FORESTRY COMMISSION

TWENTY-SEVENTH ANNUAL REPORT OF THE FORESTRY COMMISSIONERS FOR THE YEAR ENDING SEPTEMBER 30TH 1946

Presented pursuant to Section 7 (3) of the Forestry Act, 1945 (8 & 9 Geo. VI Ch. 35)

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FORESTRY COMMISSION, 25, SAVILE ROW, LONDON, W.I.

19th September 1947.

To:

THE MINISTER OF AGRICULTURE AND FISHERIES.
THE SECRETARY OF STATE FOR SCOTLAND.

Gentlemen,

In pursuance of Section 7 (3) of the Forestry Act, 1945, I have the honour to transmit the 27th Annual Report of the Forestry Commissioners covering the Forest Year ended September 30th, 1946.

I am, Gentlemen,

Your obedient Servant,

(Sd.) ROBINSON, Chairman.

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Maps showing the new Conservancy boundaries appear on pages 7 and 8.

Twenty-seventh Annual Report of the Forestry Commissioners, 1946

FOREST POLICY

Speaking in the House of Commons on the 30th November, 1945, the Minister of Agriculture and Fisheries, Mr. Tom Williams, made the following announcement on Government Forest Policy:—

"The Government have given careful and detailed attention to the future forest policy of this country. They are impressed with the necessity, as a safety measure, of rebuilding as quickly as possible our reserves of standing timber and also with the possibilities which systematic forestry and afforestation hold out for the better utilisation of large areas of poorly productive land and for increased rural employment in healthy surroundings. For these reasons, and taking into account all available information on present and prospective world supplies of timber, the Government consider that well-planned afforestation represents a sound national investment.

"The Forestry Commissioners proposed in their Report on Post-War Forest Policy (Cmd. 6447) that the country should aim at having in all five million acres of well managed forests in fifty years, and towards that end they allocated to the first post-war decade a programme of replanting and afforestation amounting to 1,100,000 acres. They further recommended that that policy should be reviewed at ten year intervals and the current programme every five years or so. These are large proposals which, however desirable for the purpose of timber supply, will need careful consideration from the point of view of their possible effect on agriculture. The Forestry Act, 1945, places on my right hon. Friend, the Secretary of State for Scotland, and myself, the duty of promoting forestry and of reconciling the claims of agriculture and forestry. For this purpose it will be necessary, before finally deciding on our ultimate forest programmes, to carry out such surveys as may be required to determine the best utilisation in the national interest of the limited supply of rural land in this country. It will also be necessary to consult my right hon. Friend the Minister of Town and Country Planning on acquisitions of land for afforestation in England and Wales.

"While for these reasons the Government cannot, at this stage, be finally committed to the acceptance of these programmes in full, they are fully seized of the great importance of pressing on, as a matter of urgency, both with a large programme of new afforestation and also with the replanting of our felled woodlands. We intend to prosecute both these tasks with the utmost vigour and for this purpose my right hon. Friend, the Chancellor of the Exchequer, is proposing to ask parliament to replenish the Forestry Fund during the five financial years 1946-50 by a total sum of £20,000,000. The annual instalments of that total sum will be presented to the House by the responsible Ministers in the ordinary way. This should provide for the afforestation and replanting of 365,000 acres (which is the first five-year quota of the Forestry Commissioners' ten-year plan), provide for additional land for future planting, and for ancillary services, and where necessary provide modern up-to-date houses for workers in State forests. In the Government's view this programme is not likely to give rise to any serious conflict between the claims of forestry and of agriculture. In carrying out this programme due regard will be given both in timing and location to the employment situation and the Government's general employment policy.

"If we are to achieve our objectives it will be very desirable that the owners of private woodlands should play a full part and so relieve the Forestry Commissioners of some of what will anyhow be a heavy strain on their

organisation. The Government, therefore, accepts the dedication scheme propounded by the Forestry Commissioners. This scheme postulates a covenant of dedication whereby the owner, in return for stated scales of State assistance, undertakes to manage and to continue to manage his woodlands in an approved way. For details of the dedication scheme and scales of State assistance, I refer hon. Members to the Forestry Commissioners' Supplementary Report on Private Woodlands (Cmd. 6500) and particularly to paragraphs 7 and 8, and paragraphs 12 and 21. The rate of interest to be charged to private owners is still under consideration. I wish to add that while reasonable time will be given for owners to investigate the applicability of this scheme to their woodlands, the alternative to proper management under State aid will be State acquisition and that the Forestry Commission will be so directed. For woodlands which ought to be used in the national interest for timber production but are unsuitable for dedication there will be grants on a smaller scale, that is, for replanting only.

"In order to secure that the present inadequate reserve of standing timber is duly conserved the Government propose to continue the war-time system of licensing timber fellings. To implement this large programme of forestry development it will be necessary to increase the facilities for education, training and research into all branches of the work, including timber utilisation. The Government will continue to establish and extend National forest parks as and when suitable opportunities occur."

ORGANISATION

The National Committees and the Regional Advisory Committees were duly constituted; the organisation of each of the Directorates into Conservancies was completed, and schemes for the training of foresters, foremen, and forest workers were put into operation.

The National Committees.—Each of the three Committees held the first of their meetings in November, 1945. The appointments to these Committees were as follows, the Chairman of the Commission being ex officio a member of each Committee:—

England:—The Earl of Radnor (Chairman), Lord Courthope, Sir Richard Cotterell, Bt., Mr. W. L. Taylor, Lord Quibell, Lord Lucas, Major Charles Mitchell.

Scotland:—The Rt. Hon. Thomas Johnston (Chairman), Sir Samuel Strang Steel, Lt.-Col. W. J. Stirling, The Duke of Buccleuch, Mr. John A. Cameron, Mr. A. McTaggart, Mr. John Veitch. (The Commissioners record with regret the death of Mr. McTaggart. This vacancy on the Committee was filled by Mr. John Veitch from the 6th August, 1946).

Wales:—Mr. Lloyd O. Owen (Chairman), Mr. W. L. Taylor, Sir Richard Cotterell, Bt., Sir Cadwaladr Bryner Jones, Lt.-Col. J. C. Wynne Finch, Alderman W. H. Vaughan.

The duties devolved on these Committees by the Commissioners relate to the following matters:—

Land Acquisitions: To consider all proposed Land Acquisitions and disposals, and make recommendations to the Commissioners.

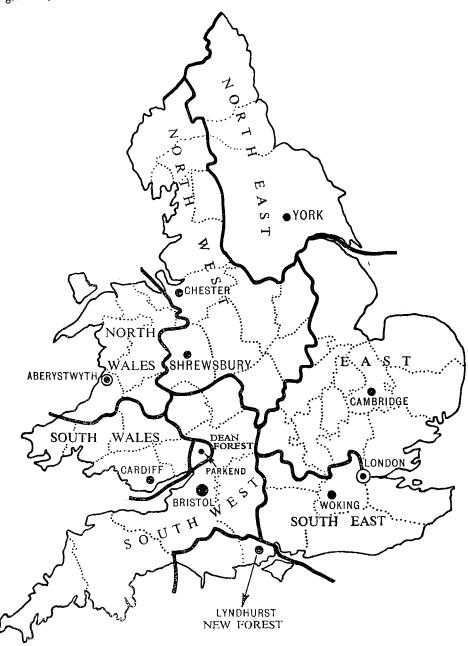
Cultural Operations: To submit programmes of planting and other works. Estate Management: To undertake the detailed management of all properties placed at the disposal of the Commissioners.

Private Forestry: To promote the Commissioners schemes for Private Forestry and Dedication, and to maintain direct contact with the Regional Advisory Committees.

National Forest Parks: To administer areas approved as National Forest Parks.

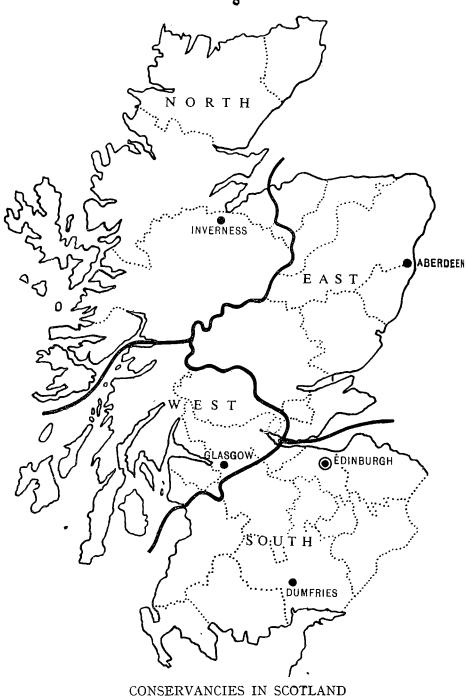
Finance: To examine and submit estimates of proposed works.

Each of the Committees held ten meetings during the year, and working along similar lines they were principally concerned with problems relating to the housing of foresters and forest workers, the Forest Workers Training Scheme, the examination of proposed acquisitions of land, the planting programme, and the Dedication Scheme.



CONSERVANCIES IN ENGLAND AND WALES

Note.—Conservancy headquarters are indicated by full dots, National headquarters by circled dots. The Conservancy office for North Wales is temporarily at Shrewsbury.



Note.—Conservancy headquarters are shown by full dots, the National headquarters by a circled dot.

Conservancies.—This arrangement while following in some measure the old Divisional boundaries entailed a considerable number of transfers of forests from one charge to another. The appointment of Conservators was made early in the year, and by the end of May the Conservancies, of which there are

5 in England, 4 in Scotland, and 2 in Wales, were set up; the boundaries of the Conservancies are shown in the maps on pages 7 and 8.

The headquarters of the Conservancies in England are as follows:—North East Conservancy at York, South West Conservancy at Bristol, South East Conservancy at Woking, the East Conservancy at Cambridge, and the North West Conservancy at Chester. The existing Deputy Surveyor's charges of the New Forest, with headquarters at Lyndhurst, and the Dean Forest, with headquarters at Whitemead Park, Parkend, Lydney, are retained.

The Scottish Conservancies have their headquarters at the old Divisional centres:—North Conservancy at Inverness, East Conservancy at Aberdeen, West Conservancy at Glasgow, and the South Conservancy at Dumfries.

In Wales the South Wales Conservancy has its office at Cardiff and the North-Wales Conservancy office remains at Shrewsbury as a temporary measure.

Regional Advisory Committees have been set up in each Conservancy with the primary purpose of providing a close link between the Conservator and all those within the Conservancy who are interested in Forestry. The general over-sight of the Regional Committees rests with their National Committee.

Each of the Committees met in May or June for the first time, with a second meeting later in the year. At these meetings the subjects considered were the furthering of the Dedication Scheme, co-operation in Private Forestry, the Forest Workers Training Scheme, and Publicity measures aiming at forest protection. From the experience of these meetings it is clear that the Committees will helpfully fulfil the functions for which they have been constituted.

The membership of the Committees is as follows:—

ENGLAND

North East Regional Committee.—The Rt. Hon. Lord Bolton (Chairman), Col. W. St. A. Warde-Aldam, Capt. J. P. Bradford, Professor R. W. Wheldon, Mr. W. Dobbie, Mr. A. Kirkup, Jr., Mr. A. M. Leitch, Mr. W. Robertson, with Mr. L. A. Chaplin (Secretary).

South West Regional Committee.—Mr. G. F. Lutterell (Chairman), The Hon. J. W. Best, Major H. T. N. Foley, Mr. W. E. Hiley, Mr. J. R. Maeer, Professor M. Skene, Mr. R. Stratton, with Mr. G. F. Taylor (Secretary).

South East Regional Committee.—Col. H. Eeles (Chairman), Mr. J. W. C. Agate, Lt.-Col. W. Burrell, Lord Cowdray, Mr. W. H. Pearson, Mr. A. D. C. Le Sueur, with Miss Manicom (Secretary).

East Regional Committee.—Major R. G. Proby (Chairman), Major K. W. Brown, Mr. S. Dye, Col. A. H. Lloyd, Mr. R. W. B. Newton, Col. E. R. Pratt, Mr. D. H. Sanderson, Mr. C. H. Thompson, with Mr. C. H. Clark (Secretary).

North West Regional Committee.—Capt. Wolryche-Whitmore (Chairman), Mr. J. V. Allen, Mr. P. J. B. Clive, Mr. B. W. I. Davies, Mr. J. Edwards, Mr. W. M. F. Vane, with Mr. E. Hewitt (Secretary).

SCOTLAND

North Regional Committee.—Major John Stirling of Fairburn (Chairman), Lord Lovat, Mr. Gilbert Brown, Mr. James Armstrong, Mr. George Mundell, Mr. D. J. Macleod, Bailie Donald MacPherson, with Mr. T. L. Eadie (Secretary).

East Regional Committee.—Professor H. M. Steven (*Chairman*), Lord Glentanar Sir Ian Forbes-Leith, Mr. Wm. Leven, Mr. Maitland Mackie, Bailie R. A. Raffan, Mr. Wm. Riddoch, with Mr. J. P. Lenman (*Secretary*).

West Regional Committee.—Mr. J. Maxwell Macdonald (Chairman), Sir George I. Campbell, Bt., of Succoth, Capt. James Craig, Mr. T. Bruce Jones, Mr. John Kirkwood, Mr. Donald Mackay, Mr. John Veitch, with Mr. T. Farmer (Secretary).

South Regional Committee.—Lord Haddington (Chairman), Sir J. Hunter Blair, Bt., Mr. J. C. Carson, Mr. W. P. Earsman, Mr. J. J. Patterson, Professor J. Ritchie, Mr. C. J. Cameron, with Mr. T. H. McGeorge

(Secretary).

WALES

North Regional Committee.—Col. G. R. D. Harrison (*Chairman*), Alderman H. T. Edwards, Mr. E. Humphrey Howard, Mr. W. Jones, Mr. R. C. Ridell, Professor T. Thomson, Col. R. J. Wordsworth, with Mr. K. Mayhew (*Secretary*).

South Regional Committee.—Capt. J. D. D. Evans (*Chairman*), Lord Merthyr, Major John Francis, Mr. J. E. Lewis, Mr. H. A. Hyde, Mr. A. E. Gough, Mr. D. G. Badham, with Mr. W. Evans (*Secretary*).

Staffing.—With the continued absence of experienced officers, both technical and clerical, on seconded duty with the Ministry of Supply and with the North German Timber Control, the proper staffing of the Conservancies and the offices of the Directorates was a matter of great difficulty; it was, however appreciated by the Commissioners that the absence of these officers would accelerate the despatch of timber from Germany which would in some measure reduce the rate of felling of our already depleted woodlands. During the war period it had been necessary to place greater responsibility than normal on members of the forester grade; many held acting District Officer posts and after a close examination of each case seven foresters who had held such rank or had acquitted themselves well in a lower grade were promoted to District Officers.

TIMBER PRODUCTION

In the transition from war to peace the Country's war time requirements have been replaced by civilian needs on an unprecedented scale for replacing war damaged houses, factories and furniture, for normal repairs and renewals held over during the war years particularly in transport and communications, and for the building of new factories and new towns.

Our Home woods played a very important role in the 1914–18 war and in the war just concluded; in both these wars heavy inroads were made into the country's very meagre forest resources. In 1938 home grown timber provided only a matter of 4 per cent. of our total timber consumption, but with the outbreak of war in 1939 a rapid change took place, and by 1943 a matter of 65 per cent. of our total timber consumption was being obtained from home grown woods. This has been a heavy drain which cannot be sustained, and the country is now experiencing all the inconveniences and worse which a shortage of timber enforces in respect of reconstruction and normal development. Pre-war we imported 96 per cent. of our requirements; these were obtained from the following countries:—

						Per cent.
The Baltic countries		Finland	, Estonia,	Latvia	and	
Lithuania)					• • •	
Canada and Newfoun	dland					16.2
Sweden and Norway						
France				•••		2.1
United States of Ame	rica			• • •		1.7
Other countries	•••					12.1
						100.0

With the need to make good the great destruction in Russia and the other Baltic countries, and on the continent of Europe, reliance cannot be placed on immediate and sustained supplies from the Baltic; our imports of timber for 1946 were in fact only one-fifth of the yearly average for the period 1934-38. Future supplies for some years to come must therefore be obtained from timber producing countries which have not been devastated; thus in the immediate future we can only look to Canada, Newfoundland and the U.S.A. for increased supplies. The importance to Britain of reserves of standing timber and well managed Home forests was never more obvious, for despite heavy depletion our woodlands are still being called on to make the major contribution to the National needs in respect of hardwoods. Under a policy of sound silviculture and full utilisation, this contribution will be on an increasing scale as the plantations created during the inter-war period become more mature. a noteworthy fact that if a sound system of forestry had been in force over the last 100 years the country could have obtained its war needs from home resources and could have met reconstruction requirements pending the establishment of normal trade relations. Some measure of control over the country's woodlands is necessary, and the Dedication Scheme will, it is anticipated, ensure that good silviculture is practised by the owners of private woodlands, and the continuation of the war time system of licensing fellings will secure that the inadequate reserve of standing timber is properly conserved.

FORESTRY PROGRAMMES

State Forestry.—The need for continuity of the National Forest Policy was recognised by the Chancellor of the Exchequer in agreeing to place the sum of £20,000,000 over the next five years at the service of the Commission; this sum is intended to cover the cost of the first five years of the Forestry Programme, as proposed in the White Paper on Forestry (Cmd. 6447). The area proposed to be planted in this period is 365,000 acres; the contribution of private owners to this programme is estimated at 75,000 acres; and in order that the necessary land may be available for planting when required, the acquisition of land must proceed well in advance of requirements. Experience has shown that for orderly working a reserve of land equal to ten times the programme must always be held; thus it is proposed that the acquisition programme will proceed at a rate starting with 121,000 acres in 1946-47 and working up to 235,000 acres in the fifth year.

Year one of the Five Year Period will be 1946-47 and the programme of planting and of acquisition of land for planting for each of the three countries has been subdivided and allocated to years as shown in the following tables.

PLANTING PROGRAMME

Year		State F	Private Forestry	Grand Total		
1946/1947 1947/1948 1948/1949 1948/1950 1950/1951	England 10,750 16,900 23,850 30,000 36,900	Scotland 14,000 18,900 24,600 30,000 35,900	Wales 5,250 7,200 9,550 12,000 14,200	Total 30,000 43,000 58,000 72,000 87,000	5,000 10,000 15,000 20,000 25,000	35,000 53,000 73,000 92,000 112,000

Acquisition of Land Program	COUISITION	AND PROG	RAMME
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Year	England Acres	Scotland Acres	Wales Acres	Total Acres
1946/1947	55,000	40,000	26,000	121,000
1947/1948	88,000	60,000	31,000	179,000
1948/1949	73,000	75,000	32,000	180,000
1949/1950	100,000	75,000	36,000	211,000
1950/1951	104,000	80,000	51,000	235,000
			•	
	420,000	330,000	176,000	926,000

Private Forestry.—Notwithstanding difficulties in obtaining labour and materials many private owners found it possible to resume or continue replanting, and during the year 4,219 acres were successfully planted under the Commissioners' scheme of grants for planting.

The Dedication Scheme has been well received, and by the end of the year the officers concerned with Private Forestry had made preliminary contacts with the owners of some 400 estates who have signified their willingness to consider the dedication of their woodlands, which in the aggregate amount to some 230,000 acres. There has been a general tendency for owners to refrain from declaring their intentions till the actual terms of the covenant have been made known and the legal difficulties in the way of making covenants of Dedication have been removed. Progress has been made in the drafting of the Deed of Covenant and the form of the Working Plan.

DAMAGE TO STATE FORESTS BY WARLIKE OPERATIONS

During the war years the Services required areas of considerable extent in the least populated parts of the country for modern methods of training; in a great number of cases such areas included many acres of plantations, and while it was not possible to exclude the plantations in all cases, much was done by good liaison to keep the damage as low as possible. At one time some 30,000 acres of plantations were in military occupation for training areas, 21,000 acres for bombing and artillery ranges, and 12,000 acres for aerodromes and camps. Military activity was greatest in the plantations in the Eastern The mere presence of thousands of troops Counties and in the New Forest. created a great fire hazard, and in addition these activities caused the enemy to bomb these areas intensively over long periods with incendiary and other The destruction of plantations was considerable but much less than was anticipated; that the destruction was kept down was due to the effective fire-fighting put in by the local forest staffs, and to the whole-hearted cooperation of the National Fire Service. One outstanding development in the technique of forest fire-fighting was the use of water delivered under pressure from mobile pumps which draw their supplies of water from dams on streams and static tanks at strategic points within the forest.

During the war years the destruction of plantations by enemy action amounted to only 2,000 acres, while fires caused by military training operations accounted for 2,050 acres and the construction of aerodromes, camps, and depots for a further 1,700 acres.

At the end of the year there still remained in the occupation of the service departments a matter of 25,500 acres of plantations over which damage has not yet been assessed; representations have been made for the early return of certain of these areas in order that they may receive appropriate silvicultural treatment,

THE NEW FOREST COMMITTEE

In April, 1946, the Commissioners appointed a Committee under the chairmanship of the Rt. Hon. Harold Baker with the following terms of reference: "To investigate the state and condition of the New Forest and, having due regard to existing rights and interests, to recommend such measures as they may consider desirable and necessary for adjusting the Forest to modern requirements."

The other members of the Committee were Mr. George Lucas (now Lord Lucas of Chilworth, a member of the English National Forest Committee of the Forestry Commission), and Mr. G. Langley-Taylor (vice chairman of the Council for the Preservation of Rural England) with Mr. D. W. Young (Deputy Surveyor of the New Forest) as Secretary to the Committee.

NORTHERWOOD HOUSE, NEW FOREST

This mansion at Lyndhurst, standing in some 27 acres of grounds within the New Forest, was made over to the Commissioners by Major Herbert Aris under a Deed of Gift for the purpose of promoting Forestry. This mansion will be used for educational purposes, and will also be able to accommodate official visitors to the Forest. The Commissioners desire to record their great appreciation of this generous gift.

EDUCATION

Discussions were held with the University Professors of Forestry with a view to widening the scope of the instruction given. As a result increased grants have been made to permit of the appointment of additional teaching staff. It is hoped that this step will also have the effect of stimulating forest research at the Universities.

During the war years the training of foresters for local supervision was carried out at Benmore (Argyll) School only; thus the opening of additional schools became an urgent matter and active steps to that end were taken during the year.

The Parkend (Glos.) School reopened in May and an intensive course was given to 20 students. Preparations were completed for opening a new school in Glen Tress Forest in October with accommodation for 45.

Short courses for foresters and woodmen from private estates, which proved so useful before the war, were restarted; five such courses were held and 53 men were passed out.

As part of the National scheme for training demobilised Service men, a Forest Workers Training Scheme was in operation during the year. Under this scheme men are given one year's training under actual working conditions, at the end of which they should be competent forest workmen.

RESEARCH

As part of the general arrangements for the development of Forest Research, Alice Holt Lodge, near Farnham, Surrey, was selected for equipment as a central station at which research staff and records will be stationed. The Alice Holt Woods of some 2,000 acres will also be available for appropriate investigations. The Station can be reached by rail from London in an hour and a half. It is hoped that private foresters will visit the Station and contact members of the research staff,

During the year under review the routine recording of data from sample plots was proceeded with, as well as investigations into the nutrition of trees in forest nurseries, and the provenance of larch from European and home sources.

The good progress made with the ploughing of poor peaty soils in the west of Scotland, coupled with the experience already gained from experimental work, encourages the hope that a successful technique can be devised for afforesting these difficult types of land.

CENSUS OF WOODLANDS

The war fellings have accentuated the need for a complete stocktaking of the woodlands of the country. The last complete Census was made in 1924 and has long been out of date. The Commissioners appointed a small staff to investigate the problem and to draw up proposals for a comprehensive census of both private and state woodlands. The work is now proceeding.

SUMMARY OF OPERATIONS

FOREST YEAR ENDED SEPTEMBER 30th, 1946

In common with other industries the shortage of man-power had its effect on forest operations, and while it was possible to increase the amount of planting over the previous year's figure, attention was again focussed on the necessary works of maintaining and thinning existing plantations.

Finance.—The figures for the year under report and the preceding year were as follows:

	Year ended September 30t		
	1946	1945	
	£	£	
Gross expenditure	1,937,614	1,356,937	
Receipts	562,504	631,380	
Net Expenditure	1,375,110	725,557	

The Vote in aid of the Forestry Fund was £850,000 in 1945/46, and £2,750,000 in 1946/47.

Land Acquired through the Forestry Fund.—The total area at the end of the forest year was 1,415,000 acres as compared with 1,364,000 acres in the previous year, the increase being due to new acquisitions (including areas to which entry has been secured) amounting to 51,575 acres, less disposals of 73 acres. At the end of the forest year the subdivision was 866,000 acres of "forest land" (that is land which is already planted, or should be planted) and 549,000 acres of "other land". Of the Forest Land 353,000 acres are situated in England, 385,000 acres in Scotland, and 128,000 acres in Wales.

Acquisitions of Forest Land amounted to 33,181 acres (of which 6,766 acres are in England, 25,821 acres are in Scotland, and 594 acres are in Wales). Acquisitions of Forest Land in the previous year amounted to 43,321 acres.

Planting.—During the 1945/46 planting season 10,448 acres were planted or sown, 18 acres were naturally regenerated, and 126 acres underplanted. The corresponding figures for 1944/45 were: planted and sown 6,510 acres, naturally regenerated 14 acres, underplanted 97 acres.

Thinning.—During the year under report 10,878 acres of plantation were thinned (England 6,200 acres, Scotland 2,897 acres, Wales 1,781 acres) compared with 8,220 acres (England 4,635 acres, Scotland 2,087 acres, Wales 1,498 acres) in the previous year.

Clear Fellings.—These amounted to 1,364 acres (England 1,189, Scotland 100, Wales 75) compared with 2,568 acres (England 1,938, Scotland 280, Wales 350) in the previous year.

Fire Protection.—During the past five years fires have destroyed 10,758 acres of State Forest valued at £247,000; apart from fires originating from sparks from railway engines, this loss is due to careless or thoughtless acts committed within or adjacent to the plantations. As the result of 803 outbreaks the loss in the current year was 1,104 acres valued at £26,000, and notwithstanding the improved methods of fire fighting which have been evolved

it is inevitable that, with the steady expansion in the area of young plantations, and the ever increasing mobility of the general public, losses from fire will increase until the folly of carelessness in the disposal of unextinguished tobacco or matches in or near forest areas is appreciated by every one, town and country dweller alike.

New Buildings and Repairs.—No new cottages were completed during the year, but much preparatory work for a large programme was undertaken. Shortage of labour and materials again prevented progress being made with arrears of repairs.

Grants for Private Planting.—The area planted under grant schemes was 4,219 acres, of which 3,641 acres were conifers, and 578 acres hardwoods. Payments made amounted to £7,307. In the previous year 2,769 acres were planted and payments were £6,542.

Utilisation of Home Grown Timber.—The Commissioners' woods have produced a great variety of produce ranging from saw timber, round mining timber, poles, down to such minor produce as bean and pea sticks.

The quantity and value of timber sold to the Board of Trade, Timber Production Department, was less by £36,000 than last year; nevertheless the receipts amounted to £143,000. It is noteworthy that from the outbreak of war in 1939 to September 1946 the timber and pitwood sold to the Board of Trade from the Commission's woods, and used for purposes directly connected with the war, totalled $51\frac{1}{4}$ million cubic feet (soft woods $34\frac{3}{4}$ million cubic feet, hardwoods $16\frac{1}{2}$ million cubic feet), the value of which was £2,231,000.

Tabular Statements relating to the items summarised above, follow on pages 16 to 19.

Land Acquired through the Forestry Fund

The following statement presents a general view of the properties acquired through the Forestry Fund as at September 1946.

	England Scotland		Wales	TOTAL GREAT BRITAIN	
Number of Forests: At beginning of year At end of year	101	131 142	42 44	274 289	
Utilisation of Ground (acres): Forest Land: Acquired Plantations Planted by Forestry Commission To be planted Total of Forest Land Nurseries Agricultural Forest Workers' Holdings (including outrun) Unplantable and Miscel-	40,000 203,000 110,000 353,000 1,000 17,000 6,500	170,000 204,000 385,000 500 27,500 3,000	3,000 80,000 45,000 128,000 500 12,000 4,000	54,000 453,000 359,000 866,000 2,000 56,500 13,500	
laneous	103,000	344,000	30,000	477,000	
Grand Total	480,500	760,000	174,500	1,415,000	

It will be noted that during the year the number of forest units shown above has increased by 15; this is due to 5 existing forest nurseries being now recorded as forest units, and to the formation of 10 new forest units as follows:— I in England, 8 in Scotland and I in Wales.

The total area of land acquired increased by 51,000 acres from 1,364,000 to 1,415,000 acres, and the plantable area by 33,000 acres to 866,000 acres.

Included in the foregoing acquisitions are certain areas which have not, for the time being, been placed at the disposal of the Commissioners by the appropriate Minister. The subjoined statement gives details of such land:—

	England	SCOTLAND	Wales	Total Great Britain
Forest Land: Acquired Plantations Plantable Total of Forest Land Agricultural Forest Workers' Holdings (including outrun) Unplantable and Miscellaneous	918 918 3,024 8	13 24,730 24,743 6,176 — 26,898	542 429 —————————————————————————————————	26,190 26,203 9,629 8 27,432
Grand Total	3,950	57,817	1,505	63,272

Silvicultural Operations During the Year (Acres)

	England	Scotland	Wales	Total, Great Britain
Planted or Sown	4,077	4,886	1,485	10,448
Naturally Regenerated	15	3	-	18
Underplanted	79	36	II	126
Thinned	6,200	2,897	1,781	10,878
Felled	1,189	100	75	1,364

Compared with the previous year the changes in silvicultural operations are planting and sowing 10,448 against 6,510 acres, area thinned 10,878 against 8,220 acres, and area felled 1,364 against 2,568 acres.

Holdings and Estate Management

	England	Scotland	. WALES	Total, Great Britain
Number of Forest Workers' Holdings Established: At beginning of year During year	728 1	393 I	380 — 2*	1,501
Total	729	394	378	1,501
Other Tenancies: Agricultural Holdings: Under £20 per annum Over £20 per annum Foresters' Houses Cottages Residential and Sporting Easements, Permissions, Minerals, etc. Site Rents and Feus	455 224 111 385 335	508 263 97 344 293 286 255	375 241 19 17 62 124	1,338 728 227 746 690 1,949 255
Grand Total	3,049	2,046	838	5,933

^{* 2} withdrawn.

Land Acquisition

Acquisitions during the year amounted to 48,490 acres net, of which 33,181 were classified as plantable.

Acquisition of Plantable Land

Year o	ending 3	oth Se	ptembo	er	By Lease or Feu	By Purchase	Total
					Acres	Acres	Acres
First Deca 1920–29	de: 				156,759	153,471	310,230
Second De 1930-39	cade:				60,057	284,700	344,757
Third Deca	ade:						
1940					24,3 96	7,238	31,634
1941	• • •	• • •		• • • •	2,526	9,924	12,450
1942	•••	• • •	• • •	•••	1,190	6,959	8,149
1943	•••		•••	• • • •	5,082	7,337	12,419
1944	• • • •	•••	•••		— 18,055 *	28,400	10,345
1945	•••		•••		15,814	27,507	43,321
1946	•••	• • •	•••	•••	9,996	23,185	33,181
	Grand	Total			257,765	548,721	806,486

^{*} This negative figure is due to the fact that properties containing 19,754 plantable acres acquired under Crown Lands Act, 1936, and previously shown as leased have been transferred to the purchase column, the consideration money having been paid in full.

PLANTING PROGRESS

State Forests

The area planted during the year was 10,448 acres.

AREA PLANTED

**			n 6 4	. 1		Pla	inted	
Year	endin	g 30	th Septe	ember		New Planting	Replacements	Total
						Acres	Acres	Acres
First Decad 1920–29 : Conifer						126,444	4,316	130,760
Hardw	oods					6,365	1,146	7,511
								138,271
Second Dec 1930-39						218,064	12,543	230,607
Third Deca	de:							
1940	• •	• • •	• • • •	• • •		26,411	877	27,288
1941		• • •	• • • •	• • •	• • • •	25,644	1,223	26,867
1942	••	• • •	•••	• • • •		16,045	701	16,746
1943 .		• • •	• • • •	• • • •	•••	11,671	1,741	13,412
1944	••	• • •	•••	• • •	•••	7,270	1,935	9,205
1945	••	• • •	•••	• • •	•••	4,377	2,133	6,510
1946		•••		•••	•••	9,073	1,375	10,448
	G	ranc	l Total	·	,	451,364	27,990	479,354

The total area planted by the Commission to 30th September, 1946, was 479,354 of which 442,660 acres consisted of conifers and 36,694 acres of hardwoods. New planting accounted for 451,364 acres and replacements, which included 13,334 acres after damage by fire, for 27,990 acres.

Details are given below :—	Conifers	Hardwoods	Total
	Acres	Acres	Acres
New Planting	419,685	31,679	451,364
Replacements	22,975	5,015	27,990
	442,660	36,694	479,354

Local Authorities and Private Owners

The Commissioners have continued to assist planting by local authorities and private owners by means of grants and a proceeds-sharing scheme. The total area planted amounts to 153,558 acres of which 4,219 were planted during the year.

Particulars of the grants are given on page 32.

		Acres
First Dec	ade:	
1920-2		72,856
Second D	ecade :	
1930-3		53,006
Third Dec	cade :	
1940	•••	4,318
1941	•••	4,427
1942	•••	3,681
194 3	• • •	4,244
1944	•••	4,038
1945	•••	2,769
1946	•••	4,219
	Grand Total	153,558

Employment in the Commission's Forests

The numbers of forest workers employed in the Commission's forests in different years are stated below; it is noteworthy that the gap between the winter maximum, and the summer minimum tends to decrease, indicating a more stable body of forest labour.

Winte	r (max	imum)	Summer	(minimum)	Percentage fall in Summer employment
920-21		935	1921	495	47 per cent.
1925–26		2,960	1926	2,335	21 per cent.
1930-31		3,850	1931	2,830	26 per cent.
935–36		4,155	1936	3,720	10 per cent.
940-41		5,625	1941	4,900	13 per cent.
1945-46		6,255	1946	5,147	17 per cent.

DETAILS OF OPERATIONS FOREST YEAR ENDED 30th SEPTEMBER, 1946

THE FORESTRY FUND

The balance in the Forestry Fund at the commencement of the Forest Year was £703,729. Receipts amounted to £2,750,000 from Parliamentary Votes and to £562,504 from Forestry Operations, etc., making a total of £3,312,504. Payments amounted to £1,937,614 so that the balance in the Fund at 30th September, 1946, was £2,078,619. Movements on the Forestry Fund Account since the establishment of the Commission are shown in Table I below.

TABLE I .- FORESTRY FUND ACCOUNT

			Receipts			Balance
Year ending 30th September	Balance from preceding Year	Parlia- mentary Votes	From Forestry Opera- tions, etc. (Table II)	Total	Payments (Table II)	in Forestry Fund, 30th September
	(1)	(2)	(3)	(4)	(5)	(6)
First decade:	£	£	£	£	£	£
1920–29		4,000,000	851,484	4,851,484	4,502,018	_
Second decade: 1930-39	_	6,126,800	1,821,852	7,948,652	7,926,093	_
Third decade:						
1940	372,025	450,000	363,198	813,198	822,217	363,006
1941	363,006	400,000	569,771	969,771	988,290	344,487
1942	344.487	625,000	618,990	1,243,990	1,120,544	467,933
1943	467,933	550,000	679,245	1,229,245	1,192,366	504,812
1944 1945	504,812 579,286	600,000 850,000	921,454 631,380	1,521,454 1,481,380	1,446,980 1,356,937	579,286
1945	703,729	2,750,000	562,504	3,312,504	1,350,937	703,729
Grand Total		16,351,800	7,019,878	23,371,678	21,293,059	

Balances remaining in the Fund at 30th September of each year include provision for the succeeding six months to the close of the Financial Year on 31st March following.

An analysis of payments and receipts by heads of account is given in Table II. It should be noted that the Forestry Commission heads of account used in this Table differ in some respects from the heads under which the Commission's estimates are presented to Parliament. Total payments amounted to £1,937,614 as compared with £1,356,937 in the previous forest year, an increase of £580,677, mainly under the head of Forestry Operations. Receipts decreased by £68,876 owing to reduced sales of forest produce and net payments were therefore £649,553 more than in Forest Year 1945.

Table IIA is a statement of expenditure and income in which amounts due to or by the Commission at the end of the Forest Year are brought into account, salaries and overheads shown in Columns (I) to (4) of Table II, are distributed over the heads of account to which they are appropriate, income from forestry operations, education, etc. is shown separately and adjustments are made between heads of account in respect of such items as produce used for forest purposes, and transfers of land and buildings between forests and forest workers' holdings.

In Tables III-VII expenditure and income, as shown under individual heads in Table IIA, are analysed in greater detail.

TABLE II.—PAYMENTS AND RECEIPTS BY HEADS OF ACCOUNT

							Payments	ents							
Year ending 30th September		Salaries Wages and Allow-	Head- quarters	Charges of Directors	Charges of Conserva-	Forestry Opera-	Advances for Affores- tation	Education	Research and Experi-	Agency and Advisory	Special Services	Forest Workers' Holdings	Total	Receipts	Net Payments
		ances (I)	(2)	(8)	3	(5)	Purposes (6)	(2)	ment (8)	Services (9)	(or)	(11)	(12)	(r3)	(14)
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		3	£	¥	ΥZ	r ₄ 2	3	Ŧ	Ĵ	ş	Ť	¥	¥	42	Ĵ
1920-29	:	494,157	22,676	30,586	74,434	3,118,837	207,824	76,004	36,927	91,776	23,342	325,455	4,502,018	851,484	3,650,534
Second Decade:										•					
1930–39	:	714,343	53,003	49,485	107,251	6,232,917	128,596	73,538	84,916	57	13,681	468,306	7,926,093	1,821,852	6,104,241
Third Decade:															
1940	:	62,630	6,397	6,698	13,565	681,491	9,660	3,657	9,433	52	762	27,872	822,217	363,198	459,019
1941 ···	:	76,984	2,997	5,996	14,978	844,949	10,250	4,351	7,819	ı	174	16,792	988,290	569,771	418,519
1942	:	87,306	4,739	5,362	16,284	954,173	19,668	10,830	9,380	1	179	12,623	1,120,544	618,990	501,554
1943	:	95,112	4,798	5,607	14,880	1,040,806	10,109	8,574	9,658	ı	170	2,652	1,192,366	679,245	513,121
т944	:	109,140	4,637	16,671	16,430	1,271,669	9,254	6,831	10,740	ı	(CR) 24	11,632	1,446,980	921,454	525,526
1945	:	119,420	4,596	6,371	15,422	1,183,551	10,086	5,570	11,433	l	210	278	1,356,937	631,380	725,557
9461	:	164,645	7,678	701,01	22,707	1,637,845	7,891	48,646	17,884	1	875	19,336	1,937,614	562,504	1,375,110
Grand Total	:	1,923,737	114,521	126,883	295,951	16,966,238	413,338	238,001	198,190	91,885	39,369	884,946	884,946 21,293,059	7,019,878	14,273,181
	_	_					_ 		-j	- 	_				

TABLE IIA.—EXPENDITURE AND INCOME

1		ı					1							,	ı	,
	Expendi- ture	(15)	¥	3,569,090		6,126,612		281,427	403,157	417,450	306,925	812,215	857,528	1,449,694	14,224,098	Ī
	Total	(14)	ş	916,559		1,943,543		572,468	576,681	721,209	889,095	647,032	566,450	535,117	7,368,154	100
	Miscel- laneous	(13)	4 2	4,509		4,230		774	605	1,536	1,038	897	585	719	14,893	
Іпсоше	Forest Workers' Holdings	(12)	¥	27,515		168,856		20,324	20,905	21,545	21,023	21,320	22,450	22,291	346,229	4.7
	Education (Table IV)	Ē	J.	2,427		443		∞	42	88	86	н	ļ	12,465	15,560	ė,
	Forestry Opera- tions (Table III)	(IO)	3	882,108		1,770,014		551,362	555,129	698,040	866,948	624,814	543,4x5	499,642	6,991,472	94.9
	H	(6)	ч ;	4,485,649		8,070,155		853,895	926,626	1,138,659	1,196,020	1,459,247	1,423,978	1,984,811	21,592,252	100
	Forest Workers' Holdings (Table VII)	(8)	£	389,883		565,871		37,587	24,479	23,424	13,615	13,789	2,700	36,200	1,107,548	5.1
column 1)	Special Services (Table VI)	(2)	L 3	61,299		42,694		1,635	926	1,225	1,229	1,326	x,547	3,387	115,268	٠.
location of C	Agency & Advisory Services	(9)	4 2	99,233		216,11		906	777	1,046	1,089	1,223	1,331	10,609	128,126	9.
ncluding Al	Research and Ex- periment (Table V)	(5)	Ч.	79,650		140,245		14,819	12,480	14,598	16,879	920'61	21,226	33,911	352,884	1.6
Expenditure (including Allocation of Column 1)	Education (Table IV)	(4)	Ч?	101,313		966'26		5,349	5,879	12,545	10,718	9,204	8,158	66,565	317,729	1.5
Ey	ces sta-	(3)	ę	241,694		154,855		12,407	12,673	24,058	12,820	12,804	15,423	23,334	510,068	4.
	FotE	(2)	- 32	3,512,577		7,056,580		781,192	922,624	1,061,763	0/9'661'1	1,401,825	1,373,593	1,810,805	19,060,629	88.3
Superior		Ξ	чz	582,178		925,404		606'06	82,117	110,149	115,801	130,146	142,831	207,848	2,387,377 19,060,629	ı
	Year ending 30th September		First Decade:	62-0261	Second Decade;	1930-39 ···	Third Decade:	о461	1941	1942	1943	1944	1945	1946	Grand Total	Percentage

Note.—The above and subsequent Tables do not include the values of properties acquired by transfer to the Commission under the Forestry (Transfer of Woods) Orders in Council.

EXPENDITURE AND INCOME (TABLE IIA) Superior Supervision

Expenditure £207,848 (Table IIA, Col. (1))

Compared with 1945, the expenditure on salaries and overhead charges rose by £65,017 due to higher salary scales and a general staff expansion to meet the increased planting programme and other new responsibilities. At the 30th September, 1946, there were 19 Conservators, 1 Deputy Surveyor, 11 Divisional Officers, and 95 District Officers.

Forestry Operations

Expenditure £1,810,805 (Table IIA, Col. (2))
Income £499,642 (Table IIA, Col. (10))

These amounts are further analysed in Table III. From this, it will be seen that the greater part of the increase of £437,212 in Expenditure during 1946, was attributable to Cultural Operations, the expenditure on which increased by £226,950. Stores and Miscellaneous increased by £57,400, Roads and Buildings by £52,559, and Preparation of Produce by £44,881. These increases are accounted for by a larger labour force being available, and by the rise in the minimum agricultural wage. Cost of Local Supervision increased by £38,577 owing to increases in the number of foresters and foremen employed, and also in their rates of pay.

Income from Forestry Operations decreased by £43,773 as compared with the previous year; sales of Forest Produce were £45,303 less, owing to reduced sales of timber, and Sales of Land and Buildings were less by £9,010. On the other hand, Income from Rents and Royalties was £4,821 higher and Other Income increased by £5,719. Under Other Income, were included proceeds of sale of livestock £20,186, and miscellaneous estate, farm and forest receipts £31,467.

TABLE III.—FORESTRY OPERATIONS

				Expenditure	Expenditure (Table IIA, Column 2)	, Column 2)					Іпсош	Income (Table IIA, Column 10)	A, Columi	10)	
Year ending 3oth September	Overhead	Superior Super- vision	Local Super- vision	Acquisition of Land, etc.	Cultural Opera- tions (See Table IIIA)	Prepara- tion and Sale of Produce	Roads and Buildings	Stores and Miscel- laneous	Total	Sales of Land and Buildings	Rents and Royalties	Forest	Other	Total	Net Expendi- ture
	(I)	(2)	(3)	(4)	(5)	(9)	(4)	(8)	(6)	(ro)	(11)	(12)	(13)	(14)	(15)
First Decade:		' 32	3	¥	ÿ	ş	√3 %	₽	3	~43	۲43	ټټ	43	Ĵ	ÿ
1920-29	192,997	201,122	174,130	787,509	1,510,801	118,853	115,488	411,677	3,512,577	78,784	274,091	406,594	122,639	882,108	2,630,469
Second Decade:						ı		`							
1930-39	332,060	352,049	493,661	1,534,471	3,071,019	362,395	246,853	664,072	7,056,580	76,484	791,032	699,094	203,404	1,770,014	5,286,566
Third Decade:										-					"4
o46z	38,263	32,565	62,773	70,857	431,753	21,482	25,487	98,012	781,192	1,634	92,728	432,065	24,935	551,362	229,830
т941	29,595	34,078	75,753	066,59	533,327	33,765	23,262	126,854	922,624	2,481	95,193	428,374	29,081	555,129	367,495
1942	37,404	48,398	94,715	55,845	550,381	96,472	26,481	152,067	1,061,763	1,677	103,045	540,778	52,540	698,040	363,723
1943	40,213	49,103	111,174	72,684	567,480	115,180	26,905	156,931	1,139,670	9,411	84,574	722,046	20,917	866,948	272,722
1944	50,690	999'65	128,904	285,835	573,132	114,974	34,803	153,821	1,401,825	691'901	100'66	375,778	49,866	624,814	110,777
1945	58,306	156'19	137,184	148,436	567,183	117,533	43,754	239,246	1,373,593	9,378	91,062	394,668	48,307	543,415	830,178
9461	68,782	72,030	175,761	144,726	794,133	162,414	96,313	296,646	1,810,805	368	95,883	349,365	54,026	499,642	1,311,163
Grand Total	848,310	910,962	1,454,055	3,166,353	8,599,209	1,143,068	639,346	2,299,326 19,060,629	19,060,629	286,386	1,720,609	4,348,762	635,715	635,715 6,991,472	12,069,157
Percentage	4.4	4.8	9.6	9.91	45·I	0.9	3.4	1.21	100	4.I	24.6	62.2	1.6	100	ı

Overheads and Supervision

Overhead Charges £68,782 (Table III, Col. (1)) Superior Supervision £72,030 (Table III, Col. (2)) Local Supervision £175,761 (Table III, Col. (3))

Overhead Charges represent a proportion of salaries, allowances and other expenses in the offices of the Commissioners and those of the Directors of Forestry for England, Scotland and Wales. Superior Supervision represents similar expenditure for Deputy Surveyors, Conservators, Divisional and District Officers, while Local Supervision covers salaries, housing allowances and miscellaneous expenses of Foresters and Foremen. During the year the number of Foresters and Foremen employed in Forestry operations was increased by 101. At the 30th September the total numbers employed were: Foresters 322, Foremen 204.

Acquisition of Land, Buildings and Standing Timber—Expenditure amounted to £144,726 (Table III, Col. (4)). Of this amount which is £3,710 less than the corresponding figure in 1945, £102,018 was spent on the purchase of land, standing timber and holdings, £32,183 on the acquisition of land and buildings on long lease or feu, and £10,525 on the redemption of tithes. This expenditure is not directly applicable to the areas acquired during the year, particulars of which are given below.

The total area of land acquired in the Forest Year 1945–1946 was 48,922 acres, of which 33,181 were classified as plantable; disposals amounted to 73 acres.

The net total area in Great Britain in respect of which the legal formalities of acquisition had been completed by the 30th September, 1946, was 1,285,101 acres, the corresponding figures for the periods covered by the two previous Annual Reports being 1,236,252 acres and 1,147,113 acres. In addition to these completed acquisitions, entry had been secured to other property. Details of acquisitions are given in the table below which also shows the area of "plantable" land and "other" land, i.e., land which is either too poor to plant or is required for other purposes.

Land acquired by Lease, Feu or Purchase from 29th November, 1919 to 30th September, 1946

	Ву	Lease or :	Feu	В	y Purchas	se	
Country	Plantable (including Planted)		Total	Plantable (including Planted)		Total	Total acquired
England & Wales: Finally completed Entry secured	146,556 2,448	29,I47 I07	175,703 2,555	284,489 133	84,926	369,415 133	545,118 2,688
Total	149,004	29,254	178,258	284,622	84,926	369,548	547,806
Scotland: Finally completed Entry secured	102,387 6,374	109,546 1,308	211,933 7,682	264,035 64	264,015	528,050 64	739,983 7,746
Total	108,761	110,854	219,615	264,099	264,015	528,114	747,729
Great Britain	257,765	140,108	397,873	548,721	348,941	897,662	1,295,535
	1		1	ļ			

Of the net total area acquired by lease, feu, and purchase in Great Britain to the 30th September 1946, 806,486 acres were classified at the time of acquisition as plantable, and of this area 433,626 acres (54 per cent.) were in England and Wales, and 372,860 acres (46 per cent.) in Scotland.

In addition to the above-mentioned areas, Crown woodlands extending to about 120,000 acres (of which some 60,000 acres are plantable) have been transferred to the Forestry Commissioners.

The total area of land administered by the Commissioners is thus approximately 1,415,000 acres; the utilisation of this land as at the 30th September, 1946, is shown on page 16.

Cultural Operations

Expenditure £794,133 (Table III, Col. (5))

Details of this expenditure are given in the following Table (IIIA). Plantations accounted for £560,267, and Nurseries for £233,866.

TABLE IIIA.—CULTURAL OPERATIONS (TABLE III, COLUMN (5))

			Plant	ations			
Year endir 30th Septem		Prepara- tory work and Planting	Establish- ment and Main- tenance	Forest Protec- tion	Total	Nurseries	Grand Total
		(1)	(2)	(3)	(4)	(5)	(6) ·
First Decade :		£	£	£	£	£	£
1920-29		638,503	295,201	95,824	1,029,528	481,273	1,510,801
Second Decade	:	1,053,327	916,427	377,133	2,346,887	724,132	3.071,019
Third Decade: 1940 1941 1942 1943 1944 1945 1946 Grand Total		139,854 149,570 115,723 84,558 70,090 65,425 144,098	128,221 159,020 198,762 206,287 224,132 222,931 293,692 2,644,673	63,079 89,341 103,490 98,583 104,841 103,058 122,477	331,154 397,931 417,975 389,428 399,063 391,414 560,267	100,599 135,396 132,406 178,052 174,069 175,769 233,866	431.753 533.327 550,381 567,480 573.132 567,183 794,133
Percentage of Column 4		39·3	42 · 2	18.5	100	_	
Percentage of Column 6		28.6	30.7	13.5	72.8	27.2	100

The increase of £78,673 in the amount spent on Preparatory Work and Planting is largely due to preparation of ground for planting in the following year to give effect to the increased planting programme required. The increase of £58,097 in nursery expenditure was incurred in making provision for increased nursery stocks for future planting.

Plantations.—The total area planted or sown during the year was 10,448 acres, of which 9,619 acres were placed under conifers and 829 acres under broadleaved species. Included in the above are 678 acres replanted after destruction by fire. Details by forests are given in Appendix 1.

In forming plantations and beating-up previous years' plantations, 27 million trees were used of which 50 per cent. were Norway and Sitka Spruces; 24 per cent. Scots and Corsican Pines; 11 per cent. European and Japanese Larches; 2 per cent. Douglas Fir and 11 per cent. broadleaved species. An area of 126 acres of existing woods was underplanted.

The quantities of work done by Conservancies during the year are shown in the Table below.

SILVICULTURAL OPERATIONS

Conservancy	Planted and Sown	Under- planted	Thinned	Felled
	Acres	Acres	Acres	Acres
England:				
N.W	703	16	752	281
N.E	1,193	6	579	72
E	335	i —	1,764	117
S.E	546	12	284	416
S.W	804	_	757	68
New	232	30	797	141
Dean	264	15	1,267	94
Total	4,077	79	6,200	1,189
Scotland:				
N	475	2	811	12
E	1,746	7	1,117	42
S	1,688	7 2	557	34
W	977	25	412	12
Total	4,886	36	2,897	100
Wales:				
N	473		1,265	62
S	1,012	11	516	13
Total	т 485	11	1,781	75
Total—Great Britain	10,448	126	10,878	1,364

In addition to the above 18 acres were naturally regenerated; 14 acres in the New Forest, 3 acres in North Scotland, and 1 acre in East England Conservancy respectively.

Cost of Planting.—The outlay on labour and material on the areas planted between 1919 and 1946 was £11 17s. od. per acre. This figure covers the cost of preparation of ground, drainage, fencing, plants, replacement of failures, and weeding, but does not include expenditure on forest protection, supervision, and overhead charges.

Nurseries.—The total area under nurseries at 30th September, 1946, was 1,677 acres stocked with 276 million seedlings, and 115 million transplants. Comparative figures for the three years 1944 to 1946 are given in the following table.

NURSERIES

	Area (Acres)		830 204 643	1,677	1,012 561	1,573	1,023 536	1,559
	(A A			I,	'н	I,	I,	ı,
		Total	130,325 37,303 108,741	276,369	146,831 103,552	250,383	149,980 106,035	256,015
mber	Seedlings	Broad- leaved	5,737 344 647	6,728	14,231 1,979	16,210	3,579 183	3,762
t 3oth Septe sands)		Coni- ferous	124,588 36,959 108,094	269,641	132,600 101,573	234,173	146,401 105,852	252,253
Stock of Plants at 30th September (Thousands)		Total	47,478 20,794 46,618	114,890	43,007 36,538	79,545	37,218 35,995	73,213
Stock	Transplants	Broad- leaved	6,590 471 511	7,572	5,449	5.743	7,681 538	8,219
		Coni- ferous	40,888 20,323 46,107	107,318	37,558 36,244	73,802	29,537 35,457	64,994
		Total	27,612 4,807 15,511	47,930	96,383	101,792	45,539	49,984
Seed Sown	(1DS.)	Broad- leaved	22,341 3,588 9,167	35,096	92,199 1,754	93,953	39,653 74	39,727
	,	Coni- ferous	5,271 1,219 6,344	12,834	4,184	7,839	5,886 4,371	10,257
	Country		England Wales Scotland	Total	England & Wales Scotland	Total	England & Wales Scotland	Total
Y	ending 3oth September	- 	1946	-	1945	l	1944	

Details showing by Conservancies the utilisation of Nursery area are as follows:—

UTILISATION OF NURSERY AREA

Conservancy	Seedbeds	Transplant Lines	Fallow and Green Crops	Other	Total
England:	Acres	Acres	Acres	Acres	Acres
North-West	33 28	39	45	21	138
North-East	28	75	55 58	20	178
East	48	42	58	24	172
South-East	10	27	24	9	70
South-West New	7	22 61	15	13	57
D	46	1	65	22	194 21
Dean	4	9	5	3	21
Total	176	275	267	112	830
Scotland:					
North	29	39	77	17	162
East	31	49	28	2 8	136
South	1 1 1	48	40	18	127
West	29	5 6	109	24	218
Total	110	192	254	87	643
Wales:					
North	-	33	7	11	51
South	33	72	20	28	153
Total	33	105	27	39	204
Total—Gt. Britain	319	572	548	238	1,677
Percentages	19	34	33	14	100

SEED SUPPLY

Imported Seed

From Canada and the United States of America crops of the main species—Sitka Spuce and Douglas Fir were satisfactory. Quantities of Corsican Pine and European Larch were obtained from Corsica and Switzerland respectively, only a small quantity of Japanese Larch was available from Japan and this was imported by arrangement with the Foreign Office. The quantities and value of the seed imported are given below:—

				$\it lbs.$	Value	Country
a i mi					(\pounds)	a .
Corsican Pine	• • •	• • •		2,037	1,833	Corsica
European Larch				1,536	990	Switzerland
Japanese Larch			• • •	96	160	Japan
Sitka Spruce (Queen	Charle	otte s	train)	$2,013\frac{1}{2}$	2,530	Canada
Sitka Spruce (Queen	Charle	otte s	train)	2,498	3,482	U.S.A.
Sitka Spruce (Washi	ngton)			500	698	U.S.A.
Douglas Fir `		•••		1,002	1,308	U.S.A.
Douglas Fir	• • •		• • •	280½	364	Canada
Abies grandis	• • •			100	100	Canada
Abies grandis	•••			99	124	U.S.A.
Pinus murrayana	•••		117	10.	15	U.S.A.

Home Collection

England.—With the exception of Scots pine and Corsican pine, the quantity of cones collected was negligible. 3,992 bushels of Scots pine cones and 1,010 bushels of Corsican pine cones were obtained which yielded 1,958 lbs. and 769 lbs. respectively. Of the major hardwood species Oak was the only seeder, and 50,503 lbs. of acorns were collected; the beech seed crop was virtually a failure everywhere.

Scotland.—The following are details of cones collected and the resultant yield of seed:—

Species	Quantity (Bushels)	$Yield\ of\ Seed \ (lbs.)$
Scots Pine	 1,017	431
European Larch	 414	382
Japanese Larch	 20	8
Norway Spruce	 235	40
Miscellaneous Conifers	 41	40 66

Small quantities of hardwood seeds were also collected.

Wales.—Only small amounts of conifer seeds were available, and 14 bushels of Scots pine and 3 bushels of Corsican pine cones were collected—these collections yielded 6 lbs. and 2 lbs. of seeds respectively. In addition 2½ bushels of Lawson Cypress cones were collected.

The hardwoods collected comprised:—Oak 644 lbs., Sycamore 40 lbs., Lime $7\frac{1}{2}$ lbs., and Haws 25 lbs.

Seed Sold

The quantity of seed sold to the Trade and private individuals was:-

		Private	
	Trade	Individuals	Total
	(lbs.)	(lbs.)	(lbs.)
Conifers	4,506	68	4,574
Hardwoods			

FOREST FIRES

Losses during the year might be regarded as average. Outbreaks reported numbered 803, of which 80 per cent. were extinguished before causing damage to Commission property; these figures include fires on adjoining land if they threatened Commission property. The area of Commission plantations burnt was 1,104 acres, equivalent in terms of growth to 11,705 acre-years (excluding 12 acres of natural regeneration and coppice). The damage was assessed at £26,000, including cost of extinguishing.

Comparative figures for the five years 1942 to 1946 are given below:—

	1942	1943	1944	1945	1946
Number of fires	1,381	514	811	630	803
Area burnt (acres)		949	1,922	276	1,104
Damage valued at	£158,000	£19,500	£36,500	£7,000	£26,000

Claims aggregating £5,850 were lodged by the Commissioners in respect of the damage done during the year.

The table below gives the causes of fires in 1946. Most of the fires originated from sparks from railway engines, but most damage was caused by fires which spread from adjoining land.

ORIGIN, NUMBER AND EXTENT OF FOREST FIRES

Origin		Number of Fires	Planted Area Burnt (acres)
Railways		477	104
Adjoining land		150	504
General public		79	131
Commission employe	es	16	41
Road engines		_	
Miscellaneous		27	5 <i>7</i>
Unknown	•••	54	267
			
Totals		803	1,104

Advances for Afforestation Purposes

Expenditure £23,334 (Table IIA, Col. 3)

Grants to private individuals and local authorities for planting amounted to £7,307, advances in respect of the proceeds-sharing scheme at Lake Vyrnwy, operated jointly with Liverpool Corporation, to £2,523, and overhead and supervisory charges to £13,504.

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

Country			England	Scotland	Wales	Total
Number of Schemes			127	37	I	165
Dianting Hardwoods			Acres 2,136 519	Acres 1,465 1	Acres 40 58	Acres 3,641 578
Total		•••	2,655	1,466	98	4,219

Until the status of the areas concerned in regard to Dedication has been determined, as an interim measure, the rate of grant for planting or replanting carried out during the season 1945–1946 has been fixed at £7 10s. od. per acre of which £5 is payable after inspection, the balance being payable on properly established and maintained plantations on completion of dedication, or after five years in the case of areas found unsuitable for dedication.

Education

Expenditure £66,565 (Table IIA, Col. 4)
Income £12,465 (Table IIA, Col. 11)

Details of expenditure are given in Table IV; the income consisted almost entirely of payments from private employers for the services of Trainees under the Forest Workers Training Scheme.

Forester Training Schools and Short Courses: Expenditure £10,946.

This expenditure is made up as follows—salaries and expenses of instructors £3,709, allowances to apprentices £2,531, and rent, stores, fuel, etc. £4,706. The total spent on the same heads in the previous year was £3,776.

Forester Training Schools

In previous reports these have been referred to as Forest Apprentices Schools. The School at Parkend in the Forest of Dean was reopened in May, 1945 when a short intensive course was started for partly-trained men who had been called up for military service before they had completed their School course. The 20 men who took this course all completed it satisfactorily and were allocated to Commission Forests in various parts of the country. Benmore Forester Training School continued the normal two-year course of instruction. Fourteen men were passed out during the year; of these, two had been trained for Northern Ireland and joined that Service, the balance were absorbed into the Commission's staff. Steps were also taken to equip a Ministry of Labour Training Camp in Glen Tress Forest near Peebles for use as an additional Forester Training School to be opened in October, 1946.

Short Courses for Foresters and Woodmen were held at Darnaway Castle, Morayshire—Instructor, Mr. T. A. Robbie; Dartington Hall, Totnes, Devon—Instructor, Mr. T. Brown; Drumlanrig Castle, Dumfries—Instructor, Mr. Frank Scott; Huntley Manor, Gloucestershire—Instructor, Major C. P. Ackers; Raby Castle, Durham—Instructor, Mr. H. Smith. The average number of men attending each course was 10, and two courses were held at Raby Castle during the year.

Forest Workers Training Scheme.—The expenditure on this scheme amounted to £44,352, of which £34,148 represented allowances to trainees and £10,204 expenditure on maintenance of training centres, etc.

This scheme was started towards the end of 1945 to provide vocational training in forestry for men who had served in the armed forces, factories, etc., during the war. The training is given in the State Forests and also on selected Private Estates, and at the conclusion of the course the choice is left with the trainee as to whether he will seek employment on a private estate or with the Commission. Many applicants came forward and at the close of the year the number of men under training was 759 distributed as follows:—

	State Forests	Private Estates	Total
England	316	157	473
Scotland	166	<i>7</i> 9	245
Wales	37	4	41
			
	519	240	<i>7</i> 59
		 -	

Grants to Educational Institutions: Expenditure £4,516

Grants were made during the year as follows:—Aberdeen University—£500; Imperial Forestry Institute, Oxford—£2,700; University College of North Wales, Bangor—£991; Cambridge University—£250; King's College, Newcastle-on-Tyne—£75.

TABLE IV.—EDUCATION

		<u> </u>	ŀ	<i>3</i> 1										
	Net	Expenditure	7	98,886	97,555		5,341	12,457	10,632	9,203	8,158	54,100	302,169	
	Income (Table IIA	(11))	ÿ	2,427	443	c	o 24	88	86	I	1	12,465	15,560	
		Total	7	101,313	866'26		5,349	12,545	10,718	9,204	8,158	66,565	317,729	100
		Grants to Institutions	77	30,691	42,646		3,050	4,267	3,050	3,050	3,050	4,516	96.745	30.5
m 4)	Vorkers Scheme	Upkeep of Training Centres	7	1	1		1 1		I	1		10,204	10,204	3.2
Expenditure (Table IIA, Column 4)	Forest Workers Training Scheme	Allowances to Trainees	Ŧ		I		1 [i	1		34,148	34,148	10.7
nditure (Tab	ort Courses	Rent, Stores, Fuel, Light, etc.	3	20,387	14,638	00	403 796	3,165	116'1	746	594	4,706	47,431	14.9
Expe	Forester Schools and Short Courses	Allowances to Apprentices	Ŧ	21,709	17,682		1,104	2,754	3,225	3,076	1,878	2,531	54,610	17.2
	Forester Sc	Salaries and Expenses of Instructors	77	15,401	10,848	C	408 665	1,313	1,443	1,109	1,304	3,709	36,200	11.4
	Superior	Supervision and Overhead Charges	Ŧ	13,125	12,184	ò	777	1,046	1,089	1,223	1,332	6,751	38,391	12.1
				÷	:		: :	:	:	:	:	:	:	
	Year ending	30th September	First Decade .	62-0261	Second Decade: 1930-39	Third Decade:	1940 1941	1942	1943	I944	1945	9461	Grand Total	Percentage:

Research and Experiment

Expenditure £33,911 (Table IIA, Col. 5)
Income £329 (Table IIA, Col. 6)

Details are given below.

TABLE V .- RESEARCH AND EXPERIMENT

Year ending 30th September	Superior Supervision and Overhead Charges	Salaries and Expenses	Labour, Stores, etc.	Grants to Institu- tions	Total	Income	Net Expendi- ture
<u>~</u>	I.	2.	3.	4.	5•	6.	7.
First Decade:	£	£	£	£	£	£	£
1920–29	13,699	38,458	20,230	7,263	79,650	1,058	78,592
Second Decade:	14,584	55,042	47,030	23,589	140,245	2,540	137,705
Third Decade: 1940 1941 1942 1943 1944 1945 1946	864 777 1,046 1,089 1,222 1,331 2,411	5,501 5,452 6,587 8,440 9,646 11,430 16,892	4,768 4,122 5,296 6,024 6,604 6,954 12,626	3,686 2,129 1,669 1,326 1,604 1,511	14,819 12,480 14,598 16,879 19,076 21,226 33,911	532 435 422 174 202 26 329	14,287 12,045 14,176 16,705 18,874 21,200 33,582
Grand Total	37,023	157,448	113,654	44,759	352,884	5,718	347,166
Percentage:	10.2	44.6	32.2	12.7	100	_	_

Production

The following table shows the work carried out during the year and the total number of plots in being at September 30th, 1947.

Permanent Sample Plots	England	Scotland	Wales	Total
New plots established		2	_	2
Plots remeasured during the year	16	54		70
Total of plots in being	104	96	20	220

One of the two new plots established was in a small stand of *Pinus contorta* of the coastal type growing at Inchnacardoch Forest near Fort Augustus on the Caledonian Canal. This is the first sample plot to be established of this particular species. The trees averaged 40 feet in height at 23 years of age, and the stand carried a volume of 1,600 cubic feet per acre.

Nursery and Plantation Work

The special Committee, appointed in 1944 to investigate the problem of the nutrition of trees in forest nurseries, carried out a large programme of experiments based mainly on the results obtained from the preliminary experiments of the previous year. Slow acting forms of nitrogenous fertilizers applied together with potassic and phosphatic manures produced remarkably fine seedlings of Sitka spruce on Wareham Heath. On this soil the response to potash in the presence of both nitrogen and phosphoric acid was particularly striking and emphasized the importance of balanced manuring of forest trees. Organic manures, such as composts, were tested against the inorganic fertilizers, and seedlings raised by the two methods were planted out direct on afforestation areas, while there was also an extensive programme of lining out the seedlings in forest nurseries. The behaviour of the plants will be watched with much interest.

Work on the partial sterilization of old nursery soil, using steam and chemical methods, was continued. The marked response to treatment in the three nurseries in which the experiments were carried out suggests that this is a possible way of dealing with certain long-established nurseries which no longer produce vigorous planting stock. This line of investigation is being actively pursued.

Preliminary tests on the use of 'Methoxone' for the control of weeds in

tree nurseries gave inconclusive results.

An assessment of European larch provenance experiments in the Welsh border country (Radnor, Brecon, Mynydd Ddu, and Mortimer Forests) gave significant results in relation to the disease known as die-back. Where the experimental plantations were formed at relatively high elevations (1,200 feet above sea-level and over), die-back was confined to the Continental, more particularly the Swiss and Austrian, seed origins. The larch raised from seed of Scottish origin, on the other hand, has grown tolerably well and is free from die-back. At lower elevations, and where the site conditions are such as to minimise damage from late frosts, the Continental seed origins are little if at all inferior to the Scottish larch. Experience in Scotland where similar experiments have been carried out tend to confirm the general conclusion that where conditions are optimal for the growth of larch, Alpine seed origins can be used with comparative safety, but that where site conditions are less favourable, plants raised from seed collected in the regions of the Alps are to be avoided at all costs.

It is satisfactory to report that during the latter part of the war a large number of samples of larch seed collected in different parts of Europe (including Scotland) were assembled in Stockholm under the aegis of the International Union of Forest Research Organisations and were thence distributed to the European forestry services for trial. The Commissioners received a complete set of the seed lots; the seed was sown in our nurseries and planted out in a number of different forests in England, Wales and Scotland, during the year under review.

The principal new work carried out in Scotland was the successful ploughing in preparation for planting of difficult peat-covered land in the west of Scotland. A specially-constructed plough designed by a Scottish engineer tackled the work very satisfactorily. The land was subsequently planted for the most part with Sitka spruce in mixture with different species of pine to test their utility as 'nurse trees' for the spruces which are intended to form the main crop.

Entomology and Pathology

The importation of spruce logs in the round from Germany during the spring and summer of 1946 led to the unwelcome discovery that many of the logs were imperfectly barked and carried large numbers of larvae and adults of a small bark beetle known as *Ips typographus*. This beetle is a serious pest in Continental spruce forests, but is one from which we have hitherto been immune in Great Britain. With the co-operation of the Board of Trade and of the Home Timber Trade, energetic measures were taken to tackle the problem so as to minimise the risk that the beetle will establish itself in this country. As the volume of imports rose steeply during the year, control measures became increasingly difficult, and the outlook is somewhat doubtful. Control measures took up a great deal of the time of the Commission's staff.

A rather serious insect pest, a small species of *Evetria* whose larvae tunnel the needles, has been found attacking plantations of Corsican pine in two forests in the Midlands. The biology of the insect is being investigated.

Another insect pest, *Grapholitha zebeana*, which is fairly common on the Continent but not hitherto recorded in Britain, has been found damaging European larch shoots in the eastern parts of England.

Die-back resulting from the attack by the root fungus Fomes annosus in 20 to 25 year old plantations of Scots and Corsican pines in East Anglia has caused appreciable losses in certain compartments. The causes of the outbreak are under investigation.

Elm disease continues to make strides in certain districts, but the overall picture is moderately reassuring. Many fine specimen trees remain unaffected

by the disease in all parts of the country.

Botanical and Soil Research

Dr. M. C. Rayner has continued her investigations on tree mycorrhizas with special reference to Sitka spruce, Scots and Corsican pines. Pure strains of *Boletus* and other fungi were isolated and used for inoculation purposes.

There is little to report in the field of forest soil research beyond the continuance of manuring experiments in tree nurseries and some further work by staff of Oxford University on the soils of Caio Forest in South Wales.

Utilisation

Close liaison has been maintained with the Director and staff of the Forest Products Research Laboratory.

Agency and Advisory Services

Expenditure £10,609 (Table IIA, Col. 6)

Income £377

The expenditure 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 enquiries and advising woodland owners as to the treatment of their woods.

The increase in expenditure from $f_{1,331}$ last year is due to the appointment of special officers to deal with matters affecting Private Woodlands and the Dedication Scheme in particular.

Special Services

Expenditure: £3,387

Details are given below.

TABLE VI.-SPECIAL SERVICES

•		Expend	liture (Tal	ole IIA, Colu	mn 7)			
Year ending 30th September	Superior Super- vision and Overhead Charges	Consul- tative Committee's Expenses	Publica- tions	Special Enquiries	Relief of Un- employ- ment	Total	Income	Net Expend- iture
First Decade:	£	£	£	£	£	£	£	£
1920-29	26,585	523	1,995	12,368	19,828	61,299	347	60,952
Second Decade:	28,698	145	1,279	12,572		42,694	33	42,661
Third Decade: 1940 1941 1942 1943 1944 1945 1946	864 777 1,046 1,089 1,222 1,331 2,411	_ 9 	. 2 — — — — — — — — — — — — — — — — — — —	760 149 179 140 104 216 976		1,635 926 1,225 1,229 1,326 1,547 3,387	1 — — — — — — 5 12	1,634 926 1,225 1,229 1,326 1,542 3,375
Grand Total:	64,023	677	3,276	27,464	19,828	115,268	398	114,870
Percentage:	55 5	.6	2.9	23.8	17.2	100		_

PUBLICATIONS

Three new publications were issued, all having particular reference to post-war needs. These were:

The Thinning of Plantations, the first booklet in the new "Forest Operations" series, planned for the guidance of foresters, estate agents, and landowners.

Forestry as a Career, a booklet giving details of training for posts as Forest Officers, Foresters, and Forest Workers, designed primarily for the guidance of men leaving the Forces.

Replanting of Felled Coniferous Woodland in Relation to Insect Pests, a leaflet (No. 25) describing the precautions necessary to avoid damage by Hylobius weevils and Hylastes beetles.

A good deal of work was done on revising and reprinting publications that had run out of stock during the war years, and the following items were re-issued:—

Bulletins

- No. 16. Studies on the Pine Shoot Moth.
- No. 17. The Cultivation of the Cricket Bat Willow.
- No. 18. Spring Frosts.

Leaflets

- No. 2. Adelges Cooleyi on Douglas Fir.
- No. 5. Conifer Heart Rot.
- No. 6. Honey Fungus.
- No. 14. The Phomopsis Disease of Conifers.
- No. 17. Chafer Beetles.
- No. 18. Two leaf Cast Diseases of Douglas Fir.

Other Publications

Yield Tables for Scots Pine and other Conifers.

Work in progress included the preparation of Guides to the National Forest Parks, and of a series of Research Notes.

Technical information for the guidance of the Commission's staff was also printed and circulated in a Departmental series entitled "Technical Notes", two sections of which, dealing with Afforestation and Protection respectively, were completed during the year under review.

EXHIBITS AT AGRICULTURAL SHOWS

An exhibit, of which a large scale model of a nursery and forest formed part, was arranged for the Bristol Farm Week Show; an exhibit was also arranged for "The Country comes to Town" Show at Glasgow.

Forest Workers Holdings

Expenditure £36,200 (Table IIA, Col. 8)

Income £22,291 (Table IIA, Col. 12)

Details of these amounts are given in Table VII. There is an apparent increase of expenditure by £33,500, as compared with the previous year. This is due to the fact that in 1945, land and buildings not required for holdings were transferred to forestry operations, with the result that in that year, Purchase and Rent of Land and Buildings (Col. 2), appeared as a credit instead of a debit figure.

The abnormal conditions prevailing have again delayed much necessary work of repair, maintenance and improvement, and no new building was undertaken.

TABLE VII.-FOREST WORKERS HOLDINGS

			Expenditu	Expenditure (Table IIA, Column 8)	IIA, Colur	лп 8)			Income (Ta	Income (Table IIA, Column 12)	lumn 12)	
Year ending	Superior Super-	Purchase and Rent		Buildings		Fencing,	Miscol			(Net Expendi-
3oth September	vision and Overhead Charges	of Land and Buildings	New	Adapta- tions	Repairs	Drain- age, etc.	laneous	Total	Kents	Other	Lotal	a in 1
	(I)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)	(01)	(11)	(12)
First Decade.	F	3	£	Ŧ	Ŧ	Ŧ	z z	Ŧ	Ŧ	Ŧ	Ŧ	Ĩ
1920–29	35,894	103,940	192,184	32,302	3,882	17,561	4,120	389,883	26,261	1,254	27,515	362,368
Second Decade: 1930–39	94,399	108,894	234,824	43,830	46,341	27,967	9,616	565,871	167,966	890	168,856	397,015
Third Decade: 1940 1941 1943 1944 1945 1945 Grand Total	8,637 7,766 10,464 10,894 2,125 2,247 16,396 188,822	3,690 2,661 2,661 1,837 *12,586(Cr.) 1,117 205,292 18.5	16,417 448 1,480 37 27 35 945 446,396	317 5,128 467 260 1000 1,234 436 84,074	5,667 6,246 7,069 6,199 7,669 9,264 14,110 106,427	1,464 1,108 1,135 498 7,81 1,100 1,100 52,055	1,395 1,122 1,437 1,433 1,533 1,725 2,096 24,482	37,587 24,479 23,424 13,615 13,789 2,700 36,200 1,107,548	20,303 20,806 21,506 21,505 21,291 22,306 21,532 342,993	21 99 39 1 1 144 759 3,236	20,324 20,905 21,545 21,320 22,450 22,450 346,229	17,263 3,574 1,879 7,408(Cr.) 7,531(Cr.) 19,750(Cr.) 13,909 761,319
		_	_									

* Credit Entry due to transfer to forestry operations of land and buildings not required for holdings.

SUMMARY OF SPECIES PLANTED

	Total (Thous.)	5,472 1,079 425 2,205 2,205 3,838 9,903 25 27 27 27 27 27 27 27 27 27 27 27 27 27	27,517
Тотаг	Beating-up (Thous.)	2,006 461 144 1,182 3,036 3,036 17 17 142 142 142 162 288 288 5	9,204
	Planting (Thous.)	3,466 618 281 1,610 411 2,695 6,867 20 40 137 275 74 275 74 74 19 70 1,085 527 17 627 74 74 17 76 17 76 17 76 17 76 17 76 17 76 76 76 76 76 76 76 76 76 76 76 76 76	18,313
	Total (Thous.)	396 22 411 411 611 1,749 16 25 26 27 27 27 27	3,624
WALES	Beating-up (Thous.)	234 27 118 118 185 518 52 2 2 40 40 40 5	1,209
	Planting (Thous.)	162 102 103 30 30 1,231 13 16 13 16 13 16 13 16 13 17 17 17	2,415
	Total (Thous.)	2,708 1924 171 2,000 5,314 110 110 110 110 110 110 110 110 110 1	11,735
Scotland	Beating-up (Thous.)	665 209 209 554 441 1,387 7 7 7 7 7 1	2,986
	Planting (Thous.)	2,043 1123 6699 1176 1,559 3,927 1 2 1 12 14 14 14 16 16 16	8,749
	Total (Thous.)	2,368 1946 1946 1966 2,840 2,840 1,860 1,860 1,590 3,7 3,7 3,7 1,590 1,590	12,158
ENGLAND	Beating-up (Thous.)	1,107 431 568 2688 114 517 1,131 8 8 8 8 8 5 604 484 484 26 26 27 28 28 27 27 28 28 27 27 27 27 27 27 27 27 27 27 27 27 27	5,009
	Planting (Thous.)	1,261 1,261 1,422 265 265 7,10 1,709 1,709 1,23 2,33 2,33 2,33 4,81 1,61 1,61 1,73 1,73 1,73 1,73 1,73 1,73 1,73 1,7	7,149
	SPECIES	Scots Pine Corsican Pine European Larch Japanese Larch Douglas Fir Norway Spruce Sitka Spruce Tsuga Thuya Pinus Contorta Hybrid Larch Lawson Cypress Picea Omorica Abies grandis Abies grandis Beech Oalts Sycamore Cherry Others	ALL SPECIES

SUMMARY OF PLANTATIONS—YEAR ENDED 30TH SEPTEMBER, 1946

			Area Plante	ed (Acres)		
Forest	Affore	ested	Re-affo	prested	To	tal
	Conifers	Broad- leaved	Conifers	Broad- leaved	Conifers	Broad- leaved
England Scotland Wales	1,270 3,345 1,108	105 54 2	2,092 1,460 344	610 27 31	3,362 4,805 1,452	715 81 33
	5,723	161	3,896	668	9,619	829

(Signed) ROBINSON (Chairman)

J. M. BANNERMAN
R. C. G. COTTERELL
COURTHOPE
THOMAS JOHNSTON
LLOYD O. OWEN
RADNOR
S. STRANG STEEL
W. J. STIRLING
W. L. TAYLOR

F. W. HAMILTON, Secretary, 25, Savile Row, London, W.I.

Appen
PLANTATIONS—YEAR ENDED 30TH

		A	Area Plante	d (Acres)		
	Affor	ested	Re-affe	orested	То	otal
	Conifers	Broad- leaved	Conifers	Broad- leaved	Conifers	Broad- leaved
England:						
N.W. Conservancy	0,0	2	424	4	697	_6
N.E. Conservancy E. Conservancy		' 14 18	369 188	118	1,179	14
C TO C				153	199	136 206
S.W. Conservancy	1	53	339 523	129	340 673	131
New Forest		16	139	52	164	68
Dean Forest		_	110	154	110	154
Total England	. 1,270	105	2,092	610	3,362	715
Scotland:						
North Conservancy	. 92		383	_	475	_
East Conservancy	. 834	20	890	2	1,724	22
South Conservancy		31	117	25	1,632	5 6
West Conservancy	1 1 1	3	70		974	3
Total Scotland	3,345	54	1,460	27	4,805	81
Wales:						
North Conservancy	294		179		473	_
South Conservancy		2	165	31	979	33
Total Wales	1,108	2	344	31	1,452	33
Great Britain : Grand Total	5,723	161	3,896	668	9,619	829

dix I september, 1946—summary

Species Planted, including Beating-up (Thousands) Norway Eur. Scots and Douglas and and Oak Ash Beech Other Total Corsican Jap. Fir Sitka Spruces Pines Larches 576 2,614 76 266 480 7 14 68 1,411 43 62 641 182 Ι 62 46 3,589 361 71 81 1,567 662 12 32I 1,763 1,684 634 85 587 142 137 97 378 87 312 316 343 48 79 256 171 83 548 102 55 75 18 40 1,126 158 I 199 1,018 491 35 33 965 12,158 3,314 1,151 379 4,067 95 1,590 597 602 180 605 68 91 2 1,548 1,692 233 36 2,119 27 37 4,144 67 56 339 524 27 2,558 21 142 3,734 133 2,032 7 2,309 79 17 41 2,712 67 1,070 17I 7,314 21 102 278 11,735 75 1 1,101 2 15 1,251 57 389 450 42 1,259 70 23 140 2,373 525 2,360 3,624 446 43 70 25 155 6,551 2,667 162 1,056 1,030 593 13,741 1,717 27,517

Appendix I PLANTATIONS—YEAR ENDED 30TH

			Area Plant	ted (Acres)		
Forest	Affor	ested	Re-affo	prested	То	tal
	Conifers	Broad- leaved	Conifers	Broad- leaved	Conifers	Broad- leaved
North West Conserv-					ł.	
I. Delamere	1 —	_		_	_	_
2. Thornthwaite	I —	_	4	_	4	
3. Cannock Chase	1	_	49	<u> </u>	49	
4. Mortimer	-		112	_	112	_
5. Walcot 6. Clipstone	-	_	39 96		39 96	_
o. Clipstone 7. Ennerdale	_		2		2	
8. Hope	8	2		l <u> </u>	8	2
9. Bawtry	_		_	l —	_	
io. Sherwood		_	122	4	122	4 - -
11. Kershope	204	_	_		204	
12. Hardknott	15	_	_	_	15	_
13. Grizedale	. 33	_	-	l —	33	<u> </u>
14. Greystoke	13	-	-	_	13	_
15. Cotgrave	_	_	_	_	_	
Total, North West	273	2	424	4	697	6
North East Con-						
SERVANCY:						
I. Chopwell		l —	15	l —	15	_
2. Allerston	63	—	. 44	<u> </u>	107	_
3. Rothbury	, —	—	45	I —	45	_
4. Selby		—	23	. —	23	_
5. Kielder		<u> </u>	9	_	453	_
6. Hamsterley 7. Ampleforth	1	_	29	-	58	_
7. Ampleforth 8. Roseisle		_	51	1 =	29 56	_
9. Harwood	I		32		30	
10. Slaley			_		_	-
11. Arkengarthdale	16		_		16	-
12. Redesdale		<u> </u>	120	-	121	-
13. Langdale	96	_	—	_	96	-
14. Widehaugh	I	ļ —		-		_
15. Warke 16. Scardale	113	14	33	_	146	14
Total, North East		14	369	<u> </u>	1,179	14
				·	-,-,-	
East Conservancy:		l.	}			
I. Hazelborough	1	-	3	14	_3	14
2. Salcey	1	i —		45	_	45 21
3. Ampthill 4. Rendlesham			9	21	_	4
5. Rockingham	1	_	-	4	9	4
6. Swaffham	I —			4	_	-
7. Thetford Chase	11	10	99	7	110	17
8. Bourne	1		l —	<u>-</u>	_	-
9. Laughton	-		49	22	49	22
	1	ı	1	1	1	<u> </u>

-continued

· SEPTEMBER, 1946—ENGLAND

SEPTEMBER	Species Planted, including Beating-up (Thousands)										
	Spec	ies Planted,	including E	Beating-up (Th	ousands)						
Scots and Corsican Pines	Eur. and Jap. Larches	Douglas Fir	Norway and Sitka Spruces	Oak, Ash, Beech	Other	Total					
24 	17 — 175 11 — 4 — 13 — 6 40 —		3 15 10 44 			44 22 83 194 55 80 75 22 — 309 352 69 74 32					
480	266	7	576	14	68	1,411					
23 177 23 27 52 109 27 34 29 3 4 92 4 92	12 25 4 11 34 10 30 34 — — — 18	34 3 - 4 - 4 	7 205 34 32 996 102 22 89 24 31 60 574 122 —	1/2 	9 2 5 10 20	42 430 97 72 1,090 231 99 161 24 60 63 581 215 — 338 86					
641	182	43	2,614	63	46	3,589					
1 28 48 2 353 123	8 — 4 — — — —		8 28 — 18 — —	55 93 51 26 120 — 92 —	5 -5 14 9 - 16 -	76 121 61 105 195 4 461 —					

Appendix I PLANTATIONS—YEAR ENDED 30TH

	_					
			Area Plan	ted (Acres)		
Forest	Affor	ested	Re-affo	orested	To	tal
	Conifers	Broad- leaved	Conifers	Broad- leaved	Conifers	Broad- leaved
East Conservancy:— (contd.) 10. Swanton	_	_	10	I	10	1
11. Dunwich	_	_	-	_		_
12. Yardley Chase			-		_	_
13. Bardney 14. The King's Forest		_	14	_	14	_
15. Wigsley		_		_		_
16. Willingham			4		4	
17. Wendover		8	<u> </u>	_	<u> </u>	8
18. Hevingham	_	_	_	_		_
19. Shouldham						
Total, East	11	18	188	118	199	136
SOUTH EAST CONSERVANCY 1. Alice Holt 2. Bere	1 1	Ξ	3 59	2	3 59	2
3. Woolmer	_			_		_
4. Bedgebury 5. Bramshill	_	_	79 44	3	79 44	3
6. Chiddingfold	<u>-</u>	_	24	I	24	I
7. Lyminge		_	36	12	36	12
8. Friston		_	_	7 7	_	77
9. Micheldever 10. Buriton						
IO. Buriton		53		_	I	53
12. Challock						
13. Goodwood		-	10	24	10	24
14. Vinehall	<u> </u>	_	_		_	
15. Gravetye 16. Marden		_	3	7	3	7
16. Marden		_	61	24	61	24
ı́8. Orlestone			20	3	20	3
19. Alton		_	_	_	_	_
20. Andover						
Total, South East	I	53	339	153	340	206
South West Conservancy						
I. Dymock	_	_	-0	_		_
2. Brendon 3. Eggesford		_	18 64	<u> </u>	18 64	1
3. Eggesiord 4. Haldon			40		40	
5. Halwill	18		32	<u> </u>	50	
6. Quantocks	_	_	· —	-	_	
7. Bodmin	_	_	31	_	31	
	<u> </u>	<u></u>	l	<u> </u>		

_continued

SEPTEMBER, 1946—ENGLAND

Species	Planted.	including	Beating-up	(Thousands)

Scots and Corsican Pines	Eur. and Jap. Larches	Douglas Fir	Norway and Sitka Spruces	Oak, Ash, Beech	Other	Total
25 8 10 44 — 7 8 — —		8 — — — — 3 — — —		4 28 32 2 		37 8 75 88 2 10 9 135 —
662	12	62	76	684	71	1,567
21 23 ——————————————————————————————————	1 36 18 1 4 3 2 72 4	8 30	20 12 34	54 14 17 48 124 28 109 20 85 15 18 22 106 —	14 4 3 98 7.22 1 3 7 7 7 4 2 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	99 107 211 163 62 147 233 29 171 17 29 103 56 24 22 226 64 —
634	142	85	137	684	81	1,763
1 50 26 				 -4 	10 6 70 8	 24 133 90 142 60

Appendix I PLANTATIONS—YEAR ENDED 30TH

			Area Plan	ted (Acres)		
Forest	Affor	ested	Re-affo	prested	То	tal
	Conifers	Broad- leaved	Conifers	Broad- leaved	Conifers	Broad- leaved
SOUTH WEST CON- SERVANCY (contd.) 8. Haugh 9. Wyre 10. Wilsey Down 11. Bruton 12. Dartmoor 13. Herodsfoot 14. West Woods 15. Lydford 16. Collingbourne 17. Hartland 18. Mendip 19. Savernake 20. Stanway 21. Bradon			6 83 	23 	6 83 21 32 45 — 27 1 56 55 144	23
Total, South West	150	2	523	129	673	131
New Forest: 1. New 2. Parkhurst 3. Wareham 4. Ringwood 5. Ferndown 6. Brighstone 7. Combley 8. Gardiner 9. Osborne			95 11 7 7 7 — 3 16	7 7 	95 111 7 1 7 18 — 3 — 22	7 7 16 38
Total, New	25	16	139	52	164	68
DEAN FOREST 1. Dean 2. Tidenham Chase Total, Dean			110	141	110	141 13 154
England: Total	1,270	105	2,092	610	3,362	715

-continued

SEPTEMBER, 1946—ENGLAND

Species Planted, including Beating-up (Thousands) Eur. Norway Scots Oak, Douglas andand and Ash, Other Total Corsican Sitka Jap. Fir Beech Larches Spruces Pines 19 74 7² 1 --2 4 56 83 71 ΙI 196 11 1,684 36o · 3 130 Ioo I Ι 228 1,126 5⁸² 10' I 1,005 1,018

3,314

1,151

9

4,067

2,650

12,158

Appendix I PLANTATIONS—YEAR ENDED 30TH

		A	rea Planted	(Acres)	-	
Forest	Affor	ested	Re-affo	prested	То	tal
	Conifers	Broad- leaved	Conifers	Broad- leaved	Conifers	Broad- leaved
North Conservancy						
I. Borgie		_	47	_	47	_
2. Inchnacardoch	.	_	"		"	_
3. Portclair	ĺ	_	_			<u> </u>
4. South Laggan	t.	· _	i —			
5. Achnashellach	1		7		7	_
6. Ratagan	.	l			1	_
7. Slattadale	·	l _			l '	
8. Glen Righ		l <u> </u>		i	!	
g. Glen Hurich		l <u> </u>	_		28	_
10. Glen Urquhart						
O 11 1 T			6	_	6	_
3.7		_			0	· -
	. -	_	— — —		_	
13. The Queen's Forest		· -	_		_	_
14. Craig nan Eun	I	_	_	_	_	_
15. Craig Phadrig		_	-	_	_	
16. Glen Shiel	1		-	_		_
17. North Strome	1	_	_	_		_
r8. Salen		_	-		_	
19. South Strome	l l	-				
20. Findon	1	-	2	_	2	_
21. Glen Garry	1				_	_
22. Kessock	. -	-	_	_		· . —
23. Eilanreach		_	·	_	1 —	
24 Dornoch	.	· -	_	_	1 —	
25. Inverinate	.		_	_	-	_
26. Balblair	. —		_	_ -	<u> </u>	- -
27. Clunes	. —	<u> </u>	_		<u> </u>	
28. Lael	. —			_	_	
29. Fiunary	. —		· —		_	-
30. Glen Loy	. —	_	_	_	_	_
31. Glen Brittle	. 19	_		l —	19	· ·—
32. Longart '	· j 9	1 -	_	-	9	_
33. Leanachan	. 19	l —			19	_
34. Guisachan	. 13			<u> </u>	13	_
35. Ardross	_	_			<u> </u>	
36. Inshriach	. 4	-	26		30	_
37. Millbuie		l —	248	l —	, 248	
38. Assich		_	<u> </u>		-	
39. Morangie		! —	_			
40. Kilcoy		-	25		25	_
41. Strath Nairn	. —	-		l —	<u> </u>	
42. Ferness	. —		22	l —	22	
43. Strath Conon		_	—	l —	—	
44. Strath Dearn	1				_	. —
45. Farigaig			_	l —		·
Total, North			383		475	
	. 92		303	_	4/3	
		' 				

--continued
SEPTEMBER, 1946-SCOTLAND

Species Planted	, including	Beating-up	(Thousands)
-----------------	-------------	------------	-------------

Scots and	Eur. and		Norway			
and Corsican Pines	Jap. Larches	Douglas Fir	and Sitka Spruces	Oak, Ash, Beech	Other	Total
2	11	20	90		1 — 1 — 1 4 — — — — — — — — — — — — — —	102
		9*				-15,1~

Appendix I PLANTATIONS—YEAR ENDED 30TH

Forest Afforested Re-afforested Total	Broad-eaved ————————————————————————————————————
EAST CONSERVANCY 1. Monaughty	
I. Monaughty — 51 — — — 51 — — 51 — — 51 — — 51 — — 51 — — 51 — — 51 — — 51 — — 51 — — 51 — — 51 — — 51 — — 51 — — 51 — — — — — 22 — — — — — — — — — — — — — — — — — — —	
3. Montreathmont	
4. Culbin 51 5. Edensmuir 53	
5. Edensmuir 53 — 2 — 55 6. Tentsmuir — 22 — 22 7. Drummond Hill 81 13 — 81 8. Teindland (includes Altonside) — 106 — 106 9. The Bin 30 — 132 — 162 58 — — — 58 — — 58 10. Ordiequish — 4 — 4 — 4 — 4 — 4 — 4 — 4 — — — 58 — — — 58 — — — 58 — — — 58 — — — 58 — — — 58 — — — 31 13 — — 31 13 — — 17 — 17 — 17 — 17 — 17 — 17 — 17	
6. Tentsmuir 22 22 7. Drummond Hill 81 13 81 8. Teindland (includes Altonside)	
8. Teindland (includes Altonside)	
Altonside)	
9. The Bin 30	
Speymouth S8	
Ordiequish	
11. Blairadam 31 3 — 31 12. Drumtochty — — — — — 13. Kemnay — — 17 — 17 14. Midmar — — — — — 15. Deer — — 35 — 35 16. Scootmore 13 — 9 — 22 17. Clashindarroch 82 — — 82 — — 82 18. Roseisle — — — 45 — 45 19. Blackcraig — — — 2 — — 2 20. Carden 2 — — 2 — 2 — 2 — 2 — 2 — 2 — 2 — 2 — 2 — — 2 2 — — 2 2 — — 99 — 99 — 99 — 99 </td <td>3 </td>	3
12. Drumtochty —	·
13. Kemnay — 17 — 17 14. Midmar — — — — 15. Deer — — 35 — 35 16. Scootmore 13 — 9 — 22 17. Clashindarroch 82 — — 82 18. Roseisle — — 45 — 45 19. Blackcraig — — 35 — 35 20. Carden 2 — — 2 21. Inglismaldie — — 33 — 33 22. Durris — — 99 — 99 23. Newton — — — — — 24. Newtyle — — — — — 26. Kinfauns — — — — — — 27. Whitehaugh 37 — — <td></td>	
14. Midmar	
16. Scootmore 13 — 9 — 22 17. Clashindarroch 82 — — 82 18. Roseisle — — 45 — 45 19. Blackcraig — — 35 — 35 20. Carden 2 — — 2 21. Inglismaldie — — 99 — 99 23. Newton — — — — — 24. Newtyle — — — — — 25. Alltcailleach — — 94 — 94 26. Kinfauns — — — — — 27. Whitehaugh 37 — — 37	
17. Clashindarroch 82 — — 82 18. Roseisle — 45 — 45 19. Blackcraig — — 35 — 35 20. Carden 2 — — 2 21. Inglismaldie — — 33 — 33 22. Durris — — 99 — 99 23. Newton — — — — 24. Newtyle — — — — 25. Alltcailleach — — 94 — 94 26. Kinfauns — — — — — 27. Whitehaugh 37 — — 37	
18. Roseisle — 45 — 45 19. Blackcraig — 35 — 35 20. Carden 2 — — 2 21. Inglismaldie — — 33 — 33 22. Durris — — 99 — 99 23. Newton — — — — 24. Newtyle — — — — 25. Alltcailleach — — 94 — 94 26. Kinfauns — — — — — — 27. Whitehaugh 37 — — 37	_
19. Blackcraig 35 35 35 20. Carden 2 35 2 _ 2 _ 21. Inglismaldie 99 99 99 _ 23. Newton	_
20. Carden 2 — — 2 21. Inglismaldie — 33 — 33 22. Durris — — 99 — 99 23. Newton — — — — 24. Newtyle — — 13 — 13 25. Alltcailleach — — 94 — 94 26. Kinfauns — — — — 27. Whitehaugh 37 — — 37	
21. Inglismaldie - 33 - 33 22. Durris - 99 - 99 23. Newton - - - - 24. Newtyle - - 13 - 13 25. Alltcailleach - 94 - 94 26. Kinfauns - - - - 27. Whitehaugh 37 - - 37	
22. Durris - 99 - 99 23. Newton - - - - 24. Newtyle - - 13 - 13 25. Alltcailleach - 94 - 94 26. Kinfauns - - - - 27. Whitehaugh 37 - - 37	
24. Newtyle - - 13 - 13 25. Alltcailleach - 94 - 94 26. Kinfauns - - - - 27. Whitehaugh 37 - - - 37	_
25. Alltcailleach — — 94 — 94 26. Kinfauns — — — — — — — — 27. Whitehaugh 37 — — 37	_
26. Kinfauns — — — — — — — — — — — — — — —	_
27. Whitehaugh 37 — — 37	_
28. Craig Vinean 21 - 43 2 64	
	2
29. Glen Devon 23 — — 23	
30. Lossie 58 — — 58	. —
31. Keillour — — 14 — 14 32. Tilliefoure 98 — — 98	_
T31 11 11	_
33. Blackhall — — 39 — 39 34. Rosarie 78 — 20 — 98	
35. Pitfichie — — 62 — 62	
36. Fetteresso 97 4 — 97	4
37. Strathord 21 — — 21	_
38. Allean — — — — — —	
39. Auchernach — — — — — — — — — — — — — — — — —	_
40. Gartiy Moor — — — — — — — — — — — — — — — — —	
Total, East 834 20 890 2 1,724	22
South Conservancy	
1. Glen 1 ress — — 7 — 7 2. Cairn Edward 66 — — 66	
3. Newcastleton 5 — 5	
4. Dalbeattie 52 3 52	- 3 -
5. Forest of Ae 173 — — 173	
6. Edgarhope — 20 — 20	

-continued september, 1946—scotland

Scots and Corsican Pines	Eur. and Jap. Larches	Douglas Fir	Norway and Sitka Spruces	Oak, Ash, Beech	Other	Total
39 23 124 116 90 —	 7 1 14 9	- 8 - - 1 - 1	55 22 121 — 143 106			109 47 124 255 90 178 227
57 37 3 3 23 14 36 70 124 23 41 51 51 132 3 41 — 153 — 93 16 32 43 87 50 — —	79	- 6 I	214 50 3 42 20 17 93 33 212 70 1 24 113 3 59 1 79 88 33 73 84 24 186 63 87 —	3	3 3 2 3 1 5 1 5 1 7 3 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1	272 87 6. 75 26 49 113 72 284 124 74 24 65 248 60 209 6 121 121 33 153 73 187 79 218 108 107 50
1,692	233	36	2,119	37	27	4,144
10 4 	 I 2 60 73	 	34 179 20 33 210 97			51 184 22 100 363 107

	Area Planted (Acres)						
Forest		Afforested		Re-affo	prested	Total	
		Conifers	Broad- leaved	Conifers	Broad- leaved	Conifers	Broad- leaved
South Conservancy —(contd.)							
7. Ġreskine		15		<u></u>		15	
8. Auchenroddan 9. Kirroughtree	•••			l i8		18	
. T. (•••	too			<u> </u>	100 60	
10. Fleet		9		5Î 2I	5 20	21	5 20
12. Changue		30			20	30	
13. Dundeugh		40				40	
14. Tinnisburn		109				109	_
15. Corriedoo		62			_	62	_
16. Garcrogo	• • •	32	_	-	_	32	
17. Laurieston		16	_	<u> </u>	_	16	_
18. Twiglees	• • •	78				78	
20. Glen Trool	•••	429	22	· —		429	22
21. Clauchrie			_			=	_
22. Shielswood	• • • •	l	_	J		_	
23. Mabie		136	6			136	6
24. Wauchope		100		_	l —	100	
25. Carrick				. -	_		
26. Elibank	• • •	63	_			63	<u>-</u>
27. Glen Gap	• • •	_ '	_	<u> </u>		_	_
28. Craik	•••				_		
Total, South		1,515	31	117	25	1,632	56
West Conservancy	Y.		!	ł	}	1	
 Inverliever 			_			ļ —	_
2. Glen Duror	• • • •		-	<u> </u>	<u> </u>	i —	_
3. Glen Branter	• • •	44	_	-	-	44	
4. Ardgartan5. Barcaldine	• • •	50		_	- -	50	
6. Benmore	•••	27		<u> </u>	_		
7. Glen Finart		27			_	27	_
8. Fearnoch				<u> </u>		,	
9. Lennox		_		5		5	i
10. Loch Ard		202	1	l: <u>~</u>	l –	202	1
11. Devilla		_	_	- <u> </u>		-	
12. Achaglachgach	• • •	4	_	-	_	4	
13. Knapdale	•••	47	2 -	-	_	47	2
14. Strathyre 15. Tulliallan	•••	131		_		131	
15. Tulliallan 16. Garadhban					_		
17. Inverinan				65		65	
18. Asknish		. 155	·	. -	. <u> </u>	155	
19. Carron Valley	•••	118		l: —	_	118	
20. Caπadale	•••	8			_	. 8	
21. Minard	•••	118	-	!		118	_
22. Saddell	•••		-			_	
23. Kilmichael 24. Corlarach	•••	_	_	- '	-	-	
24. Corlarach 25. Glendaruel	• • •	_	_	<u> </u>	_	-	_
26. Strath Lachlan						_	
2.3		ļ	·	-			
Total, West	•••	904	3	70		974	3
SCOTLAND: Total		3,345	54	1,460	27	4,805	81
		Carrier and Art State of the Contract of the C	an area Salestonia				

-continued september, 1946—SCOTLAND

Species Planted,	including	Beating-up	(Thousands)
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		·	<u> </u>	_	•	
Scots and Corsican Pines	Eur. and Jap. Larches	Douglas Fir	Norway and Sitka Spruces	Oak, Ash, Beech	Other	'Total
112 7 12 1 4 3 13 1 13 1 54	31 97 55 7 1 9 22 162 4 		30 31 42 29 14 76 78 178 109 49 28 216 780 2 ———————————————————————————————————	26 84 21 8 	16 17 	30 31 201 185 165 76 78 185 111 62 31 216 919 2 — — 222 269 — 124
339	524	27	2,558	144	142	3,734
1			6 76 117 6 49 13 10 10 435 3 116 253 10 91 247 241 46 281 22 — —		2 4 1 13 8 3	3 8 82 117 6 50 23 10 10 498 16 123 275 20 98 309 266 76 297 22
79	. 133	17	2,032	7.	41	2,309
2,712	1,070	171	7,314	···190 ···	278	11,735

Appendix I

PLANTATIONS—YEAR ENDED 30TH

	Area Planted (Acres)						
Forest	Afforested		Re-afforested		Total area area area area area area area ar		
	Conifers	Broad- leaved	Conifers	Broad- leaved	Conifers	Broad- leaved	
NORTH CONSERVANCY: I. Hafod Fawr 2. Gwydyr 3. Coed y Brenin 4. Kerry 5. Beddgelert 6. Cynwyd 7. Dovey 8. Radnor 9. Cwmeinion 10. Mathrafal 11. Tarenig 12. Bryn Mawr 13. Myherin 14. Clocaenog 15. Dyfnant 16. Hafren 17. Coed Sarnau 18. Newborough 17. Coed Sarnau 18. Newborough 19. Margam 19. Llanover 10. Lantrisant 10. Chepstow 10. Glasfynydd 10. Pembrey 11. Caio 12. Crychan 13. Mynydd Ddu 14. Itton 15. Hay 16. St. Gwynno 17. Coed y Rhaiadr 18. Cwmogwr 19. Giedd 20. Michaelston 21. Tair Onen 22. Usk 23. Monmouth 24. Wentwood 24. Wentwood 27. Wentwood 21. Tair Onen 22. Usk 23. Monmouth 24. Wentwood 23. Monmouth 24. Wentwood	11 4 — 11 — 17 68 — 91 8 84 — 294 — 240 143 — 240 164 45 — 27 — 92 — 50 — 50 — —		179 52 22 4 9 11 11 11 11 4		11 4 52 — 117 8 — 17 68 59 98 84 — 473 473 473 473 11 11 11 19 11 11 19 11 11 11 11 11 11	6	
25. Cilgwyn 26. Goytre	87.	2				33	
Total, South	814			31	979		
WALES: TOTAL	1,108	2 \$ 5		31	1,452	er 33	
	1.00	\$ T			C(0,1	2.7:3	

-continued SEPTEMBER, 1946-WALES

SEPTEMBER	SEPTEMBER, 1940—WALES								
	Species Planted, including Beating-up (Thousands)								
Scots and Corsican Pines	Eur. and Jap. Larches	Douglas Fir	Norway and Sitka Spruces	Oak, Ash, Beech	Other	Total			
5 14 13 		- I	11 74 34 84 4 234 12 8 - 54 125 85 187 11		-6 2 1 -1 -1	16 104 65 96 6 3 265 13 8 - 54 125 85 222 11 174 4			
75	57	I	1,101	2	15	1,251			
45 15 12 	39 35 15 5 1 133 54 1 1 23 13 3 8 - - - 2 41 - - 5		7 38 7 3 — 257 164 2 10 8 2 297 67 — 34 33 66 46 145 1 8 8 —	56 — 5 — 1 — — — — — — — — — — — — — — — —	12 -6 -5 -18 -6 -23 -7 4 1 11 2 -1 2 -1 2 -1 2 -1 2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1	165 88 42 19 1 473 321 4 21 93 31 345 99 4 50 63 11 251 8 105 44 51			
450	389	42	1,259	93	140	2,373			
5 ² 5	446	43	2,360	95	155	3,624			

Appendix II List of Forest Units as at 30th September, 1946, with maps†

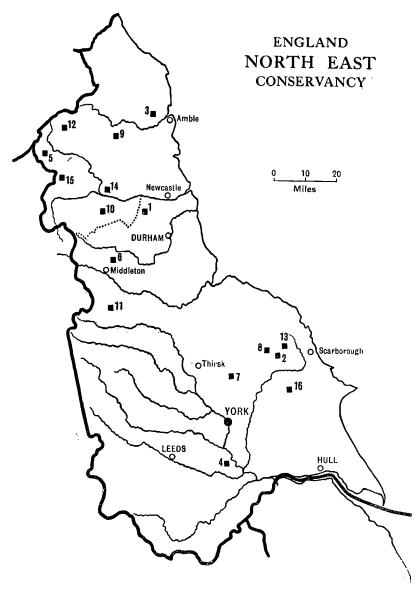


- 1. Delamere, Cheshire*
- 2. Thornthwaite, Cumberland
- 3. Cannock Chase, Staffs
- Mortimer, Hereford and Salop
 Walcot, Salop
 Clipstone, Derby and Notts

- 7. Ennerdale, Cumberland8. Hope, Derby

- 9. Bawtry, Notts
- 10. Sherwood, Notts
- 11. Kershope, Cumberland
- 12. Hardknott, Cumberland and Lancs
 13. Grizedale, Lancs
 14. Greystoke, Cumberland
 15. Cotgrave, Notts

Forests are listed throughout in order of acquisition; new units are shown by triangles Former Crown Wood



- Chopwell, Durham*
 Allerston, Yorks
 Rothbury, Northumberland
 Selby, Volka
- 4. Selby, Yorks
- 5. Kielder, Northumberland 6. Hamsterley, Durham 7. Ampleforth, Yorks 8. Rosedale, Yorks

- 9. Harwood, Northumberland
- 10. Slaley, Northumberland

- 11. Arkengarthdale, Yorks
 12. Redesdale, Northumberland
 13. Langdale, Yorks
 14. Widehaugh, Northumberland
 15. Warke, Northumberland
- 16. Scardale, Yorks



- Hazelborough, Bucks and Northants*
- 2. Salcey, Bucks and Northants
- 3. Ampthill, Beds
- Rendlesham, Suffolk
 Rockingham, Northampton
- 6. Swaffham, Norfolk
 7. Thetford Chase, Norfolk and Suffolk
 8. Bourne, Lincoln and Rutland
- Laughton, Lincoln
 Swanton, Norfolk

- 11. Dunwich, Suffolk 12. Yardley Chase, Bedford and Northampton.

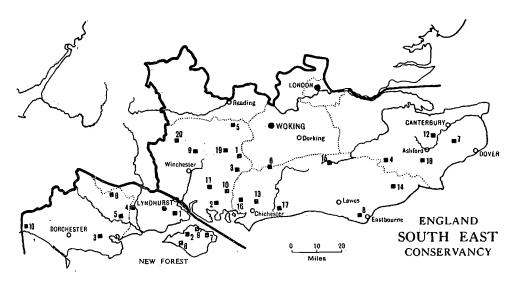
 13. Bardney, Lincoln

 14. The King's Forest, Suffolk

 15. Wigsley, Lincoln and Nottingham

 16. Willingham, Lincoln

- 17. Wendover, Bucks
 18. Hevingham, Norfolk
 19. Shouldham, Norfolk



SOUTH-EAST CONSERVANCY

- 1. Alice Holt, Hants*
- 2. Bere, Hants*
- 3. Woolmer, Hants*
- Bedgebury, Kent and Sussex*
 Bramshill, Berks and Hants
- 6. Chiddingfold, Surrey and Sussex
- Lyminge, Kent
 Friston, Sussex
- Micheldever, Hants
- 10. Buriton, Hants and Sussex

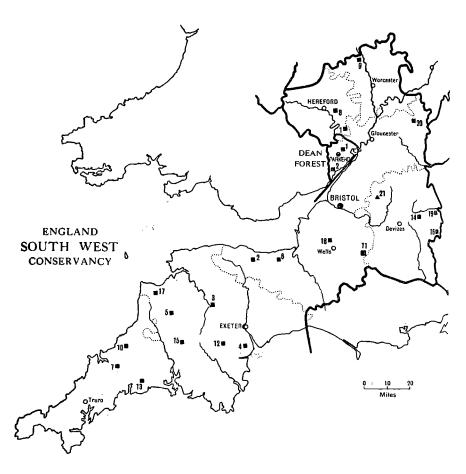
- 11. Westbury, Hants
- 12. Challock, Kent
- 13. Goodwood, Sussex
- 14. Vinehall, Sussex
- 15. Gravetye, Sussex16. Marden, Sussex
- 17. Arundel, Sussex
- Orlestone, Kent
- 19. Alton, Hants
- 20. Andover, Hants

NEW FOREST

- I. New Forest, Hants*
- 2. Parkhurst, Isle of Wight*
- 3. Wareham, Dorset
- Ringwood, Dorset and Hants
 Ferndown, Dorset

- Brighstone, Isle of Wight
- 7. Combley, Isle of Wight 8. Gardiner, Dorset and Wilts 9. Osborne, Isle of Wight
- 10. Charmouth, Devon and Dorset

^{*} Former Crown Woods



- 1. Dymock, Gloucester and Hereford*
- 2. Brendon, Somerset
- 3. Eggesford, Devon

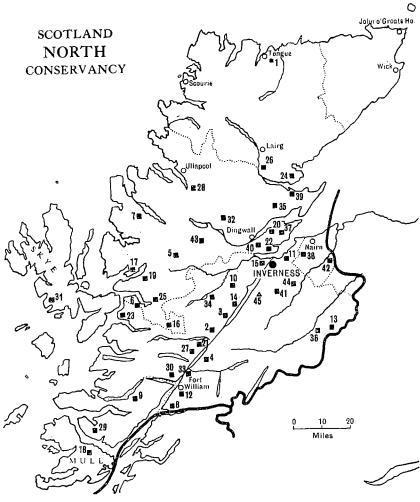
- 3. Eggestord, Devon
 4. Haldon, Devon
 5. Halwill, Devon
 6. Quantocks, Somerset
 7. Bodmin, Cornwall
 8. Haugh, Hereford
 9. Wyre, Worcester
 10. Wilsey Down, Cornwall
 11. Bruton, Somerset and V
- 11. Bruton, Somerset and Wilts

- 12. Dartmoor, Devon
- 13. Herodsfoot, Cornwall
- 14. West Woods, Wilts
- 15. Lydford, Devon
- 16. Collingbourne, Wilts
- 17. Hartland, Devon 18. Mendip, Somerset

- 19. Savernake, Wilts 20. Stanway, Gloucester 21. Braydon, Wilts

DEAN FOREST

- 1. Dean Forest, Gloucester, Hereford, and Monmouth*
- 2. Tidenham Chase, Gloucester
- * Former Crown Woods

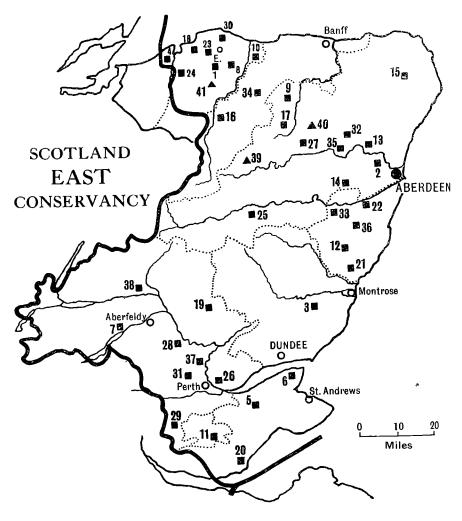


- 1. Borgie, Sutherland.
- 2. Inchnacardoch, Inverness
- 3. Portclair, Inverness
- 4. South Laggan, Inverness 5. Achnashellach, Ross
- 6. Ratagan, Inverness and Ross
- Slattadale, Ross
- 6. Glen Righ, Inverness
- 9. Glen Hurich, Argyll
- 10. Glen Urquhart, Inverness
- 11. Culloden, Inverness
- 12. Nevis, Inverness
- 13. The Queen's Forest, Inverness
- 14. Craig nan Eun, Inverness15. Craig Phadrig, Inverness16. Glen Shiel, Ross

- 17. North Strome, Ross
- 18. Salen, Isle of Mull
- 19. South Strome, Ross
- 20. Findon, Ross
- 21. Glen Garry, Inverness
- 22. Kessock, Ross
- Eilanreach, Inverness

- 24. Dornoch, Sutherland
- 25. Inverinate, Ross 26. Balblair, Sutherland 27. Clunes, Inverness 28. Lael, Ross

- 29. Fiunary, Argyll 30. Glen Loy, Inverness
- 31. Glen Brittle, Isle of Skye 32. Longart, Ross
- 33. Leanachan, Inverness
- 34. Guisachan, Inverness
- 35. Ardross, Ross
- 36. Inshriach, Inverness
- 37. Millbuie, Ross38. Assich, Nairn
- 39. Morangie, Ross
- 40. Kilcoy, Ross41. Strath Nairn, Inverness
- 42. Ferness, Nairn 43. Strath Conon, Ross
- 44. Strath Dearn, Inverness
- 45. Farigaig, Inverness



- 1. Monaughty, Moray
- Kirkhill, Aberdeen
- 3. Montreathmont, Angus
- Culbin, Moray and Nairn
 Edensmuir, Fife
 Tentsmuir, Fife

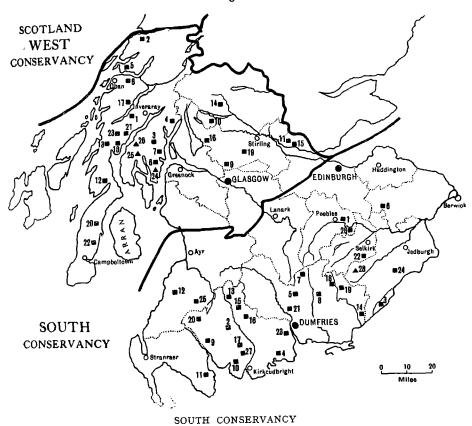
- 7. Drummond Hill, Perth8. Teindland, Moray

- 9. The Bin, Aberdeen
 10. Speymouth, Moray
 11. Blairadam, Fife and Kinross
- 12. Drumtochty, Kincardine
- Kemnay, Aberdeen
- 14. Midmar, Aberdeen
- 15. Deer, Aberdeen16. Scootmore, Moray
- 17. Clashindarroch, Aberdeen 18. Roseisle, Moray
- 19. Blackcraig, Perth
- 20. Carden, Fife
- 21. Inglismaldie, Kincardine

- 22. Durris, Kincardine
- 23. Newton, Moray
- 24. Newtyle, Moray 25. Alltcailleach, Aberdeen26. Kinfauns, Perth
- Whitehaugh, Aberdeen 27.
- 28. Craig Vinean, Perth 29. Glen Devon, Perth
- 30. Lossie, Moray

- 31. Keillour, Perth 32. Tilliefoure, Aberdeen 33. Blackhall, Kincardine
- 34. Rosarie, Banff
- 35. Pitfichie, Aberdeen
- 36. Fetteresso, Kincardine37. Strathord, Perth38. Allean, Perth

- 39. Auchernach, Aberdeen
- 40. Gartly Moor, Aberdeen
- 41. Dallas, Moray



- Glen Tress, Peebles
- Cairn Edward, Kirkcudbright
 Newcastleton, Roxburgh
- 4. Dalbeattie, Kirkcudbright

- 5. Forest of Ae, Dumfries 6. Edgarhope, Berwick 7. Greskine, Dumfries 8. Auchenroddan, Dumfries
- 9. Kirroughtree, Kirkcudbright
- 10. Fleet, Kirkcudbright
- II. Kilsture, Wigtown
 12. Changue, Ayr

- 13. Dundeugh, Kirkcudbright14. Tinnisburn, Dumfries and Roxburgh

- 15. Corriedoo, Kirkcudbright
- 16. Garcrogo, Kirkcudbright
- 17. Laurieston, Kirkcudbright

- 18. Twiglees, Dumfries
 19. Castle O'er, Dumfries
 20. Glen Trool, Kirkcudbright
- 21. Clauchrie, Dumfries
- 22. Shielswood, Selkirk
- 23. Mabie, Kirkcudbright
- 24. Wauchope, Roxburgh
- 25. Carrick, Ayr26. Elibank, Peebles
- 27. Glen Gap, Kirkcudbright
- 28. Craik, Roxburgh

WEST CONSERVANCY

- Inverliever, Argyll*
 Glen Duror, Argyll
- 3. Glen Branter, Argyll
- 4. Ardgartan, Argyll
- Barcaldine, Argyll
- 6. Benmore, Argyll
- 7 Glen Finart, Argyll
- 8. Fearnoch, Argyll
- 9. Lennox, Stirling
- 10. Loch Ard, Perth
- 11. Devilla, Fife
- 12. Achaglachgach, Argyll
- Knapdale, Argyll

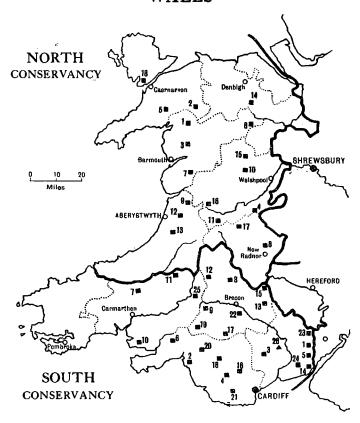
- - 14. Strathyre, Perth
 - Tulliallan, Fife 16. Garadhban, Stirling
 - 17. Inverinan, Argyll
 18. Asknish, Argyll
 19. Carron Valley, Stirling

 - 20. Carradale, Argyll

 - 21. Minard, Argyll

 - 22. Saddell, Argyll 23. Kilmichael, Argyll
 - 24. Corlarach, Argyll 25. Glendaruel, Argyll
 - 26. Strath Lachlan, Argyll
- * Former_Crown Wood

WALES



NORTH CONSERVANCY

- 1. Hafod Fawr, Merioneth*
- Gwydyr, Caernarvon and Denbigh
- Coed y Brenin, Merioneth
 Kerry, Montgomery
- Beddgelert, Čaernarvon
- 6. Cynwyd, Merioneth
- 7. Dovey, Merioneth and Montgomery
- 8. Radnor, Radnor
- 9. Cwmeinion, Cardigan

- 10. Mathrafal, Montgomery
 - Tarenig, Cardigan and Montgomery
 Bryn Mawr, Cardigan
- 13. Myherin, Cardigan
- 14. Clocaenog, Denbigh and Merioneth
- 15. Dyfnant, Montgomery
- 16. Hafren, Montgomery
- 17. Coed Sarnau, Radnor 18. Newborough, Anglesey

SOUTH CONSERVANCY

- 1. Tintern, Monmouth*
- 2. Margam, Glamorgan
- 3. Llanover, Monmouth
- 4. Llantrisant, Glamorgan
- 5. Chepstow, Monmouth
- 6. Rheola, Glamorgan
- 7. Brechfa, Carmarthen8. Brecon, Brecon
- 9. Glasfynydd, Brecon
- 10. Pembrey, Carmarthen
- 11. Caio, Carmarthen
- 12. Crychan, Brecon and Carmarthen
- 13. Mynydd Ddu, Brecon and Monmouth

- 14. Itton, Monmouth15. Hay, Brecon and Hereford16. St. Gwynno, Glamorgan
- 17. Coed y Rhaiadr, Brecon
- 18. Cwmogwr, Glamorgan
- 19. Giedd, Brecon
- 20. Michaelston, Glamorgan
- 21. Tair Onen, Glamorgan 22. Usk, Brecon
- 23. Monmouth, Monmouth
- 24. Wentwood, Monmouth
- 25. Cilgwyn, Carmarthen
- 26. Goytre, Monmouth
- * Former Crown Woods