	4,309	6,170	53,068	63,547	200,889
1927	. 19,522	12,496	36,354	35,928	34,528	9,310	17,744	165,882	3,598	7,367	53,696	64,661	230,543
1928	. 20,864	15,033	35,403	38,442	37,935	13,867	16,934	178,478	2,535	4,253	61,965	68,753	247,231
6261	. 20,341	18,563	32,686	36,076	33,007	11,134	23,354	175,161	1,189	4,062	56,223	61,474	236,635
Total, 1925-29	95,699	65,732	151,438	161,682	156,352	56,908	80,711	768,522	14,586	25,025	271,290	310,901	1,079,423
Total, First decade	151,950	81,147	204,523	243,213	183,499	69,372	95,824	1,029,528 25,304	25,304	48,106	407,863	481,273	1,510,801
1930	19,541	25,042	34,554	43,364	36,070	22,047	26,169	206,787	3,264	6,767	63,538	73,569	280,356
Grand Total	171,491	106,189	239,077	286,577	219,569	91,419	121,993	1,236,315	28,568	54,873	471,401	554,842	1,791,157
Percentage	9.6	5.8	13.3	91	12.3	5.1	8.9	69	9.1	$3 \cdot I$	26.3	31	100

Plantations.—The total area planted or sown during the year was 24,721 acres, of which 22,648 acres were placed under conifers and 2,073 acres under broadleaved species. Included in the above is the area (1,174 acres) reafforested in the former Crown woodlands and the area (2,048 acres) replanted after damage by fire.

The total addition to the woodland area of Great Britain as a result of the Commission's operations, was 14,155 acres. In forming plantations and beating-up previous years' plantations 63,469,000 trees were used, of which 44 per cent. were Scots and Corsican pines, 26 per cent. Norway and Sitka spruces, 13 per cent. European and Japanese larches and 5 per cent. Douglas fir.

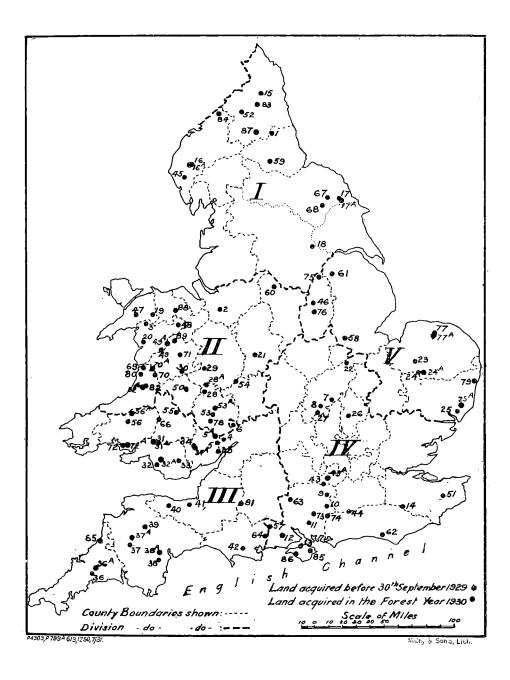
An area of 269 acres of existing woods was underplanted, necessitating the use of 266,000 plants.

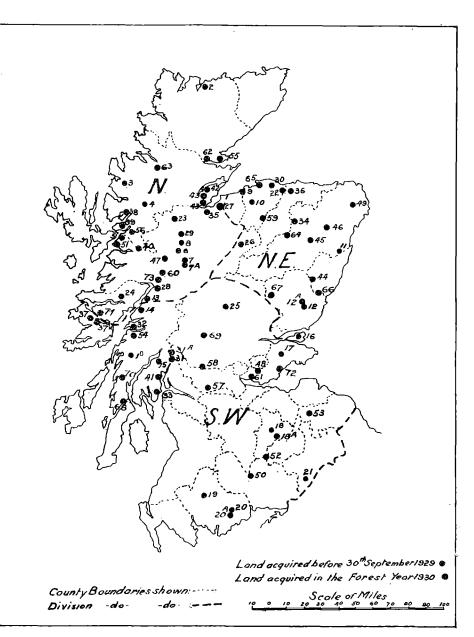
ENGLAND AND WALES.

FORESTRY COMMISSION AREAS.

]	FORESTRY	Сомм	issio	N AREAS.	
1.	Chopwell.*			38.	$\mathbf{Haldon}.$	
2 .	Delamere.*			38a.	Do.	(addition to).
3.	Hafod Faw:	r.*		39.	Eggesford.	
4.	Dean Fores	t.*		4 0.	\mathbf{Exmoor} .	
õ.	${f Tintern.*}$			41.	Quantocks.	
5A.	Do.	(addition	to).	42.	Wareham.	
6.	Dymock.*			43.	Bramshill.	
7.	Salcey.*			43A.	Do.	(addition to).
8.	Hazelborou	gh.*		44.	Chiddingfol	
9.	Alice Holt.			45.	Ennerdale.	
10.	Woolmer.*			46 .	Clipstone.	
11.	Bere.*			47.	Beddgelert.	
12.	New Forest	*		4 8.	Cynwyd.	
13.	Parkhurst.*			49.	Dovey.†	
14.	Bedgebury.	*		49a.	Do.	(addition to).
15.				50.	Radnor.	•
16.	Thornthwai	te.		51.	Lyminge.	
16A.		(addition	to).	52.	North Tyne	Valley.
17.	Allerston.	•	·	53.	Haugh.	U
17a.	Do.	(addition	to).	53A.	Do.	(addition to).
18.		,		54.	Wyre.	,
19.	•			55.	Brecon.	
	Vaughan.			56.	Glangwili.	
21.	Cannock Ch	ase.		56A.	Do.	(addition to).
22.		1.		57.	Ringwood.	,,
23.	Swaffham.			58.	Bourne.	
24.		ase.		59.	Hamsterley.	
24A.		(addition	to).	60.	Hope.	
25.	Rendlesham			61.	Laughton.	
25A.	$\mathrm{D}o$.	(addition	to).	62.	Friston.	
26.	Ampthill.			63.	Micheldever	•
27.	Brackley.			64.	Ferndown.	
28.	Mortimer.			65.	Wilsey Dov	vn.
28a.	Do.	(addition	to).	66.	Glasfynydd.	
29.	Walcot.			67.	Rosedale.	
30.	Kerry.			68.	Ampleforth.	
31.	Rheola.			69.	Cwmeinon.	
31a.	Do.	(addition	to).	70.	Tarenig.	
32.	Margam.			70A.	Do.	(addition to).
32A.	Do.	(addition	to).	71.	Mathrafal.	
33.	Llantrisant.			72.	Pembrey.	
34.	Llanover.			72A.	Do.	(addition to).
34A.	Do.	(addition	to).	73.	Westbury.	
35.	Chepstow.	·	•	74.	Buriton.	
36.	Bodmin.			<i>7</i> 5.	Bawtry.	
36a.	Do.	(addition	to).	76.	Sherwood.	
37.	Halwill.			77.	Swanton.	
37a.	Do.	(addition	to).	77a.	Do.	(addition to).

^{*} Former Crown Wood.
† Now includes the area previously known as "Corris Valley".





78. Chase. 84. Kershope. 79. Dunwich, 85. Combley. 80. Brynmawr. 86. Brighstone. 81. Bruton. 87. Slaley. Clocaenog. 82. Myherin. 88. (addition to). Dyfnant. 82a. Do. 89.

83. Harwood.

SCOTLAND.

FORESTRY COMMISSION AREAS.

1. Inverliever.*	36. Ordiequeish.
2. Borgie.	37. Salen.
3. Slattadale.	37A. Do. (addition to).
4. Achnashellach.	38. North Strome.
5. Ratagan.	39. South Strome.
6. Inchnacardoch.	40. Glenshiel.
7. South Laggan.	41. Glenfinart.
7A. Do. (addition to).	42. Findon.
8. Port Clair.	43. Kessock.
9. Culbin.	43A. Do. (addition to).
10. Monaughty.	44. Drumtochy.
11. Kirkhill.	45. Midmar.
12. Montreathment.	46. Kemnay.
12a. Do. (addition to).	47. Glengarry.
13. Glen Righ.	48. Blairadam.
14. Glenduror.	49. Deer.
15. Glenbranter.	50. Closeburn.
16. Tentsmuir.	51. Eilanreach.
17. Edensmuir.	52. Greskine.
18. Glentress.	53. Edgarhope.
18a. Do. (addition to).	54. Fearnoch.
19. Bennan.	55. Dornoch.
20. Dalbeattie.	56. Inverinate.
20a. Do. (addition to).	57. Lennox Castle.
21. Newcastleton.	58. Loch Ard.
22. Teindland.	59. Scootmore.
23. Glenurquhart.	60. Clunes.
24. Glenhurich.	61. Devilla.
25. Drummond Hill.	62. Balblair.
26. Glenmore.	63. Lael.
27. Culloden.	64. Clashindarroch.
28. Nevis.	65. Roseisle.
29. Craig-nan-Eun.	66. Inglismaldie.
30. Altonside.	67. Blackcraig.
31. Ardgartan.	68. Achaglachgach.
31A. Do. (addition to).	69. Tulloch.
32. Barcaldine.	70. Knapdale.
33. Benmore.	71. Fiunary.
34. The Bin.	72. Carden.
35. Craig Phadrig.	73. Glenloy.

^{*} Former Crown Wood.

Plantations. Year ended 30th

	Area planted (acres).							
Forest.	Affo	rested.	Re-afi	forested.	To	otal.		
	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.		
Alice Holt, Hants*	_	_	. 43	13	43	13		
Allerston, Yorks	507	_	! —	_	507	_		
Ampleforth, Yorks	224	_	_		224			
Ampthill, Bedford	100		_	11	100	11 21		
Bawtry, Notts Beddgelert, Carnarvon	$\frac{100}{42}$		$\frac{-}{24}$		66	41		
Bedgebury, Kentand Sussex*	_		143	_	143			
Bere, Hants*		_	_	35	_	35		
Bodmin, Cornwall	_ '		55		55			
Bourne, Lincoln	_	_	45	40	45	40		
Brackley, Bucks and Northants.	_	_	5	37	5	37		
Bramshill, Berks and Hants	_	_	97		97			
Brecon, Brecknock	152	_			152	_		
Brighstone, Isle of Wight	72	5		_	72	5		
Bruton, Somerset and Wilts	76	_	l —	<u>.</u>	76			
Buriton, Hants	_	99	-	90		189		
Cannock Chase, Stafford	300	_	_	_	300	_		
Chase, Hereford Chepstow, Glos. and Mon-	<u> </u>	_	12 96	$\begin{array}{c} 24 \\ 2 \end{array}$	12 96	.24 2		
mouth. Chiddingfold, Surrey			17	89	17	89		
Chopwell, Durham*	37			_	37			
Clipstone, Notts	262	113	204	54	466	167		
Clocaenog, Denbigh and	156	_	156	_	312	-		
Merioneth.	E	72			_ E	70		
Combley, Isle of Wight	5 5 50	12		I —	5 50	72		
Cwmeinon, Cardigan Cynwyd, Merioneth	67	_	65	-2	132	-2		
Dean Forest, Glos., Here-		_	130	188	130	188		
ford, and Monmouth.*			36	4	36	4		
Delamere, Cheshire* Dovey, Merioneth and	$\frac{-}{474}$		317	_ 4	791	4		
Montgomery.	414		311	_	131			
Dunwich, Suffolk	173	21			173	21		
Dymock, Gloucester and			66	112	66	112		
Hereford.								
Eggesford, Devon			40	_	40	_		
Ennerdale, Cumberland	153	_		_	153	_		
Exmoor, Somerset	15	<u> </u>	86	_	101	_		
Ferndown, Dorset	70	<u></u>	63	_	133			
Friston, Sussex	160	54	92		22	54		
Glangwili, Carmarthen	$\begin{array}{c c} 169 \\ 50 \end{array}$		_54	5	261 50	_5		
Glasfynydd, Brecknock Gwydyr, Carnarvon	$\frac{30}{489}$		134	6	623	6		
Hafod Fawr, Merioneth*	403.	_			41			
Haldon, Devon	138		80	_	218	_		
Halwill, Devon	44		5	_	49	<u> </u>		
Hamsterley, Durham	319	11	1	_	319	11		
Harwood, Northumberland	126	_	-	_	126	_		
Haugh, Hereford	—	_	17	29	17	29		
	<u> </u>		<u> </u>	ļ	<u> </u>	<u> </u>		

[†] Now includes forest previously known as Corris Valley, Merioneth.

September, 1930-England and Wales.

	Species	s planted,	including	beating	g-up (t	housan	ds).	!	
Scots and Corsican Pines.	Eur. and Jap. Larches.	Douglas Fir.	Norway and Sitka Spruces.	Oak.	Ash.	Beech.	Others.	Total.	Forest.
53 1,026 247 46 253 2 79 — 39	33 281 153 — 3 2 13 24 97 6	9 14 12 — — 100 — 26 19 12	18 165 15 2 32 138 93 — 8 4 279	101 — 108 38 — 109 — 136	 3 3 64	19 104 55 — — — 7 — 7	1 9 9 1 - 45 8 - -	234 1,599 491 157 333 189 285 132 97 184 433	Alice Holt.* Allerston Amplefortb. Ampthill. Bawtry. Beddgelert. Bedgebury.* Bere.* Bodmin. Bourne. Brackley.
1,013 48 260 — 1,132	1 157 3 30 198 437	2 50 — 30 —	143 68 — 29 — 77	— — — — —	9 - 37 -	25 206 43	10 - - - 28	1,159 333 297 89 441 1,717	Bramshilf. Brecon. Brighstone. Bruton. Buriton. Cannock
27 59		90		126 —		4 7		157 313	Chase. Chase. Chepstow.
12 2 1,202 11	12 1 248 116	22 2 —	54 58 2 393	207 — 151 —	$\begin{bmatrix} 11 \\ -12 \\ - \end{bmatrix}$	- - -	4 8 296 1	322 71 1,911 521	Chiddingfold. Chopwell.* Clipstone. Clocaenog.
1 13 84	8 19 81 152	26 26	— 84 158 131		_ _ _ _ 38	5 152	13 	21 104 294 1,003	Combley. Cwmeinon. Cynwyd. Dean Forest.*
87 58	64 330		13 591	_		15 17	2 20	181 1,370	Delamere.* Dovey.†
514 —	 155	_	8	41 229		-8	_ 3	555 418	Dunwich. Dymock.*
31 93 246 85 90 	10 45 48 107 171 5 311 36 - 10 189 2 46	69 51 32 — 62 — 198 — 120 14 13 —	2 202 60 26 132 256 512 55 4 221 82 196	8 -13 	- 3 5 5	-5 111 -1111 -5 -67 	3 -6 -11 3 1 85 - - 43 16	84 337 250 272 314 466 262 1,389 91 560 268 713 228 115	Eggesford. Ennerdale. Exmoor. Ferndown. Friston. Glangwili. Glasfynydd. Gwydyr. Hafod Fawr.* Haldon. Hulwill. Hamsterley. Harwood. Haugh.

Plantations. Year ended 30th

		A	rea pla	nted (acre	es).	
Forest.	Affo	rested.	Re-aff	orested.	Т	otal.
	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.
Hazelborough, Northants*	_	_	_	8	_	8
Hope, Derby	89	_	_		89	_
Kerry, Montgomery	12	_	_	_	12	_
Kershope, Cumberland	247		_	_	247	_
Laughton, Lincoln	269	11	l —	_	269	11
Llanover, Monmouth	96		35	_	131	
Llantrisant, Glamorgan	105			_	105	
Lyminge, Kent	_	_	113	27	113	27
Margam, Glamorgan	_	_	_			_
Mathrafal, Montgomery	_		59	7	59	7
Micheldever, Hants				60	:	60
Mortimer, Hereford, Radnor and Salop.	176		295	24	471	· 24
Myherin, Cardigan	40	3	143	2	183	5
New Forest, Hants*	-	_	70	174	70	174
North Tyne Valley,	173	<u> </u>		_	173	. -
Northumberland.			i			
Parkhurst, Isle of Wight*	-		7	21	7	21
Pembrey, Carmarthen	171		-	_	171	
Quantocks, Somerset		_	56	_	56	_
Radnor, Radnor	194	_	8	_	202	7
Rendlesham, Suffolk	125	_	i — I	_	125	<u> </u>
Rheola, Glamorgan	216	—	63	_	279	_
Ringwood, Hants	_	_	115	_	115	_
Rockingham, Northants	120	204	50	111	170	315
Rosedale, Yorks	264	_ '	-	_	264	_
Rothbury, Northumberland	_	-			_	_
Salcey, Bucks and	-		_ :	2	· —	2
Northants.*						
Selby, Yorks		_	<u> </u>	_	. —	
Sherwood, Notts	250	30) —	_	250	3 0
Swaffham, Norfolk	391	18	15	1	406	19
Swanton, Norfolk	19	2	60	_	79	2
Tarenig, Cardigan and	115	_	4	_	119	_
Montgomery.						
Thetford Chase, Norfolk	488	54	249	53	737	107
and Suffolk.					ایتیا	
Thornthwaite, Cumberland	164	_			164	
Tintern, Monmouth*		_	70	34	70	34
Vaughan, Merioneth	182	_	74		256	
Walcot, Salop	-	_	34	3	34	3
Wareham, Dorset		_	112	-	112	_
Westbury, Hants		_	-	_		_
Wilsey Down, Cornwall	-	_	46		46	
Wyre, Worcester	_	—	136	3	136	3
Total	8,239	718	3,842	1,271	12,081	1,989
By direct sowing (included		48		47		95

^{*} Former Crown Wood.

September, 1930—England and Wales—contd.

	Species planted, including beating-up (thousands).											
Scots and Corsican Pines.	Eur. and Jap. Larches.	Douglas Fir.	Norway and Sitka Spruces.	Oak.	Ash.	Beech.	Others.	Total.	Forest.			
_	_		_	37	_	_	_	37	Hazel- borough.**			
25 695 61 — 172 — 374	138 8 9 144 173 31 74 63 152 576	36 123 -7 -30	39 221 391 175 220 103 — 305 26 — 30			8 2 — — — — — — — — — — — — — — — — — —	61 8 1 27 — 11 — — 3	246 275 417 906 425 276 171 551 104 455 1,158	Hope. Kerry. Kershope. Laughton. Llanover. Llantrisant. Lyminge. Margam. Mathrafal. Micheldever. Mortimer.			
2 319 113	105 162 1	93 29 —	68 191 263		<u></u>	10 229 —	2 12	278 1,113 389	Myherin. New Forest.* North Tyne Valley.			
3 461 5 39 804 57 297 92 295 84	$\begin{array}{c c} & 1 \\ & -46 \\ 201 \\ & -223 \\ & 18 \\ & 1 \\ & -6 \\ & - \end{array}$	3 -58 26 19 - 22 33 58 14	9 -32 166 -333 17 380 84 17 -	579	7 50 	1 — 13 1 — 1 — 29 — —	14 23 — 17 3 6 6 21 4 — 3	38 484 141 462 827 619 360 1,156 470 121	Parkhurst.* Pembrey. Quantocks. Radnor. Rendlesham. Rheola. Ringwood. Rockingham. Rosedale. Rothbury. Salcey.*			
123 853 1,377 —		94 102		50 —	_ 	 	51 - 1	123 904 1,521 135 209	Selby. Sherwood. Swaffham. Swanton. Tarenig.			
7,167	11	166	102	107	_	19	211	7,783	Thetford			
86 43 43 2 598 — — 4	45 120 134 88 23 — 6 198	56 56 58 — 40 — 17	176 30 237 — 10 — 71 11	87 — — — — —	16 -3 2	25 2 — — — — — — 3	25 1 22 — 12 — 14 —	413 355 494 93 683 — 91 235	Chase. Thornthwaite. Tintern.* Vaughan. Walcot. Wareham. Westbury. Wilsey Down. Wyre.			
22,056	6,538	2,493	8,243	2,901	320	1,406	1,333	45,290	Total.			

Plantations. Year ended

		A	rea plar	ted (acre	s).	
Forest.	Affo	rested.	Re-af	forested.	Т	otal.
	Conifers.	Broad- leaved.	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.
Achnashellach, Ross	_	_	_	_	İ _	_
Ardgartan, Argyll	306	_	_		306	
Balblair, Sutherland	_	_	100	_	100	— :
Barcaldine, Argyll	124	_	129	1	253	1
Benmore, Argyll	252	7		_	252	7
Bennan, Kirkcudbright	42		-	_	42	
Bin (The), Aberdeen		_	231	_	231	_
Blairadam, Fife and Kinross	37	_	80	_	117	_
Borgie, Sutherland	l —	-	—	_	—	
Carden, Fife	[—]		26	_	26	_
Clashindarroch, Aberdeen	200	_	-	-	200	_
Closeburn, Dumfries	160	_		_	160	_
Clunes, Inverness	105	_		_	105	
Craig-nan-Eun, Inverness	142	_	-	_	142	<u> </u>
Craig Phadrig, Inverness	-	_		_	-	_
Culbin, Elgin	17	_	252		269	_
Culloden, Inverness	l =. 1	_	<u> </u>		<u> </u>	
Dalbeattie, Kirkcudbright	54	_ _ _	78	19	132	19
Deer, Aberdeen	94	_	96	_	190	_
Devilla, Fife		_ _ _	48	_	48	-
Dornoch, Sutherland	_	_	224	— ,	224	- ,
Drummond Hill, Perth	070	_	204	4	204	4
Drumtochty, Kincardine	272	_	13	2	285	2
Edensmuir, Fife	13	_ _	$\frac{21}{90}$	$\begin{array}{c} 11 \\ 2 \end{array}$	34 90	$\begin{array}{c} 11 \\ 2 \end{array}$
Edgarhope, Berwick	150	_	30	Z	150	
Eilanreach, Inverness	111	1			111	1
Fearnoch, Argyll			150		150	
Findon, Ross Glenbranter, Argyll	180	_			180	
Glenduror, Argyll	156	_	_		156	_
Glenfinart, Argyll	130	_	84		214	
Glengarry, Inverness	135	-			135	_ _ _
Glenhurich, Argyll	170	_	l —	_	170	_
Glenmore, Inverness	_		266	_	266	
Glen Righ, Inverness	79	1	—	_	79	1
Glenshiel, Ross	120	_	_	_	120	_
Glentress, Peebles	-	_	2	4	2	4
Glenurquhart, Inverness	198	—	-	_	198	
Greskine, Dumfries	48	3	_	_	48	3
Inchnacardoch, Inverness	117		<u> </u>	_	117	_
Inglismaldie, Kincardine		_	24	<u></u>	24	-
Inverinate, Ross	157	_		_	157	-
Inverliever, Argyll*	6	<u> </u>	18	_	24	_
Kemnay, Aberdeen		_	80		80	
Kessock, Ross		_	222	1	222	1
Kirkhill, Aberdeen	191	_	100	_	940	_
Lael, Ross	131	${2}$	109	_	240	
Lennox Castle, Stirling	170	4	_		$\begin{array}{c c} 64 \\ 170 \end{array}$	2
Loch Ard, Perth	170	_	$\frac{-}{126}$	_	126	_
Midmar, Aberdeen			103	_	103	
Monaughty, Elgin	-	_	103	_	100	_

^{*} Former Crown Wood.

30th September, 1930—Scotland.

8 39 — 268 — — — — 315 Closeburn. 255 1 116 85 — — — — 227 Craig-nan-Eun. 17 — 6 — — — 19 42 Craig-Phadrig. 667 — — — — 38 705 Culloin. 39 10 16 4 — — 6 — 75 Culloden. 82 41 — 135 — 10 10 12 290 Dalbeattie. 56 30 — 325 — 1 16 27 455 Deer. 84 16 — 5 — — 1 — 106 Devilla. 292 22 3 67 — — 5 — 327 Drummod Hil 128 1 — 19		Species	planted,	including	beating	g-up (th	ousand	s).		
Till	and Corsican	and Jap.		and Sitka	Oak.	Ash.	Beech.	Others.	Total.	Forest.
88 33 1 65 — — 18 — 205 Kennay. 329 15 52 31 — 1 — 1 429 Kessock. 68 12 2 21 — — 3 8 114 Kirkhill. 60 124 12 113 — — 80 389 Lael. 35 — — 72 — — 8 115 Lennox Castle. 110 24 18 107 — — 33 292 Loch Ard. 84 24 3 144 — 1 10 15 281 Midmar.	75 125 16 59 34 214 23 46 73 8 6 25 17 667 39 82 56 84 292 177 28 128 106 276 41 80 33 39 135 49 62 88 329 68 329 68 35 110		30 — 16 — — — — — — — — — — — — — — — — —	460 32 386 197 60 458 196 74 13 164 268 147 85 — 4 135 325 57 50 164 200 23 325 260 239 84 328 240 114 124 20 146 72 183 183 183 183 183 183 183 183			2 2 5	30 30 51 	565 202 439 430 106 814 197 110 59 2815 161 227 425 455 157 1266 443 2240 435 129 435 1445 240 435 447 455 449 449 449 449 449 449 449 449 449	Ardgartan. Balblair. Barcaldine. Benmore. Bennan. Bin (The). Blairadam. Borgie. Carden. Clashindarroch. Closeburn. Clunes. Craig-nan-Eun. Craig Phadrig. Culbin. Culloden. Dalbeattie. Deer. Devilla. Dornoch. Drummond Hill. Drumtochty. Edensmuir. Edgarhope. Eilanreach. Fearnoch. Findon. Glenbranter. Glenduror. Glenfinart. Glengarry. Glenhurich. Glenshiel. Glenshiel. Glenshiel. Glenshiel. Glenshiel. Glenshiel. Glentress. Glenurquhart. Greskine. Inchnacardoch. Inglismaldie. Inverinate. Inverliever. Kemnay. Kessock. Kirkhill. Lael. Lennox Castle.

Plantations. Year ended

		A	rea plai	nted (acre	ев).	
Forest.	Affo	rested.	Re-aff	orested.	Total.	
	Coni- fers	Broad- leaved.	Coni- fers.	Broad- leaved.	Coni- fers.	Broad- leaved.
Montreathmont, Angus Nevis, Inverness Newcastleton, Roxburgh North Strome, Ross Ordiequeish, Elgin Port Clair, Inverness and Ross Ratagan, Inverness and Ross Roseisle, Elgin and Moray Salen, Argyll Scootmore, Moray Slattadale, Ross South Laggan, Inverness South Strome, Ross Teindland, Elgin Tentsmuir, Fife Total	123 144 152 - 240 148 88 - 61 - 127 - 156 - 5,179	- 1 - 4 	76 -8 -52 143 -42 -138 -100 -100 -3,342	- - 19 - - - - - - - - - - - - - - - - -	76 123 152 152 52 143 240 190 88 138 61 — 127 100 156	19 — 4 — 4 — — — — — — — — — — 82
By direct sowing (included above).	5	4	3	 	8	4

Plantations. Year ended

England and Wales	•••	8,239	718	3,842	1,271	12,081	1,989
Scotland		5,179	19	3,342	63	8,521	82
Total	•••	13,418	737	7,184	1,334	20,602	2,071

30th September, 1930—Scotland—contd.

	Species planted, including beating-up (thousands).												
Scots and Corsican Pines.	Eur. and J ap. Larches.	Douglas Fir.	Norway and Sitka Spruces.	Oak.	Ash.	Beech.	Others.	Total.	Forest.				
214	I _		28	_	_	5	26	273	Montreathmont.				
	15		175	_	_	2	9	201	Nevis.				
l —	11	_	279	_	6	2	5	303	Newcastleton.				
31	7	20	173	_	_	<u> </u>	18	249	North Strome.				
94	l —	· —	3	_	_	-	44	141	Ordiequeish.				
57	11	42	122	_		<u> </u>	8	240	Port Ĉlair.				
18	125	1	325	_	_	_	9	478	Ratagan.				
341	_		-	_	_	5	20	366	Roseisle.				
25	7	1	123	_			2	158	Salen.				
145	34	. 5	35	_	_	2	10	231	Scootmore.				
_	2	49	83	-		-	19	153	Slattadale.				
1	4		10			_	9	24	South Laggan.				
33	31	45	71	_	_	-	11	191	South Strome.				
160	9	_	7		_	1	77	254	Teindland.				
301	-	_	9		_	_	86	396	Tentsmuir.				
6,186	1,653	671	8,151	5	23	176	1,314	18,179	Total.				

30th September, 1930-Summary.

22,056 6,186	6,538 1,653	2,493 671	8,243 8,151	2,901 5	320 23				England & Wales. Scotland.
28,242	8,191	3,164	16,394	2,906	343	1,582	2,647	63,469	Total.

Cost of Planting.—The outlay per acre on labour and material on the areas planted between 1919 and 1930 was as follows:—

				£	s.	d.
England and V	Wales			8	19	0
Scotland				9	13	5
Great Britain		 	• • •	9	3	10

These figures cover the cost of preparation of ground, drainage, fencing, plants, planting, replacement of failures and weeding but do not include expenditure on forest protection, overhead charges and supervision.

Forest Fires.—Fires were fewer in number and caused much less damage than in 1929, when exceptionally dry weather was experienced. Revised methods of fire protection have also contributed to the improvement. Comparative figures for the two years are as follows:—

		1929.	1930.
Number of fires		409	165
Area burnt (acres)	 	4,574	258
Damage caused	 	£ $45,961$	£2,080

As the result of claims made by the Commissioners the sum of £693 may be recovered in respect of the damage caused in 1930.

The fires were principally caused by sparks from railway engines (53 per cent. of the total number), carelessness on the part of the general public (15 per cent.) and sparks from road engines (8 per cent.).

Nurseries.—The total area under nurseries at 30th September, 1930, was 863 acres stocked with 254 million seedlings and 100 million transplants. Comparative figures for the three years 1928-30 are given in the following table:—

Nurseries.

Year-				Seed Sov	vn.		Sto		nts at 30t thousands		nber	
end- ing	Count	ry.		(lbs.).		T	ransplan	ıts.		Seedling	s.	
30th Sept.		-	Conifer- ous.	Broad- leaved.	Total.	Conifer- ous.			Conifer- ous.	Broad- leaved.	Total.	Area (Acres
1930			137,725	55,827	6,338	62,165	142,832	14,396	157,228	592		
	Wales. Scotland		3,814	944	4,758	36,797	595	37,392	96,262	534	96,796	271
	Total		11,370	131,113	142,483	92,624	6,933	99,557	239,094	14,930	254,024	863
1929	England Wales.	and	3,778	90,366	94,144	70,411	4,291	74,705	82,286	11,010	93,296	570
	Scotland		2,092	432	2,524	34,378	764	35,142	64,955	764	65,719	280
	Tot	al	5,870	90,798	96,668	104,789	5,058	109,847	147,241	11,774	159,015	850
1928	England Wales.	and	5,821	48,238	54,059	77,285	5,217	82,502	109,648	4,640	114,288	565
	Scotland	••.	2,072	107	2,179	34,755	1,048	35,803	62,000	318	62,318	274
	Tot	al	7,893	48,345	56,238	112,040	6,265	118,305	171,648	4,958	176,606	839

Seed Supply.—The autumn crop of Douglas fir seed was again practically a failure in Canada, but plentiful supplies were obtained from the United States of America. The Sitka spruce crop was very good both in Canada and the United States. The yield from European larch, Norway spruce and Corsican pine was satisfactory, but Japanese larch again failed completely.

As regards home-collected seed, in England and Wales beech, chestnut, hornbeam, sycamore and Scots pine were plentiful and the necessary supplies of acorns were obtained, but ash yielded a poor crop. In Scotland, Scots pine cones were obtained with some difficulty but the quality of the seed was good; European larch and Douglas fir did not yield sufficient seed to meet requirements.

The quantity of seed sold during the year amounted to 2,746 lb.

The Commissioners have to express their gratitude for gifts of seed from the forest authorities of Canada, France, Hungary, Italy, Japan, Portugal and Turkey.

Subhead F—Advances for Afforestation Purposes. Expenditure £16,944.

Grants to private individuals and local authorities for planting and scrub clearing amounted to £12,111, advances in respect of a proceeds-sharing scheme to £1,529 and overhead and supervisory charges to £3,304. The basis on which grants were made was as follows:—

- (1) Conifers.—Up to £2 per acre planted and thereafter maintained as a forest crop.
- (2) Hardwoods.—Up to £4 per acre planted with approved species and thereafter maintained as an area for the production of hardwoods.
- (3) Clearance of Scrub, &c.—Up to £1 per acre (in exceptional cases up to £2 per acre) cleared. Limited to selected schemes involving not less than 20 acres.

The number of schemes in respect of which grants were paid during the year and the areas dealt with are stated below:—

_	England & Wales.	Scotland.	Total.
No. of Schemes	267	96	363
Planting conifers Planting hardwoods Scrub clearing	Acres. 3;041 991 195	Acres. 2,376 105 —	Acres. 5,417 1,096 195

The area planted under the proceeds-sharing scheme was 189 acres.

Subhead G—Education. Expenditure: Gross £10,208; Net £9,945.

Details of expenditure are given in Table G.

Table G.—Education.

		Exp	ENDITURE	(Table II	A, Column	1 4).	,		
	Superior		pprentices	' Schools.					
Year ending 30th September.	Super- vision and Over-	Salaries and Expenses		Allow- ances to	Stores, Fuel,	Grants to Institu-	Total.	Income.	NET EXPEN- DITURE.
	head Ch arg es.	of In- structors.	and Build- ings.	Appren- tices.	Light, etc.	tions.	i 120		
First decade :	£					£	£	£	
Five years, 1920-24	7,238					52,510	1,889	50,621	
1925 1926 1927 1928 1929	1,240 1,361 1,231 1,005 1,050	1,150 1,138 769 803 851	166 235 185 109 129	1,685 2,347 2,028 2,303 2,202	931 1,280 1,122 971 978	4,743 4,239 4,135 4,235 4,182	9,915 10,600 9,470 9,426 9,392	435 17 68 9 9	9,480 10,583 9,402 9,417 9,383
Total, 1925-29	5,887	4,711	824	10,565	5,282	21,534	48,803	538	48,265
Total, First decade	13,125	15,401					101,313	2,427	98,886
Second decade:	900	820	838	2,203	1,215	4,232	10,208	263	9,945
Grand Total Percentage	14,025 12·6	16,221 14·6	7,033 6·3	23,912 21·4	15,407 13·8	34,923 31·3	111,521 - 100	2,690	108,831

Apprentices' Schools: Expenditure, £5,076.—Increased expenditure on land and buildings was due to additions to the school at Parkend. During the year, 58 forest apprentices underwent courses of instruction in the Commission's schools at Parkend (Forest of Dean) and at Benmore (Argyllshire). At the final qualifying examination 25 men who had successfully completed the two years' course were granted certificates of proficiency.

Grants to Universities and Colleges: Expenditure, £2,232.— The following Universities and Colleges received grants during the year:—Oxford University, Cambridge University, University College of North Wales, Bangor; Armstrong College, Newcastle-on-Tyne; Aberdeen University; Edinburgh and East of Scotland College of Agriculture.

These centres provide courses of training for forest officers and also forestry instruction for those engaged in estate management and agriculture. The number of students studying forestry during the year was 179, 41 forestry degrees were granted and 9 candidates obtained diplomas.

Imperial Forestry Institute: Expenditure, £2,000.—The grant of £2,000 per annum to the Imperial Forestry Institute from the Forestry Fund was continued. Thirty-five students attended for the whole or part of the academic year 1929-30 and these included 12 post graduate probationers (Great Britain 1, Colonial Services 11) and 23 forest officers on leave (India 4, Dominion Services 4, Sudan 1, Colonial Services 13, private student (U.S.A.) 1).

Subhead H—Research and Experiment. Expenditure: Gross £12,338; Net £12,233.

Details of expenditure are given in Table H.

Table H.—Research and Experiment.

	,	Expenditur	E (Table IL	, Column 5)			
Year ending 30th September.	Superior Super- vision and Overhead Charges.	Salaries and Expenses.	Labour, Stores, etc.	Grants to Institu- tions.	Total.	Income.	NET EXPENDI- TURE.
First decade :	£	£	£	£	£	£	£
Five years, 1920-24	6,450	20,486	4,453	3,093	34,482	586	33,896
1925 1926 1927 1928 1929	1,662 1,492 1,376 1,584 1,135	3,030 3,336 3,492 3,682 4,432	1,112 1,946 2,712 4,758 5,249	600 663 757 745 1,405	6,404 7,437 8,337 10,769 12,221	43 110 93 93 133	6,361 7,327 8,244 10,676 12,088
Total, 1925-29	7,249	17,972	15,777	4,170	45,168	472	44,696
Total, First decade Second decade :	13,699	38,458	20,230	7,263	79,650	1,058	78,592
1930	1,316	5,07 9	4,529	1,414	12,338	105	12,233
Grand Total Percentage	15,015 16·3	43,537 47·4	24,759 26-9	8,677 9·4	91,988 <i>100</i>	1,163	90,825

Production.—Four new sample plots were established during the year, 3 in England and Wales and 1 in Scotland. Remeasured plots numbered 4 in England and Wales and 21 in Scotland. At 30th September, there were 178 plots, 105 being in England and Wales and 73 in Scotland.

Nursery and Plantation.—Investigations in nurseries dealt in the main with the raising of seedlings for use on cultivated sites, the technique of raising birch and alder in the nursery, and the improvement of germination in European larch and Sitka spruce by using special methods of covering the seed to prevent caking. Satisfactory progress was made under all three heads.

Plantation experiments on peat soils were continued at Inchnacardoch, Achnashellach, Glenmore, Borgie and Glen Righ Forests in Scotland, at Beddgelert Forest in Wales, and at North Tyne Forest in England. Further work on the poor calluna heaths was done at Hamsterley and Allerston Forests in England, and at Teindland Forest in Scotland. At Allerston the trial of a powerful tractor-driven plough proved successful as a means of breaking through the pan layer, and the work is now proceeding at an economic cost. The grassy heaths of East Anglia present certain difficulties, chiefly of a climatic nature. An experiment has been carried out involving a combination of different methods of soil preparation with size of plant, using quick-growing but frost-tender species. Nurse species such as birch and grey alder have also been planted.

Plots of different nurse species have been established on shallow soils over chalk at Buriton Forest in Hampshire, experience having shown that beech and larch planted direct on such soils often suffer severely from frost and drought. Work on oak and ash was continued on previous lines in the Forest of Dean and at Dymock, Alice Holt and Rockingham Forests. Further comparative plots of plants raised from different seed lots of Scots pine, lodgepole pine and oak have been established.

Entomology and Mycology.—Further work was done on the pine shoot moths in the Eastern Counties, and an investigation was begun on the caterpillars causing the defoliation of oak.

A further survey in connection with the Dutch elm disease was carried out; this disease, though undoubtedly serious, is not at present spreading very rapidly. The fungus responsible for causing heart rot in the upper part of oak stems has been identified as Stereum spadiceum and some preliminary work put in hand in connection with it. The watermark disease of the cricket bat willow was investigated by means of a survey carried out during the summer in Essex and adjoining counties. The survey showed that there were several centres where the attack was severe and causing considerable loss to the growers concerned. There were no clear indications of the existence of any definite relation between cultural methods or soil conditions on the one hand, and the incidence of the disease on the other.

The refrigerating apparatus, installed at Oxford for the purpose of studying forms of frost damage on young trees is functioning satisfactorily, and many interesting observations have been made.

Botany.—Research work at Aberdeen has continued on previous lines; the development of mycorrhiza in peat is only possible under certain conditions which are being investigated.

Facilities in Wareham Forest were given to Dr. M. C. Rayner for work on the mycorrhiza of pines.

Advisory Committee on Forest Research.—At the first meeting of this Committee which was held in January, 1930, the whole field of the Commission's research operations was reviewed and the future programme of work was approved.

Utilisation.—The Commissioners have continued to collaborate with the Forest Products Research Board both directly in connection with investigations on the commercial utilisation of timber and by the supply of timber for seasoning and other tests.

Subhead J—Agency and Advisory Services. Expenditure: Gross, £1,177; Net, £1,139.

No direct expenditure was incurred under this head. The sum of £1,177 is an apportionment of overhead and supervisory charges in respect of the time of various officers of the Commission who have been engaged in answering inquiries and advising owners of woodlands as to the treatment of their woods.

Subhead K-Special Services. Expenditure, £2,097.

Details of expenditure are given in Table K.

Table K.—Special Services.

	Ez	KPENDITUR	E (Table	IIA, Colu	mn 7).			
Year ending 30th September.	Superior Supervision and Overhead Charges.	Consulta- tive Com- mittees' Expenses.	Publications.	Special Inquir- ies.	Relief of Un- employ- ment.	Total.	In- come.	NET Expen- DITURE.
First decade: Five years, 1920-24	£ 10,760	£ 349	£ 1,634	£ 3,571	£ 19,828	£ 36,142	£ 278	£ 35,864
1925 1926 1927 1928 1929	3,226 3,052 2,740 4,503 2,304	50 32 13 33 46	78 74 43 45 121	4,824 1,251 355 1,177 1,190		8,178 4,409 3,151 5,758 3,661	36 — — 19 14	8,142 4,409 3,151 5,739 3,647
Total, 1925–29	15,825	174	361	8,797		25,157	69	25,088
Total, First decade	26,585	523	1,995	12,368	19,828	61,299	347	60,952
Second decade:	1,822	60	68	147	<u> </u>	2,097	<u> </u>	2,097
Grand Total Percentage	28,407 44·8	583 0·9	2,063 3·3	12,515 19·7	19,8 2 8 <i>31·3</i>	6 3, 396 100	347	63,049

Publications.—During the year under review the Commissioners issued British Yield Tables and their Tenth Annual Report for the year ending 30th September, 1929. In addition Bulletin No. 9 (Beetles Injurious to Timber) was revised and reprinted.

Exhibits at Agricultural Shows.—Forestry exhibits were sent by the Commissioners to the Shows of the Royal Agricultural Society at Manchester, the Bath and West Society at Torquay, the Royal Wesh Agricultural Society at Caernarvon and the Highland and Agricultural Society at Dumfries.

Imperial Conference, 1930.—In connection with the Imperial Conference held in London during October and November, 1930, a special Committee was appointed to report on Empire Forestry matters. Under the Chairmanship of Sir Padamji P. Ginwala

(India) forest policy in the Empire was reviewed, and particular stress was laid on the desirability of improving the existing facilities for scientific instruction and research. The Committee embodied their recommendations in a resolution* which was subsequently adopted by the Imperial Conference.

Colonial Office Conference, 1930.—A Colonial Office Conference took place in London during June and July, 1930, and members of the Forestry Commission took part in the discussion. A Committee on Forest Services and Research was set up which issued a Report† summarising its conclusions.

Consultative Committees.—The English Consultative Committee held four meetings during the year, the Scottish Committee met once and the Welsh Committee twice.

A formal reference was submitted by the Commissioners to the Committees for their views on the question as to what steps, other than the provision of planting grants, could profitably be taken by the Commissioners for the improvement of private forestry.

The facts relating to the Department's afforestation programme in Carmarthenshire were submitted to the Welsh Committee for their advice, and the following subjects were discussed by some of the Committees:—

- (a) Disposal of thinnings.
- (b) Dutch elm disease.
- (c) Planting of hardwoods.
- (d) Income tax on woodlands.
- (e) Afforestation grants.

The Commissioners regret to report the deaths during the year of Sir Kenneth Mackenzie Bart., a member of the Scottish Committee, and Mr. C. D. Thompson, a member of the Welsh Committee.

During the year Mr. D. C. Roberts and Mr. C. G. Trevor were appointed members of the Welsh Committee, and Sir Douglas Newton resigned from the English Committee.

Subhead L—Forest Workers' Holdings. Expenditure, £108,575; Income, £12,206.

Details of expenditure and income are given in Table L. The main item of expenditure, £43,126, is in respect of new buildings. On the income side, rents have increased by £3,605 to £12,119.

^{*} Imperial Conference 1930. Summary of Proceedings (Cmd. 3717); Appendices (Cmd. 3718).—H.M. Stationery Office.

† Report of the Colonial Office Conference, 1930. (Cmd. 3628).—H.M. Stationery Office.

Table L.—Forest Workers' Holdings.

With the completion of 159 holdings during the year the total number at 30th September amounted to 777. The estimated average cost of establishing holdings is £535; of which the value of land accounts for £76, and cost of buildings, drainage, water supply, etc., £459.

The further information contained in the following statement may be of interest as showing the way in which the holdings have been utilised, the estimated value of live stock, etc. The data are the result of a rough census taken at a somewhat later period than the end of the forest year, 1930, and relate to 887 holdings.

Number of forest workers resident on the holdings	953
Total number of residents on the holdings	3,513
Average annual rent of house, outbuildings	
and land	£ 14 7s.
Average area	10 acres
Head of live stock:—	
Horses	331
Cows	477
Other cattle (including calves)	489
Sheep	1,800
Pigs	1,316
Poultry	42,516
Miscellaneous (including goats)	49 8
Estimated value of the live stock	£31,333

Subhead Z-Income £160,606.

Details of income are given in Table Z.

Table Z.—Income.

		Fores	try Operati	ons.	1	Forest Workers'		
Year ending 30th September.	Sales of Land Buildings, etc.	Rent and Royalties.	Forest Produce.	Other.	Total.	Holdings (Rents, etc.).	Miscel- laneous.	Grand Total.
First decade :	£	£	£	£	£	£	£	£
Five years, 1920-24	12,579	42,902	96,753	40,407	192,641	8	4,601	197,250
1925 1926 1927 1928 1929	23,626 16,395 3,417 15,551 7,216	39,367 42,086 45,483 49,116 55,137	54,862 44,005 72,111 72,552 66,311	16,389 19,698 14,375 16,502 15,268	134,244 122,184 135,386 153,721 143,932	1,257 3,374 6,074 8,216 8,586	850 727 379 185 194	136,351 126,285 141,839 162,122 152,712
Total, 1925-29	66,205	231,189	309,841	82,232	689,467	27,507	2,335	719,309
Total, First decade Second decade :	78,784	274,091	406,594	122,639	882,108	27,515	6,936	916,559
1930	2,642	65,184	63,949	16,219	147,994	12,206	406	160,606
Grand Total Percentage	81,426 7·6	339,275 31·4	470,543 43·7	138,858 12·9	1,030,102 95·6	39,721 3·7	7,342 0·7	1,077,165 100

Total income shows an increase of £7,894 compared with 1929. As regards income from forestry operations, sales of land decreased by £4,574 and sales of forest produce by £2,362 but rents and royalties increased by £10,047 and other income by £951, resulting in a net increase under the head of forestry operations of £4,062. Rents and royalties include £19,005 from the Forest of Dean Mines. Other income comprises sales of live stock £6,527, sand and gravel £3,197, rabbits, stores, etc., £6,495.

Employment in the Commission's Forests.

The number of persons (excluding Divisional and District Officers and office staffs) employed in the Commission's forests is stated in the table below:—

ì	Summ	er (Min	imum)	١.	Winte	er (Maz	kimum).
1920				210	1920–21			93
1921				495	1921-22			1,780
1922				525	1922 – 23			1,778
1923				880	1923-24			2,220
1924				1,620	1924-25			2,650
1925	•••			1,980	1925-26			2,96
1926				2,335	1926-27			3,18
1927				2,735	1927-28			3,49
1928				2,740	1928-29			3,56
1929				2,640	1929-30			3,83
1930				3,130	1930-31			3,85

(Signed) J. STIRLING-MAXWELL (Chairman).

R. L. Robinson (Vice-Chairman).

F. D. ACLAND.

J. H. ALPASS.

G. L. COURTHOPE.

D. R. Grenfell.

HUGH MURRAY.

W. R. SMITH.

W. Steuart-Fothringham.

A. G. HERBERT, Secretary,

9, Savile Row, London, W.

APPENDIX.

Imports of Timber, Wood Manufactures and Pulp of Wood.

Imports of timber in 1930 amounted to 10,143,000 loads valued at £42,797,000 which denotes a decrease of 101,000 loads (1 per cent.) in volume and £3,042,000 in value (6.6 per cent.) as compared with 1929. The slight reduction was mainly in respect of hardwoods; hewn softwoods, pitprops and sleepers were imported in greater quantity than in the previous year. Imports of wood manufactures showed a decline in value from £9,683,000 to £8,742,000 (9.7 per cent.). In pulp of wood there was a falling off from 1,638,000 to 1,532,000 tons (6.5 per cent.), the reduction in value being £792,000 (7.3 per cent.).

Imports of Timber, Wood Manufactures and Pulp of Wood.

		Quantities (thousands).	housands).			Value (thousands).	ands).	
Description.	Average 1909–13.	Average 1914–18.	1929.	1930.	Average 1909-13.	Average 1914–18.	1929.	1930.
TMBBR.	Loads.	Loads.	Loads.	Loads.	બ	વ્ય	ધ્ય	બ
Mahogany	1	1	44	31	1		568	358
Oak		! !	e 42		1 1	1 1	40 936	
Teak	1	1	4	08 		1	91	828
Other sorts	!	1	64		1	1	578	_
Hewn-Sott (hr, pine, spruce, etc.) Sawn-Hard—	542	129	427	497	1,353	583	1,224	1,420
Mahogany	1	1	30	24	1		527	397
Walnut	1	1	10		!	1	275	
Uak	ı	1	238) A9R			2,928	100
Teak]	J	43	670	١	1	1,140	69T',
Other Borts Sawn-Soft—			318	<u> </u>	ļ	1	3,216	_
Deal and planks	İ		3,069	_	!		14,101	_
Boards		1	1,427	4.852	ļ	ı	6,583	20.675
Other sorts	1	ļ	729	· ·	I		3,088)
Planed or Dressed—) \				١.
Floorings	ļ	1	407	_	ļ	1	2,195	_
Matchings]	1	80	→ 623 →	1	1	449	3,303
Other sorts		1	134	_ 		1	192	

Imports of Timber, Wood Manufactures and Pulp of Wood.—continued.

				.				
		Quantities (thousands).	thousands).			Value (thousands).	ousands).	
Description.	Average 1909–13.	Average 1914-18.	1929.	1930.	Average 1909–13.	Average 1914–18.	1929.	1930.
Other descriptions— Pitprops Staves Sleepers	2,944 161 — — 6,557*	1,673 71 130 — 3,550*	2,693 126 369 5	2,782 91 533	3,510 795 — 21,903*	4,425 648 602 — 24,362*	5,029 787 1,676 347	5,193 657 2,416 331
Total unmanufactured timber	10,204	5,553	10,244	10,143	27,561	30,620	45,839	42,797
WOOD MANUFACTURES.		·						
Furniture and cabinet ware Builders' woodwork (window frames done etc.)	1 1		1.1	1 1	416 180	115 62	989 1,355	916 1,218
						İ	2,994 3	2,490
Tool handles Domestic woodwork (bread					11		242 345	4,118
Not elsewhere specified]	1	-	1	2,099	1,821	3,755	
Total manufactured timber			İ	1	2,695	1,998	9,683	8,742
Pulp of wood	Tons. 859	Tons. 682	Tons. 1,638	Tons. 1,532	4,058	7,915	10,900	10,108

* These figures apply mainly to sawn softwoods. It is not possible to differentiate according to the various categories enumerated above owing to a change in the Board of Trade classification from 1920 onwards.