

FORESTRY COMMISSION

TWENTY-EIGHTH  
ANNUAL REPORT OF THE  
FORESTRY COMMISSIONERS  
FOR THE YEAR ENDING  
SEPTEMBER 30TH  
1947

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

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*Ordered by The House of Commons to be printed  
30th June 1948*

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FORESTRY COMMISSION,  
25, SAVILE ROW,  
LONDON, W.1.

28th May, 1948.

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 28th Annual Report of the Forestry Commissioners covering the Forest Year ended September 30th, 1947.

I am,  
Gentlemen,  
Your obedient Servant,  
(Sd.) ROBINSON,  
*Chairman.*

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**TWENTY-EIGHTH ANNUAL REPORT  
OF THE  
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FOR THE FOREST YEAR ENDING  
SEPTEMBER 30th 1947**

**FOREST POLICY**

The Forest Year ending the 30th September, 1947, was the first complete year of the post-war forestry programme. The weather conditions during the year were particularly unfavourable for forestry operations, but nevertheless the approved planting programme was substantially attained.

Forest policy was the subject of an announcement in the House of Commons on the 30th November, 1945, which was referred to in the Commissioners' previous Annual Report. It was again before the House on the 24th October, 1946, when the Minister of Agriculture and Fisheries, the Rt. Hon. Tom Williams, M.P., made a full statement on forestry during the Debate on his motion :—

“That this House approve the policy of His Majesty's Government for Forestry as announced by the Minister of Agriculture and Fisheries on 30th November, 1945”.

His opening statement was as follows :—

“On 30th November last year I made a statement in this House on Government Forest Policy. After careful and detailed study, the Government were impressed with the necessity, as a safety measure, apart from all other considerations, to rebuild our reserves of standing timber as quickly as possible. The Government were also impressed with the possibilities that systematic forestry and afforestation held out for the better utilisation of large areas of poor land, and increased employment in healthy rural surroundings for quite a considerable body of people. We proposed, therefore, at that time to ask the Forestry Commission to prepare for what we regarded as large scale action. My right hon. Friend the Chancellor of the Exchequer readily agreed to replenish the Forestry Fund by some £20 million during the five years 1946–50. The first instalment of that figure appears in the Estimates for the current financial year. This sum of £20 million is expected to provide for the afforestation and replanting of something like 365,000 acres by State action and by assistance to owners of private woodlands, for the acquisition of land, for increased facilities for education, training and research into all branches of forestry, for up-to-date houses for forestry workers, and for national forest parks; and in addition, of course, the maintenance and development of the large areas of young plantations already established by the Forestry Commission.”

The Minister then went on to say that the war of 1914–1918, and the more recent war had made everyone appreciate the high place that timber occupies among the raw materials of industry; that before 1914 our requirements had been easily and cheaply met by imports; that little or no provision had been made to safeguard our needs in an emergency, and that our supplies of home grown timber had been left to the initiative of private owners. He recalled that in 1919 the then Government established the Forestry Commission,

which could not in the short time between the wars make up for the fellings of 1914-1918, and that the fellings since 1939 had reduced our home grown supplies to a dangerously low level.

The Minister paid a tribute to the landowners of 50 to 70 years ago to whose initiative and foresight we owed the timber which had carried us through the war years.

Timber, in the Minister's view, was likely to remain an essential raw material for industry for a very long time, and as the growth in the great forests from which our overseas supplies had come, was not keeping pace with the depletion, he felt that these facts justified speedy and large scale planting operations in this country to restore some element of safety; to this end, he considered, there must be full co-operation between the State and private owners along with continuous effort. The Government recognised the importance of private afforestation, and had accepted the Dedication Scheme proposed by the Forestry Commission in 1943, the essence of which is to secure continuity of good forest management irrespective of changes of ownership.

The Minister also referred to the recreational facilities available to the public in the National Forest Parks of which five had already been established.

The debate on the Motion lasted for nearly six hours, and reflected the keen interest being taken in forestry matters; the House was in general sympathy with the motion, which was agreed to without a division.

The Forestry Act, 1947, received the Royal Assent on 27th March, 1947. This Act was necessary to get over the difficulties which had arisen in connection with the dedication of land to forestry purposes. The essential feature of the dedication scheme is that dedication must run with the land, that is, it will bind not only the present owner but successive owners, thus securing what is perhaps the most vital consideration in forestry, a continuity of policy and sound management. This Act enables certain classes of limited owners, such as tenants for life in England, and liferenters, heirs of entail, and trustees in Scotland, to enter into dedication schemes. It also enables officers of the Forestry Commission to sign documents on behalf of the Secretary of State for Scotland in connection with his powers and duties under the Forestry Act, 1945.

The drafting of the Deeds of Covenant and the form of the Plan of Operations required for the Dedication Scheme were proceeded with. These documents have since been published in an explanatory Booklet.\*

## ORGANISATION

### The National Committees

Each of the three Committees met monthly (except August) during the year; the general progress of the work of the Commission in their respective countries was kept under close review; particular consideration was given to land acquisition, the planting programme, the housing position, private forestry and the supply of plants to the nursery trade, the Dedication of Woodlands Scheme and the Forest Workers Training Scheme. The National Committees kept in touch with their Regional Advisory Committees both by personal contact between members, and by the attendance of some of their members at Regional Advisory Committee meetings.

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\* The Dedication of Woodlands, H.M. Forestry Commission Booklet No. 2. H.M. Stationery Office, price 1s. net.

The membership of the National Committees was as follows, with the Chairman of the Commission an *ex-officio* 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, Bt., Lt.-Col. W. J. Stirling, The Duke of Buccleuch, Mr. J. M. Bannerman, Mr. John Cameron, Mr. John Veitch.

*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 Regional Advisory Committees.**—This organisation has functioned usefully during the year ; most of the eleven committees have met several times and have considered problems of private forestry, especially those arising out of the Dedication Scheme. One of the matters to which the Commissioners attach much importance is the development of co-operative schemes in private forestry. This was remitted to the Regional Committees by the Commissioners, and the Committees are using their influence to foster such schemes where possible.

The Regional Committees in England, in addition to the general matters noted above, gave much consideration to timber prices, shortages of labour and materials, and plants, and made recommendations to the National Committee. The Scottish Regional Committees were active in holding public meetings on the Dedication Scheme, particularly in the East and South Conservancies ; the West Regional Committee gave special consideration to co-operation and to the control of foxes. In Wales, the South Regional Committee held three meetings and considered the furthering of the Dedication Scheme and co-operation between estates ; the Forest Workers Training Scheme and labour shortages came also under review.

There were only a few changes in the membership of the Committees, which at the end of the year were constituted 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. Maer, 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 Mr. H. W. Gulliver (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. N. G. Barraclough, Mr. P. J. B. Clive, Mr. T. H. Evans, 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, Bt., 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, Mr. Peter Campbell, Capt. James Craig, Mr. T. Bruce Jones, Mr. John Kirkwood, Mr. Donald Mackay, 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.**—During the year the technical and clerical officers on seconded duty with the Board of Trade (previously with the Ministry of Supply), and with the North German Timber Control, have virtually all resumed duty with the Forestry Commission. Although the services of these officers from home forestry could be ill-spared, it was realised that the work done in getting timber out of Germany would in some measure reduce the pressure to fell more timber in the home woods. Recruitment of additional staff needed to carry out the expanding forestry programme has proceeded steadily; in appointing district officers consideration was again given to members of the forester grades who had given outstanding service during the war; three such promotions were made during the year; the number of promotions from forester grade to district officer grade since 1939 is twenty-seven.

## TIMBER PRODUCTION

It is a matter of serious regret that, owing in the main to difficulties of international trade, abnormal felling continues in the country's badly depleted woodlands. During the year licences for felling were issued by the Board of Trade in respect of 55 million cubic feet; this shows an increase of  $2\frac{1}{2}$  million cubic feet over the figure for the previous year. This heavy drain cannot much longer be sustained; clear fellings must be reduced to a minimum as speedily as possible and production encouraged from improvement thinnings. A large aggregate area of the younger plantations which remain are in need of thinning and considerable quantities of poles and pitprops might be obtained from this source, greatly to the benefit of the stands concerned.

It remains more obvious than ever that a measure of control over the woodlands of the country is necessary, and that a system of licences for fellings should continue.



Concern was felt by woodland owners that prices for standing timber had become frozen, while wages had increased considerably, and that forestry had become uneconomic. This led to representations being made to the Board of Trade; these resulted in the prices for growing trees and home grown round logs being raised by 25 per cent. The interests concerned had asked for an all round increase of 40 per cent.

The maximum prices for converted timber from home grown logs were also increased during the year. For most categories there are different rates depending on whether the converted material has come from "an uncertified mill", a "certified town mill", or other sources. Converted timber from an uncertified mill shows the following average increase:—softwoods (except larch) 30 per cent., larch 26 per cent., hardwoods 28 per cent., sleepers and crossing timbers 30 per cent. For a few special classes of oak intended for railway wagon construction the percentage increase is up to 40 per cent. The percentage increases for "certified town mills" are somewhat less than the above, viz.:—softwoods (except larch) 24 per cent., hardwoods 23 per cent. Prices for telegraph and transmission poles were also increased by 35 per cent. in the case of unpeeled poles and 25 per cent. for peeled poles.

### FORESTRY PROGRAMMES

The programme of planting and of land acquisition for the Five Year Period, 1946-1951, are given in the tables below.

#### PLANTING PROGRAMME

(In acres)

Year	State Forestry				Private Forestry	Grand Total
	England	Scotland	Wales	Total		
1946-1947 ...	10,750	14,000	5,250	30,000	5,000	35,000
1947-1948 ...	16,900	18,900	7,200	43,000	10,000	53,000
1948-1949 ...	23,850	24,600	9,550	58,000	15,000	73,000
1949-1950 ...	30,000	30,000	12,000	72,000	20,000	92,000
1950-1951 ...	36,900	35,900	14,200	87,000	25,000	112,000
Total, 5 years ...	118,400	123,400	48,200	290,000	75,000	365,000

#### LAND ACQUISITION PROGRAMME

Year	England <i>Acres</i>	Scotland <i>Acres</i>	Wales <i>Acres</i>	Total <i>Acres</i>
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
Total, 5 years	420,000	330,000	176,000	926,000

**State Forestry.**—The forest year 1946-47 was the first year of the Post War Forestry Programme, and, as will be seen from the Planting Programme table given above, the acreage prescribed for the year was 30,000 acres. This acreage had been allocated to the individual countries on the basis that the opportunities for afforestation in Scotland are approximately equal to those in England and Wales, and that of the half allocated to England and Wales,

two thirds should be undertaken by England and one third by Wales. But it had also to be borne in mind that the war fellings in England and Wales were somewhat heavier than in Scotland. The figures thus arrived at for each country allocate 41 per cent. of the total planting to England, 42 per cent. to Scotland, and 17 per cent. to Wales. The planting actually carried out during the year amounted to 26,356 acres. If it had not been for an interruption of planting operations for six weeks by frost and snow the objective of 30,000 acres would probably have been reached.

The areas planted in the individual countries were :—England 8,891 acres, Scotland 12,351 acres, and Wales 5,114 acres.

The rate of acquisition of land for planting was unsatisfactory ; this is attributed to the lack of experienced staff, and to the uncertainties of the post-war period. The area of plantable land acquired was as follows :—England 7,966 acres, Scotland 9,344 acres, and Wales 5,012 acres, making a total of 22,322 acres against the programme figure of 121,000 acres. The Commissioners are thus left with heavy arrears to be overtaken.

**Private Forestry.**—In spite of difficulties due to bad weather, and shortages of labour, plants and materials, many private owners were able to carry on with replanting, and, during the year 3,659 acres were planted under State aided schemes alone ; this acreage was made up between the three countries as follows :—England 1,994 acres, Scotland 1,335 acres, and Wales 330 acres. In addition there was no doubt some private planting done without the aid of State grants, so it seems possible that the White Paper programme of 5,000 acres for the first year may have been reached. This is satisfactory considering that the Forestry Act, 1947, dealing with matters relating to the dedication of woodlands, was still before Parliament, and that the deeds of covenant, and the form of the plan of operations required, were not then in their final form.

The appointment of Private Woodlands Officers in each Conservancy enabled technical advice and guidance in matters of dedication to be given on a much larger scale than hitherto ; the organisation of this service will be expanded as more trained officers become available. These officers were asked to advise on thinnings, utilisation, and management, and also to explain the provisions of the Dedication Scheme. Largely as a result of these contacts 821 owners, controlling 436,000 acres of woodlands, had up to the end of the year intimated their willingness to consider dedication, and several had drawn up preliminary plans of operation. The above figures are made up as follows :—England, 573 intimations of willingness to consider dedication, which cover 260,000 acres ; Scotland, 191 intimations covering 161,000 acres ; Wales, 57 intimations covering 15,000 acres. These areas represent the following percentages of the total area of private woodlands in the respective countries :—England, 16 per cent. ; Scotland, 17 per cent. ; Wales 6 per cent. The total of 436,000 acres intimated amounts to 15.5 per cent. of the private woodlands in England, Scotland and Wales.

**Plant Supply for Private Planting.**—Discussions on the supply of plants for private planting were held with representatives of woodland owners (the Royal Forestry Society of England and Wales, the Royal Scottish Forestry Society, the Central Landowners' Association, the Scottish Lands and Property Federation), and of nursery trade associations (the Horticultural Trades Association and the Scottish Seed and Nursery Trade Association). The nursery trade again anticipated a shortage of planting stock, and the Commission were able to a very large extent to meet this shortage in the 1946-47 season by making available to the Trade over 8 million transplants and seedlings, along with 2,800 lbs. of conifer seed and 7,000 lbs. of hardwood seed.

At a meeting held in July, 1947, the Commission agreed to make available to the trade approximately 10 million transplants and seedlings for the planting season 1947-48. On the matter of prices it is the policy of the Commissioners to regard the fixing of prices for nursery stock as a subject for negotiation between the woodland owners and the nursery trade.

**The Private Forestry Committee.**—A body representing the principal societies and associations concerned with private forestry in Great Britain, met the Commissioners on two occasions to discuss matters affecting their common interests. This is a joint committee representing the two Private Forestry Committees set up in 1946 by the forestry societies and associations in England and Wales, and Scotland respectively. It was formed at the suggestion of the Commissioners so that matters common to the whole country could be brought before the Commissioners by a body representative of the private forestry interests of Great Britain. The discussions covered a wide field including various aspects of the Dedication Scheme, the amount of the planting grant, maximum prices for standing timber, felling licences, and co-operation in private forestry.

## EDUCATION

**Forest Officers.**—The release of men from the Forces brought about a considerable increase, estimated at fifty per cent., in the number of men studying at the Universities in order to qualify for posts in the forest services and in private forestry.

**Foresters.**—The facilities for training men as foresters for State and private forestry at home, and to a limited extent for overseas forest departments, were expanded. Five Forester Training Schools, an increase of three over the pre-war number, were in operation during the year. At Benmore School, which had operated throughout the war, the normal two year course was given and seventeen men completed their final year; in addition, a special nine months' course was given to sixteen men whose training had been interrupted by National Service. The Parkend School, which had been closed for the latter part of the war, was re-opened and 37 men completed their first year. In addition to these, new schools were started at Glentress, near Peebles, with 45 men; and at Lynford Hall, Thetford, with 44 men; the third, which will ultimately become the Forester Training School for Wales, was opened in temporary quarters at New Park Mansion, in the New Forest with 40 men. This School will move to Gwydyr Forest, North Wales, when arrangements for its accommodation are completed.

**Short Courses for Foresters and Woodmen.**—Five such courses of three months' duration, with an average of 12 men in each, were given during the year; three were held in England, two being on Lord Barnard's Raby Castle Estate, Durham, and one on the Dartington Hall Estate, Devon; in Scotland, two courses were arranged, one on the Duke of Buccleuch's Bowhill Estate, Selkirk, and the other on the Earl of Moray's Darnaway Estate, Morayshire. The thanks of the Commissioners are due to the several owners for providing the facilities for these courses on their properties.

**The Forest Workers Training Scheme.**—This Scheme, which provides practical training extending over one year for men released from National Service, was continued. Training is given in State forests and also on private estates, accommodation being found for trainees either in private lodgings or in hostels. At the end of the year 800 men were under training; of this number over one-quarter were taken by private estates, and the remainder were placed on Forestry Commission operations throughout the country. During the year this scheme has provided 111 entrants of good quality for the Forester Training Schools.

**Northerwood House, New Forest** (the gift of Major Herbert Aris), has now been adapted for use as a hostel for holding short courses of instruction for officers of the Department, for accommodating university students doing practical training in the New Forest, and for conferences generally. The first occasion on which it was used was for a conference of the heads of delegations of the Fifth British Empire Forestry Conference which took place in June; it was later used for the accommodation of students from Oxford University who were on an instructional visit to the New Forest.

It is already clear that the hostel will serve an increasingly useful purpose.

## RESEARCH

The research staff of the Commission, now centred for the most part at the newly equipped Research Station at Alice Holt, is settling down to investigate some of the problems confronting the forester after the war years. The war fellings with their trail of partially cleared or devastated woodlands present a problem of great complexity. Another consequence of the war was the cutting off either wholly or in part of supplies of imported seeds of such species as Corsican pine and Japanese larch, while the heavy fellings in mature larch, Scots pine, beech, and other trees in this country have greatly reduced supplies of seed of these species from native sources. Shortage of seed from the above causes has been threatening to upset the future planting programme. These and other factors stress the importance of making the most efficient use possible of the seed at our disposal and call for further investigation. The long continued researches of Dr. C. Rayner at Wareham Forest and elsewhere have increasingly focussed attention on the nutrition of tree seedlings, and on the complicated interrelations between root mycorrhiza, soil reaction, and intake of chemical nutrients. In July, 1944, the Commission's Advisory Committee on Forest Research appointed a special Sub-Committee to study this problem with Professor F. T. Brooks, F.R.S., of Cambridge University, as Chairman. Some progress has been made towards solving the problem of raising plants capable of being used for planting in the forest at an age of one or two years, as compared with the present general practice of planting out three or four year old trees. Success in this investigation would go a long way to meet the present shortage of plant supplies.

Another problem facing the silvicultural members of the Research Branch is the assessment of the numerous plantation experiments throughout the country, many of which are now over 20 years of age. These deal in the main with choice of species and methods of establishing plantations on difficult soil types such as peat bogs, heather moorland in exposed conditions, shallow chalk soils, and the like.

The appointment of an officer specialising in forest mensuration has enabled more attention to be given to the study of the rate of growth and production of our principal species. Additional field parties have been formed to extend the scope of this work.

These for the most part are *ad hoc* studies, but the longer range problems such as forest soils are also being covered with the assistance of the Universities and the Agricultural Soil Research Institutes.

Fungus diseases and insect pests necessitate constant attention by the members of the pathological section of the Branch. Apart from a few more or less local troubles, among which a root fungus disease in pine plantations in East Anglia, a needle-mining caterpillar on Corsican pine in the Midlands, and an attack of larch sawfly in Perthshire and elsewhere, may be mentioned, the health of the woodlands appears generally satisfactory.

## HOUSING AND HOLDINGS

In July, 1946, the Ministry of Works became responsible for building houses for the Forestry Commission in England and Wales, while in Scotland the programme was shared by the Scottish Special Housing Association and the Commission's Estate Staff. The programme has been revised from time to time as demanded by national considerations.

No great progress was made during the year, and only 52 houses were completed; of this number 40 are in Scotland, 8 in England and 4 in Wales. These houses were erected under contracts previously arranged by the Forestry Commission. During the year further contracts were placed for 210 houses and work was in progress on 178 of these. As much preliminary work on site selection and in obtaining clearances from Planning Authorities has already been done, this should enable more rapid progress to be made.

## FOREST ROADS

The Forest Roads Scheme was put forward by the Commissioners and approved by the Government in July, 1946. The major purpose of the scheme was the construction of roads to facilitate the extraction of forest produce; it would also make a contribution to the relief of unemployment, and would be well suited to the employment of the Polish Resettlement Corps.

A Forest Engineering Branch was organised and equipped as far as supplies permitted, and by the end of the year some 90 miles of usable roads had been constructed. Special efforts were made to absorb Polish labour, but the results were disappointing.

## THE NEW FOREST COMMITTEE

This Committee, appointed by the Commissioners in April, 1946, under the Chairmanship of the Rt. Hon. Harold Baker, concluded its work after holding 35 meetings and considering the written and oral testimony of 29 public bodies. The report of this Committee was presented to Parliament and published in November, 1947.\*

## THE FIFTH BRITISH EMPIRE FORESTRY CONFERENCE

His Majesty's Government in Great Britain and Northern Ireland acted as hosts for this important conference, which normally meets at five-yearly intervals in various countries of the Commonwealth for the exchange of information and ideas on forest policy and technique. Official delegates attended from all the Dominions, India, Burma, and most of the Colonies, together with associate delegates representing the timber trade and private forestry interests; guests from the United States of America and the Food and Agriculture Organisation of the United Nations were also present at certain sessions. In all, 71 delegates, 38 associate delegates, and 3 guests, attended, and 33 countries were represented.

The Conference was opened in London on the 16th June, 1947, by the Rt. Hon. Tom Williams, M.P., Minister of Agriculture and Fisheries, and the Rt. Hon. Joseph Westwood, M.P., Secretary of State for Scotland, and its meetings continued until the 19th July. During an extensive programme of tours the delegates visited Forestry Commission operations in Thetford Chase, the Border country of Northumberland and Roxburghshire, and the Black Isle of Ross and Cromarty; private woodlands inspected included those of the Duke of Buccleuch at Boughton in Northamptonshire, and the Darnaway

(\* Report of the New Forest Committee, 1947 (Cmd. 7245), H.M. Stationery Office, price 3s. 6d. net.

Forest of the Earl of Moray in Morayshire. Specialists in Forest Products Research formed a separate section within the Conference, discussions on technical problems being arranged by the Director of the Forest Products Research Laboratory, Princes Risborough. The forest products delegates rejoined the main Conference when matters of common interest to foresters and technologists were under discussion. The Conference held certain of its sessions at Oxford where the Imperial Forestry Institute and Bureau were visited.

One of the principal items for discussion was the part played by Empire forests during the recent war, and under this heading detailed statistical statements were presented by 38 forest departments, the whole forming a valuable inventory of the Commonwealth's forest resources. In addition, 66 technical papers were presented to the Conference. The Conference passed eleven resolutions which the Standing Committee on Empire Forestry has since transmitted to the Governments concerned. These resolutions, which are given in the Summary Report\* covered Forest Policy, Land Use, Survey of Resources, Forest Management, Silviculture and Protection, Forest Products Research, Timber Supplies and Marketing, Education, the Imperial Forestry Bureau, and the Empire Forestry Association. Officials of the Food and Agriculture Organisation of the United Nations explained the work of the F.A.O. Forestry Division, and the Conference fully expects that this will be of mutual advantage to the Commonwealth Countries and to F.A.O.

One important outcome of the Conference is the proposal to set up a Technical Committee on Aerial Survey of Forests to co-ordinate the mapping of all the Commonwealth forests during the next ten years; preliminary discussions have been held on the composition and setting up of this Committee, the headquarters of which are to be in Great Britain. The Forest Products Committee have also met and it is probable that the sub-committee on Timber Mechanics may meet in Canada in 1948 to discuss standards of timber testing and other matters which could not be dealt with adequately by correspondence.

### NATIONAL FOREST PARKS

There are now six actual or potential National Forest Parks, covering a total area of nearly 240,000 acres. During the war little attention could be given to these Parks, but the several Committees concerned are now doing much to develop facilities for camping and public access. The Commissioners are grateful to the representatives of outside interests who have generously given their time and support to these projects; they propose to form further National Forest Parks in other districts as and when conditions permit.

The first of the six parks to be formed is that in Argyll, which now extends over 58,000 acres of rugged hill country; included in its area are 7,000 acres owned by the Corporation of Glasgow. Two camping grounds were open throughout the summer season, and footpaths were maintained to give access through the plantations to the high ground above the level of tree growth. The Glen Trool Park, in Galloway, has recently been extended by the addition of the Carrick area in Ayrshire; it now extends to 110,000 acres and is likely to remain the largest Forest Park in Britain. It includes a number of hill lochs as well as some of the wildest country south of the Highlands. Plans are in hand for camping grounds close to Loch Trool. At the Queen's Forest of Glen More, Inverness-shire, a Park of 12,500 acres now extends from the shores of Loch Morlich to the summit of the Cairngorm, 4,084 feet above sea level. This Park was made available for public access during the year under review.

\* Fifth British Empire Forestry Conference. Summary Report, Resolutions, and Reports of Committees. H.M. Stationery Office, 1947, 1s. net.

The Forest of Dean National Forest Park, comprising 29,000 acres of wooded hill country in Gloucestershire and Monmouth, has been open since 1938, and its camp site at Christchurch, near Coleford, is again available for public use. In North Wales, the Snowdonia National Forest Park, covering 21,000 acres in Caernarvonshire, includes a camping ground and many miles of attractive hill walks. During the year, a Committee was formed to administer the Hardknott National Forest Park, which occupies 7,000 acres of the high fells at Eskdale and Dunnerdale, in the English Lake District.

At all these Forest Parks, attention is given to the conservation of natural resources of all kinds. Good land utilisation as between forestry and agriculture is practised, and throughout the area wild life is protected. Careful regard is paid to amenities and scenic effects both in the arrangement of plantations and the design and siting of buildings.

An illustrated Guide to the Forest of Dean was issued during the year, together with a revised edition of the Guide to the Argyll Park; guides to other areas are in preparation.

### CENSUS OF WOODLANDS

The essential preliminary investigations were completed by January, 1947, and a start on the main work of the Census was made simultaneously in England and in Scotland. By the end of September a little over 500,000 acres of private woodland had been covered; of this area 221,000 acres were in England, 240,000 acres in Scotland and 42,000 acres in Wales. The proportion of felled, devastated, and scrub woodland was as high as 60 per cent. in some counties.

## SUMMARY OF OPERATIONS

## FOREST YEAR ENDED SEPTEMBER 30th, 1947

Forestry is an industry in which results are in a great measure at the mercy of the weather, and the forest year now being reviewed was one of very great extremes. The winter was one of great severity and prolonged snowfall, while the spring and summer were among the driest and hottest recorded. The wintry conditions caused long interruptions of work in the planting season, and the drought and heat brought about a prolonged period of great fire risk, necessitating constant alertness on the part of the forest staff. Labour was more readily available than in past years, but shortages at many forests existed, and in some cases limited the amount of planting. While the greatest efforts were made to reach the agreed planting programme, due attention was also given to the essential works of maintaining and thinning existing plantations.

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

	<i>Year ended September 30th</i>	
	1947	1946
	£	£
Gross payments ... ..	3,871,688	1,937,614
Receipts ... ..	660,690	562,504
Net payments ... ..	3,210,998	1,375,110

The Vote in aid of the Forestry Fund was £2,750,000 in 1946/47, and £4,856,000 in 1947/48.

**Land Acquired through the Forestry Fund.**—The total area at the end of the forest year was 1,440,500 acres as compared with 1,415,000 acres in the previous year, the increase being due to new acquisitions (including areas to which entry has been secured) amounting to 25,500 acres. At the end of the forest year the subdivision of the total area was 880,500 acres of "forest land" (that is land which is already planted, or should be planted) and 560,000 acres of "other land". Of the forest land 361,000 acres are situated in England, 385,700 acres in Scotland, and 133,800 acres in Wales.

Acquisitions of forest land amounted to 22,322 acres (of which 7,966 acres are in England, 9,344 acres are in Scotland, and 5,012 acres are in Wales). The comparable figures for the previous year were as follows :—England 6,766 acres, Scotland 25,821 acres, Wales 594 acres, totalling 33,181 acres.

**Planting.**—During the 1946/47 planting season 26,356 acres were planted or sown (including 96 acres naturally regenerated), and 139 acres underplanted. These figures show considerable increases over the corresponding figures for 1945/46 which were : planted and sown 10,448 acres, naturally regenerated 18 acres, underplanted 126 acres.

**Thinning.**—During the year under report 13,803 acres of plantation were thinned (England 8,195 acres, Scotland 3,620 acres, Wales 1,988 acres) compared with 10,878 acres (England 6,200 acres, Scotland 2,897 acres, Wales 1,781 acres) in the previous year.

**Clear Fellings.**—These amounted to 679 acres (England 389, Scotland 161, Wales 129) compared with 1,364 acres (England 1,189, Scotland 100, Wales 75) in the previous year.

**Fire Protection.**—Destruction by fire is one of the greatest risks to young plantations. During the past five years fires have destroyed 4,896 acres valued at £114,000. The year 1947 was remarkable for prolonged periods of exceptionally high fire risk, yet the number of outbreaks and the value of



damage done are very close to the average for the previous five years, while the acreage destroyed was considerably less than this average. The number of outbreaks which occurred during the year was 701, involving 645 acres, and a loss of £25,000.

**New Buildings and Repairs.**—Progress in the building of new houses has not been satisfactory; only fifty-two houses were completed, with work in progress on a further 178 houses. Shortage of some materials and the difficulty of finding contractors to undertake repair work has prevented rapid progress in overtaking arrears of maintenance; the future outlook is, however, more hopeful.

**Grants for Private Planting.**—The area planted under grant schemes, for which payments were made during the year, was 7,600 acres, of which 5,425 acres were conifers, 344 acres hardwoods, and 1,831 acres mixed planting. Payments made amounted to £71,782. In the previous year 4,219 acres were planted and payments were £7,307.

**Utilisation of Home Grown Timber.**—The Commissioners' woods have produced a great variety of produce ranging from saw timber, telegraph and transmission poles, round mining timber, posts and stakes, wood for pulping and celotex, along with such minor produce as bean and pea sticks and moss. The income from all classes of forest produce was £436,111.

**Tabular Statements** relating to the items summarised above are given on the following pages.

#### Land Acquired through the Forestry Fund

The following statement gives the utilisation of the properties acquired through the Forestry Fund as at September, 1947:—

	ENGLAND	SCOTLAND	WALES	TOTAL GREAT BRITAIN
<i>Number of Forests:</i>				
At beginning of year ...	103	142	44	289
At end of year ...	108	148	46	302
<i>Utilisation of Ground (acres):</i>				
<i>Forest Land:</i>				
Acquired Plantations	40,100	11,900	3,200	55,200
Planted by Forestry Commission ...	211,100	182,400	85,400	478,900
To be planted ...	109,800	191,400	45,200	346,400
Total Forest Land ...	361,000	385,700	133,800	880,500
Nurseries ...	900	700	200	1,800
Agricultural ...	17,400	32,400	12,800	62,600
Forest Workers' Holdings (including outrun) ...	6,700	2,900	4,200	13,800
Unplantable and Miscellaneous ...	102,500	349,400	29,900	481,800
Grand Total	488,500	771,100	180,900	1,440,500

The number of forest units was increased by 13; this increase was distributed as follows:—

**ENGLAND.**—New units at Watlington (Oxfordshire), Southwater (Sussex), Shalfleet (Isle of Wight), Neroche (Somerset); and Okehampton (Devonshire) previously part of Eggesford Forest.

**SCOTLAND.**—New units at Urray (Ross-shire), Countesswells (Aberdeenshire), Tomintoul (Banffshire), Rannoch (Perthshire), Craigieburn (Dumfriesshire), Leithope (Roxburghshire). Adjustments of areas previously acquired: Altonside merged with Teindland, Ordiequish merged with Speymouth; Pitmedden separated from Edensmuir as a new unit, and Cardrona likewise separated from Glentress.

**WALES.**—New units at Derry Ormond (Cardiganshire), and Taf Fechan (Brecknock).

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

	ENGLAND	SCOTLAND	WALES	TOTAL GREAT BRITAIN
Forest Land :				
Acquired Plantations ...	13	20	—	33
Plantable ...	1,909	34,394	542	36,845
Total of Forest Land ...	1,922	34,414	542	36,878
Agricultural ...	4,812	12,219	544	17,575
Forest Workers' Holdings (including outrun) ...	758	—	—	758
Unplantable and Miscel- laneous ...	29	34,678	587	35,294
Grand Total ...	7,521	81,311	1,673	90,505

### Silvicultural Operations during the year (acres)

	ENGLAND	SCOTLAND	WALES	TOTAL GREAT BRITAIN
Planted or Sown ...	8,891	12,351	5,114	26,356
Naturally Regenerated (included above)	91	5	—	96
Underplanted ...	51	73	15	139
Thinned ...	8,195	3,620	1,988	13,803
Felled ...	389	161	129	679

Compared with the quantities of work done in the previous year the major changes are as follows:—Planting has increased from 10,448 acres to 26,356 acres; the area stocked by natural regeneration has gone up from 18 to 96 acres; the area of young plantations which has been thinned has increased from 10,878 acres to 13,803 acres, and it may be noted that this operation in future years will steadily and rapidly increase; while the area felled showed a decrease from 1,364 acres to 679 acres.

### Holdings and Estate Management

	ENGLAND	SCOTLAND	WALES	TOTAL, GREAT BRITAIN
Number of Forest Workers' Holdings Established :				
At beginning of year ...	732	394	378	1,504
During year ...	—	4	—	4
Total ...	732	398	378	1,508
Other Tenancies :				
Agricultural Holdings :				
Under £20 per annum ...	422	530	352	1,304
Over £20 per annum ...	182	275	204	661
Foresters' Houses ...	118	131	32	281
Cottages ...	421	396	18	835
Residential and Sporting ...	329	301	61	691
Easements, Permissions, Minerals, etc. ...	1,549	302	136	1,987
Site Rents and Feus ...	—	273	—	273
Grand Total ...	3,021	2,208	803	6,032

### Land Acquisition

Acquisitions during the year amounted to 25,475 acres net, of which 22,322 were classified as plantable; this plantable area comprised 12,448 acres of bare land, and 9,874 acres which previously carried a forest crop, or was under a forest crop when acquired.

#### ACQUISITION OF PLANTABLE LAND

Year ending 30th September	By Lease or Feu	By Purchase	Total
	Acres	Acres	Acres
First Decade :			
1920-29 ... ..	156,759	153,471	310,230
Second Decade :			
1930-39 ... ..	60,057	284,700	344,757
Third Decade :			
1940 ... ..	24,396	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 ... ..	15,292	27,239	42,531†
1946 ... ..	9,996	23,185	33,181
1947 ... ..	13,016	9,306	22,322
Grand Total ... ..	270,259	557,759	828,018

\* 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.

† As adjusted in consequence of re-allocation between "plantable" and "other" land.

### PLANTING PROGRESS

#### State Forests

The area planted during the year was 26,356 acres, in which is included 96 acres of natural regeneration.

#### AREA PLANTED

Year ending 30th September	Planted		Total
	Afforested	Re-afforested	
	Acres	Acres	Acres
First Decade :			
1920-29 ... ..	101,976	36,295	138,271
Second Decade :			
1930-39 ... ..	174,428	56,179	230,607
Third Decade :			
1940 ... ..	21,569	5,719	27,288
1941 ... ..	19,627	7,240	26,867
1942 ... ..	12,733	4,013	16,746
1943 ... ..	9,301	4,111	13,412
1944 ... ..	5,477	3,728	9,205
1945 ... ..	3,025	3,485	6,510
1946 ... ..	5,884	4,564	10,448
1947 ... ..	17,456	8,900	26,356
Grand Total ... ..	371,476	134,234	505,710

The present year is the first year of operations towards fulfilling the planting programme as given in the White Paper on Forestry.\* The objective for the year was 30,000 acres, of which it was anticipated 25,000 acres would be afforestation, and 5,000 acres re-afforestation; the area planted was 26,356 acres, being 3,644 acres short of the target; but for the most difficult winter on record, the full programme would probably have been attained. Of the 26,356 acres planted, 8,900 were re-afforestation, and on comparison with the programme in the White Paper (given on page 9 of this Report) it will be noted that this work of re-planting felled woodlands has gone on quicker by some 3,900 acres than was anticipated.

The total area planted by the Commission to 30th September, 1947, was 505,710 acres, of which 467,575 acres consisted of conifers and 38,135 acres of hardwoods. Afforestation accounted for 371,476 acres and re-afforestation for 134,234 acres, which latter includes 14,447 acres replanted after damage by fire.

The total area planted is further analysed as follows:—

	<i>Conifers Acres</i>	<i>Hardwoods Acres</i>	<i>Total Acres</i>
Afforestation ....	357,175	14,301	371,476
Re-afforestation ...	110,400	23,834	134,234
	<u>467,575</u>	<u>38,135</u>	<u>505,710</u>

### 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 to date amounts to 161,158 acres; during the year grants were made in respect of 7,600 acres.

Particulars of the grants are given on page 33.	<i>Acres</i>
First Decade :	
1920-29 ...	72,856
Second Decade :	
1930-39 ...	53,006
Third Decade :	
1940 ... ..	4,318
1941 ... ..	4,427
1942 ... ..	3,681
1943 ... ..	4,244
1944 ... ..	4,038
1945 ... ..	2,769
1946 ... ..	4,219
1947 ... ..	7,600
Grand Total	<u>161,158</u>

### Employment in the Commission's Forests

With the increase in the planting programme the numbers of workers have progressively increased from 6,700 in October, 1946, to 10,500 in October, 1947. In addition the number of men employed on Forest Road Work at the end of the year was 3,400.

\* Post-War Forest Policy. Report by H.M. Forestry Commissioners (Cmd. 6447). H.M.S.O. 1943.

## DETAILS OF OPERATIONS

### FOREST YEAR ENDED 30th SEPTEMBER, 1947

#### THE FORESTRY FUND

The balance in the Forestry Fund at the commencement of the Forest Year was £2,078,619. Receipts amounted to £4,856,000 from Parliamentary Votes and to £660,690 from Forestry Operations, etc., making a total of £5,516,690. Payments amounted to £3,871,688 so that the balance in the Fund at 30th September, 1947, was £3,723,621. Movements on the Forestry Fund Account since the establishment of the Commission are shown in Table I below.

TABLE I.—FORESTRY FUND ACCOUNT

Year ending 30th September	Balance from preceding Year	Receipts			Payments (Table II)	Balance in Forestry Fund, 30th September
		Parliamentary Votes	From Forestry Operations, etc. (Table II)	Total		
	(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 ...	504,812	600,000	921,454	1,521,454	1,446,980	579,286
1945 ...	579,286	850,000	631,380	1,481,380	1,356,937	703,729
1946 ...	703,729	2,750,000	562,504	3,312,504	1,937,614	2,078,619
1947 ...	2,078,619	4,856,000	660,690	5,516,690	3,871,688	3,723,621
Grand Total	—	21,207,800	7,680,568	28,888,368	25,164,747	—

*Note.*—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.

In Table II an analysis of payments and receipts by heads of account is given. 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 £3,871,688 as compared with £1,937,614 in the previous forest year, an increase of £1,934,074. Of this increase £997,267 was under the head of Forestry Operations, and £413,826 was expenditure on the new Engineering Branch. There were also increases of £237,792 on Education and £150,937 on Salaries. Receipts increased by £98,186 owing to additional sales of forest produce and farm stock, and to contributions by private employers for work done by trainees. Net payments were £1,835,888 more than in Forest Year 1946.

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 (1) 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, transfers of land and buildings between forests and forest workers holdings, and value of work done in forests by trainees and students.

In Tables III—VIII, 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

Year ending 30th September	Payments											Receipts (14)	Net Payments (15)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)			(12)	Total (13)
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
First decade: 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	5,997	5,996	14,978	844,949	10,250	4,351	7,819	—	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	—	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	9,638	—	170	2,652	—	1,192,366	679,245	513,121
1944 ...	109,140	4,637	6,671	16,430	1,271,669	9,254	6,831	10,740	—	(CR) 24	11,632	—	1,446,980	921,454	525,526
1945 ...	119,420	4,596	6,371	15,422	1,185,551	10,086	5,570	11,433	—	210	278	—	1,356,937	631,380	725,557
1946 ...	164,645	7,678	10,107	22,707	1,637,845	7,891	48,646	17,884	—	875	19,336	—	1,937,614	562,504	1,375,110
1947 ...	315,582	10,456	19,701	66,144	2,635,112	48,544	286,438	34,655	—	14,820	26,410	413,826	3,871,688	660,690	3,210,998
Grand Total	2,239,319	124,977	146,584	362,095	19,601,350	461,882	524,439	232,845	91,885	54,189	911,356	413,826	25,164,747	7,680,568	17,484,179

TABLE IIIA.—EXPENDITURE AND INCOME

Year ending 30th September	Overhead Charges and Superior Supervision	Expenditure (including Allocation of Column 1)										Income						Net Expenditure
		Forestry Operations (Table III)	Advances for Afforestation Purposes	Education (Table IV)	Research and Experiment (Table V)	Agency & Advisory Services (Table VI)	Special Services (Table VI)	Forest Workers Holdings (Table VII)	Engineering (Table VIII)	Total	Forestry Operations (Table III)	Education (Table IV)	Forest Workers Holdings (Table VII)	Engineering (Table VIII)	Miscellaneous	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)		
First Decade:	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£		
1920-29 ...	582,178	3,512,577	241,694	101,313	79,650	99,233	61,299	389,883	4,485,649	882,108	2,427	27,515	—	4,509	916,559	3,569,090		
Second Decade:	925,404	7,056,580	154,855	97,998	140,245	11,912	42,694	565,871	8,070,155	1,770,014	443	168,856	—	4,230	1,943,543	6,126,612		
Third Decade:	90,903	781,192	12,407	5,349	14,819	906	1,635	37,587	853,895	551,362	8	20,324	—	774	572,468	281,427		
1940 ...	82,117	922,644	12,673	5,879	12,480	777	926	24,479	979,838	555,129	42	20,905	—	605	576,681	403,157		
1942 ...	110,149	1,061,763	24,058	12,545	14,598	1,046	1,225	23,424	1,138,659	698,040	88	21,545	—	1,536	721,209	417,450		
1943 ...	115,801	1,139,670	12,820	10,718	16,879	1,089	1,229	13,615	1,196,020	866,948	86	21,023	—	1,038	889,095	306,925		
1944 ...	130,146	1,401,825	12,804	9,204	19,076	1,223	1,326	13,789	1,459,247	624,814	1	21,320	—	897	647,032	812,215		
1945 ...	142,831	1,373,593	15,423	8,138	21,226	1,231	1,547	2,700	1,423,978	543,415	—	22,450	—	585	566,450	857,528		
1946 ...	207,848	1,821,628	23,334	66,565	33,911	10,609	3,387	25,377	1,984,811	499,642	12,465	22,291	—	719	535,117	1,449,694		
1947 ...	424,574	3,061,731	91,322	331,087	65,268	13,589	26,461	35,232	4,176,138	627,381	94,284	21,803	3,257	895	747,620	3,428,518		
Grand Total	2,811,951	22,133,203	601,390	648,816	416,152	141,715	141,729	1,131,957	25,768,390	7,618,853	109,844	368,032	3,257	15,788	8,115,774	17,652,616		
Percentage	—	85.9	2.3	2.5	1.6	.6	.6	4.4	100	93.9	1.4	4.5	—	.2	100	—		

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)****Overhead Charges and Superior Supervision***Expenditure* £424,574 (Table IIA, Col. (1) )

Compared with 1946, the expenditure on salaries and overhead charges rose by £216,726 owing to higher salary scales and a general staff expansion to meet the increased planting programme and other new responsibilities. At 30th September, 1947, the technical forestry staff consisted of 4 Directors, 19 Conservators, 1 Deputy Surveyor, 17 Divisional Officers and 118 District Officers.

**Forestry Operations***Expenditure* £3,061,751 (Table IIA, Col. (2) )*Income* £627,381 (Table IIA, Col. (11) )

These amounts are further analysed in Table III. From this, it will be seen that of the increase of £1,240,123 in Expenditure during 1947, £557,831 was attributable to Cultural Operations. Stores and Miscellaneous increased by £286,635, Roads and Buildings by £141,212, and Preparation of Produce by £126,241. The minimum agricultural wage was increased in July, 1946, and a larger labour force was employed during the year under review. Cost of Local Supervision increased by £71,428 owing to increases in the number of foresters and foremen employed. The expenditure on roads under this heading represents work done by the regular forest workers, as distinguished from the road construction programme undertaken by the special Engineering Branch.

The increase of £127,739 in Income from Forestry Operations was chiefly caused by the expansion in sales of forest produce, which increased by £86,746. Other Income, which increased by £42,139, included proceeds from sale of livestock £59,520, and miscellaneous estate, farm and forest receipts £32,816.

TABLE III.—FORESTRY OPERATIONS

Year ending 30th September	Expenditure (Table II, Column 2)										Income (Table II, Column 11)					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	
<b>First Decade:</b>																
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	
<b>Second Decade:</b>																
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	203,464	1,770,014	5,286,566	
<b>Third Decade:</b>																
1940 ...	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	
1941 ...	29,595	34,078	75,753	65,990	533,327	33,765	23,262	126,854	922,624	2,481	95,193	428,374	29,081	555,159	367,495	
1942 ...	37,404	48,398	94,715	55,845	550,381	96,472	26,481	132,067	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	50,917	866,948	272,722	
1944 ...	50,690	59,666	128,904	285,835	573,132	114,974	34,803	153,821	1,401,823	106,169	93,001	375,778	49,866	624,814	777,011	
1945 ...	58,306	61,951	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	
1946 ...	74,069	77,566	175,761	144,726	794,133	162,414	96,313	296,646	1,821,628	368	95,883	349,365	54,026	499,642	1,132,1986	
1947 ...	110,065	164,424	247,189	78,648	1,331,964	288,655	237,525	583,281	3,061,751	759	94,346	436,111	96,165	627,381	2,431,370	
<b>Grand Total</b>	963,662	1,080,922	1,701,244	3,245,001	9,951,173	1,431,723	876,871	2,882,607	22,133,203	287,145	1,814,955	4,784,873	731,880	7,618,853	14,514,350	
<b>Percentage</b>	4.3	4.9	7.7	14.7	44.9	6.5	4.0	13.0	100	3.8	23.8	62.8	9.6	100	—	

## Overhead Charges and Supervision

Overhead Charges £110,065 (Table III, Col. (1))  
 Superior Supervision £164,424 (Table III, Col. (2))  
 Local Supervision £247,189 (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 128. At the 30th September the total numbers employed were:—Foresters 418, Foremen 236.

### Acquisition of Land, Buildings and Standing Timber

Expenditure amounted to £78,648 (Table III Col. (4)). Of this amount, which is £66,078 less than the corresponding figure in 1946, £32,910 was spent on the purchase of land, standing timber and buildings, £33,753 on the acquisition of land and buildings on long lease or feu, and £11,985 on the redemption of tithes. This expenditure is not directly applicable to the areas acquired during the year, particulars of which are given below, since these include land to which entry has been secured but in respect of which contracts have not been completed.

The total area of land acquired in the Forest Year 1946-47 was 25,501 acres of which 22,322 were classified as plantable; disposals amounted to 26 acres.

The net total area in Great Britain in respect of which the legal formalities of acquisition had been completed by the 30th September, 1947, was 1,308,193 acres, the corresponding figures for the periods covered by the two previous Annual Reports being 1,285,101 acres and 1,236,252 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, 1947

Country	By Lease or Feu			By Purchase			Total acquired
	Plantable (including planted)	Other land	Total	Plantable (including planted)	Other land	Total	
England :							
Finally completed	115,121	16,435	131,556	194,500	55,710	250,210	381,766*
Entry secured ...	4,197	364	4,561	133	—	133	4,694
Total ... ..	119,318	16,799	136,117	194,633	55,710	250,343	386,460
Scotland :							
Finally completed	107,639	110,723	218,362	268,127	264,342	532,469	750,831
Entry secured ...	6,374	1,308	7,682	64	—	64	7,746
Total ... ..	114,013	112,031	226,044	268,191	264,342	532,533	758,577
Wales :							
Finally completed	36,928	13,232	50,160	94,935	30,501	125,436	175,596
Entry secured ...	—	—	—	—	—	—	—
Total ... ..	36,928	13,232	50,160	94,935	30,501	125,436	175,596
Great Britain ...	270,259	142,062	412,321	557,759	350,553	908,312	1,320,633

\* As adjusted on revision of records on separating statistics for England and Wales.

Of the net total area acquired by lease, feu, and purchase in Great Britain to the 30th September, 1947, 828,018 acres were classified at the time of acquisition as plantable, and of this area 313,951 acres (38 per cent.) were in England, 382,204 acres (46 per cent.) in Scotland, and 131,863 acres (16 per cent.) in Wales.

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 acquired for forestry purposes is thus approximately 1,440,500 acres; the utilisation of this land as at the 30th September, 1947, is shown on page 17.

### Cultural Operations

*Expenditure* £1,351,964 (Table III, Col. (5))

Details of this expenditure are given in the following Table (IIIA). Plantations accounted for £988,258, and Nurseries for £363,706.

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

Year ending 30th September	Plantations				Nurseries (5)	Grand Total (6)
	Prepara- tory work and Planting (1)	Establish- ment and Main- tenance (2)	Forest Protec- tion (3)	Total (4)		
	£	£	£	£	£	£
First Decade : 1920-29 ...	638,503	295,201	95,824	1,029,528	481,273	1,510,801
Second Decade : 1930-39 ...	1,053,327	916,427	377,133	2,346,867	724,132	3,071,019
Third Decade :						
1940 ...	139,854	128,221	63,079	331,154	100,599	431,753
1941 ...	149,570	159,020	89,341	397,931	135,396	533,327
1942 ...	115,723	198,762	103,490	417,975	132,406	550,381
1943 ...	84,558	206,287	98,583	389,428	178,052	567,480
1944 ...	70,090	224,132	104,841	399,063	174,069	573,132
1945 ...	65,425	222,931	103,058	391,414	175,769	567,183
1946 ...	144,098	293,692	122,477	560,267	233,866	794,133
1947 ...	393,787	405,455	189,016	988,258	363,706	1,351,964
Grand Total ...	2,854,935	3,050,128	1,346,842	7,251,905	2,699,268	9,951,173
Percentage of Column 4 ...	39.4	42.0	18.6	100	—	—
Percentage of Column 6 ...	28.7	30.6	13.6	72.9	27.1	100

The general increase in expenditure on cultural operations was due partly to larger programmes, and partly to higher wage rates. The acreage planted was greater than in the previous year, and more had to be spent on maintenance and on fire protection owing to the larger areas requiring attention; with additional labour available, arrears of maintenance work were also undertaken. The large increase in nursery expenditure is mainly due to an expansion of existing nursery areas to provide stocks for future operations on an increased scale.

**Plantations.**—The total area planted, sown, or naturally regenerated during the year was 26,356 acres, of which 24,914 acres were placed under conifers and 1,442 acres under broadleaved species. Included in the above are 1,113 acres replanted after destruction by fire. Details by forests are given in Appendix II.

In forming plantations and beating-up previous years' plantations, 54 million trees were used of which 54 per cent. were Norway and Sitka spruces ; 23 per cent. Scots and Corsican pines ; 11 per cent. European and Japanese larches ; 1 per cent. Douglas fir ; 2 per cent. other conifers and 9 per cent. broadleaved species. An area of 139 acres of existing woods was underplanted.

A summary of the work done in each Conservancy during the year is given in the table below.

## SILVICULTURAL OPERATIONS

Conservancy	Planted and Sown	Under- Planted	Thinned	Felled
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
<b>ENGLAND :</b>				
North West ...	1,807	—	953	12
North East ...	2,914	—	344	2
East ...	1,018	5	4,015	15
South East ...	900	—	421	274
South West ...	1,176	38	731	—
New Forest ...	600	2	641	38
Dean Forest ...	476	6	1,090	48
Total ...	8,891	51	8,195	389
<b>SCOTLAND :</b>				
North ...	2,023	12	677	66
East ...	4,229	41	2,163	73
South ...	3,138	20	293	9
West ...	2,961	—	487	13
Total ...	12,351	73	3,620	161
<b>WALES :</b>				
North ...	2,410	—	1,540	50
South ...	2,704	15	448	79
Total ...	5,114	15	1,988	129
Total—Great Britain	26,356	139	13,803	679

Included in the above table are 96 acres over which natural regeneration was obtained ; the major portion of this being 75 acres restocked mainly with Scots Pine in the New Forest ; the balance was made up of small areas distributed as follows :—N.E. England—2 acres ; S.E. England—6 acres ; Dean Forest—8 acres ; South Scotland—5 acres.

NURSERIES

An increase in the area of nursery ground is required to meet the needs of the progressively increasing planting programme; a matter of 173 acres was added during the year, and further increases are anticipated. The total area under nurseries at 30th September, 1947, was 1,850 acres stocked with 338 million seedlings, and 119 million transplants. Comparative figures for the three years 1945 to 1947 are given in the following table:—

Year ending 30th September	Country	Seed Sown <i>lbs.</i>			Stock of Plants at 30th September <i>Thousands</i>						Area <i>Acres</i>
		Coni-ferous	Broad-leaved	Total	Transplants			Seedlings			
					Coni-ferous	Broad-leaved	Total	Coni-ferous	Broad-leaved	Total	
1947	England	7,656	122,927	130,583	37,346	9,518	46,864	142,750	14,389	157,139	879
	Scotland	6,482	5,791	12,273	53,736	606	54,342	138,008	523	138,531	735
	Wales	1,714	3,105	4,819	17,208	280	17,488	41,835	326	42,161	236
	Total	15,852	131,823	147,675	108,290	10,404	118,694	322,593	15,238	337,831	1,850
1946	England	5,271	22,341	27,612	40,888	6,590	47,478	124,588	5,737	130,325	830
	Scotland	6,344	9,167	15,511	46,107	511	46,618	108,094	647	108,741	643
	Wales	1,219	3,588	4,807	20,323	471	20,794	36,959	344	37,303	204
	Total	12,834	35,096	47,930	107,318	7,572	114,890	269,641	6,728	276,369	1,677
1945	England and Wales	4,184	92,199	96,383	37,558	5,449	43,007	132,600	14,231	146,831	1,012
	Scotland	3,655	1,754	5,409	36,244	294	36,538	101,573	1,979	103,552	561
	Total	7,839	93,953	101,792	73,802	5,743	79,545	234,173	16,210	250,383	1,573

The details of the utilisation of the nurseries are shown in the following table; compared with the previous year there has been an increase in the area under Seedbeds of 120 acres, and a slight decrease in the areas under Transplant Lines, and Fallow and Green Crops.

## UTILISATION OF NURSERY AREA

Conservancy	Seedbeds	Transplant Lines	Fallow and Green Crops	Other	Total
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
<b>ENGLAND :</b>					
North West ...	48	55	29	29	161
North East ...	49	72	44	22	187
East ...	56	43	48	21	168
South East ...	27	22	16	10	75
South West ...	8	28	18	14	68
New Forest ...	67	42	65	25	199
Dean Forest ...	7	7	4	3	21
Total ...	262	269	224	124	879
<b>SCOTLAND :</b>					
North ...	32	41	94	17	184
East ...	36	53	55	45	189
South ...	32	48	38	18	136
West ...	31	63	101	31	226
Total ...	131	205	288	111	735
<b>WALES :</b>					
North ...	4	33	20	17	74
South ...	42	56	34	30	162
Total ...	46	89	54	47	236
Total— Great Britain	439	563	566	282	1,850
Percentages ...	24	30	31	15	100

## Seed Supply

## IMPORTED SEED

A partial failure of crop in the Queen Charlotte Islands restricted supplies of new Sitka spruce seed, but a considerable quantity of good quality seed from 1945 was available. The Douglas fir crop was also limited. Japanese larch seed was scarce, and only old seed was available from Japan. Norway spruce from France and Switzerland was in good supply. The Corsican pine crop was ample. The quantities and values of seed imported are given below :—

	<i>lbs.</i>	<i>Value</i> (£)	<i>Country</i>
Corsican Pine ...	5,642	10,226	Corsica
European Larch ...	309	191	Switzerland
Japanese Larch ...	1,000	1,602	Japan
Douglas Fir ...	1,674	2,563	United States of America
Norway Spruce ...	1,004	798	France
Norway Spruce ...	2,136	1,256	Switzerland
Sitka Spruce (Queen Charlotte strain) ...	820	1,132	Canada

	<i>lbs.</i>	<i>Value</i> (£)	<i>Country</i>
Sitka Spruce (Queen Charlotte strain) ...	3,071	3,519	United States of America
Sitka Spruce (Washington)	988	1,394	United States of America
Thuja plicata	4	4	United States of America
Pinus contorta	9	15	United States of America
Abies grandis ...	224	265	United States of America
Abies nobilis ... ..	71	77	United States of America
Abies concolor	25	34	United States of America
Abies pectinata (alba) ...	9	1	France
Abies pectinata (alba) ...	24	11	Switzerland
Sequoia sempervirens	24	40	United States of America
Pinus ponderosa ...	10	7	United States of America
Pinus montana ... ..	8	14	France
Beech ... ..	29,531	1,964	Holland
Beech ... ..	160	21	Switzerland
Oak (Pedunculate) ... ..	39,375	1,139	Holland
Oak (Red) ... ..	1,378	41	Holland

## HOME COLLECTION

Generally speaking the year was a poor one for the collection of conifer seed, and with the exception of Scots pine and European larch the quantities of cones collected were negligible. Hardwood seed crops were generally moderate, good yields being very local. The details of collections are tabulated below :—

	COLLECTION OF CONES				Seed extracted <i>lbs.</i>
	England <i>Bushels</i>	Scotland <i>Bushels</i>	Wales <i>Bushels</i>	Total <i>Bushels</i>	
Scots Pine ...	1,773	770	2	2,545	953
Corsican Pine...	22	—	4	26	11
European Larch	—	395	—	395	448
Japanese Larch	—	15	3	18	9
Douglas Fir ...	—	18	—	18	4
Norway Spruce	—	30	—	30	14
Sitka Spruce ...	—	11	—	11	6
Other Conifers	74	140	4	218	176

## COLLECTION OF HARDWOOD SEEDS

	England <i>lbs.</i>	Scotland <i>lbs.</i>	Wales <i>lbs.</i>	Total <i>lbs.</i>
Ash ... ..	629	67	194	890
Beech ... ..	23,298	311	109	23,718
Oak ... ..	72,123	—	3,402	75,525
Sycamore ... ..	120	7	21	148
Cherry ... ..	239	—	10	249
Hawthorn... ..	—	—	117	117
Other Hardwoods	699	10	21	730



The following quantities of seed were sold to the nursery trade and to private individuals :—

	Trade	Private Individuals	Total
	<i>lbs.</i>	<i>lbs.</i>	<i>lbs.</i>
Conifers	2,619	178	2,797
Hardwoods ...	7,083	—	7,083

### Forest Fires

In spite of a year of exceptionally high and prolonged fire risk, the losses compare very favourably with the average for previous years. Outbreaks reported numbered 701, of which 83 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 645 acres (including 223 acres of natural regeneration). The damage was assessed at £25,000, including cost of extinguishing.

Comparative figures for the five years 1943 to 1947 are given below :—

	1943	1944	1945	1946	1947
Number of fires ...	514	811	630	803	701
Area burnt (acres)...	949	1,922	276	1,104	645
Damage valued at... ..	£19,500	£36,500	£7,000	£26,000	£25,000

Claims aggregating £5,050 were lodged by the Commissioners in respect of the damage done during the year.

The table below analyses the causes of fires in 1947. 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

<i>Origin</i>	<i>Number of Fires</i>	<i>Planted Area Burnt Acres</i>
Railways ... ..	502	45
Adjoining land ... ..	75	256
General public ... ..	59	72
Commission employees ... ..	14	14
Road engines ... ..	2	—
Miscellaneous ... ..	11	8
Unknown	38	250
Totals	701	645

### Advances for Afforestation Purposes

*Expenditure* £91,322 (Table IIA, Col. 3)

Grants to private individuals and local authorities for planting amounted to £71,772, advances in respect of the proceeds-sharing scheme at Lake Vyrnwy, operated jointly with Liverpool Corporation, to £1,432, and overhead and supervisory charges to £18,118.

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 ... ..	333	151	54	538
Planting	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
Conifers ... ..	2,557	2,614	254	5,425
Hardwoods ... ..	267	23	54	344
Mixed ... ..	1,597	56	178	1,831
Total ... ..	4,421	2,693	486	7,600

The above includes 3,941 acres planted previous to 30th September, 1946, for which payments were made during the year ended 30th September, 1947.

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 1946-47 has been fixed at £10 os. od. per acre of which £7 10s. od. 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 unsuitable for dedication.

### Education

*Expenditure* £331,087 (Table IIA, Col. 4)

*Income* £94,284 (Table IIA, Col. 12)

Details of expenditure are given in Table IV. The staff and office expenses of the Education Branch have greatly increased in the post-war period. Salaries and office expenses have been shown this year in a separate column of Table IV. The income consisted of payments by private employers for services of trainees under the Forest Workers Training Scheme, payments by trainees for board and lodging, and the value of work done by trainees and students in the Commission's Forests.

### Forester Training Schools and Short Courses

*Expenditure* £71,680

This expenditure is made up as follows—salaries and expenses of instructors £10,867, allowances to men under training £15,135, and rent, stores, fuel, etc., £45,678. The total spent on the same heads in the previous year was £10,946. The increase in expenditure as compared with the previous year is due to the opening of three new Forester Schools during the year. Expenditure on Notherwood House has also been included under this head.

FORESTER TRAINING SCHOOLS.—Three schools, additional to those at Benmore and the Forest of Dean, were opened during the year; one at Glentress Forest, near Peebles, one at Lynford Hall, near Mundford in Thetford Chase, and the third at New Park Mansion, near Brockenhurst, in the New Forest. This latter school will move to Gwydyr Forest, near Bettws y Coed, North Wales, as soon as premises are available. Each of these schools is planned to accommodate 60 students, and they, together with the Benmore and Dean Schools, will bring the total capacity of the schools up to 270. The courses given during the year were as follows:—at Benmore, the second year's training of the normal two years' course was successfully undertaken by seventeen students, and Forester's Certificates were awarded; in addition, an intensive course of nine months' duration was given to sixteen ex-Service men whose attendance at a Forester Training School had been interrupted b

military service ; fifteen qualified for Forester's Certificates. The men from both these courses were placed in employment with the Commission with the exception of two who returned to Northern Ireland, and a third who emigrated. At the other four schools, namely : Glentress, Dean, Lynford and New Park, the first year's course of the normal two years' training was undertaken by a total of 155 students.

SHORT COURSES FOR FORESTERS AND WOODMEN were held at the following private estates :—Bowhill Estate, Selkirk—Instructor, Mr. T. Allan ; Dainaway Estate, Morayshire—Instructor, Mr. E. S. Grant ; Dartington Hall Estate, Totnes, Devon—Instructor, Mr. T. Brown ; and Raby Castle, Durham (two courses)—Instructor, Mr. H. Smith. The average number of men attending each course was twelve. At the end of each course, which was of three months' duration, examinations were held by the Royal Forestry Society of England and Wales for the Woodman's Certificate (in England), and by the Royal Scottish Forestry Society for the Junior Forester's Certificate (in Scotland). All the students were awarded the appropriate certificate.

**Forest Workers Training Scheme.**—The expenditure on this scheme amounted to £231,962 of which £145,634 represented allowances to trainees and £86,328 expenditure on maintenance of training centres, etc.

This scheme continued to provide practical training in forestry for men released from the armed forces, and other forms of war service. The trainees are accommodated in hostels or in private lodgings, and the training is given in State Forests or in the woodlands of selected private estates. During the year, 415 men completed their year's training or entered a Forester Training School before the expiry of their year's training ; of this number, 214 went into State Forestry, 80 into Private Forestry, and 96 into Forester Training Schools ; a small number (25) did not continue in forestry.

The scheme is proving a good recruiting ground for suitable men for admission to Forester Training Schools, and during the year places were found for 111 trainees (includes 15 selected in the previous year). The country of origin of these entrants to the Schools was England—76, Scotland—27, Wales—8 ; at the end of the year a further 177 had qualified for admission to a Forester Training School.

The total number of men in the Forest Workers Training Scheme at the end of the year was as follows :—

	<i>State Forests</i>	<i>Private Estates</i>	<i>Total</i>
England	403	157	560
Scotland	126	62	188
Wales	45	3	48
Total	574	222	796

**Grants to Educational Institutions :** *Expenditure* £7,743

Grants were made during the year as follows :—Aberdeen University—£1,456 ; Imperial Forestry Institute, Oxford—£3,125 ; University College of North Wales, Bangor—£2,249 ; Cambridge University—£250 ; King's College, Newcastle-on-Tyne—£100 ; University of Edinburgh—£563.

TABLE IV.—EDUCATION

Year ending 30th September	Expenditure (Table III, Column 4)										Income (Table III Column (12))	Net Expendi- ture	
	Superior Supervision and Overhead Charges	Salaries and Expenses	Forester Schools and Short Courses			Forest Workers Training Scheme		Grants to Institutions	Total	Income (Table III Column (12))			Net Expendi- ture
			Instructors Salaries and Expenses	Allowances to Appren- tices	Rent, Stores, Fuel, Light, etc.	Allowances to Trainees	Upkeep of Training Centres						
First Decade :	£	£	£	£	£	£	£	£	£	£	£	£	
1920-29 ... ..	13,125	—	15,401	21,709	20,387	—	—	30,691	101,313	2,427	98,886		
Second Decade :													
1930-39 ... ..	12,184	—	10,848	17,682	14,638	—	—	42,646	97,998	443	97,555		
Third Decade :													
1940 ... ..	864	—	408	1,164	488	—	—	2,425	5,349	8	5,341		
1941 ... ..	777	—	665	591	796	—	—	3,050	5,879	42	5,837		
1942 ... ..	1,046	—	1,313	2,754	3,165	—	—	4,267	12,545	88	12,457		
1943 ... ..	1,089	—	1,443	3,225	1,911	—	—	3,050	10,718	86	10,632		
1944 ... ..	1,223	—	1,109	3,076	746	—	—	3,050	9,204	1	9,203		
1945 ... ..	1,332	—	1,304	1,878	594	—	—	3,050	8,158	—	8,158		
1946 ... ..	6,751	—	3,709	2,531	4,706	34,148	10,204	4,516	66,505	12,465	54,100		
1947 ... ..	13,589	6,113	10,867	15,135	45,678	145,634	86,328	7,743	331,087	94,284	236,803		
Grand Total ... ..	51,980	6,113	47,067	69,745	93,109	179,782	96,532	104,488	648,816	109,844	538,972		
Percentage ... ..	8.0	.9	7.3	10.7	14.4	27.7	14.9	16.1	100	—	—		

## Research and Experiment

Expenditure £65,268 (Table IIA, Col. 5)  
Income £217

Details are given below.

TABLE V.—RESEARCH AND EXPERIMENT

Year ending 30th September	Expenditure (Table IIA, Column 5)					Income	Net Expenditure
	Superior Supervision and Overhead Charges 1.	Salaries and Expenses 2.	Labour, Stores, etc. 3.	Grants to Institutions 4.	Total 5.		
First Decade : 1920-29 ..	£ 13,699	£ 38,458	£ 20,230	£ 7,263	£ 79,650	£ 1,058	£ 78,592
Second Decade : 1930-39 ...	14,584	55,042	47,030	23,589	140,245	2,540	137,705
Third Decade :							
1940 ... ..	864	5,501	4,768	3,686	14,819	532	14,287
1941 ... ..	777	5,452	4,122	2,129	12,480	435	12,045
1942 ... ..	1,046	6,587	5,296	1,669	14,598	422	14,176
1943 ... ..	1,089	8,440	6,024	1,326	16,879	174	16,705
1944 ... ..	1,222	9,646	6,604	1,604	19,076	202	18,874
1945 ... ..	1,331	11,430	6,954	1,511	21,226	26	21,200
1946 ... ..	2,411	16,892	12,626	1,982	33,911	329	33,582
1947 ... ..	4,530	30,140	26,231	4,367	65,268	217	65,051
Grand Total ...	41,553	187,588	139,885	49,126	418,152	5,935	412,217
Percentage ...	9.9	44.9	33.5	11.7	100	—	—

### THE FOREST RESEARCH STATION

As proposed in the White Paper on Post-War Forest Policy, the Forestry Commission Research Station was established during the year at Alice Holt Lodge, near Farnham, Surrey. This medium sized manor house is conveniently situated in Alice Holt Forest—a State Forest of 2,000 acres. The building has been adapted to provide laboratories, including a photographic section, a library, and offices for the Chief Research Officer and his staff. By the end of the year the following sections of the Research Branch were installed and operating—Silviculture, Mensuration, Forest Pathology, Forest Entomology, and temporarily the Census of Woodlands. The Forestry Commission Library was transferred from London and now functions both as a working reference library for the Research Station and as a general Forest Library for the Commission. The concentration of all these activities in a central institution under the Chief Research Officer is already proving to be very beneficial as it makes for much better co-ordination of work between the branches.

### PRODUCTION

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

<i>Permanent Sample Plots</i>	<i>England</i>	<i>Scotland</i>	<i>Wales</i>	<i>Total</i>
In being on 1/10/46 ... ..	104	96	20	220
New plots established ... ..	6	19	—	25
Written off ... ..	3	3	—	6
In being on 30/9/47 ... ..	107	112	20	239
Remeasured during the year ...	32	17	11	60

In November, 1946, a second sample plot party was formed. One party now covers Scotland and the north of England, the other the rest of England and Wales. The work of the sample plot parties has been reviewed and the existing plots allocated to circuits so that on a three-year cycle, measurements can be carried out with a minimum of travelling. A start has also been made on a systematic search for plots to fill in the major gaps in the height/age distribution of the main species.

A revised yield table for Japanese larch was under compilation, and the results of comparative thinning investigations in Norway spruce at Bowmont and in pines in East Anglia were analysed, and prepared for publication.

#### NURSERY AND PLANTATION WORK

A large proportion of the work of the silvicultural research staff was concentrated on experiments connected with the projects of the committee appointed in 1944 to investigate problems connected with the maintenance of fertility, and the nutrition of tree seedlings and trans-plants in forest nurseries. The work mainly centred on trials of various fertilisers to determine the most suitable forms to apply and the best proportions of nitrogen, phosphate and potassium to use in different circumstances in combination with, and without, various organic manures. Much useful information was obtained, and although the investigations are still in their early stages, it has been possible to make provisional recommendations for the improvement of nursery technique in the raising of Sitka spruce.

Work on the partial sterilisation of old nursery soil using steam and chemical methods was continued, and further confirmation of the beneficial effects of such treatment in certain "sick" nurseries was obtained. In steam-sterilisation an incidental advantage is that weed seeds are killed, and the saving in weeding costs largely offsets the high cost of this method of sterilisation.

It was discovered in the course of nursery experiments that one reason why many old nurseries no longer produce good seedlings is that they have, in the course of time, become too alkaline. Acidification experiments to try to remedy this condition were commenced.

An assessment of 25 experiments carried out on peat sites at relatively high elevations in which the growth of Scots pine and lodgepole pine was compared, showed that lodgepole pine grew from 19 per cent. to 65 per cent. faster than Scots pine. Hybrid larch also showed its superiority over Japanese larch on similar exposed peat sites.

A comprehensive assessment of 56 experiments with various forms of phosphatic fertilisers applied on peat and heathland sites showed that great advantages were to be gained by the correct use of such fertilisers which in some cases made all the difference between a successful plantation and a failure. Japanese larch and Sitka spruce showed the greatest responses to such fertilisers.

Striking results have been obtained by the use of broom as a nurse to Sitka spruce on difficult moorland sites, plants with broom nurses growing well and fast, while those without remained in check or grew very slowly. A similar effect with Scots pine as a nurse for Sitka spruce has been observed but is slower in developing.

A detailed assessment of a large series of oak planting experiments at Dymock Forest (laid out in 1927 to 1930), showed that initial differences in treatment such as the use of different types of planting stock, weeding, hoeing, manuring, grading of nursery plants, direct sowing with varying numbers of acorns per patch, the use of different spacings and the planting of seedlings singly or in bunches all produced satisfactory plantations. The early differences in growth, where present, had practically disappeared.

The collection and testing of various races and hybrids of poplars was considerably extended during the year. The Commission's pathologist attended the International Poplar Conference in Paris in April, 1947 and, partly as a result of the contacts made there, arrangements were made to import a number of new varieties and hybrids.

Provenance plots of larch (19 provenances) and beech (12 provenances) were established during the year to study their relative rates of growth, branching habit, bole form, and resistance to disease.

#### ENTOMOLOGY

Much of the entomologist's time was taken up with work in connection with control measures to reduce the danger from the importation of the beetle *Ips typographus* in the bark of spruce logs coming into this country from Germany. This bark beetle is a serious pest in continental spruce forests but hitherto has not been found in Britain. A visit was made to forests in the British Zone in Germany from which spruce logs were being sent to this country.

Studies were continued on the life history and parasites of the Larch Shoot Moths (*Argyresthia*) and the Corsican Pine Needle Miner (*Evetria purdeyi*).

Some experiments in the control of chafer larvae by using preparations containing "gammexane" were initiated in the New Forest; the provisional results are promising.

#### PATHOLOGY

The major pathological problem under investigation was the death of groups of 20 to 25 years old pine in East Anglia associated with the root fungus *Fomes annosus*. A large scale survey was carried out, and many factors investigated. The work as a whole is still incomplete but it appears that infection is mainly through root contact, and that the stumps of trees removed in early cleanings constitute a serious source of infection, and further that the disease tends to be worse on alkaline soils; the disease, however, is not as widespread as had at one time been supposed.

Other subjects under study during the year were the dying back of pines on calcareous soils, the fungal disease *Phaeocryptopus gäumannii* on Douglas fir, and the fungus *Keithia* which does so much damage to nursery plants of Western red cedar (*Thuja plicata*). The survey of elm disease disclosed an unexpected spread of it northwards over the Scottish border; hitherto no major outbreaks north of a line from Chester to York had been discovered.

#### BOTANICAL AND SOIL RESEARCH

A study of the variation in botanical characters of European larch was continued by Dr. E. V. Laing at Aberdeen University, and similar studies on Hybrid larch, Scots pine and Douglas fir were started. It is hoped that these investigations will indicate diagnostic characters by which superior and inferior races of these species can be recognised.

Dr. Rayner's long term nursery fertility experiments at Wareham, designed to demonstrate the importance of maintaining mycorrhizal activity in the soils of forest nurseries, were continued. Detailed work on identifying, cultivating, and testing fungi which form beneficial mycorrhizal root associations and harmful "pseudo-mycorrhizal" associations, was continued.

Two whole-time research workers attached to the Imperial Forestry Institute, Oxford, have been appointed for research into forest soils.

## UTILISATION

Close liaison has been maintained with the Director and staff of the Forest Products Research Laboratory, who have, among other things, co-operated in an investigation into the rate of healing and the freedom or otherwise of fungal attack in wounds caused by pruning.

## ADVISORY COMMITTEE ON FOREST RESEARCH

The Committee met in September at Bury St. Edmunds. The progress of current research was reviewed and visits made to plantation experiments in Thetford and neighbouring forests.

## CENSUS OF WOODLANDS

Based on the results of a trial survey made on a small scale in the summer and autumn of 1946, work began in January 1947 on a comprehensive census of all woodlands, private and State, exceeding five acres in extent. It is designed to provide a record by area of each type of crop by species, age-class and condition, and will show the extent and location of the war fellings.

By the end of the forest year over half a million acres had been surveyed. Four counties in England and nine counties in Scotland had been completed, and a further thirteen counties, including five in Wales, had been started.

**Agency and Advisory Services**

*Expenditure* £13,589 (Table IIA, Col. 6)

*Income* £652

The expenditure is an apportionment of overhead and supervisory charges in respect of the time of officers of the Commission who have been engaged in advising woodland owners as to the treatment of their woods, and on the Dedication Scheme.

**Special Services**

*Expenditure* : £26,461 (Table IIA, Col. 7)

Details are given below :—

TABLE VI.—SPECIAL SERVICES

Year ending 30th September	Expenditure (Table IIA, Column 7)						Income	Net Expenditure
	Superior Super- vision and Overhead Charges	Con- sul- ta- tive Com- mit- tee's Exp- enses	Publi- ca- tions	Special En- quiries	Relief of Un- em- ploy- ment	Total		
First Decade : 1920-29 ...	£ 26,585	£ 523	£ 1,995	£ 12,368	£ 19,828	£ 61,299	£ 347	£ 60,952
Second Decade : 1930-39 ...	28,698	145	1,279	12,572	—	42,694	33	42,661
Third Decade :								
1940 ...	864	9	2	760	—	1,635	1	1,634
1941 ...	777	—	—	149	—	926	—	926
1942 ...	1,046	—	—	179	—	1,225	—	1,225
1943 ...	1,089	—	—	140	—	1,229	—	1,229
1944 ...	1,222	—	—	104	—	1,326	—	1,326
1945 ...	1,331	—	—	216	—	1,547	5	1,542
1946 ...	2,411	—	—	976	—	3,387	12	3,375
1947 ...	6,341	—	2,507	17,613	—	26,461	25	26,436
Grand Total	70,364	677	5,783	45,077	19,828	141,729	423	141,306
Percentage ...	49.6	.5	4.1	31.8	14.0	100	—	—



## Special Enquiries

Included in the expenditure of £17,613 under Special Enquiries are the expenses incurred in connection with the Empire Forestry Conference, 1947, amounting to £4,691, and the Census of Woodlands £10,830.

## Publications

Five new items were published during the year by H.M. Stationery Office. The second number in the Forest Operations Series entitled *The Establishment of Hardwoods* by A. H. Popert, dealt with a subject of immediate importance, particularly to private estates having large acreages of war-time fellings to replant. The *Forest of Dean National Forest Park Guide* is a popular illustrated handbook containing contributions by experts on the history and natural history of that attractive region. The first of a new series of Booklets was brought out, entitled *Woodland Mosses*, written and illustrated with a very good series of photographs by H. Watson, Instructor at the Forester Training School, Benmore. The other new issues were the *26th Annual Report for the Year ending 30th September, 1945*, and the *Summary Report, Resolutions and Reports of Committees of the Fifth British Empire Forestry Conference, 1947*.

Existing Stationery Office publications revised and re-issued during the year included the following :—

### *Bulletins—*

- No. 8. British Bark Beetles
- No. 13. Studies on Tree Roots
- No. 14. Forestry Practice

### *Leaflets—*

- No. 4. Black Pine Beetle
- No. 7. Adelges attacking Spruce
- No. 12. Income Tax and Death Duties on Woodlands
- No. 19. Elm Disease
- No. 23. Pit Props

### *Other Publications—*

- Argyll National Forest Park Guide
- Forestry Commission Yield Tables

One new leaflet, No. 24, entitled *The Dedication of Woodlands*, was issued by the Department for free distribution to landowners and others interested. A Statement entitled *Empire Forests and the War—Great Britain* was published for the Fifth British Empire Forestry Conference, 1947, together with thirteen technical papers.

Four of these papers were by Commissioners or members of their Staff, being entitled :—

- The Technique of Afforestation in Great Britain by Lord Robinson
- Forest Policy and Legislation in Great Britain by W. L. Taylor
- Private Forestry in Great Britain by E. Wynne Jones
- The Treatment of Derelict and Devastated Woodlands in Britain  
by M. V. Laurie

## Exhibits at Agricultural Shows

The growing public interest in forestry led to a number of requests being received for exhibits at agricultural shows. Although it was not possible to respond to all of these, suitable exhibits were staged at the larger shows, including the Royal Show at Lincoln, the Northumberland at Newcastle, the West Midland at Shrewsbury, the Three Counties at Hereford, the Bath and West at Cheltenham, the Sussex at Chichester, and the Royal Welsh at Carmarthen.

These exhibits comprised an outdoor section in which a miniature nursery was set up, and fire-fighting equipment and the larger items of forest produce displayed. A tented section showed a model forest, samples of forest products, botanical and entomological specimens, and photographs of representative forests. Forest officers drawn from local conservancy staffs attended to answer numerous enquiries from the public. The forestry exhibits proved a popular and well-attended feature of the shows, and among other matters, brought to the notice of the public in a very effective way, the danger to which forests are exposed from fire.

### **Forest Workers Holdings**

*Expenditure* £35,232 (Table IIA, Col. 8)

*Income* £21,803 (Table IIA, Col. 13)

Details of these amounts are given in Table VII. Four new holdings were created during the year. The shortages of materials and the difficulty of finding contractors to undertake repairs at reasonable costs have again delayed much necessary work of repair, maintenance and improvement.

TABLE VII.—FOREST WORKERS HOLDINGS

Year ending 30th September	Expenditure (Table II, Column 8)						Income (Table II, Column 13)				Net Expendi- ture	
	Superior Super- vision and Overhead Charges (1)	Purchase and Rent of Land and Buildings (2)	Buildings			Fencing, Drain- age, etc. (6)	Miscel- laneous (7)	Total (8)	Rents (9)	Other (10)		Total (11)
			New (3)	Adapta- tions (4)	Repairs (5)							
First Decade:	£	£	£	£	£	£	£	£	£	£	£	
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 ...	8,637	3,690	16,417	317	5,667	1,464	1,395	37,587	20,303	21	20,324	17,263
1941 ...	7,766	2,661	448	5,128	6,246	1,108	1,122	24,479	20,806	99	20,905	3,574
1942 ...	10,464	2,066	1,480	467	7,069	441	1,437	23,424	21,506	39	21,545	1,879
1943 ...	10,894	* 6,327(Cr.)	36	260	6,179	1,438	1,438	13,615	21,022	1	21,023	7,408(Cr.)
1944 ...	2,125	1,837	27	100	7,669	498	1,533	13,789	21,291	29	21,320	7,531(Cr.)
1945 ...	2,247	*12,586(Cr.)	35	1,234	9,264	781	1,725	2,700	22,306	144	22,450	19,750(Cr.)
1946 ...	5,573	1,117	945	436	14,110	1,100	2,096	25,377	21,532	759	22,291	3,086
1947 ...	7,247	829	998	5,334	17,147	649	3,028	35,232	21,360	443	21,803	13,429
Grand Total	185,246	206,121	447,394	89,408	123,574	52,794	27,510	1,131,957	364,353	3,679	368,032	763,925
Percentage ...	16.4	18.2	39.5	7.9	10.9	4.7	2.4	100	99.0	1.0	100	—

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

**Engineering Branch***Expenditure* £551,428 (Table IIA, Col. 9)*Income* £3,257 (Table IIA, Col. 14)

Details are given below. Income consists of receipts from Engineering Branch employees for board and lodging at Forestry Commission camps.

TABLE VIII.—ENGINEERING

Forest Year	Expenditure						Income	Net Expenditure
	Superior Supervision and Overhead Charges	Salaries and Expenses of Engineers	Plant Machinery, etc.	Road Construction	Camps and Misc.	Total		
1947 ...	£ 24,459	£ 34,630	£ 157,047	£ 303,783	£ 31,509	£ 551,428	£ 3,257	£ 548,171
Percentage	4.4	6.3	28.5	55.1	5.7	100	—	—

By the 30th September, 1947 a total of 3,452 men were placed in work; road work was in hand at 47 forests, 90 miles of usable roads had been made, and work was progressing on a further 50 miles.

SUMMARY OF SPECIES PLANTED  
In Thousands of Plants Used

SPECIES	ENGLAND			SCOTLAND			WALES			TOTAL		
	Planting	Beating-up	Total	Planting	Beating-up	Total	Planting	Beating-up	Total	Planting	Beating-up	Total
	Scots Pine ...	2,887	1,039	3,926	4,901	497	5,398	1,049	247	1,296	8,837	1,783
Corsican Pine ...	1,283	202	1,485	109	56	165	304	29	333	1,696	287	1,983
European Larch ...	153	36	189	543	24	567	22	5	27	718	65	783
Japanese Larch ...	1,498	225	1,723	1,949	244	2,193	1,036	91	1,127	4,483	560	5,043
Douglas Fir ...	265	108	373	219	66	285	58	23	81	542	197	739
Norway Spruce ...	2,167	367	2,534	3,421	364	3,785	1,743	79	1,822	7,331	810	8,141
Sitka Spruce ...	4,288	1,072	5,360	9,997	983	10,980	4,041	466	4,507	18,326	2,521	20,847
Tsuga ...	37	5	42	20	—	20	—	—	8	57	13	70
Thuja ...	28	13	41	—	—	—	25	23	48	53	36	89
Pinus contorta ...	7	—	7	43	7	50	5	—	5	55	7	62
Hybrid Larch ...	213	31	244	61	3	64	1	—	1	275	34	309
Lawson Cypress ...	15	13	28	15	7	22	48	25	73	78	45	123
Picea omarica ...	54	5	59	14	—	14	82	2	84	150	7	157
Abies grandis ...	2	1	3	11	—	11	—	1	1	13	2	15
Ash ...	35	7	42	46	24	70	—	—	—	81	31	112
Beech ...	1,267	438	1,705	126	21	147	58	45	103	1,451	504	1,955
Oaks ...	1,692	383	2,075	199	9	208	216	61	277	2,107	453	2,560
Sycamore ...	20	22	42	9	5	14	—	—	—	29	27	56
Cherry ...	8	7	15	3	1	4	—	—	—	11	8	19
Others ...	96	30	126	42	17	59	39	10	49	177	57	234
All Species ...	16,015	4,004	20,019	21,728	2,328	24,056	8,777	1,115	9,842	46,470	7,447	53,917

SUMMARY OF PLANTATIONS—YEAR ENDED 30TH SEPTEMBER, 1947  
Areas, in acres

Country	Afforested		Re-afforested		Total		
	Conifers	Broad-leaved	Conifers	Broad-leaved	Conifers	Broad-leaved	All Species
England ...	4,124	180	3,562	1,025	7,686	1,205	8,891
Scotland ...	8,983	26	3,239	103	12,222	129	12,351
Wales ...	4,119	24	887	84	5,006	108	5,114
Great Britain	17,226	230	7,688	1,212	24,914	1,442	26,356

(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.1.

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## **APPENDICES**

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APPEN  
PLANTATIONS—YEAR ENDED 30TH

	Area Planted (Acres)						Scots Pine
	Afforested		Re-Afforested		Total		
	Conifers	Broad-leaved	Conifers	Broad-leaved	Conifers	Broad-leaved	
<b>ENGLAND :</b>							
North West ...	1,066	6	613	122	1,679	128	474
North East ...	2,401	19	490	4	2,891	23	748
East ...	320	68	546	84	866	152	960
South East ...	18	18	631	233	649	251	678
South West ...	308	—	701	167	1,009	167	455
New Forest ...	11	69	476	44	487	113	544
Dean Forest ...	—	—	105	371	105	371	67
<b>TOTAL ENGLAND</b>	<b>4,124</b>	<b>180</b>	<b>3,562</b>	<b>1,025</b>	<b>7,686</b>	<b>1,205</b>	<b>3,926</b>
<b>SCOTLAND :</b>							
North ...	852	—	1,171	—	2,023	—	1,453
East ...	2,525	16	1,665	23	4,190	39	2,753
South ...	2,851	7	239	41	3,090	48	774
West ...	2,755	3	164	39	2,919	42	418
<b>TOTAL SCOTLAND</b>	<b>8,983</b>	<b>26</b>	<b>3,239</b>	<b>103</b>	<b>12,222</b>	<b>129</b>	<b>5,398</b>
<b>WALES :</b>							
North ...	2,054	—	356	—	2,410	—	525
South ...	2,065	24	531	84	2,596	108	771
<b>TOTAL WALES</b>	<b>4,119</b>	<b>24</b>	<b>887</b>	<b>84</b>	<b>5,006</b>	<b>108</b>	<b>1,296</b>
<b>GRAND TOTAL :</b>							
<b>Great Britain ...</b>	<b>17,226</b>	<b>230</b>	<b>7,688</b>	<b>1,212</b>	<b>24,914</b>	<b>1,442</b>	<b>10,620</b>



## DIX I

SEPTEMBER, 1947—SUMMARY BY CONSERVANCIES

## Species Planted, including Beating Up (Thousands)

Corsican Pine	European Larch	Japanese Larch	Douglas Fir	Norway Spruce	Sitka Spruce	Oak	Ash	Beech	Others	Total
278	—	346	29	900	868	68	5	112	265	3,345
259	2	296	26	674	4,025	1	—	86	39	6,156
487	53	2	161	5	—	519	3	129	30	2,349
45	—	250	39	396	11	181	6	552	111	2,269
48	9	660	23	388	352	41	—	464	93	2,533
267	73	93	95	126	90	36	2	296	12	1,634
101	52	76	—	45	14	1,229	26	66	57	1,733
1,485	189	1,723	373	2,534	5,360	2,075	42	1,705	607	20,019
—	290	316	16	600	1,388	—	—	5	96	4,164
163	112	484	133	989	3,355	99	—	84	36	8,208
2	71	1,075	57	1,389	2,718	99	70	27	62	6,344
—	94	318	79	807	3,519	10	—	31	64	5,340
165	567	2,193	285	3,785	10,980	208	70	147	258	24,056
131	—	215	2	224	2,931	—	—	2	38	4,068
202	27	912	79	1,598	1,576	277	—	101	231	5,774
333	27	1,127	81	1,822	4,507	277	—	103	269	9,842
1,983	783	5,043	739	8,141	20,847	2,560	112	1,955	1,134	53,917

## APPENDIX II

Table A

## AREA STATEMENT BY FORESTS—ENGLAND

Forest	Areas in Acres					Total Area
	Planted during year		Area under Plantations	Provisional Allocation of Other Land		
	Afforested	Re-afforested		Plantable	Agricultural, Unplantable, etc.	
<b>NORTH WEST CONSERVANCY :</b>						
1. Delamere ... ..	—	12	1,692	242	35	1,969
2. Thornthwaite ... ..	1	—	3,182	632	1,066	4,880
3. Cannock Chase ... ..	—	150	5,299	113	124	5,536
4. Mortimer ... ..	—	134	5,592	238	208	6,038
5. Walcot ... ..	—	44	1,205	637	7	1,849
6. Clipstone ... ..	—	223	5,282	1,326	315	6,923
7. Ennerdale ... ..	—	30	2,752	674	4,430	7,856
8. Hope ... ..	10	—	561	1,883	542	2,986
9. Bawtry ... ..	—	8	502	36	45	583
10. Sherwood ... ..	41	43	1,874	393	78	2,345
11. Kershope ... ..	608	30	6,584	2,423	3,348	12,355
12. Hardknott ... ..	53	—	686	2,036	5,289	8,011
13. Grizedale ... ..	270	—	2,467	2,518	823	5,808
14. Greystoke ... ..	89	20	844	728	—	1,572
15. Cotgrave ... ..	—	41	41	329	—	370
<b>Total North West ...</b>	<b>1,072</b>	<b>735</b>	<b>38,563</b>	<b>14,208</b>	<b>16,310</b>	<b>69,081</b>
<b>NORTH EAST CONSERVANCY :</b>						
1. Chopwell ... ..	—	91	638	161	17	816
2. Allerston ... ..	128	129	9,454	1,547	1,060	12,061
3. Rothbury ... ..	—	38	989	757	142	1,888
4. Selby ... ..	—	17	751	4	1	756
5. Kielder ... ..	1,319	15	19,623	23,509	31,150	74,282
6. Hamsterley ... ..	72	—	3,509	1,364	637	5,510
7. Ampleforth ... ..	—	26	1,663	298	332	2,293
8. Rosedale ... ..	9	56	2,270	230	374	2,874
9. Harwood ... ..	—	31	1,449	442	161	2,052
10. Slaley ... ..	—	—	1,155	100	225	1,480
11. Arkengarthdale ... ..	32	—	994	105	241	1,340
12. Redesdale ... ..	390	86	4,733	6,060	6,835	17,628
13. Langdale ... ..	106	—	1,421	2,116	2,007	5,544
14. Widehaugh ... ..	—	—	—	—	70	70
15. Warke ... ..	328	—	5,439	9,191	1,930	16,560
16. Scardale ... ..	36	5	256	325	77	658
<b>Total North East ...</b>	<b>2,420</b>	<b>494</b>	<b>54,344</b>	<b>46,209</b>	<b>45,259</b>	<b>145,812</b>
<b>EAST CONSERVANCY :</b>						
1. Hazelborough ... ..	64	—	1,588	265	354	2,207
2. Salcey ... ..	—	25	1,168	92	19	1,279
3. Ampthill ... ..	—	2	358	10	84	452
4. Rendlesham ... ..	—	18	6,080	890	1,092	8,062
5. Rockingham ... ..	—	28	3,863	1,106	177	5,146
6. Swaffham ... ..	—	93	5,173	540	246	5,959
7. Thetford Chase ... ..	107	301	30,957	8,976	6,283	46,216
8. Bourne ... ..	—	—	1,439	857	204	2,500
9. Laughton ... ..	62	10	1,943	144	57	2,144
<i>Carried forward</i>	<b>233</b>	<b>477</b>	<b>52,569</b>	<b>12,880</b>	<b>8,516</b>	<b>73,965</b>

APPENDIX II—Table A—(continued)

Forest	Areas in Acres					Total Area
	Planted during year		Area under Plantations	Provisional Allocation of Other Land		
	Afforested	Re-afforested		Plantable	Agricultural, Unplantable, etc.	
<i>Brought forward</i>	233	477	52,569	12,880	8,516	73,965
10. Swanton ... ..	—	44	1,034	449	70	1,553
11. Dunwich ... ..	—	—	686	135	22	843
12. Yardley Chase ... ..	—	—	1,453	508	152	2,113
13. Bardney ... ..	—	21	1,281	1,424	141	2,846
14. The King's Forest ... ..	—	—	4,270	1,407	255	5,932
15. Wigsley ... ..	—	—	244	1,407	38	1,749
16. Willingham ... ..	119	18	736	1,037	130	1,903
17. Wendover ... ..	36	—	598	190	26	814
18. Hevingham ... ..	—	—	—	189	40	229
19. Shouldham ... ..	—	70	114	842	—	956
20. Watlington ... ..	—	—	264	21	21	306
Total East ... ..	388	630	63,249	20,549	9,411	93,209
SOUTH EAST CONSERVANCY :						
1. Alice Holt ... ..	—	50	1,793	133	216	2,142
2. Bere ... ..	—	54	1,402	12	29	1,443
3. Woolmer ... ..	—	—	299	1,754	20	2,073
4. Bedgebury ... ..	—	88	2,377	762	226	3,365
5. Bramshill ... ..	—	133	3,359	939	18	4,316
6. Chiddingfold ... ..	—	55	1,808	275	7	2,090
7. Lyminge ... ..	—	62	1,857	577	61	2,495
8. Friston ... ..	—	71	589	1,323	74	1,986
9. Micheldever ... ..	—	6	1,525	597	83	2,205
10. Buriton ... ..	—	7	1,366	187	180	1,733
11. Westbury ... ..	—	—	347	2	10	359
12. Challock ... ..	—	57	433	988	1	1,422
13. Goodwood ... ..	—	28	802	2,022	—	2,824
14. Vinehall ... ..	—	9	438	419	30	887
15. Gravetye ... ..	—	10	363	40	507	910
16. Marden ... ..	—	14	205	988	—	1,193
17. Arundel ... ..	36	96	1,218	1,494	65	2,777
18. Orlestone ... ..	—	68	503	246	1	750
19. Alton ... ..	—	56	31	207	—	238
20. Andover ... ..	—	—	—	978	21	999
21. Southwater ... ..	—	—	—	349	—	349
Total South East ... ..	36	864	20,715	14,292	1,549	36,556
SOUTH WEST CONSERVANCY :						
1. Dymock ... ..	—	—	1,308	13	56	1,377
2. Brendon ... ..	—	—	1,847	4	338	2,189
3. Eggesford ... ..	—	14	838	30	14	882
4. Haldon ... ..	—	18	2,986	—	34	3,020
5. Halwill ... ..	49	5	3,253	592	579	4,424
6. Quantock ... ..	—	6	1,734	1	345	2,080
7. Bodmin ... ..	—	54	1,610	667	322	2,599
8. Haugh ... ..	—	40	513	75	18	606
9. Wyre ... ..	—	126	1,625	726	53	2,404
10. Wilsey Down ... ..	—	—	853	—	51	904
11. Bruton ... ..	—	30	660	60	5	725
<i>Carried forward</i>	49	293	17,227	2,168	1,815	21,210

## APPENDIX II—Table A—(continued)

Forest	Areas in Acres					
	Planted during year		Area under Plantations	Provisional Allocation of Other Land		Total Area
	Afforested	Re-afforested		Plantable	Agricultural, Unplantable, etc.	
<i>Brought forward</i>	49	293	17,227	2,168	1,815	21,210
12. Dartmoor ... ..	75	15	2,228	894	642	3,764
13. Herodsfoot ... ..	—	9	146	217	25	388
14. Westwoods ... ..	—	—	599	336	252	1,187
15. Lydford ... ..	—	51	448	113	38	599
16. Collingbourne ... ..	—	155	632	599	8	1,239
17. Hartland ... ..	92	25	1,013	686	443	2,142
18. Mendip ... ..	92	—	612	528	54	1,194
19. Savernake ... ..	—	246	2,203	2,182	92	4,477
20. Stanway ... ..	—	54	54	962	—	1,016
21. Braydon ... ..	—	20	255	193	2	450
22. Okehampton ... ..	—	—	299	57	26	382
23. Neroche ... ..	—	—	53	1,696	257	2,006
Total South West ... ..	308	868	25,769	10,631	3,654	40,054
NEW FOREST :						
1. New ... ..	—	384	19,092	31	46,024	65,147
2. Parkhurst ... ..	—	12	1,037	—	233	1,270
3. Wareham ... ..	2	32	3,241	—	267	3,508
4. Ringwood ... ..	—	9	4,020	—	302	4,322
5. Ferndown ... ..	—	13	689	—	110	799
6. Brighstone ... ..	16	—	977	163	253	1,393
7. Combley ... ..	—	—	550	—	9	559
8. Gardiner ... ..	51	16	469	285	3	757
9. Osborne ... ..	—	—	133	—	—	133
10. Charmouth ... ..	11	54	88	437	25	550
11. Shalfleet ... ..	—	—	—	186	17	203
Total New ... ..	80	520	30,296	1,102	47,243	78,641
DEAN FOREST :						
1. Dean ... ..	—	476	17,062	2,837	4,035	23,934
2. Tidenham Chase ... ..	—	—	1,181	29	47	1,257
Total Dean ... ..	—	476	18,243	2,866	4,082	25,191
TOTAL ENGLAND ... ..	4,304	4,587	251,179	109,857	127,508	488,544

## AREA STATEMENT BY FORESTS—SCOTLAND

NORTH CONSERVANCY :						
1. Borgia ... ..	—	69	214	1,588	902	2,704
2. Inchnacardoch ... ..	—	51	1,619	793	6,756	9,168
3. Portclair ... ..	—	29	1,842	535	3,123	5,500
4. South Laggan ... ..	—	—	1,124	10	2,976	4,110
5. Achnashellach ... ..	—	24	832	1,135	17,707	19,674
6. Ratagan ... ..	—	—	1,409	33	1,040	2,482
7. Slattadale ... ..	—	—	34	691	430	1,155
8. Glen Righ ... ..	100	—	1,555	3,937	391	5,883
9. Glen Hurich ... ..	10	—	2,772	1,083	11,325	15,180
10. Glen Urquhart ... ..	—	—	1,994	—	387	2,381
<i>Carried forward</i>	110	173	13,395	9,805	45,037	68,237

APPENDIX II—Table A—(continued)

Forest	Areas in Acres					Total Area
	Planted during year		Area under Plantations	Provisional Allocation of Other Land		
	Afforested	Re-afforested		Plantable	Agricultural, Unplantable, etc.	
<i>Brought forward</i>	110	173	13,395	9,805	45,037	68,237
11. Culloden ... ..	—	7	720	2	2	724
12. Nevis ... ..	54	—	1,023	940	5,696	7,659
13. The Queen's Forest	—	—	2,426	2,174	7,900	12,500
14. Craig nan Eun ... ..	—	—	1,357	—	565	1,922
15. Craig Phadrig ... ..	—	—	204	—	7	211
16. Glen Shiel ... ..	—	—	765	—	2,888	3,653
17. North Strome ... ..	—	—	851	—	1,118	1,969
18. Salen ... ..	107	—	2,126	1,424	3,947	7,497
19. South Strome ... ..	—	10	1,217	52	2,288	3,557
20. Findon ... ..	13	—	1,190	48	95	1,333
21. Glen Garry ... ..	80	—	2,946	2,445	16,588	21,979
22. Kessoek ... ..	8	—	669	117	124	910
23. Eilanreach ... ..	—	—	824	—	96	920
24. Dornoch ... ..	—	—	670	—	34	704
25. Inverinate ... ..	—	—	1,038	—	194	1,232
26. Balblair ... ..	—	—	773	—	83	856
27. Clunes ... ..	—	—	1,062	443	4,347	5,852
28. Lael ... ..	—	—	1,882	219	170	2,271
29. Fiunary ... ..	40	92	2,293	4,904	17,372	24,569
30. Glen Loy ... ..	—	—	1,876	146	524	2,546
31. Glen Brittle ... ..	26	—	1,330	141	7,245	8,716
32. Longart ... ..	26	—	749	400	115	1,264
33. Leanachan ... ..	—	85	1,024	4,299	2,223	7,546
34. Guisachan ... ..	99	5	751	1,365	254	2,370
35. Ardrross ... ..	—	160	1,861	1,779	508	4,148
36. Inshriach ... ..	2	28	837	1,001	459	2,297
37. Millbuie ... ..	—	302	4,631	1,204	580	6,415
38. Assich ... ..	36	—	241	584	218	1,043
39. Morangie ... ..	99	—	115	943	87	1,145
40. Kilcoy ... ..	95	52	566	2,188	320	3,074
41. Strath Nairn ... ..	47	—	146	2,071	1,707	3,924
42. Ferness ... ..	—	48	94	974	470	1,538
43. Strath Conon ... ..	—	150	150	2,543	7,106	9,799
44. Strath Dearn ... ..	—	59	119	1,435	582	2,136
45. Farigaig ... ..	10	—	33	2,247	2,310	4,590
46. Urray ... ..	—	—	54	584	64	702
Total North ... ..	852	1,171	52,008	46,477	133,323	231,808
EAST CONSERVANCY :						
1. Monaghty ... ..	—	—	2,812	92	110	3,014
2. Kirkhill ... ..	—	57	839	575	126	1,540
3. Montreathmont ... ..	—	—	2,081	—	263	2,344
4. Culbin ... ..	—	—	—	—	—	—
5. Edensmuir ... ..	49	93	3,896	1,801	628	6,325
6. Tentsmuir ... ..	49	—	1,118	121	17	1,256
7. Drummond Hill ... ..	—	18	3,370	130	648	4,148
8. Teindland (includes Altonside) ... ..	200	—	3,476	363	1,435	5,274
9. The Bin ... ..	—	112	936	283	86	1,305
10. Speymouth ... ..	84	30	4,226	1,218	483	5,927
Ordiequish ... ..	253	—	898	3,650	393	4,941
11. Blairadam ... ..	64	—	1,328	134	306	1,768
<i>Carried forward</i>	699	310	25,380	8,367	4,495	37,842

APPENDIX II—Table A—(continued)

Forest	Areas in Acres					Total Area
	Planted during year		Area under Plantations	Provisional Allocation of Other Land		
	Afforested	Re-afforested		Plantable	Agricultural, Unplantable, etc.	
<i>Brought forward</i>	699	310	25,380	8,367	4,495	37,842
12. Drumtochty ...	—	—	2,309	21	955	3,285
13. Kemnay ...	—	75	1,078	74	21	1,173
14. Midmar ...	—	—	594	—	257	851
15. Deer ...	51	24	2,035	—	184	2,219
16. Scootmore ...	17	3	1,886	706	470	3,062
17. Clashindarroch ...	300	—	5,263	4,300	9,164	18,727
18. Roseisle ...	—	44	1,844	452	26	2,322
19. Blackcraig ...	5	34	1,485	65	498	2,048
20. Carden ...	—	—	455	—	27	482
21. Inghismaldie ...	—	80	974	147	10	1,131
22. Durriss ...	—	142	2,503	1,115	224	3,842
23. Newton ...	—	—	—	15	160	175
24. Newtyle ...	—	36	885	16	184	1,085
25. Alltcaileach ...	161	14	2,346	1,313	175	3,834
26. Kinfauns ...	—	—	641	—	1	642
27. Whitehaugh ...	22	7	1,076	138	362	1,576
28. Craig Vinean ...	50	124	1,431	751	394	2,576
29. Glen Devon ...	77	—	513	377	25	915
30. Lossie ...	77	3	887	708	309	1,904
31. Keillour ...	—	186	596	780	364	1,740
32. Tilliefourie ...	218	—	826	1,324	1,482	3,632
33. Blackhall ...	—	273	465	1,655	1,113	3,233
34. Rosarie ...	93	71	481	1,528	1,313	3,322
35. Pitfichie ...	—	181	262	2,855	1,936	5,053
36. Fetteresso ...	346	20	667	4,279	3,359	8,305
37. Strathord ...	171	—	329	669	20	1,018
38. Allean ...	60	—	145	2,582	212	2,939
39. Auchernach ...	50	—	129	756	675	1,560
40. Gartly Moor ...	144	—	144	1,245	1,032	2,421
41. Dallas ...	—	61	236	550	1,235	2,021
42. Countesswells ...	—	—	287	344	33	664
43. Pitmedden ...	—	—	572	283	151	1,006
44. Rannoch ...	—	—	695	2,482	2	3,179
45. Tomintoul ...	—	—	—	1,031	419	1,450
<b>Total East</b> ...	<b>2,541</b>	<b>1,688</b>	<b>59,019</b>	<b>40,928</b>	<b>31,287</b>	<b>131,234</b>
<b>SOUTH CONSERVANCY :</b>						
1. Glentress ...	—	16	1,618	23	335	1,976
2. Cairn Edward ...	206	—	2,754	6,498	5,780	15,032
3. Newcastleton ...	13	—	3,278	—	273	3,551
4. Dalbeattie ...	52	111	2,946	707	753	4,406
5. Forest of Ae ...	348	—	3,376	4,232	3,075	10,683
6. Edgarhope ...	29	6	955	571	108	1,634
7. Greskine ...	13	10	848	124	182	1,154
8. Auchenorodan ...	—	—	704	—	26	730
9. Kirroughtree ...	137	—	2,317	341	1,070	3,728
10. Fleet ...	75	21	919	273	593	1,785
11. Kilsture ...	—	54	441	56	3	500
12. Changue ...	164	—	697	840	653	2,190
13. Dundeeburn ...	50	—	777	1,281	174	2,232
14. Tinnisburn ...	70	—	1,027	279	98	1,404
15. Corriedoo ...	110	—	544	334	144	1,022
<i>Carried forward</i>	1,267	218	23,201	15,559	13,267	52,027

APPENDIX II—Table A—(continued)

Forest	Areas in Acres					Total Area
	Planted during year		Area under Plantations	Provisional Allocation of Other Land		
	Afforested	Re-afforested		Plantable	Agricultural, Unplantable, etc.	
<i>Brought forward</i>	1,267	218	23,201	15,559	13,267	52,027
16. Garcogo ... ..	52	—	359	1,151	411	1,921
17. Laurieston ... ..	16	17	381	3,001	1,023	4,405
18. Twiglees ... ..	512	42	2,071	2,410	627	5,108
19. Castle O'er ... ..	195	—	1,544	887	215	2,646
20. Glen Trool ... ..	154	—	171	11,379	30,001	41,551
21. Claunchie ... ..	45	—	48	580	11	639
22. Shielswood ... ..	—	—	—	920	93	1,013
23. Mabie ... ..	195	—	648	1,481	1,129	3,258
24. Wauchope ... ..	102	—	379	5,483	3,234	9,096
25. Carrick ... ..	48	—	84	12,674	35,577	48,335
26. Elibank ... ..	225	—	290	1,564	1,058	2,912
27. Glen Gap ... ..	—	—	—	1,525	469	1,994
28. Craik ... ..	—	—	10	2,575	783	3,368
29. Cardrona ... ..	6	3	1,269	—	591	1,860
30. Craigieburn ... ..	41	—	61	503	21	585
31. Leithope ... ..	—	—	—	1,045	120	1,165
Total South ... ..	2,858	280	30,516	62,737	88,630	181,883
WEST CONSERVANCY :						
1. Inverliever ... ..	56	—	3,793	2,735	20,413	26,941
2. Glen Duror ... ..	—	—	2,094	134	6,120	8,348
3. Glen Branter ... ..	51	—	3,788	898	6,229	10,915
4. Ardgartan ... ..	43	—	4,305	937	12,885	18,127
5. Barcaldine ... ..	—	—	2,827	302	876	4,005
6. Benmore ... ..	172	27	3,271	1,165	8,563	12,999
7. Glen Finart ... ..	46	—	2,403	151	6,158	8,712
8. Fearnoch ... ..	—	—	1,121	—	221	1,342
9. Lennox ... ..	—	10	560	—	20	580
10. Loch Ard ... ..	524	—	7,620	9,154	9,962	26,736
11. Devilla ... ..	—	50	776	15	9	800
12. Achaglachgach ... ..	—	—	1,556	8	405	1,969
13. Knapdale ... ..	253	—	4,219	2,153	13,336	19,708
14. Strathyre ... ..	327	25	4,679	179	5,233	10,091
15. Tulliallan ... ..	—	—	—	—	112	112
16. Garadhban ... ..	—	—	1,108	—	29	1,137
17. Inverinan ... ..	74	76	2,384	1,342	9,069	12,795
18. Asknish ... ..	145	—	1,302	1,773	2,828	5,903
19. Carron Valley ... ..	317	—	2,073	2,692	1,875	6,640
20. Carradale ... ..	195	15	1,287	2,423	6,925	10,635
21. Minard ... ..	105	—	869	2,123	2,197	5,189
22. Saddell ... ..	60	—	244	1,731	2,942	4,917
23. Kilmichael ... ..	156	—	242	4,825	7,620	12,687
24. Corlarach ... ..	100	—	103	547	872	1,522
25. Glendaruel ... ..	27	—	27	2,623	3,405	6,055
26. Strath Lachlan ... ..	107	—	107	3,344	3,865	7,316
Total West ... ..	2,758	203	52,758	41,254	132,169	226,181
TOTAL SCOTLAND ... ..	9,009	3,342	194,301	191,396	385,409	771,106

**APPENDIX II—Table A—(continued)**  
**AREA STATEMENT BY FORESTS—WALES**

Forest	Areas in Acres					Total Area
	Planted during year		Area under Plantations	Provisional Allocation of Other Land		
	Afforested	Re-afforested		Plantable	Agricultural, Unplantable, etc.	
<b>NORTH CONSERVANCY :</b>						
1. Hafod Fawr ...	—	—	442	53	872	1,367
2. Gwydyr ...	281	47	7,792	3,624	6,529	17,945
3. Coed y Brenin ...	87	60	6,309	3,749	6,675	16,733
4. Kerry ...	4	43	1,938	181	121	2,240
5. Beddgelert ...	232	—	1,430	241	1,100	2,771
6. Cynwyd ...	3	—	1,525	48	127	1,700
7. Dovey ...	105	139	7,179	2,124	2,556	11,859
8. Radnor ...	—	44	2,565	434	1,275	4,274
9. Cwmeinion ...	—	—	599	—	339	938
10. Mathrafal ...	—	—	415	—	16	431
11. Tarenig ...	—	—	1,185	231	1,198	2,614
12. Bryn Mawr ...	16	—	657	—	156	813
13. Myherin ...	72	20	3,602	1,701	2,917	8,220
14. Clocaenog ...	438	—	5,982	3,191	3,569	12,742
15. Dyfnant ...	—	—	603	106	166	875
16. Hafren ...	568	—	2,419	4,116	3,862	10,397
17. Coed Sarnau ...	167	3	580	2,673	802	4,055
18. Newborough ...	81	—	81	1,394	629	2,104
<b>Total North ...</b>	<b>2,054</b>	<b>356</b>	<b>45,303</b>	<b>23,866</b>	<b>32,909</b>	<b>102,078</b>
<b>SOUTH CONSERVANCY :</b>						
1. Tintern ...	—	138	4,022	202	461	4,685
2. Margam ...	—	—	1,484	1	306	1,791
3. Llanover ...	2	—	2,302	211	164	2,677
4. Llantrisant ...	—	6	1,061	—	95	1,156
5. Chepstow ...	—	5	989	9	—	998
6. Rheola ...	369	128	6,387	3,760	2,285	12,432
7. Brechfa ...	581	84	8,039	3,643	3,078	14,760
8. Brecon ...	—	—	1,583	54	232	1,869
9. Glasfynydd ...	—	—	1,643	492	108	2,243
10. Pembrey ...	71	—	1,577	1,232	1,694	4,503
11. Caio ...	247	46	2,248	768	712	3,728
12. Crychan ...	285	—	3,916	2,555	1,095	7,566
13. Mynydd Ddu ...	3	—	1,418	38	1,264	2,720
14. Itton ...	24	—	331	184	—	515
15. Hay ...	—	—	675	—	46	721
16. St. Gwynno ...	197	—	1,286	1,132	439	2,857
17. Coed y Rhaiadr ...	—	—	553	9	48	610
18. Cwmogwr ...	29	65	605	1,322	827	2,754
19. Giedd ...	34	—	348	302	96	746
20. Michaelston ...	100	—	1,346	2,621	645	4,612
21. Tair Onen ...	—	5	33	20	136	189
22. Usk ...	117	4	760	211	91	1,062
23. Monmouth ...	6	9	237	127	90	454
24. Wentwood ...	—	125	268	645	13	926
25. Cilgwyn ...	—	—	—	186	5	191
26. Goytre ...	—	—	176	13	—	189
27. Derry Ormond ...	—	—	—	685	83	768
28. Taf Fechan ...	24	—	24	936	170	1,130
<b>Total South ...</b>	<b>2,089</b>	<b>615</b>	<b>43,311</b>	<b>21,358</b>	<b>14,183</b>	<b>78,852</b>
<b>TOTAL WALES ...</b>	<b>4,143</b>	<b>971</b>	<b>88,614</b>	<b>45,224</b>	<b>47,092</b>	<b>180,930</b>



## Appendix II—continued

Table B

## AREAS STATEMENT CONSERVANCIES—SUMMARY

Forest	Areas in Acres					Total Area
	Planted during year		Area under Plantations	Provisional Allocation of Other Land		
	Afforested	Re-afforested		Plantable	Agricultural, Unplantable, &c.	
ENGLAND :						
North West Conservancy	1,072	735	38,563	14,208	16,310	69,081
North East Conservancy	2,420	494	54,344	46,209	45,259	145,812
East Conservancy ...	388	630	63,249	20,549	9,411	93,209
South East Conservancy	36	864	20,715	14,292	1,549	36,556
South West Conservancy	308	868	25,709	10,631	3,654	40,054
New Forest ...	80	520	30,296	1,102	47,243	78,641
Dean Forest ...	—	476	18,243	2,866	4,082	25,191
Total, England ...	4,304	4,587	251,179	109,857	127,508	488,544
SCOTLAND :						
North Conservancy ...	852	1,171	52,008	46,477	133,323	231,808
East Conservancy ...	2,541	1,688	59,019	40,928	31,287	131,234
South Conservancy ...	2,858	280	30,516	62,737	88,630	181,883
West Conservancy ...	2,758	203	52,758	41,254	132,169	226,181
Total, Scotland ...	9,009	3,342	194,301	191,396	385,409	771,106
WALES :						
North Conservancy ...	2,054	356	45,303	23,866	32,909	102,078
South Conservancy ...	2,089	615	43,311	21,358	14,183	78,852
Total, Wales ...	4,143	971	88,614	45,224	47,092	180,930
GRAND TOTAL : GREAT BRITAIN ...	17,456	8,900	534,094	346,477	560,009	1,440,580

## Appendix III

Outline Maps showing Distribution of Forests  
as at September 30th, 1947

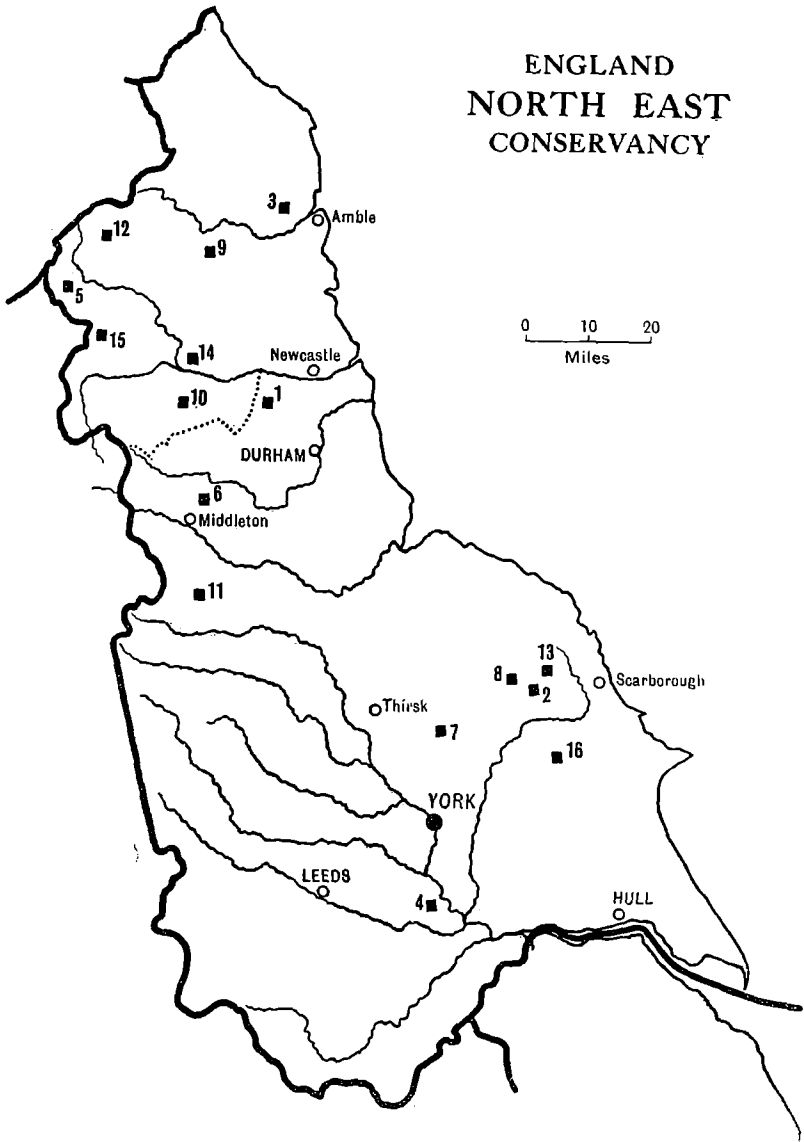
Forests are listed by Conservancies in order of acquisition ; new units are shown by triangles, and former Crown Woods are indicated in the lists by asterisks.



*Conservator's Office* : Upton Grange, Upton-by-Chester

- |                                 |                                     |
|---------------------------------|-------------------------------------|
| 1. Delamere, Cheshire*          | 9. Bawtry, Notts                    |
| 2. Thornthwaite, Cumberland     | 10. Sherwood, Notts                 |
| 3. Cannock Chase, Staffs        | 11. Kershope, Cumberland            |
| 4. Mortimer, Hereford and Salop | 12. Hardknott, Cumberland and Lancs |
| 5. Walcot, Salop                | 13. Grizedale, Lancs                |
| 6. Clipstone, Derby and Notts   | 14. Greystoke, Cumberland           |
| 7. Ennerdale, Cumberland        | 15. Cotgrave, Notts                 |
| 8. Hope, Derby                  |                                     |

## ENGLAND NORTH EAST CONSERVANCY



*Conservator's Office : Briar House, Fulford Road, York*

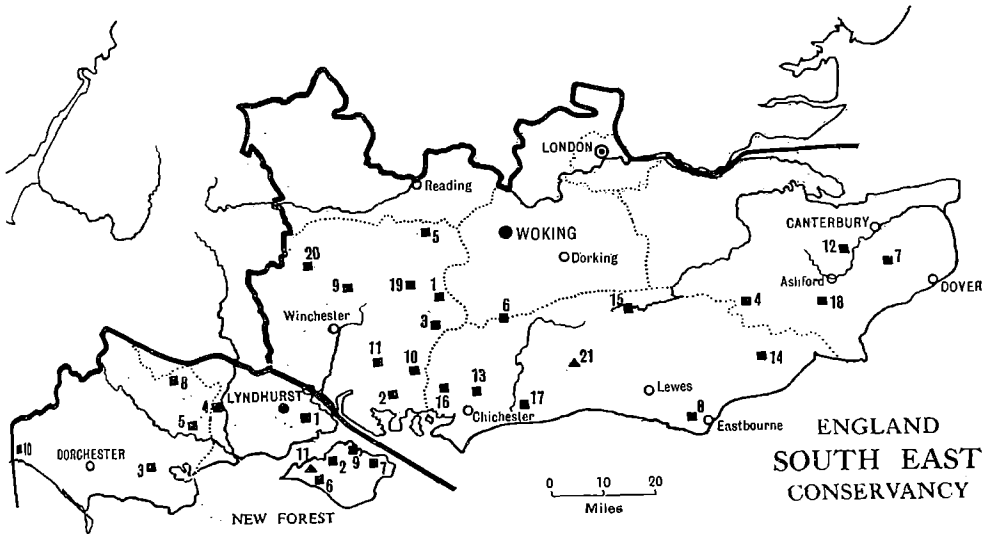
- |                             |                               |
|-----------------------------|-------------------------------|
| 1. Chopwell, Durham*        | 9. Harwood, Northumberland    |
| 2. Allerston, Yorks         | 10. Slaley, Northumberland    |
| 3. Rothbury, Northumberland | 11. Arkengarthdale, Yorks     |
| 4. Selby, Yorks             | 12. Redesdale, Northumberland |
| 5. Kielder, Northumberland  | 13. Langdale, Yorks           |
| 6. Hamsterley, Durham       | 14. Widehaugh, Northumberland |
| 7. Ampleforth, Yorks        | 15. Warke, Northumberland     |
| 8. Rosedale, Yorks          | 16. Scardale, Yorks           |

ENGLAND  
EAST  
CONSERVANCY



Conservator's Office : 71, Regent Street, Cambridge

- |  |   |
|--|---|
| 1. Hazelborough, Bucks and Northants*  | 12. Yardley Chase, Bedford and Northampton. |
| 2. Salcey, Bucks and Northants         | 13. Bardney, Lincoln                        |
| 3. Ampthill, Beds                      | 14. The King's Forest, Suffolk              |
| 4. Rendlesham, Suffolk                 | 15. Wigsley, Lincoln and Nottingham         |
| 5. Rockingham, Northampton             | 16. Willingham, Lincoln                     |
| 6. Swaffham, Norfolk                   | 17. Wendover, Bucks                         |
| 7. Thetford Chase, Norfolk and Suffolk | 18. Hevingham, Norfolk                      |
| 8. Bourne, Lincoln and Rutland         | 19. Shouldham, Norfolk                      |
| 9. Loughton, Lincoln                   | 20. Watlington, Oxford                      |
| 10. Swanton, Norfolk                   |   |
| 11. Dunwich, Suffolk                   |   |



### SOUTH-EAST CONSERVANCY

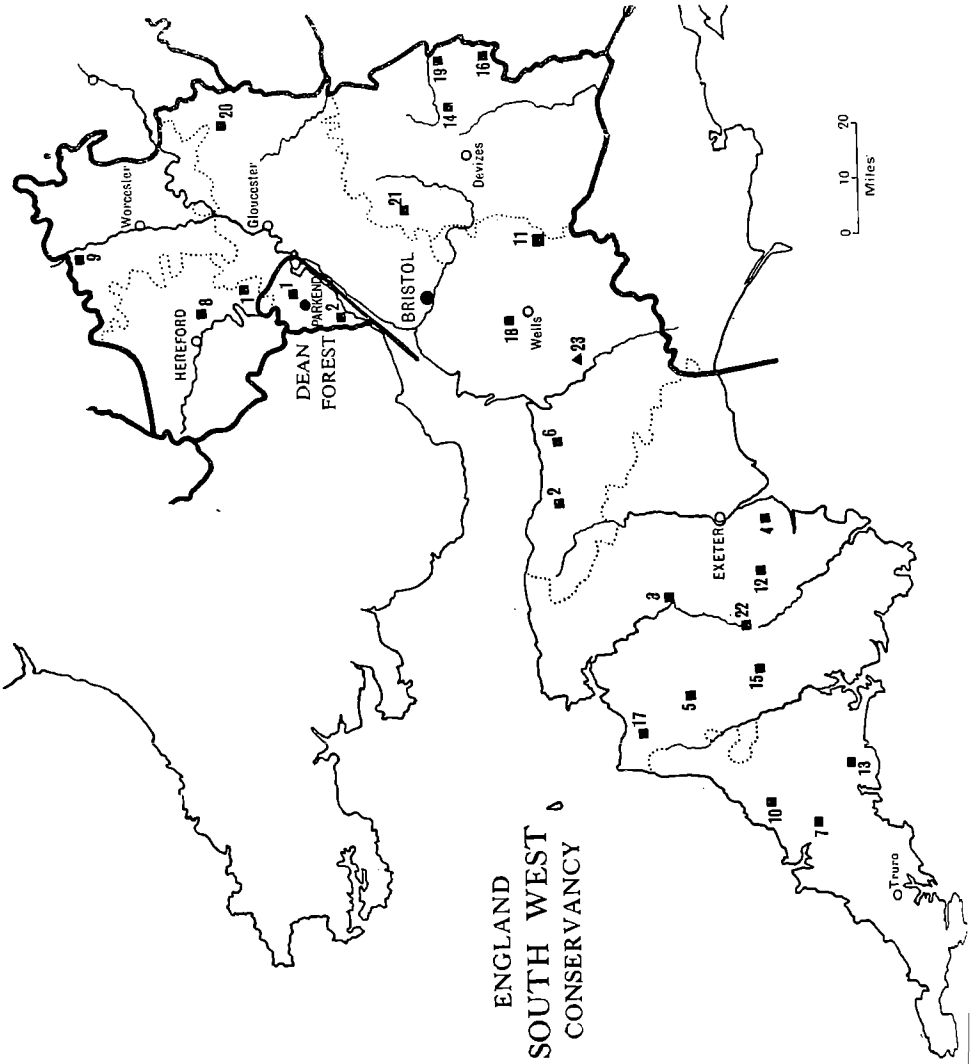
*Conservator's Office* : Danesfield, Grange Road, Woking

- |                                    |                        |
|------------------------------------|------------------------|
| 1. Alice Holt, Hants*              | 12. Challock, Kent     |
| 2. Bere, Hants*                    | 13. Goodwood, Sussex   |
| 3. Woolmer, Hants*                 | 14. Vinehall, Sussex   |
| 4. Bedgebury, Kent and Sussex*     | 15. Gravetye, Sussex   |
| 5. Bramshill, Berks and Hants      | 16. Marden, Sussex     |
| 6. Chiddingfold, Surrey and Sussex | 17. Arundel, Sussex    |
| 7. Lyminge, Kent                   | 18. Orlestone, Kent    |
| 8. Friston, Sussex                 | 19. Alton, Hants       |
| 9. Micheldever, Hants              | 20. Andover, Hants     |
| 10. Buriton, Hants and Sussex      | 21. Southwater, Sussex |
| 11. Westbury, Hants                |                        |

### NEW FOREST

*Deputy Surveyor's Office* : The King's House, Lyndhurst

- |                               |                                 |
|-------------------------------|---------------------------------|
| 1. New Forest, Hants*         | 7. Combley, Isle of Wight       |
| 2. Parkhurst, Isle of Wight*  | 8. Gardiner, Dorset and Wilts   |
| 3. Wareham, Dorset            | 9. Osborne, Isle of Wight       |
| 4. Ringwood, Dorset and Hants | 10. Charmouth, Devon and Dorset |
| 5. Ferndown, Dorset           | 11. Shalfleet, Isle of Wight    |
| 6. Brighstone, Isle of Wight  |                                 |



## SOUTH WEST CONSERVANCY

### *Conservator's Office :*

9. Downfield Road, Bristol, 8

1. Dymock\*, Gloucester and Hereford
2. Brendon, Somerset
3. Eggesford, 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 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
22. Okehampton, Devon
23. Neroche, Somerset

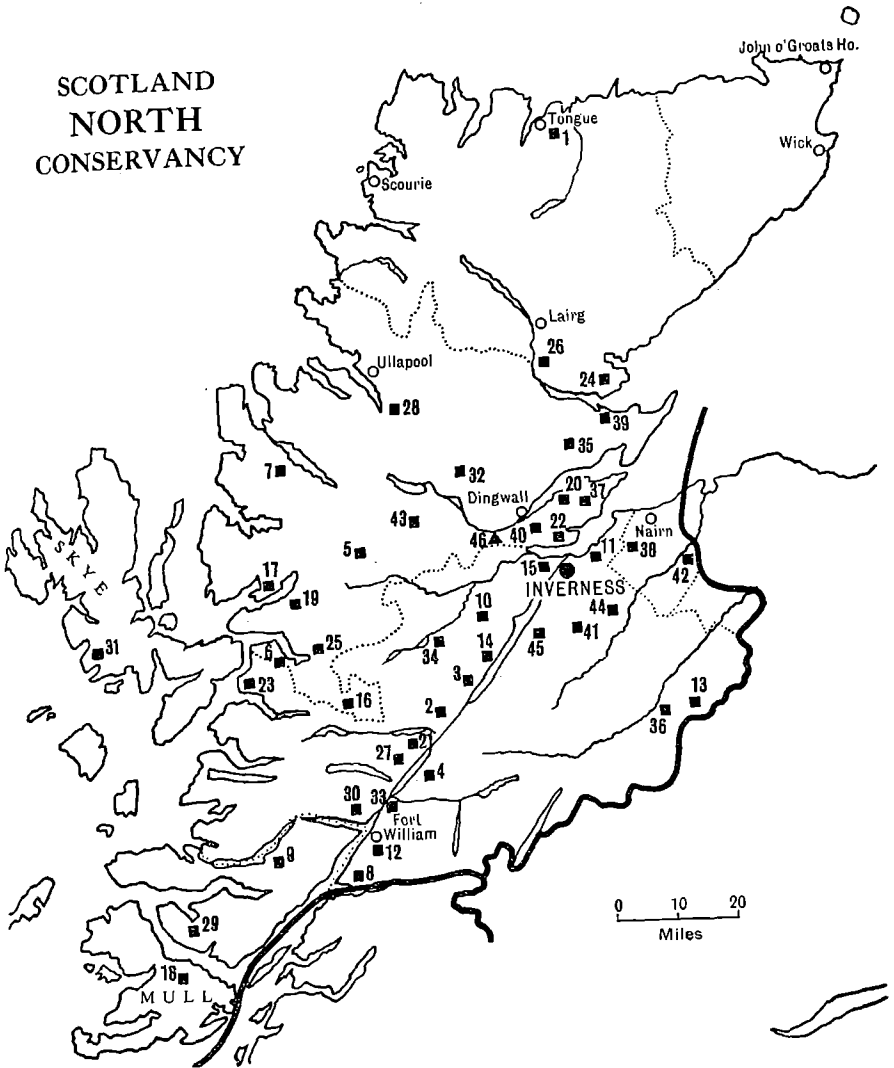
### DEAN FOREST

#### *Deputy Surveyor's Office :*

Whitemead Park, Parkend, nr. Lydney

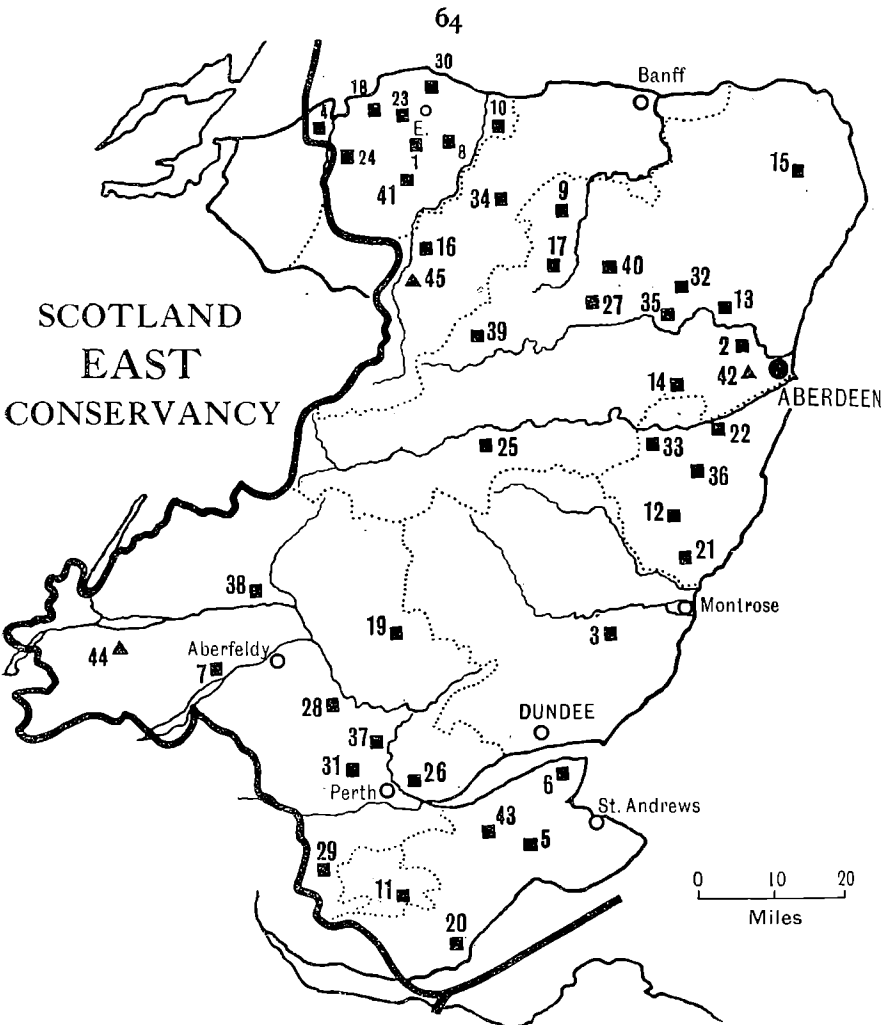
1. Dean Forest\*, Gloucester, Hereford, and Monmouth
2. Tidenham Chase, Gloucester

# SCOTLAND NORTH CONSERVANCY



Conservator's Office : 53, Church Street, Inverness

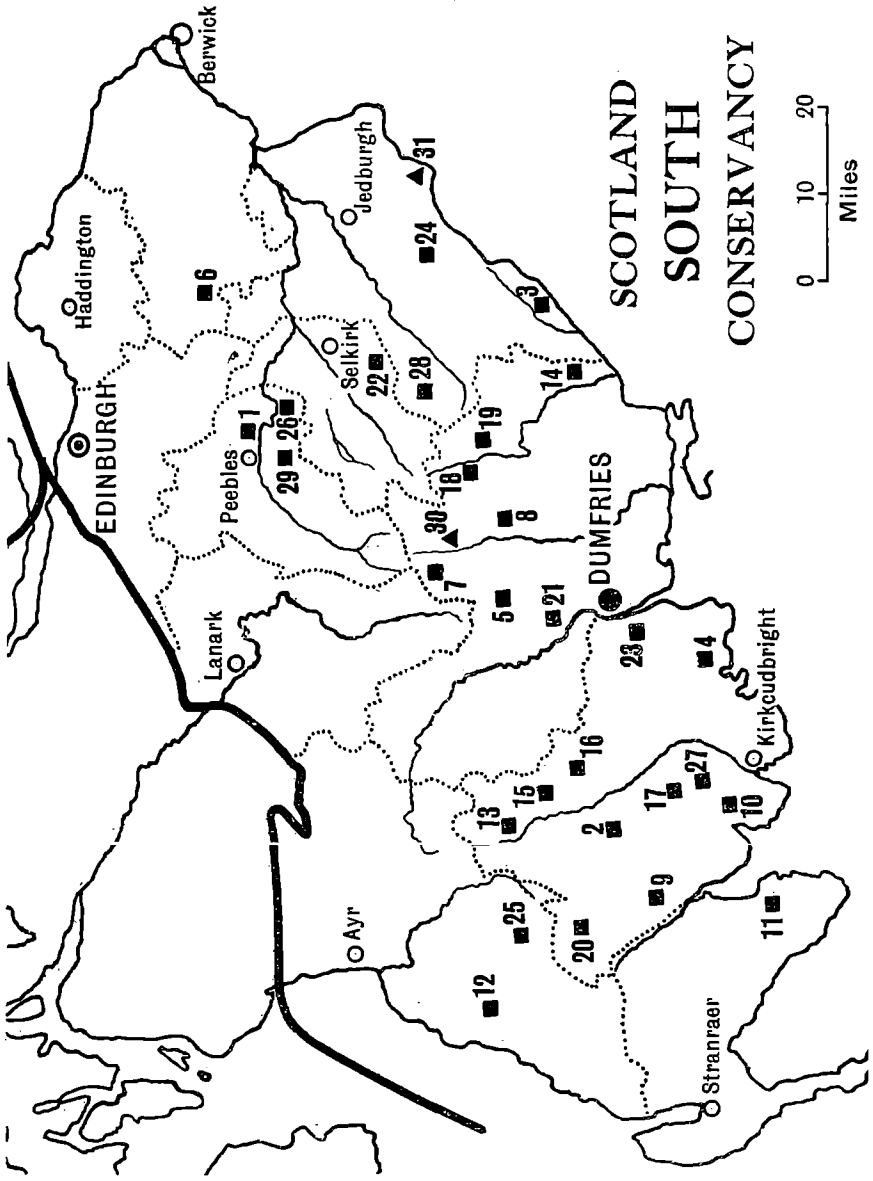
- |                                   |                                |
|-----------------------------------|--------------------------------|
| 1. Borgie, Sutherland             | 24. Dornoch, Sutherland        |
| 2. Inchnacardoch, Inverness       | 25. Inverinate, Ross           |
| 3. Portclair, Inverness           | 26. Balblair, Sutherland       |
| 4. South Laggan, Inverness        | 27. Clunes, Inverness          |
| 5. Achnashellach, Ross            | 28. Lael, Ross                 |
| 6. Ratagan, Inverness and Ross    | 29. Fiumary, Argyll            |
| 7. Slattadale, Ross               | 30. Glen Loy, Inverness        |
| 8. Glen Righ, Inverness           | 31. Glen Brittle, Isle of Skye |
| 9. Glen Hurich, Argyll            | 32. Longart, Ross              |
| 10. Glen Urquhart, Inverness      | 33. Leanachan, Inverness       |
| 11. Culloden, Inverness           | 34. Guisachan, Inverness       |
| 12. Nevis, Inverness              | 35. Ardrross, Ross             |
| 13. The Queen's Forest, Inverness | 36. Inshriach, Inverness       |
| 14. Craig nan Eun, Inverness      | 37. Millbuie, Ross             |
| 15. Craig Phadrig, Inverness      | 38. Assich, Nairn              |
| 16. Glen Shiel, Ross              | 39. Morangie, Ross             |
| 17. North Strome, Ross            | 40. Kilcoy, Ross               |
| 18. Salen, Isle of Mull           | 41. Strath Nairn, Inverness    |
| 19. South Strome, Ross            | 42. Ferness, Nairn             |
| 20. Findon, Ross                  | 43. Strath Conon, Ross         |
| 21. Glen Garry, Inverness         | 44. Strath Dearn, Inverness    |
| 22. Kessoek, Ross                 | 45. Farigaig, Inverness        |
| 23. Eilanreach, Inverness         | 46. Urray, Ross                |



*Conservator's Office : 12, North Silver Street, Aberdeen*

- |                                 |                            |
|---------------------------------|----------------------------|
| 1. Monaughty, Moray             | 24. Newtyle, Moray         |
| 2. Kirkhill, Aberdeen           | 25. Alltcaillach, Aberdeen |
| 3. Montreathmont, Angus         | 26. Kinfauns, Perth        |
| 4. Culbin, Moray and Nairn      | 27. Whitehaugh, Aberdeen   |
| 5. Edensmuir, Fife              | 28. Craig Vinean, Perth    |
| 6. Tentsmuir, Fife              | 29. Glen Devon, Perth      |
| 7. Drummond Hill, Perth         | 30. Lossie, Moray          |
| 8. Teindland, Moray             | 31. Keillour, Perth        |
| 9. The Bin, Aberdeen            | 32. Tilliefour, Aberdeen   |
| 10. Speymouth, Moray            | 33. Blackhall, Kincardine  |
| 11. Blairadam, Fife and Kinross | 34. Rosarie, Banff         |
| 12. Drumtochty, Kincardine      | 35. Pitfichie, Aberdeen    |
| 13. Kemnay, Aberdeen            | 36. Fetteresso, Kincardine |
| 14. Midmar, Aberdeen            | 37. Strathord, Perth       |
| 15. Deer, Aberdeen              | 38. Allean, Perth          |
| 16. Scootmore, Moray            | 39. Auchernach, Aberdeen   |
| 17. Clashindarroch, Aberdeen    | 40. Gartly Moor, Aberdeen  |
| 18. Roseisle, Moray             | 41. Dallas, Moray          |
| 19. Blackcraig, Perth           | 42. Countesswells Aberdeen |
| 20. Carden, Fife                | 43. Pitmedden, Fife        |
| 21. Inglismaldie, Kincardine    | 44. Rannoch, Perth         |
| 22. Durriss, Kincardine         | 45. Tomintoul, Banff       |

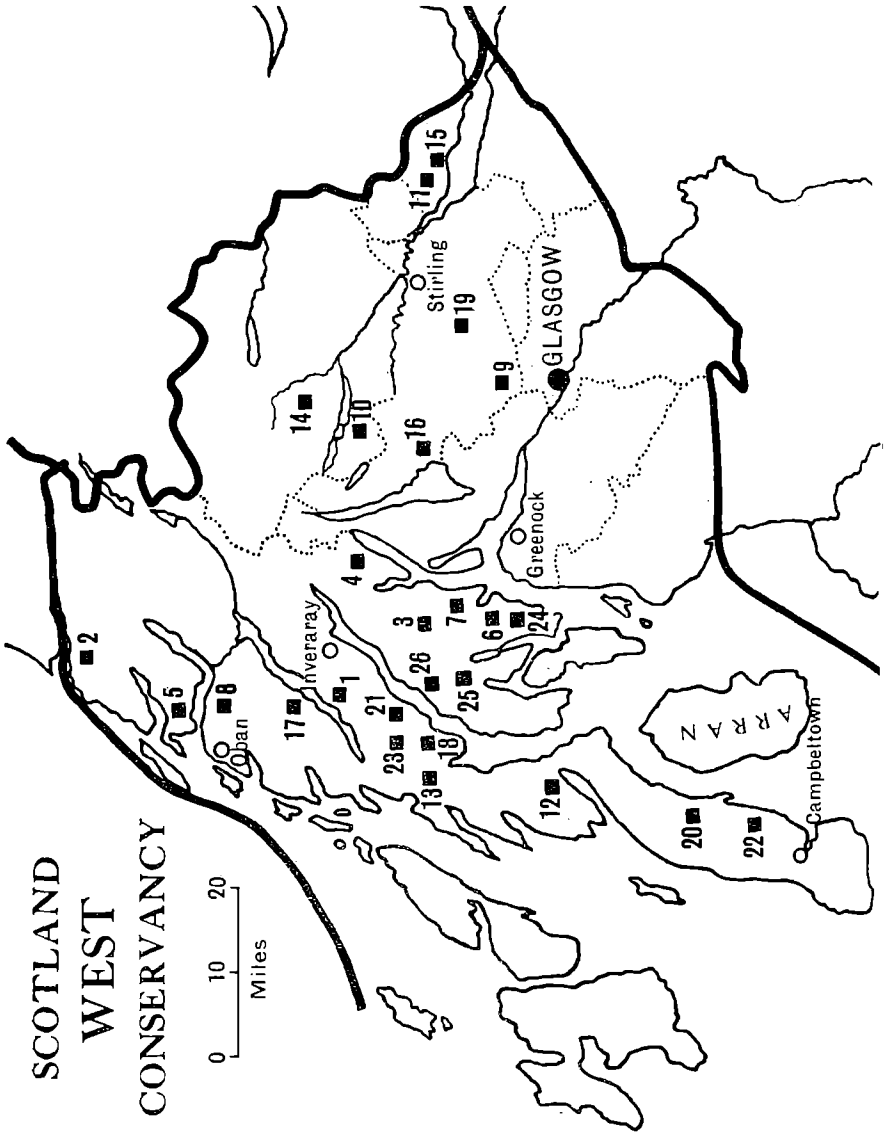
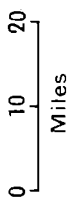




*Conservator's Office :*

- Greystone Park, Moffat Road,  
Dumfries
1. Glentress, Peebles
  2. Cairn Edward, Kirkcudbright
  3. Newcastleton, Roxburgh
  4. Dalbeattie, Kirkcudbright
  5. Forest of Ae, Dumfries
  6. Edgarhope, Berwick
  7. Greskine, Dumfries
  8. Auchenuroddan, Dumfries
  9. Kirroughtree, Kirkcudbright
  10. Fleet, Kirkcudbright
  11. Kilsture, Wigtown
  12. Change, Ayr
  13. Dundeugh, Kirkcudbright
  14. Tinnisburn, Dumfries and  
Roxburgh
  15. Corriedoo, Kirkcudbright
  16. Garcogo, 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, Ayr
  26. Eitbank, Peebles
  27. Glen Gap, Kirkcudbright
  28. Craik, Roxburgh
  29. Cardrona, Peebles
  30. Craigieburn, Dumfries
  31. Leithope, Roxburgh

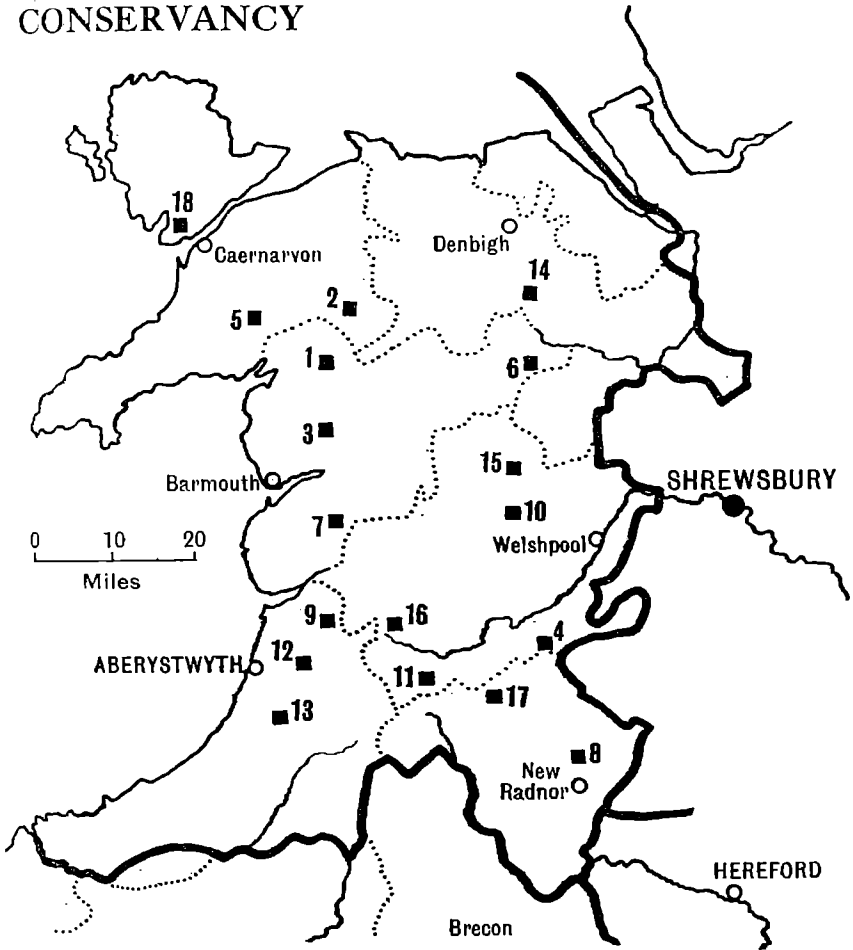
# SCOTLAND WEST CONSERVANCY



*Conservator's Office :*  
53; Bothwell Street, Glasgow, C.2

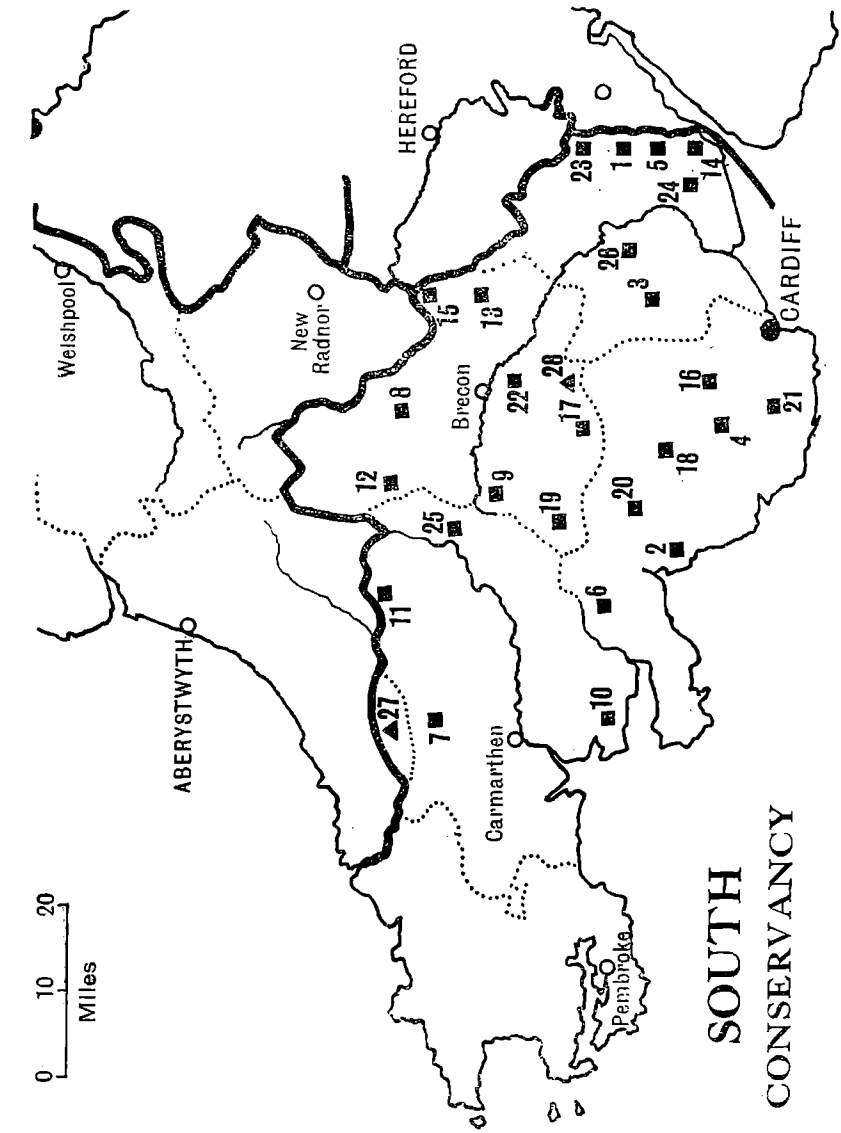
1. Inverliver, Argyll\*
2. Glen Duror, Argyll
3. Glen Branter, Argyll
4. Ardgartan, Argyll
5. Barcaldine, Argyll
6. Benmore, Argyll
7. Glen Finart, Argyll
8. Fearnoch, Argyll
9. Lennox, Stirling
10. Loch Ard, Perth
11. Devilla, Fife
12. Achaglachgach, Argyll
13. Knappdale, Argyll
14. Strathyre, Perth
15. 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

## WALES

NORTH  
CONSERVANCY

*Conservator's Office temporarily at : 35, Hills Lane, Shrewsbury*

- |                                    |                                      |
|------------------------------------|--------------------------------------|
| 1. Hafod Fawr, Merioneth*          | 10. Mathrafal, Montgomery            |
| 2. Gwydyr, Caernarvon and Denbigh  | 11. Tarenig, Cardigan and Montgomery |
| 3. Coed y Brenin, Merioneth        | 12. Bryn Mawr, Cardigan              |
| 4. Kerry, Montgomery               | 13. Myherin, Cardigan                |
| 5. Beddgelert, Caernarvon          | 14. Clocaenog, Denbigh and Merioneth |
| 6. Cynwyd, Merioneth               | 15. Dyfnant, Montgomery              |
| 7. Dovey, Merioneth and Montgomery | 16. Hafren, Montgomery               |
| 8. Radnor, Radnor                  | 17. Coed Sarnau, Radnor              |
| 9. Cwmeinion, Cardigan             | 18. Newborough, Anglesey             |



166, Newport Road, Cardiff

1. Tintern, Monmouth\*
2. Margam, Glamorgan
3. Llanover, Monmouth
4. Llantrisant, Glamorgan
5. Chepstow, Monmouth
6. Rheola, Glamorgan
7. Brechfa, Carmarthen
8. Brecon, Brecon
9. Glasfynydd, Brecon
10. Pembrey, Carmarthen
11. Caio, Carmarthen
12. Crychan, Brecon and Carmarthen
13. Mynydd Ddu, Brecon and Monmouth
14. Iton, Monmouth
15. Hay, Brecon and Hereford
16. St. Gwynno, Glamorgan
17. Coed y Rhaiaidr, Brecon
18. Cwmogwr, Glamorgan
19. Gidd, Brecon
20. Michaelston, Glamorgan
21. Tair Onen, Glamorgan
22. Usk, Brecon
23. Monmouth, Monmouth
24. Wentwood, Monmouth
25. Cilgwyn, Carmarthen
26. Goytre, Monmouth
27. Derry Ormond, Cardiff
28. Tat Ffechan, Brecon