FORESTRY COMMISSION

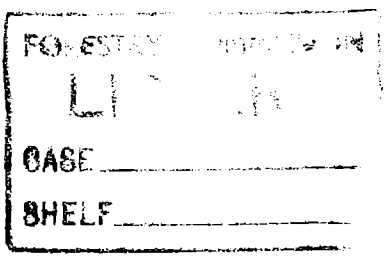
Thirty-Sixth Annual Report of the Forestry Commissioners

for the year ended

30th September 1955

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

Ordered by The House of Commons *to be Printed*
1st August 1956



LONDON
HER MAJESTY'S STATIONERY OFFICE
PRICE 4*s* 6*d* NET

FORESTRY COMMISSION,
25, SAVILE ROW,
LONDON, W.1.
11th April, 1956

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 36th Annual Report of the Forestry Commissioners covering the Forest Year ended 30th September 1955.

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

CONTENTS

THIRTY-SIXTH ANNUAL REPORT

OF THE

FORESTRY COMMISSIONERS

FOR THE YEAR ENDED

SEPTEMBER 30th 1955

GENERAL REVIEW

Planting and Acquisition of Land

The extent of the Commission's forests, including acquired plantations, now exceeds one million acres. It is of interest to record the passing of this milestone, but it must be recorded too that for the first time since the war the area planted was less than in the previous year. In Forest Year 1954, the area planted was 70,400 acres; in 1955 it was 67,900, a drop of 2,500 acres. A fall in the rate of planting was forecast by the Commissioners in their last report, and it is again their unwelcome duty to say that they can see no alternative but to accept a still lower figure as the target for next year. The reason is simply an insufficient flow of acquisitions of plantable land. The Commissioners emphasised this point strongly in their last report, and the picture is no better this year as the net area of land acquired for planting amounted to 61,100 acres only; this is 6,800 acres less than the area planted, and so the already inadequate reserve has been still further depleted.

Shortage of land is not a problem for private woodland owners; their difficulties are of another kind—shortage of labour, skilled staff and finance. It is pleasing to record that in spite of these difficulties the area planted on private estates, including an estimate of work done without grants, increased this year by 15 per cent., and amounted to 22,100 acres as compared with 19,100 acres and 18,200 acres in the two previous years.

During the year, 21,016 acres of private woodlands were licensed for clear felling. Conditions attached to felling licences, and the prescriptions in plans of operations on private estates, together provide for the replanting by private owners of 16,643 acres of this total, while 2,732 acres when felled will be acquired for replanting by the Commission.

In the Post War Forest Policy Report* published in 1943 the estimated progress of private planting was 25,000 acres per annum, and the Commission feel confident that the rate for private planting will continue to rise and will soon well exceed this figure.

Special Planting in the Highlands

The recommendations in respect of forestry in the Report of the Commission of Enquiry into Crofting Conditions were considered by the Government and a statement on planting in the crofting areas was made in the House of Commons on 14th July, 1955, by the Secretary of State for Scotland in the following terms :—

> "As Principal Sir Thomas Taylor stresses in his Report, forestry in the crofting areas is more and more seen to be of greater value and importance as an ancillary source of employment, additional to normal crofting activities.

* Report by the Commissioners on Post-War Forest Policy, 1943. Cmd. 6447.

The Government have, therefore, been considering what should be done with this end in view, and came to the conclusion that the Forestry Commission should be authorised to extend its activities in these areas even if this means, in some instances, planting on land which will give a smaller return than it normally looked for. I am accordingly asking the Commission to embark on a new scheme of planting in those areas and to aim at planting 25,000 to 35,000 acres there during the next ten years. This will, I hope, be of benefit in bringing additional employment where it is so much needed."

Special efforts to acquire more land in the crofting counties have been and are being made in conjunction with the Department of Agriculture for Scotland, and close liaison is being maintained with the Crofters Commission.

PRODUCTION AND USE OF HOME GROWN TIMBER

Production of sawn timber, both softwood and hardwood, was less than in the previous year. The diminishing pressure of Scottish windblow operations led to a substantial reduction in the level of production of sawn softwood and of softwood railway timbers. In England and Wales the production of hardwoods was lower; this may have been partly due to the lessening demand for railway wagon timbers.

Mining Timber.—The price agreements for home mining timber were reviewed during the year. The price for unpeeled pitwood sold by weight to the National Coal Board's South-western Division was increased from 1st January, 1955. The new free on transport prices, which run until 30th June, 1956, show a rise of 3s. 6d. and 7s. 6d. per ton respectively for softwoods (96s.) and laggings (77s. 6d.) compared with the prices for the previous twelve months: the limit on freight recoverable from the National Coal Board remains at 30s. per ton.

The prices in England and Wales for softwood round props sold on the 100 lineal feet basis also rose. The new prices, which run from the 1st July, 1955, until the 30th June, 1957, showed an increase equivalent to 3d. per cubic foot—from 4s. 7½d. free on transport to 4s. 10½d. free on transport—and the limit on recoverable freight was raised from 35s. to 38s. per ton.

In Scotland a new agreement with the National Coal Board covering supplies to the Scottish Division showed an increase equivalent to 3d. per cubic foot on props with a top diameter of from 2 to 4 inches and no change on the larger sizes: the agreement runs from 1st July, 1955, for two years for peeled props and for one year for unpeeled props. The prices, which are on a delivered basis, work out approximately as follows per cubic foot: top diameter 2 to 4 inches—peeled 5s. 6d., unpeeled 5s. 2d.; top diameter 4½ inches and over—peeled 5s. 9d., unpeeled 5s. 5d. The Scottish home timber merchants also reached agreement with the National Coal Board on prices for sawn mining timber for the Scottish pits for a period of two years A price for the overspill of sawn mining timber from Scotland to England has been agreed, and in England the Federated Home Timber Associations report that, after being without an agreement for hardwood sawn mining timber for a considerable period, prices have been arranged to run for twelve months from 1st October, 1955.

The quantity of home mining timber bought by the National Coal Board showed no substantial difference from the previous year. The effect of Scottish windblow production makes any valid analysis difficult, but it would appear that there was a slight increase in purchases of sawn mining

timber and a small drop in purchases of round mining timber. In the latter case an increase in Scotland more than offset a fall in England and Wales.

Utilisation.—The Weyroc chipboard factory at Annan, Dumfries-shire, referred to in last year's Report, was completed and fully commissioned by the end of the year. The Company (The Airscrew Company & Jicwood Ltd.) are vigorously tackling the problems concerned with continuity of supplies and plan to increase output in the near future, when the scale of supplies will have to be substantially increased. It is to be hoped that all those interested in the utilisation of forest material will co-operate in these efforts in view of the importance of enlarging outlets for home produce.

The hardwood pulping project which was also mentioned last year was taken a stage further. Satisfactory technical reports on the main timbers available—the tests were carried out for Wiggins Teape and Co. Ltd. at the Forest Products Laboratory in Madison, U.S.A.—led that firm to investigate, in detail, site and other factors. A decision by the firm to erect the pulpmill at Sudbrook, Monmouthshire, was taken during the year. An important aspect of the project is a continuing supply of suitable pulpwood at an economic price. The Commissioners consider this pulping project of such importance to the home forestry industry that they have agreed to enter into a long-term supply contract for approximately one-third of the mill's annual requirements of pulpwood. It is the Commissioners' intention to vary their supplies by agreement with the mill so as to ensure that the mill will be able to accept all suitable supplies from sources other than the Commission and also that the mill has an adequate operating stock.

Interest continued in the possibility of erecting plant for pulping home-grown softwood and a decision was taken by The Bowater Paper Corporation Limited to go ahead with a project at Ellesmere Port for the production of groundwood pulp. This plant will not, at any rate initially, be supplied entirely from home production ; as in the case of Bowaters' groundwood mill at Sittingbourne, it will be necessary to use some imported pulpwood. The Commissioners have, after discussion with Bowaters, agreed to meet a proportion of the mill's needs over a term of years, in view of the desirability of establishing additional and alternative outlets for the increasing production of softwood thinnings, while keeping in mind at the same time the coal mining industry's timber needs.

The Commissioners' interest in pulping of home timber led them to recommend an investigation into small scale pulping developments in Europe and elsewhere. During the year the European Productivity Agency of the Organisation for European Economic Co-operation approved such an investigation, which will be undertaken by an eminent Canadian expert.

By the end of the year the Commission had almost completed new five-year estimates of softwood thinning production for all their forests ; it is proposed to revise annually these short-term estimates, which are based on the individual forest thinning plans, so that the probable thinning out-turns will always be known for five years ahead. Progress was also made with longer-term forecasts covering softwood thinning production both from private woodlands and from Commission forests in ten and twenty years' time. The long-term forecasts, which are essential to the rational development of utilisation and of markets, will be revised every five years.

Mention has been made in previous Reports of the saw-milling company operating at Strachur, Argyll, on the conversion and treatment of small-sized coniferous timber. The mill is now in full production and its products are finding a ready sale in the casewood, house carcassing and related markets.

The organisation of the mill is not yet complete in all respects but the Commissioners are satisfied with the progress which has been made and are obtaining useful information about the conversion and treatment of small-sized coniferous timber.

STATISTICAL SUMMARY OF FORESTRY COMMISSION OPERATIONS

Table 1

FOREST YEAR 1954		FOREST YEAR 1955
Great Britain ... 77,100	Plantable land acquired	Great Britain ... 61,100
England 21,000	(acres)	England 21,900
Scotland 39,000		Scotland 20,500
Wales 17,100		Wales 18,700
Great Britain ... 70,400	Total area planted	Great Britain ... 67,900
England 23,000	(acres)	England 21,200
Scotland 34,300		Scotland 34,000
Wales 13,100		Wales 12,700
Great Britain ... 43,000	Afforested	Great Britain ... 40,900
England 11,700	(acres)	England 9,900
Scotland 23,400		Scotland 23,200
Wales 7,900		Wales 7,800
Great Britain ... 27,400	Replanted	Great Britain ... 27,000
England 11,300	(acres)	England 11,300
Scotland 10,900		Scotland 10,800
Wales 5,200		Wales 4,900
Great Britain ... 36,500	Area Thinned	Great Britain ... 39,500
England 21,300	(acres)	England 22,500
Scotland 10,000		Scotland 11,800
Wales 5,200		Wales 5,200
Great Britain ... 272	Houses built	Great Britain ... 176
England 122	(number)	England 74
Scotland 108		Scotland 79
Wales 42		Wales 23
Great Britain ... 277	Motorable Roads constructed	Great Britain ... 338
England 73		England 104
Scotland 160	(miles)	Scotland 181
Wales ... 44		Wales 53

WORK STUDY IN FORESTRY OPERATIONS

Work Study has long been employed in industrial management under various names and forms as a means of improving efficiency and increasing productivity. Its uses in agriculture and forestry, which are subject to a wide range of natural and therefore largely uncontrollable factors such as terrain and climate, have not as yet been fully explored : in forestry, although a good deal of very successful pioneer work has been done abroad—principally in Europe —in the study of logging techniques, there is scope for investigation in almost the whole field of operations from nursery work onwards. During the year

under review the Forestry Commission began to investigate possible applications of Work Study to its own operations. The advice of the British Productivity Council and of a number of European experts was of great value and is acknowledged with thanks.

A pilot survey of thinning operations at two typical forests was undertaken by a firm of work study consultants who at the same time were commissioned to look at and report on the organisation of mechanical maintenance in one of the Directorates. It was also decided to arrange for two District Officers to be trained in Work Study technique as the nucleus of a specialist team, and to initiate studies on the scientific selection of the tools and equipment best suited to specific jobs and conditions. At a later stage, when preliminary research has pointed out the lines of future approach, consideration will be given to starting training courses for forest workers in the use of any new and untraditional techniques or equipment which may be evolved.

Much detailed research remains to be carried out before the Commission can commit itself to introducing work study extensively but the first indications suggest that the intelligent application of its principles may appreciably increase the efficiency of many operations.

Private Forestry

DEDICATION

The amended forms of Dedication Deed were finally agreed by the United Kingdom Forestry Committee, and the draft of a booklet describing them was under consideration by the Committee. Despite the continued uncertainty among private owners about the new form of Deed, the total area dedicated rose from 342,600 acres to 410,300 acres during the year.

GRANTS

No change was made during the year in the amount of the grants available to owners of Dedicated Woodlands which remained at £15 per acre for planting and 5s. per acre per annum for maintenance of productive woodlands. In consequence, the planting grants available to owners of Approved Woodlands and Small Woods remained at £7 10s. per acre and £15 per acre respectively. Scrub Clearance and Thinning Grants also remained unchanged.

The number of estates managed according to a Plan of Operations approved by the Commissioners (other than under dedication schemes) rose from 146, covering 44,400 acres, to 268, covering 82,900 acres.

CO-OPERATIVE FORESTRY SOCIETIES

The policy of the Forestry Commissioners towards the formation of Co-operative Societies and their willingness to assist such Societies in the formative years is well known, but there has been a lull in the year under review and no new Societies have been formed. The older established Societies in England and Scotland are well settled, but in Wales one Society—the Dolgelly Woodlands Association—has had to cease activities.

THE FELLING QUOTA

The position in Scotland with regard to the clearance of timber blown in the January, 1953, gales was satisfactory, and the Commissioners, after consultation with the Home Grown Timber Advisory Committee, decided to restore general licensing under the quota in Scotland. This was done gradually in order not to prejudice the clearance of the balance of the windblown timber.

It was also decided not to re-introduce the special allowance of two million cubic feet of hardwood in respect of hedgerow and over-mature trees, but to allow a measure of elasticity in the actual quota figure. The definition of hardwoods for which a felling licence would not be granted was also relaxed in order to allow a proportion of better quality timber to be included in e.g. selection fellings.

The quotas were fixed as follows:—

	Thousands of cubic feet			
	England	*Scotland*	*Wales*	*Total*
Coniferous	2,210	4,225	465	6,900
Broadleaved	18,900	4,400	2,700	26,000

LICENSING

The number of applications for felling licences was slightly greater than in the previous year, and licences were issued for 97 per cent. and 82 per cent. of the quotas for coniferous and broadleaved timbers respectively.

Of the 7,532 applications received, including 507 brought forward, more than 72 per cent. were in respect of felling in England. The number of licences issued was 6,643, an increase of 257 over the total for the previous year: applications voluntarily withdrawn totalled 244, and of the 77 refusal notices issued 23 were accompanied by licences for part of the desired felling. At the end of the year 539 applications were awaiting decision.

It was necessary to consult the local planning authorities on only about 18 per cent. of the applications received, compared with 20 per cent. last year, and 58 applications were referred to them to be dealt with as if they were applications under the relevant Tree Preservation Orders. One case of dispute was referred to the Minister of Housing and Local Government under Section 13 (2) of the Forestry Act, 1951.

Conditions requiring the restocking and maintenance of the areas felled were attached to 1,457 licences covering 14,125 acres. A further 320 felling licences were issued in respect of dedicated estates and the 2,518 acres so covered will be replanted under the Plans of Operations in force. Only one case arose in which a Reference Committee was appointed to consider a complaint against the imposition of replanting conditions.

During the year legal proceedings were instituted in six cases for offences under the Forestry Act, 1951; three of these were in England, two in Scotland and one in Wales. All were successful and fines were imposed varying from £5 to £100.

Committee on Marketing of Woodland Produce

During the year under report the Committee held eight meetings, extending over seventeen days, to consider written evidence and hear witnesses. It is hoped that the Committee will report to the Commissioners in the early part of 1956.

Home Grown Timber Advisory Committee

Regular meetings of the Home Grown Timber Advisory Committee were held in October, 1954, and January, April and July, 1955. Normal business in connection with the Forestry Act, 1951, including the felling quota for the year to 30th September, 1956, was carried out. In addition the meetings provided the welcome opportunity for frank discussion on a number of other matters affecting private forestry and the home-grown timber trade.

Committee on Hedgerow and Farm Timber

In July, 1955, Lord Merthyr, the Chairman of the Committee on Hedgerow and Farm Timber, submitted the Report of the Committee to the Commissioners. This Committee, set up in January, 1953, has held 21 meetings and has heard evidence and considered memoranda from a number of organisations and individuals; visits were also made to districts of special interest in England, Scotland and Wales. At the end of the year the report was under consideration by the Commissioners.

Forest of Dean Committee

The Commissioners have appointed a Committee, similar to the New Forest Committee* of 1946, to review problems associated with grazing rights and other interests in the Forest of Dean.

The Committee was appointed on 20th June, 1955, under the Chairmanship of Sir Thomas Creed (Principal of Queen Mary College, University of London) with the following terms of reference :—

> "To review the situation in the Forest of Dean and, having regard to all existing rights and interests, to recommend such measures as they consider desirable and necessary to secure that the administration of the Forest, more particularly as regards the grazing of animals, may be adjusted to modern requirements."

The other members of the Committee are Mr. Francis Peter (a Governor of the Royal Agricultural College), Mr. W. H. Guillebaud (late Deputy Director General of the Forestry Commission) and Mr. G. Langley-Taylor (Vice Chairman of the Council for the Preservation of Rural England and a member of the New Forest Committee). The Secretary to the Committee is Mr. R. G. Sanzen-Baker (Deputy Surveyor of the Forest of Dean).

Wages and Conditions of Industrial Employees

The Forestry Commission Industrial and Trade Council had under consideration during the year claims for increased wages for the Commission's industrial employees, and an increase from 122s. to 129s. per week, with effect from the beginning of January, 1955, was negotiated in the minimum wage for adult male forestry workers, with proportionate increases for women and juveniles. Later in the year a claim was made for a further increase and as agreement was not reached by the Council, this matter was referred to the Industrial Court whose decision was not known at the close of the year under report.

The wages and conditions of service of forestry workers on private estates are regulated by the Agricultural Wages Boards who, early in 1955, also awarded increases which raised the minimum wage for adult males from 120s. to 127s. per week for workers in England and Wales and from 116s. to 124s. per week for workers in Scotland, with corresponding increases for women and juveniles.

Windblow in Scotland

The year under report saw the closing stages of the main task of clearing the timber blown down in the north-east and other parts of Scotland by the gale of January, 1953. The financial arrangements for assisting the movement of sawlogs to mills outside the gale-damaged area were extended from 31st December, 1954, to 31st March, 1955. Some 10 million cubic feet of sawlogs qualified for subsidy during the operation of this scheme. The

* See *Report of New Forest Committee*, 1947 (Cmd. 7245).

arrangement between the National Coal Board and the Forestry Commission for freight assistance for certain mining timbers from the windblow area, not required in Scotland, was extended from 31st March, 1955, to 30th June, and later, owing to railway transport difficulties, to 31st July. The volume of mining timber sent under this scheme to pits in England and Wales was equivalent to about 7 million cubic feet of roundwood. Thus altogether approximately one-third of the volume blown in the gales was helped on its way in one form or the other by Government assistance. The expenditure incurred on transport assistance during the year was £329,000 making a total of £738,000 up to 30th September, 1955.

While the main task was virtually completed by the end of September there still remained the aftermath of the storm: on many areas scattered trees and fragments of plantations left by the gale require to be cleared; fences and ditches need attention; and in places uprooted stumps may have to be dealt with. There also remains the legacy of bark beetles and weevils which have found considerable scope for breeding in the fallen material and in stumps. Crown damage to adjacent pine plantations by the pine shoot beetle (*Myelophilus piniperda*) has been common and in two forests breeding has commenced in standing stems. A mass emergence of pine weevils (*Hylobius abietis*) took place in most areas during the summer, their numbers being swelled by broods which failed to emerge in the cold summer of 1954. It is thought that 1955 has probably seen the peak of emergence of the pine weevil, and observations of a decrease in breeding support this. The *Hylastes* beetle, however, appears still to be on the increase and it is possible that this pest may outlast the others. Replanting in most areas must still be considered liable to damage until at least 1958.

In addition to the above pests on pines, *Ips cembrae,* a larch bark beetle new to this country, has been reported from a number of forests, mainly in Morayshire; so far, however, it has not been found breeding in standing trees. *Ips cembrae* on occasion does considerable damage to plantations in dry regions on the Continent.

It is satisfactory to be able to report that the initial co-operation among private woodland owners, the timber trade and the Forestry Commission, continued throughout the period of clearance, though inevitably differences of opinion arose on occasions. It is to the credit of all concerned in windblow operations, including the National Coal Board and the British Transport Commission, the former of whom provided the biggest single outlet for windblow production, that clearance was effected in little more than the time originally set: and further, that the amount of deterioration, due to decay, was less significant than might reasonably have been expected. The fact that virtually all the blown timber that could have been classed as marketable before the blow did in fact find a market is evidence of the effectiveness of the efforts of all concerned.

Grey Squirrels

Although there has been no slackening of effort in the campaign to exterminate the grey squirrel, the number destroyed was only 236,000, as compared with 406,000 in the previous year. This decline is believed to be due, in part, to natural causes, including the cold and inclement weather during the 1955 spring breeding season, a poor mast or seed crop in the autumn of 1954 and heavy attack by predatory animals which, owing to myxomatosis, could no longer find rabbits. Nevertheless, the all-out attacks on this pest of woodland and orchard, which have been in progress for 3½ years, may now be causing a general decline in its numbers. Although

it has now spread to most counties of England and Wales, no kills were recorded in the four northern counties of Northumberland, Cumberland, Westmorland and Lancashire, the two eastern counties of Norfolk and Suffolk, or in Anglesey, Caernarvon, or Cardigan. In Scotland, the grey squirrel is still only found in a narrow belt of country across the Central Lowlands.

The two Committees (one in England and Wales and the other in Scotland) studying the grey squirrel problem were active during the year; and the bonus scheme, whereby 1s. is paid for the tail of each squirrel destroyed, was continued. A revised version of the free pamphlet *Traps for Grey Squirrels* was issued. Research into the life history of the grey squirrel was continued in co-operation with the Ministry of Agriculture, Fisheries and Food.

Myxomatosis

The rabbit has long been recognised as the most serious animal pest of forest trees, and the possibility that the myxomatosis disease might effectively reduce its numbers has therefore attracted much attention among foresters. Since this disease was first confirmed in Kent in 1953, it has spread to every county of England and Wales, and also to most parts of Scotland. Close liaison has been maintained by the Commission with the Ministry of Agriculture, Fisheries and Food.

Rabbits have been closely controlled, and in fact virtually exterminated, in the Commission's own woodlands. It is hoped that owners and occupiers of land everywhere will join wholeheartedly in the extermination of the few surviving rabbits, and so prevent any resurgence of the rabbit population: the Commission, for its part, is glad to co-operate with its neighbours in any scheme directed to this end.

Agreement with Council for the Preservation of Rural England on Afforestation in the Lake District

The agreement made in 1936 between the Forestry Commission and the Council for the Preservation of Rural England was revised during the year so as to permit a limited amount of additional planting by the Commission in the Lake District. In 1936 the Forestry Commission undertook not to acquire land for afforestation within a prescribed area of roughly 300 square miles of the Lake District, and to consult the Council for the Preservation of Rural England about planting proposals in areas to the south and south-west of it. The object of this agreement was to preserve the characteristic beauty of the central Lake District, with its traditional hardwood trees. Latterly, however, new legislation had placed on the Forestry Commissioners responsibility for establishing and maintaining adequate reserves of growing trees, and at the same time it had become clear that because of changed economic conditions some private owners could no longer afford to maintain or replant their woodlands, which would become derelict if the Commission were not permitted to acquire them. It has therefore been agreed, after discussion with the Council for the Preservation of Rural England, that in future the Commission will not be absolutely debarred from acquiring and planting land within the prescribed area, provided that it was under timber trees in 1936 and that the Council is consulted before acquisition. It has also been agreed that the original object of maintaining the hardwood character of the Lake District woodlands will still be pursued in the Commission's treatment of any land so acquired; it is acknowledged, however, that to achieve this object some temporary softwood planting may occasionally be necessary. The revised agreement, which was arrived at

after consultation by the Council with the Lake District Planning Board, the Nature Conservancy and the National Parks Commission, leaves unchanged the arrangements for consulting the Council about planting in the areas to the south and south-west, and re-affirms that in the prescribed area the Forestry Commission will not acquire any land which was not under timber trees in 1936.

Conferences and Visits Abroad

In November, 1954, Sir Henry Beresford-Peirse, Deputy Director General, and Mr. J. A. B. Macdonald, Conservator for South Scotland, attended the Seventh Session of the European Forestry Commission of the Food and Agriculture Organisation of the United Nations in Geneva. At the end of the Session Sir Henry Beresford-Peirse was elected Chairman of this Commission for 1955 and 1956.

In December, 1954, the Fourth World Forestry Congress met at Dehra Dun, India. The United Kingdom delegation was led by Mr. A. P. F. Hamilton, Forestry Commissioner, and included Sir Henry Beresford-Peirse and two other Commission officers—Mr. G. J. L. Batters, a Conservator in the English Directorate, and Mr. M. V. Edwards, a Divisional Officer in the Research Branch. Forestry Commission officers contributed eight papers to the various sections of the Congress, which had as its main themes the present status of forest management in the world, the utilisation of forest products, the protective and productive functions of the forest and the special problems of tropical forestry. Special thanks are due to the officers of the Indian Forest Service whose untiring efforts did so much to make the Congress an interesting and noteworthy occasion for foresters from all over the world.

At the invitation of the French Government a party including the Earl of Radnor, Chairman of the Forestry Commission, Sir Arthur Gosling, Director General, Major D. C. Bowser, Forestry Commissioner and immediate past President of the Royal Scottish Forestry Society, and Mr. C. M. Floyd, President of the Royal Forestry Society of England and Wales and a member of the Forestry Commission's National Committee for England, visited some of the forest areas in the vicinity of Paris. The party enjoyed a most instructive tour and greatly appreciated the courtesy extended to them both by officials of the French Government and private landowners whose forests they visited.

The United Kingdom was represented by Mr. T. R. Peace, a Divisional Officer in the Research Branch, at the Eighth Session of the International Poplar Commission which was held in Madrid in April, 1955.

Mr. James Macdonald, Director of Research and Education, attended a meeting of the International Union of Forest Research Organisations at Stockholm in September, 1955.

The annual meeting of the British Association for the Advancement of Science was held in Bristol in September, 1955. Contributions to the deliberations of the Forestry Sub-Section were made by Mr. A. H. Popert, Conservator for South West England, and by Mr. J. R. Aaron, a District Officer on the staff of the Director of Research and Education. Excursions made by the Sub-Section included a visit to the Forest of Dean.

A Nuffield Foundation Fellowship for the study of management and utilisation of conifer plantations in Commonwealth countries and in Germany, Denmark and Belgium was awarded to Mr. M. J. Penistan, one of the Commission's Divisional Officers.

Obituary

The Commissioners have to record with deep regret the death of Lord Courthope on 2nd September, 1955. Lord Courthope was appointed Chairman of the Forestry Commission's Consultative Committee for England in 1919 and held that office until his appointment as a Forestry Commissioner in 1927. He served on the Commission until 1948 and from 1928 to 1945 was the official spokesman of the Forestry Commission in the House of Commons. Lord Courthope had held several distinguished offices in the world of Forestry, being successively Chairman of the English Forestry Association (1916–1921); of the Royal English Arboricultural Society (1918–1920) and of the Empire Forestry Association (1923–1924). His deep interest in British forestry and his close knowledge of its special problems were assets which will be greatly missed.

The Commissioners also have to record with regret the death of Mr. A. G. Herbert who was Secretary of the Commission from its inception in 1919 until his retirement at the end of 1945. It is believed that Mr. Herbert attended every meeting of the Commission while he held office, and to that remarkable record must be added his invaluable services during the Commission's formative years and in the later difficulties of war-time.

SUMMARY OF THE YEAR'S WORK

The weather during the closing months of 1954 was wet and stormy, particularly in the western half of the country, and greatly hindered planting and nursery work; conditions worsened in January and February when frost and snow over most of the country prevented these operations getting under way till mid March, causing them to be carried on undesirably late into the year. A dry April brought the usual spring fire danger period; May and June were cool and changeable, while July, August and September brought drought or near drought conditions and fire danger to most parts of the country. Losses from fire were light, however, and in general, growth in nurseries and in plantations was about the normal.

The Forestry Fund. Payments and receipts for the forest years ended 30th September, 1954 and 1955, were:

	1954	1955
	£	£
Payments	10,373,211	11,053,705
Receipts ...	2,507,941	2,658,827

The amount paid into the Forestry Fund from Parliamentary Votes during the forest year ended 30th September, 1955, was £8,473,000, made up of £4,073,000 from the Vote for the financial year ended 31st March, 1955, and £4,400,000 from the Vote for the financial year ending 31st March, 1956 (page 25).

Land Acquired. The net area of plantable land acquired during the year was 61,076 acres, comprising 29,821 acres of bare land, 26,925 acres of felled or devastated woodlands and 4,330 acres of standing woods (Table 6, page 29).

The total area of land at 30th September, 1955, acquired through the Forestry Fund, under the Forestry (Transfer of Woods) Act, 1923, and by gifts, was 2,102,300 acres. This comprised 1,317,800 acres classed as "Forest Land", which is either already planted or will be planted in due course, and 784,500 acres of "Other Land" which includes nurseries, rough grazing and agricultural land, and also other land unsuitable for tree planting. The areas of these categories in England, Scotland and Wales are given in Table 3, page 27.

New Forests. Twenty-three new forests, two being formerly parts of older forests, were constituted during the year; 14 in England; 4 in Scotland; 5 in Wales. (Table 5, page 28.)

Forest Nurseries. The area in use as forest nurseries was 2,131 acres. Seed sown during the year was 33,497 lb. of broadleaved seed and 16,350 lb. of conifer seed. Stocks of forest trees in nurseries totalled 439 million, 276 million being seedlings and 163 million being transplants (pages 31 to 38).

Forestry Commission Planting. The area planted during the year was 67,906 acres; a reduction of 2,531 acres compared with last year's record figure of 70,437 acres. The number of trees used for new planting and for replacing failures in recently planted areas was 118·4 million (pages 38 to 40).

Forest Protection. Fires in or threatening Forestry Commission plantations totalled 2,834, of which 92 per cent. were extinguished before causing damage to plantations. The area of plantations burned was 276 acres, the assessed damage including the cost of extinguishing being £19,000 (page 40).

As a result of the spread of myxomatosis the number of rabbits destroyed dropped to 154,000 as compared with 292,000 in the previous year, while the number of hares taken increased from 13,000 to 17,000. Grey squirrels

were less numerous; 23,400 only were destroyed in the Commission's forests as against 43,900 last year. The number of foxes killed annually continues to increase; 5,900 in the present year, 3,500 and 4,600 in 1953 and 1954 respectively (page 42).

Preparation and Sale of Produce

Thinning and Clear Felling. Thinnings were made in 39,542 acres of young plantations. The area clear felled was 6,985 acres of which 4,671 acres consisted of scrub or devastated woodlands and 715 acres were coppice or coppice with standards (page 42).

Disposal of Forest Products. Disposals during the year comprised: Standing timber, including thinnings, 3·92 million cubic feet; round timber, including selected poles, 3·60 million cubic feet; mining timber, 3·56 million cubic feet; posts, stakes and unselected poles, 2·03 million cubic feet; pulpwood and boardmill, 1·33 million cubic feet; firewood, cordwood, etc., 1·80 million cubic feet. Gross income was £2,425,000; direct expenditure on felling, preparation and despatch of produce was £1,444,000 (pages 42 and 43).

Roads. Work was undertaken at 330 forests and 338 miles of motorable road were completed (page 44).

Housing. 176 houses for forest workmen and local supervisors were completed; a further 108 were in course of erection at the end of the year (page 45).

The Dedication Scheme. Dedication was completed by the owners of 143 estates covering 67,650 acres of woodlands; in addition Plans of Operations for 159 estates in respect of 48,111 acres of woodlands had been agreed for Dedication (page 47).

Approved Woodlands. 124 estates with 38,983 acres of woodlands were accepted as Approved Woodlands (page 48).

Planting on Private Estates. The extent of private planting is estimated at 22,100 acres of which 19,600 acres qualified for planting grants (page 48).

Licensing of Timber Felling. 6,643 licences were issued authorising the felling of 38,439,000 cubic feet of timber on private estates (page 50).

Research and Experiment. Research work on a wide variety of forestry problems has been continued at the Forest Research Station, Alice Holt Lodge, Farnham, Surrey, and in experimental areas in many of the Commission's forests and nurseries (page 51).

Grants for forest research in specific fields have been made to Universities and other Institutions (page 55).

Education. The Commission maintains five Forester Training Schools at which 109 men completed the two-year course; 78 took employment with the Commission, 2 with private owners, 7 in Colonial and Commonwealth Forest services, and 8 returned to posts under the Government of Northern Ireland; 14 took up other employment (page 56).

Publications. Eleven new publications were issued, and eighteen publications for sale and six free pamphlets were revised and reprinted (page 57).

Publicity and Public Relations. The public were kept informed of the work of the Commission through the usual channels. Press conferences and visits to forests were arranged; lectures to schools and other bodies were given by the Commission's officers who also contributed articles to journals with forestry interests. Exhibits were arranged at 15 major agricultural shows. Schemes under which schools may adopt forest plots and obtain gifts of forest trees for educational purposes were continued. Forestry was the subject of B.B.C. sound and television programmes (page 58).

ORGANISATION

THE FORESTRY COMMISSIONERS

Her Majesty the Queen approved the re-appointment of the Earl of Radnor, K.C.V.O., as Chairman of the Commissioners and the re-appointment as Commissioners of Mr. J. M. Bannerman, O.B.E., Lt. Col. Sir Richard Cotterell, Bt. and Mr. Lloyd O. Owen, J.P. These appointments are for a further period of three years. Approval was also given to the appointment as Commissioner of Major D. C. Bowser, O.B.E. in the place of Professor John Walton, F.R.S.E. who retired on completion of his term of office. This appointment is also for a term of three years.

The Commissioners at the close of the year were as follows:

The Earl of Radnor, K.C.V.O. (*Chairman*).
Mr. J. M. Bannerman, O.B.E.
Major D. C. Bowser, O.B.E.
Lt. Col. Sir Richard Cotterell, Bt., J.P.
Mr. A. P. F. Hamilton, C.I.E., O.B.E., M.C.
Mr. Stanley C. Longhurst, J.P.
Mr. John McNaughton, C.B.E.
Mr. Lloyd O. Owen, J.P.
Major John Stirling of Fairburn, M.B.E.
Mr. W. H. Vaughan, O.B.E., J.P.

Secretary to the Commissioners: Mr. H. A. Turner.

THE NATIONAL COMMITTEES

The National Committees for England, Scotland and Wales which are appointed by the Commissioners in accordance with Section 3 of the Forestry Act, 1945, met monthly throughout the year except in August.

The membership of these Committees as constituted at the end of the year is given below, the Chairman of the Forestry Commission being ex officio a member of each Committee. A number of changes have, however, taken place during the year. The Duke of Northumberland and Mr. C. M. Floyd were appointed to the Committee for England from which the Hon. James W. Best retired. The Committee for Scotland lost the services of Professor John Walton and Mr. J. Veitch who were replaced by Major D. C. Bowser and Mr. W. McGinniss. Mr. J. E. Lewis and Mr. C. S. Longhurst were appointed to the Committee for Wales from which Mr. David Lewis retired. These appointments are held for 3 years from 1st January, 1955, when the Committees were reappointed.

THE NATIONAL COMMITTEE FOR ENGLAND

Lt. Col. Sir Richard Cotterell, Bt. (*Chairman*), Mr. C. M. Floyd, Mr. A. P. F. Hamilton, The Earl of Listowel, Mr. S. C. Longhurst, The Duke of Northumberland.

Secretary to the Committee: Mr. E. S. J. Hinds.

THE NATIONAL COMMITTEE FOR SCOTLAND

Major John Stirling of Fairburn (*Chairman*), Mr. J. M. Bannerman, Major D. C. Bowser, Mr. John A. Cameron, The Earl Cawdor, Mr. W. McGinniss, Mr. John McNaughton.

Secretary to the Committee: Mr. F. C. Handford.

THE NATIONAL COMMITTEE FOR WALES

Mr. Lloyd O. Owen (*Chairman*), Major J. D. Gibson-Watt, Mr. A. P. F. Hamilton, Mr. J. E. Lewis, Mr. S. C. Longhurst, Dr. R. Phillips, Mr. W. H. Vaughan.

Secretary to the Committee : Mr. T. H. McGeorge.

THE REGIONAL ADVISORY COMMITTEES

Under the Forestry Act, 1951, Section 15, the Commissioners are required to maintain a Regional Advisory Committee for each Conservancy. Appointments to these committees expired in November, 1954, and new committees have been constituted for a further period to December, 1957. In re-constituting these committees the Commissioners have re-appointed most of the members so that continuity of action may be ensured, while at the same time introducing new members into each. All committees have met at intervals throughout the year.

The membership of these Committees at the end of the year is given below: —

ENGLAND

North-West.—Viscount Newport (*Chairman*), Alderman J. V. Allen, Mr. J. L. Benson, Mr. R. F. Dickinson, Mr. J. Edwards, Mr. K. H. Gough, Mr. G. R. Jacob, Mr. R. W. S. Thompson, Mr. C. J. Venables. *Secretary to the Committee :* Mr. J. Steele. The Committee met in November, 1954, and in March and July, 1955.

North-East.—Lord Bolton (*Chairman*), Professor J. S. Allen, Mr. R. H. B. Hammersley, Mr. W. P. Hedley, Mr. A. Kirkup, Jr., Mr. A. M. Leitch, Mr. R. Minto, Jr., Mr. R. Stanley, Mr. H. Wardale. *Secretary to the Committee :* Mr. L. A. Chaplin. Meetings were held in October and December, 1954, and June, 1955.

East.—Major Sir Richard G. Proby, Bt. (*Chairman*), Lt.-Col. M. E. St. J. Barne, Major R. L. Coke, Mr. A. V. Hilton, Mr. N. D. G. James, Mr. G. Oates, Mr. C. H. Thompson, Mr. R. B. Verney, The Earl of Yarborough. *Secretary to the Committee :* Mr. G. H. Clark. The Committee met in September, 1955.

South-East.—Mr. G. E. H. Palmer (*Chairman*), Mr. A. E. Aitkins, Lt.-Col. W. R. Burrell, Mr. G. E. H. Calvert, The Rt. Hon. Viscount Cowdray, Mr. A. L. F. Hills, Major J. M. Mills, Mr. W. H. Pearson, Major R. E. Whitaker. *Secretary to the Committee :* Mr. H. W. Gulliver. There were meetings in October, 1954, and March and July, 1955.

South-West.—Mr. W. E. Hiley (*Chairman*), The Earl Bathurst, Lord Hilton, Mr. J. R. Maeer, Major J. L. Pilling, Mr. M. Philips Price, M.P., Mr. L. C. Wheeler, Lt.-Commander R. J. B. White, Brig. C. H. Woodhouse. *Secretary to the Committee :* Mr. A. W. Matthews. Meetings were held in March and September, 1955.

SCOTLAND

North.—Major D. J. Brodie of Lethen (*Chairman*), Mr. J. Armstrong, Mr. G. Brown, Mr. R. Dean, Mr. J. Grant, Mr. A. N. S. Kinnear, Mr. A. R. Mackenzie, Mr. A. B. L. Munro-Ferguson. *Secretary to the Committee :* Mr. M. Nicholson. The Committee met in December, 1954, and in May, 1955.

East.—Professor H. M. Steven (*Chairman*), The Earl of Dundee, Lord Glentanar, Mr. J. B. Hendry, Sir Ian Forbes Leith, Bt., Mr. A. D. Miller, Lt.-Col. J. W. Nicol, Bailie R. A. Raffan, Mr. W. Riddoch. *Secretary to the Committee:* Mr. J. P. Lenman. Meetings were held in October, 1954, and in April, 1955.

South.—Major S. F. Macdonald Lockhart (*Chairman*), Sir James Hunter Blair, Bt., Mr. A. Duncan, Mr. W. P. Earsman, Mr. T. E. Hubbard, Mr. D. M. McQueen, Commander D. Herries Maxwell, Mr. J. Roe, Mr. R. F. Wilson. *Secretary to the Committee:* Mr. T. H. McGeorge. There were meetings in October, 1954, and in April and June, 1955.

West.—Sir George I. Campbell, Bt., of Succoth (*Chairman*), Mr. P. Campbell, Capt. J. Craig, Lt.-Col. W. D. H. C. Forbes, Mr. R. M. Hamilton, Professor J. Kirkwood, Mr. W. D. McGregor, Mr. P. S. Murray, Jr. *Secretary to the Committee:* Mr. B. Kinnaird. The Committee met in March and July, 1955.

WALES

North.—Col. P. R. Davies-Cooke (*Chairman*), Mr. P. S. Barnie, Capt. G. L. Bennett Evans, Major W. D. D. Evans, Mr. T. Jones, Capt. J. Hext Lewis, Professor E. C. Mobbs, Mr. D. Tudor, Lt.-Col. J. F. Williams-Wynne. *Secretary to the Committee:* Mr. K. Mayhew. Meetings took place in October, 1954, and in March and July, 1955.

South.—Major J. D. D. Evans (*Chairman*), Mr. D. G. Badham, Mr. H. H. Busher, Mr. I. G. Gordon, Mr. H. A. Hyde, Mr. D. Jenkins, Mr. A. J. Llewellyn, Mr. M. H. Maxwell, Mr. P. W. Murray Threipland. *Secretary to the Committee:* Mr. E. H. Bradford. This Committee met in October, 1954, and in February, 1955.

HOME GROWN TIMBER ADVISORY COMMITTEE

This Committee met in October, 1954, and in January, April, and July, 1955. One change only took place during the year; The Duke of Buccleuch replaced Major D. C. Bowser. The membership of the Committee at the end of the year is given below.

The Earl of Radnor ...	Chairman, Forestry Commission (*Chairman of the Committee*)
Mr. A. P. F. Hamilton ...	Forestry Commission
Sir Arthur Gosling ...	
Mr. O. J. Sangar ...	
Mr. A. H. H. Ross ...	
Mr. G. B. Ryle ...	
Mr. J. Macdonald ...	
Mr. H. A. Turner ...	
Mr. J. Rea Price ...	Board of Trade
Lord Bolton	Country Landowners Association
Major Sir Richard G. Proby, Bt. ...	
Mr. W. E. Hiley	
Mr. C. M. Floyd	
The Duke of Buccleuch	Scottish Landowners Federation
The Earl Cawdor	
The Earl of Dundee	
Capt. J. Maxwell Macdonald ...	

Mr. G. R. Jacob Mr. C. J. Venables Mr. H. N. Sadd Mr. F. G. Chalke	... ...	Federated Home Timber Associations
Mr. T. Bruce Jones ... Mr. Bruce B. Kennedy Mr. J. C. McGregor ...	... ...	Home Timber Merchants Association of Scotland
Mr. Bryan Latham	...	Timber Trades Federation

Secretary: Mr. H. R. Flowers.

THE COMMISSIONER'S STAFF

The organisation of the staff at the Headquarters of the Commission and in the Directorates remained substantially unchanged. The Director General and Deputy Director General have been assisted by the Directors of Forestry for England, Scotland and Wales, by the Director of Research and Education, and by the Chief Engineer.

The officers holding the above appointments at the close of the year are given below :—

Director General : Sir Arthur Gosling, K.B.E., C.B., F.R.S.E.
Deputy Director General: Sir Henry Beresford-Peirse, Bt., F.R.S.E.
Director of Forestry for England : Mr. O. J. Sangar, C.B.E., M.C.
Director of Forestry for Scotland: Mr. A. H. H. Ross, O.B.E.
Director of Forestry for Wales: Mr. G. B. Ryle.
Director of Research and Education : Mr. James Macdonald, C.B.E.
Chief Engineer: Major General H. P. W. Hutson, C.B., D.S.O., O.B.E., M.C.
Secretary: Mr. H. A. Turner.

PROFESSIONAL SCIENTIFIC AND TECHNICAL STAFF

The professional, scientific and technical staff comprised : 18 Conservators, 2 Deputy Surveyors, 38 Divisional Officers, 1 Machinery Research Officer, 225 District Officers, and 9 of other grades ; 683 Foresters, 325 Foremen, and 17 Estate Clerks of Works ; an engineer staff of 3 Directorate Engineers, 1 Planning Officer, 3 Mechanical Engineers, 10 Conservancy Engineers, 28 Assistant Engineers and 35 Clerks of Works.

ADMINISTRATIVE, EXECUTIVE AND CLERICAL STAFF

At the Headquarters of the Commission, the Secretary's staff consisted of 17 officers of the rank of Higher Executive Officer and above, and 45 other Executive and Clerical Officers. The staff under the Controller of Finance comprised 10 officers of the rank of Higher Executive Officer and above, and 34 other Executive and Clerical Officers.

The staff attached to the offices of the Directors of Forestry, the Director of Research and Education and the Conservators, comprised 46 officers of the rank of Higher Executive Officer and above, and 469 other Executive and Clerical Officers.

The typing and other staff at all offices numbered 117 and 95 respectively.

LABOUR EMPLOYED

The number of men, women and juveniles employed at 30th September, 1955, was 13,337, of whom 5,273 were in England, 4,738 in Scotland and 3,326 in Wales. The number at the end of the previous year was 13,621.

Note.—A reorganisation of the forester and foreman grades was under consideration at 30th September, 1955. Changes were agreed upon in December with effect from 1st August, 1955, but had not been brought into force by the date when this report was prepared. The designations and numbers of these grades, therefore, refer to the old organisation.

THE YEAR'S WORK

THE FORESTRY FUND

The Forestry Fund was established by the Forestry Act, 1919. From this Fund is defrayed all the expenditure of the Commissioners, and into it are paid their receipts from sales of produce, rentals, etc., together with the amounts drawn against the annual Parliamentary Vote. Any balance of a Vote not required during the year for which it was voted may not be drawn into the Forestry Fund but the Commissioners are permitted to carry forward a small working balance to the next Financial Year.

In Table 2 below are shown the drawings during each Forest Year and also the balance remaining in the Forestry Fund at the 30th September (the end of the Forest Year).

FORESTRY FUND—SUMMARY

Table 2 — Year ended 30th September — £

	Balance from Preceding Year	Receipts			Payments
		Total	From Parliamentary Votes	Other	
	(1)	(2)	(3)	(4)	(5)
GRAND TOTAL, 1920–1955 ...	—	94,105,628	70,909,800	23,195,828	93,830,396
1920–29	—	4,421,484	3,570,000	851,484	4,502,018
1930–39	—	8,114,652	6,292,800	1,821,852	7,926,093
1940–49	—	26,370,778	18,945,000	7,425,778	26,238,789
1950	240,014	7,030,748	5,495,000	1,535,748	7,025,414
1951	245,348	8,161,846	6,350,000	1,811,846	8,012,098
1952	395,096	9,258,033	6,893,000	2,365,033	9,277,642
1953	375,487	9,258,319	7,041,000	2,217,319	9,421,426
1954	212,380	10,357,941	7,850,000	2,507,941	10,373,211
1955	197,110	11,131,827	8,473,000	2,658,827	11,053,705
1956	275,232	—	—	—	—

Note.—The above amounts are cash actually received or paid out.

The amount drawn from Parliamentary Votes into the Fund during the Forest Year 30th September, 1955, was £8,473,000, made up of £4,073,000 from the vote for the financial year ended 31st March, 1955, and £4,400,000 from the vote for the financial year ending 31st March, 1956. Other receipts mainly from sales of forest produce totalled £2,658,827; payments made amounted to £11,053,705.

As intimated in our Report for the year ended 30th September, 1954, (H.C. 18, 1954, p. 14), the accounts for the year ended 30th September, 1955, have been prepared from an accounting system on commercial lines which was introduced on 1st April, 1954. The decentralisation of the accounting arrangements necessarily had the effect of changing some of the procedures hitherto followed; as a result comparative figures for the previous year have not been given in the Financial Tables (Appendices 1 to 8 on pp. 61 to 63); comparative figures for the previous year will, of course, be given in future Reports.

The financial tables have been recast, and explanatory notes on each are given below:

Appendix 1.—*Financial Statement*

This shows the expenditure which has to be accounted for and provides a reconciliation with the receipts from Parliamentary Votes in Table 2, page 25. The expenditure is summarised by main heads which are amplified in the subsequent tables.

Appendix 2.—*Capital Expenditure*

This statement gives an analysis of capital expenditure during the year (less sales of assets). In previous years expenditure of this nature was included in Forestry Operations.

Appendix 3.—*Forestry Operations*

This gives a broad analysis of expenditure on forestry operations during the year. Income from sales of timber and other forest produce and the value of the increase in stocks of felled timber and forest produce are also given.

It should be noted that the cost of raising the plants used in the formation and maintenance of plantations is now included under these heads.

It should also be noted that the amount shown against each heading is direct expenditure comprising direct wages, charges for the use of departmentally owned powered vehicles and machines, materials and contract services. Overhead expenses consist of labour overheads (paid holidays, wet time, sick pay, etc.), local supervision (salaries and expenses of foresters and foremen), estate expenses (maintenance of buildings, rent, etc.) and administrative and control overheads (salaries and expenses of district officers and conservancy staffs).

Appendix 4.—*Private Forestry*

This appendix is in the same form as last year with the exception that expenditure on loans for forestry operations and on proceeds-sharing schemes is now included in miscellaneous expenditure in Appendix 2, Capital Expenditure.

Appendix 5.—*Research*

This appendix has been changed from a subjective to an objective analysis of expenditure and shows expenditure allocated to the several sections of research work.

Appendix 6.—*Education*

Expenditure during the year is shown against the Commission's educational activities.

Appendix 7.—*General Administration*

This table shows expenditure on salaries, travelling and office expenses at the Commission's Headquarters and at Directorate offices (excluding the Directorate of Research and Education). It also shows expenditure on the administration of felling licensing and on information and shows.

Appendix 8.—*Special Expenditure*

This includes expenditure of a special and non-recurring nature.

ACQUISITION AND UTILISATION OF LAND

The total area of land acquired through the Forestry Fund, under the Forestry (Transfer of Woods) Act, 1923, and by gifts from private persons, less disposals, was 2,102,000 acres at 30th September, 1955. In most acquisitions of land it is unavoidable that in addition to plantable land there is included some rough grazing and agricultural land which it is not intended to plant, and also land unsuitable for planting on account of soil conditions, exposure or other reasons; it may also be necessary to include standing woods. Table 3 below gives the present or intended future use of the land so far acquired.

UTILISATION OF LAND

Table 3 — At 30th September 1955 — Thousand acres

	Great Britain	England	Scotland	Wales
Total Acquired	2,102·3	669·1	1,135·1	298·1
Forest Land: Total	1,317·8	506·5	578·1	233·2
Acquired Plantations	81·3	51·0	24·0	6·3
Planted by Forestry Commission	923·9	348·4	403·1	172·4
To be planted	312·6	107·1	151·0	54·5
Other Land: Total	784·5	162·6	557·0	64·9
Nurseries	2·1	0·8	0·9	0·4
Rough Grazing and Agricultural Land ...	500·7	69·9	380·6	50·2
Forest Workers Holdings	13·0	6·8	3·8	2·4
Unplantable and Miscellaneous	268·7	85·1	171·7	11·9

The above table shows that of the 2,102,000 acres acquired to date, 1,318,000 acres are classed as Forest Land, comprising 924,000 acres of plantations planted by the Commission, 81,000 acres of plantations acquired from private owners, and 313,000 acres of land to be planted in due course. The land awaiting planting, which is partly bare land and partly old woodland, is held in the three countries as follows: England, 107,000 acres; Scotland, 151,000 acres; Wales, 55,000 acres. It should be noted that all land shown as to be planted is not immediately available, and that as much as possible is let for grazing until it is actually required. Land which it is not intended to plant is shown under Other Land; this includes 514,000 acres of rough grazing and agricultural land, along with 269,000 acres of land unsuitable for planting.

Land not placed at the disposal of the Commissioners

The statement of areas given in the previous table includes land under the management of the Ministry of Agriculture and the Department of Agriculture of Scotland. Details of this land are given in Table 4 below.

LAND NOT PLACED AT THE DISPOSAL OF THE COMMISSIONERS

Table 4 — At 30th September 1955 — Acres

	Great Britain	England	Scotland	Wales
Total	368,385	65,162	267,202	36,021
Forest Land	40,835	5,444	33,372	2,019
Rough grazing, agricultural and miscellaneous	327,550	59,718	233,830	34,002

The land in the charge of the Agricultural Departments at the end of the year was 368,385 acres, of which 40,835 acres have been classified as plantable, most of which will be transferred to the Commissioners for planting in due course.

Number of Forests

There are now 500 forests, a total which includes a small number of central nurseries which have little or no woodlands attached. The numbers in each of the three countries are given in Table 5 below; the individual forests are listed by Conservancies in Appendices 12 to 14 on pages 67 to 76, and their approximate positions are shown on the Conservancy maps on pages 78 to 90.

NUMBER OF FORESTS

Table 5 — At 30th September 1955

	Great Britain	England	Scotland	Wales
Number of Forests:—				
At beginning of year ...	479	199	201	79
At end of year	500	212	204	84
Net increase during the year ...	21	13	3	5

Twenty-three new forests, of which two were formerly parts of older forests, were constituted during the year; the net increase, however, was twenty-one only, as the properties comprising Shielswood Forest in South Conservancy, Scotland, and Walderslade Forest in South East Conservancy, England, were sold. The property designated Shielswood Forest, extending to 1,013 acres, was purchased in 1942, and having regard to the national need at that time and since, it has remained as a sheep farm, no forestry operations being undertaken. Present conditions indicate that it should remain in agricultural use and the whole was therefore sold. The area purchased to form Walderslade Forest, in Kent, amounting to 200 acres, was sold to the Chatham Borough Council; part of the area was required for housing, and as the remainder would have been uneconomic for our purposes, the whole was disposed of.

Details of the additional forests formed during the year are given below.

ENGLAND:

Allendale, Northumberland.
Brooke Woods, Norfolk.
Cartmel, Westmorland.
Cawthorne, Yorks.
Chilworth, Hants.
Holmfirth, Yorks.
Joyden's Wood, Kent.
Lavenham, Suffolk.
Lyth, Westmorland.
Matlock, Derby.
Middlemarsh Wood, Dorset.
Rievaulx, Yorks.
Rochester, Kent.
Whaddon Chase, Bucks.

SCOTLAND:

Achnasheen, Ross.
Creran, Argyll.
Glen Varragill, Skye, Inverness-shire.
Healaval, Skye, Inverness-shire.

WALES:

Conwil Elvet, Carmarthenshire.
Glanllyn, Merioneth (formerly part of Penllyn Forest).
Maelor, Flintshire.
Tanat, Montgomeryshire.
Ystwyth, Cardiganshire (formerly part of Myherin Forest).

Changes were made in the names of three forests: in South East Conservancy, England, Buscot Forest, Berkshire, was renamed Badbury Forest; in North Conservancy, Wales, Coed Penllyn, Merionethshire, was renamed Penllyn Forest, and Glyn y Groes, Denbigh-shire was renamed Llangollen Forest.

Land Acquired During the Year

The area of land acquired, including land to which entry was secured prior to the legal procedure being completed, amounted to 84,955 acres, of which 63,533 acres are classed as plantable. Disposals and adjustments totalled 20,816 acres, made up of 2,457 acres classed as plantable, 17,532 acres as unplantable, and 827 acres of grazing and agricultural land.

The net addition of plantable land was thus 61,076 acres, details of which are given in table 6 below.

PLANTABLE LAND ACQUIRED DURING THE YEAR
[NET AREA]

Table 6 — Year ended 30th September 1955 — Acres

	Total	Bare Land	Land previously under a Tree Crop	Standing Woods
Great Britain	61,076	29,821	26,925	4,330
England	21,911	7,910	12,959	1,042
Scotland	20,493	8,558	9,306	2,629
Wales	18,672	13,353	4,660	659

The net addition of 61,076 acres of plantable land is made up of 29,821 acres of bare land (49 per cent.), 26,925 acres of felled or devastated woodlands (44 per cent.) and 4,330 acres of standing woods (7 per cent.). Compared with the previous year there has been a decrease of 16,073 acres in the area of plantable land acquired; changes in the proportions of the types of land acquired were small, bare plantable land decreased by 4 per cent., while old woodland and standing woods both increased by 2 per cent.

The shortage of plantable land in relation to the Commissioners' planting programme is discussed earlier in this Report (page 7).

Progress of Acquisition of Plantable Land

The acreage of plantable land acquired from 1920 onwards is given below.

ACQUISITION OF PLANTABLE LAND

Table 7 — Year ended 30th September — Acres

Period	Total	By Lease or Feu	By Purchase
Total 1920–1955	1,273,285	428,364	844,921
1920–29	310,230	156,759	153,471
1930–39	344,757	60,057	284,700
1940–49	255,725	81,536	174,189
1950	60,996	26,423	34,573
1951	56,113	24,624	31,489
1952	53,604	15,718	37,886
1953	53,635	20,742	32,893
1954	77,149	22,049	55,100
1955	61,076	20,456	40,620

Land Acquired to date

Table 8 below presents a summary statement of land acquired to date, classified into Plantable Land (including land already planted before acquisition) and Other Land. This table also shows separately the amounts acquired by lease or feu, and by purchase. The heading Entry Secured relates to properties on which work was able to start although the legal procedure had not actually been completed.

SUMMARY STATEMENT OF LAND ACQUIRED*

Table 8 — At 30th September 1955 — Acres

	Total	By Lease or Feu			By Purchase		
		Total	Plantable†	Other	Total	Plantable†	Other
Total:							
Great Britain	1,982,156	586,455	428,364	158,091	1,395,701	844,921	550,780
England ...	566,787	224,727	199,977	24,750	342,060	272,973	69,087
Scotland ...	1,122,587	267,000	150,811	116,189	855,587	416,695	438,892
Wales ...	292,782	94,728	77,576	17,152	198,054	155,253	42,801
Acquisitions completed:							
Great Britain	1,959,526	573,681	416,512	157,169	1,385,845	838,752	547,093
England ...	556,239	218,765	194,584	24,181	337,474	268,490	68,984
Scotland ...	1,112,937	262,565	146,541	116,024	850,372	415,064	435,308
Wales ...	290,350	92,351	75,387	16,964	197,999	155,198	42,801
Entry Secured:							
Great Britain	22,630	12,774	11,852	922	9,856	6,169	3,687
England ...	10,548	5,962	5,393	569	4,586	4,483	103
Scotland ...	9,650	4,435	4,270	165	5,215	1,631	3,584
Wales ...	2,432	2,377	2,189	188	55	55	—

* Excluding Crown Woods amounting to 120,000 acres (of which some 60,000 acres are plantable) transferred to the Commissioners under the Forestry (Transfer of Woods) Act, 1923.
† Including planted land.

In the previous Report the figures for Scotland under Entry Secured for areas acquired by Lease or Feu, and By Purchase, were inadvertently transposed; the correct figures have been brought into account in this table and also in Table 7.

Of the total of 1,982,156 acres acquired, 1,273,285 acres were classified at the time of acquisition as plantable land, of which 472,950 acres (37 per cent.) are in England, 567,506 acres (45 per cent.) in Scotland and 232,829 acres (18 per cent.) in Wales. The classification at the time of acquisition is of course varied in the light of experience, local developments and other factors, and the present or intended use of land as at 30th September is given in Table 3 on page 27.

Expenditure during the year on the purchase and lease of land, including salaries and expenses of the acquisition staff, legal expenses, outgoing valuations, and tithe and stipend redemptions, was £317,000. The value of land disposed of was £50,000 making a net expenditure of £267,000 (Appendix 2, page 61).

It should be noted that this amount cannot be directly related to the area acquired during the year since that area includes land to which entry was

secured pending financial settlement. The average price paid during the year for plantable land, excluding timber and buildings, was £3 1s. 8d. per acre; the average rent paid for plantable land was 2s. 5d. per acre.

FORESTRY OPERATIONS

Few industries are more dependent on reasonable weather for the timely and successful completion of seasonal operations than forestry, and the forest year under review (October, 1954, to September, 1955) was one in which cultural operations were subject to hindrances almost from start to finish.

The Autumn of 1954 continued the wet and unsettled weather which had characterized most of that year; in particular heavy rain in Scotland and in the western half of the country hindered the work of preparing ground for planting both in the forest and in the nurseries. With the new year conditions worsened, snow and frost prevented planting and nursery work getting properly under way till mid-March; nursery work was doubly hindered as the despatch of plants for planting once the snow and frost had gone had to take priority over other nursery work. As a result planting in the forests, and lining out and seed sowing in the nurseries, had to be carried on undesirably late into the spring. A dry April gave rise to fears that there might be considerable losses from drought among the newly planted and newly lined out trees; a cool May and June with changeable weather, however, enabled the young trees to establish themselves in some degree so that they were able to withstand the drought or almost drought conditions which prevailed generally throughout July, August and September. The dry conditions during these months were helpful in many ways, but the fire danger became very serious and men had to be diverted from other works for fire protection duty. As things turned out, however, losses from fire were light and the exceptionally warm summer months in some measure made up for the late start so that normal growth of seedlings and transplants was general, with better than normal growth in some nurseries. In plantations some damage from drought has occurred though the full effects may not make themselves obvious till later on.

Forestry operations are discussed below under the headings of Forest Nurseries, Plantations, Protection and Preparation of Produce. Under Forest Nurseries are included the collection and the supply of seed, and the raising of young trees required for the formation of plantations. Plantation work comprises fencing, clearing of ground, ploughing, draining and the planting of the young trees; it also includes the after-attention which must be given to plantations, namely, weeding and beating up, and the maintenance of fences, drains, etc. Protection includes measures to safeguard plantations from damage by fire and also measures against injurious animals, insects and fungi. Preparation of produce includes the thinning and clear felling of plantations, and also the extraction and preparation of material for sale and for forest use.

Expenditure on forestry operations amounted to £7,803,000 less £2,425,000 in respect of sales of timber and other forest produce and the increase in stocks of felled timber and other forest produce. (Appendix 3, page 61.)

Forest Nurseries

Seed Supply

The Commissioner's policy is to collect from their own woods and, by arrangement with owners, from private woodlands as much as possible of the seed required to provide the trees for their planting programme. The amount of seed produced by trees varies greatly with the season but it is usually possible to meet from home sources most of our requirements of the broad-leaved species such as oak, ash, sycamore and beech; the beech crop, however, is intermittent and in the present year, except in east Scotland, few beech nuts were produced. The position in regard to conifer seed is less happy and Scots pine is the only important home-grown species which can

be relied on to provide all our requirements; for Douglas fir, sitka spruce, Japanese larch, *Tsuga*, lodgepole pine and other species, though considerable acreages of these have been planted in this country, until more of them reach seedbearing age it is necessary to import from the countries of origin.

In order that the most suitable seed, both as regards quality and suitability for the locality in which the trees will be grown, will be available, existing plantations of seedbearing age are being recorded and classified. Also special seed sources, known as seed stands, seed orchards and seed plantations, are being formed to increase the supply of seed from the best of existing varieties and from hybrids of important species.

Home Collected Seed

Over most of England and Wales the conifer seed crop, apart from Scots pine in East Anglia, was poor, and with that exception Scotland was the main source of supply. The production of broadleaved tree seed was everywhere poor; generally speaking, acorns which usually form the greater part of the seed collected did not ripen, and for the fourth year in succession the beech mast failed.

The collection of cones of all species amounted to 10,877 bushels; this is almost twice the total for the previous year, the principal increase being in Scots pine cones of which the greatest amounts were collected in the East Conservancy, England, and in the North and East Conservancies, Scotland. Corsican pine everywhere failed to produce a crop worth collecting. Reasonable crops of European larch, Japanese larch, Norway spruce and Sitka spruce were available in Scotland; most of the European larch was collected in the North and East Conservancies, while Japanese larch coned in all the Scottish Conservancies except the North; Sitka spruce was most abundant in West Conservancy and provided more than half the total collection of 532 bushels of cones. East Conservancy, Scotland, provided 300 out of the 543 bushels of Norway spruce cones; Silver fir also coned well in Scotland and 573 bushels were collected, most of which came from West Conservancy.

The quantity of broadleaved tree seed collected totalled 21,696 lb., and shows a very decided drop compared with the collection made in the previous year, the reasons being the almost complete failure of the beech, acorn and sweet chestnut crops.

Details by species of the amounts collected from coniferous and broadleaved trees are given in Tables 9 and 10 below.

HOME COLLECTION OF CONIFER SEED

Table 9 — Year ended 30th September 1955

	Cones Collected					Cones kilned	Seed extracted
	Total	England	Scotland	Wales	Research		
	Bushels					Bushels	lb.
Total	10,877	3,829	6,985	21	42	10,623	6,678
Scots Pine ...	6,723	3,711	3,001	10	1	6,557	3,282
Corsican Pine ...	11	10	—	—	1	11	—
European Larch	938	—	931	7	—	859	422
Japanese Larch	207	—	204	2	1	194	137
Douglas Fir ...	199	4	195	—	—	187	64
Norway Spruce	543	—	543	—	—	508	437
Sitka Spruce ...	550	18	532	—	—	537	300
Other Conifers...	1,706	86	1,579	2	39	1,770	2,036

Table 10 — Year ended 30th September 1955 — lb.

	Total	England	Scotland	Wales	Research
Total	21,969	19,473	1,796	466	234
Ash	281	4	245	32	—
Beech	689	30	622	37	—
Oak	19,145	18,708	336	88	13
Sycamore	450	126	254	69	1
Spanish Chestnut	—	—	—	—	—
Other broadleaved trees ...	1,404	605	339	240	220

Imports of Seed. The Commission has continued to make bulk imports of seed of Douglas fir, Sitka spruce, Japanese larch and Corsican pine, to cover their own and also private and trade needs. After a series of poor years, Douglas fir gave an exceptionally good crop and a considerable quantity of seed of this species, which stores well, was purchased; other North American species gave only moderate crops and our full requirements of Sitka spruce, lodgepole pine, and *Tsuga heterophylla* could not be met; *Thuja plicata* seed was unobtainable. Japanese larch and Corsican pine seed were in good supply but European larch of acceptable origin was not available.

The crop of broadleaved tree seeds, as in Britain, was poor also on the Continent, and small quantities only of red oak and beech were obtained. To offset the general shortage of beech seed, considerable purchases of seedlings and transplants of this species were made from Holland and Germany.

Table 11 below lists, by species, the quantities and countries of origin of the seed purchased.

Sales of Seed. The amounts of coniferous seed sold to the Trade and to Woodland Owners showed little difference from previous years except in the case of Scots pine and Douglas fir; sales of the former, as will be seen from Table 12 overleaf, increased considerably, part of the increase being a consignment to the U.S.A. Sales of Douglas fir seed returned to their usual level, no doubt an effect of a drop in price resulting from the good crop. Sales of broadleaved tree seeds were limited to a small quantity of beech.

IMPORTED SEED

Table 11 — Year ended 30th September 1955

Species	Quantity (lb.)	Origin
All Species: Total	32,672	—
Coniferous: Total ...	24,179	—
Corsican pine	1,023	Corsica
Lodgepole pine	627	British Columbia, Canada
Lodgepole pine	244	Washington, U.S.A.
Pinus jeffreyi	50	California, U.S.A.
Pinus peuce	54	Macedonia, Yugo-Slavia
Pinus ponderosa	50	British Columbia, Canada
Pinus radiata	44	New Zealand
European larch	—	—
Japanese larch	3,467	Japan
Douglas fir	10,000	Washington, U.S.A.
Norway spruce	802	France
Norway spruce	446	Poland
Sitka spruce	50	Alaska, U.S.A.
Sitka spruce	711	Queen Charlotte Islands, Canada
Abies grandis	1,795	Oregon, U.S.A.

Table 11—(*cont.*)

Species	Quantity (lb.)	Origin
Abies grandis	14	British Columbia, Canada
Abies grandis	1,477	Washington, U.S.A.
Abies amabilis	568	Washington, U.S.A.
Abies concolor	75	California, U.S.A.
Abies lowiana	52	Montana, U.S.A.
Abies nordmanniana	31	Germany
Abies procera	573	Washington, U.S.A.
Abies procera	1,424	Oregon, U.S.A.
Tsuga heterophylla	27	Washington, U.S.A.
Tsuga heterophylla	74	Queen Charlotte Islands and Vancouver, Canada
Thuja plicata	—	—
Sequoia sempervirens	59	California, U.S.A.
Sequoia wellingtonia	100	California, U.S.A.
Cryptomeria japonica	44	Japan
Cupressus macrocarpa... ...	34	France
Lawson cypress...	35	Germany
Other conifers	229	Various
Broadleaved: Total ...	8,493	
Red oak	2,800	Holland
Beech	3,080	Denmark
Beech	2,200	Germany
Other broadleaved species ...	413	Various

SALES OF SEED

Table 12 — Years ended 30th September — lb.

Species	Total		Sold to			
			Nursery Trade		Woodland Owners	
	1954	1955	1954	1955	1954	1955
All species: Total... ...	5,802	4,077	4,317	3,939	1,485	138
Coniferous: Total... ...	2,845	4,063	2,693	3,939	152	124
Scots pine	205	781	198	769	7	12
Corsican pine	269	306	246	289	23	17
Lodgepole pine	57	70	55	66	2	4
European larch	104	244	92	234	12	10
Japanese larch	1,151	1,035	1,128	1,019	23	16
Douglas fir	145	668	123	658	22	10
Norway spruce	157	141	136	111	21	30
Sitka spruce	545	554	520	542	25	12
Abies grandis	127	144	120	138	7	6
Other conifers	85	120	75	113	10	7
Broadleaved: Total ...	2,957	14	1,624	—	1,333	14
Oak	2,026	—	1,176	—	850	—
Beech	114	14	112	—	2	14
Other broadleaved species	817	—	336	—	481	—

Nursery Work

Wet stormy weather during the last three months of 1954, and frost and snow in the first three months of 1955, seriously retarded nursery work, and sowing and lining out were not completed till late in the season—as late as May in the North. The effects of this and of the exceptionally dry weather which prevailed everywhere later in the year did not, in the long run, seriously affect the nurseries. Germination of seed was delayed but seedlings made rapid progress when they came through, and by the end of the season most species had made normal growth. Transplants were more affected by drought than seedlings, and in general, growth was somewhat less than usual; losses from drought did occur but were surprisingly low. The dry summer had this advantage, that it enabled weeds to be brought under control, full advantage being taken of mechanical and chemical means.

Nursery Area. The total area under forest nurseries remained substantially the same as last year; the addition of 27 acres, of which 17 were of the heathland type, in England, was balanced by 30 acres being given up in Scotland; changes in Wales were small. The net result of these and some smaller changes brought the area under nurseries at the end of the year to 2,131 acres, of which 393 acres are classed as heathland nurseries; last year the areas were 2,129 acres and 375 acres respectively.

Use of Nursery Ground. Rotation of cropping is observed in the nurseries and of the total area of 2,131 acres, 314 acres (15 per cent.) were occupied by seed beds, 669 acres (31 per cent.) by transplant lines and 712 acres (33 per cent.) by fallow or green crops. Compared with last year there were only small changes in these proportions; the area under seed beds and under transplants both decreased by three per cent., while the area under green crops or fallow increased by 4 per cent., thus permitting summer cultivation and cleaning to be undertaken over a slightly greater acreage. Details by Conservancies are given in Table 13, page 36.

Seed Sown. The quantity of conifer seed sown was 16,350 lb., an increase of 365 lb. on last year's sowing. A number of changes took place in the amounts of the individual species used; the main reductions were in respect of Scots pine, lodgepole pine, Japanese and hybrid larches, Norway spruce and Sitka spruce; sowings were increased of European larch, Douglas fir, and particularly of *Abies grandis*. In the case of broadleaved seed, the quantity sown was considerably less than last year, 33,497 lb. as compared with 218,044 lb., the difference being due entirely to the shortage of acorns and beech seed. Details by countries are given in Table 14, page 36, along with comparable figures for 1953 and 1954.

Stocks of Seedlings and Transplants. At the end of September the nurseries held close on 439 million plants of all categories; compared with last year this shows a decrease of 13 per cent. Transplant and seedling stocks dropped by 5 per cent. and 8 per cent. respectively. Details for the last three years of the stocks of coniferous and broadleaved transplants and seedlings held in each of the three countries are given in Table 15, page 37.

Sales of Nursery Stock. Sales of surplus seedlings and transplants to the nursery trade, for lining out or for resale to woodland owners, amounted to 11½ million plants as compared with 5½ million in the previous year. Details by species are given in Table 16, page 38.

Expenditure on nurseries, including the purchase and collection of seed, was £542,000; sales of seed and surplus nursery stock brought in £60,000.

USE OF NURSERY GROUND

Table 13 — At 30th September 1955 — Acres

	Total	Seedbeds	Transplant Lines	Fallow and Green Crops	Other
GREAT BRITAIN	2,131	314	669	712	436
Percentage of total area	100	15	31	33	21
ENGLAND: Total	795	97	250	305	143
Conservancy:					
North West	174	17	47	70	40
North East	168	19	68	46	35
East	162	27	54	56	25
South East	100	9	27	47	17
South West	103	15	30	46	12
New Forest	59	5	14	33	7
Dean Forest	29	5	10	7	7
SCOTLAND: Total ...	863	131	275	251	206
Conservancy:					
North	217	41	65	85	26
East	183	25	60	42	56
South	247	43	83	71	50
West	216	22	67	53	74
WALES: Total	440	82	134	147	77
Conservancy:					
North	234	42	69	82	41
South	206	40	65	65	36
Research Nurseries	33	4	10	9	10

SEED SOWN IN NURSERIES

Table 14 — Years ended 30th September — lb.

	1953	1954	1955
TOTAL SEED SOWN			
Great Britain	214,497	234,029	49,847
England	140,973	157,196	30,681
Scotland	15,825	24,080	10,543
Wales	57,420	51,829	8,006
Research Nurseries	279	924	617
CONIFEROUS SEED			
Great Britain ...	13,718	15,985	16,350
England	3,919	4,251	3,691
Scotland	6,732	7,672	7,232
Wales	2,973	3,917	5,192
Research Nurseries	94	145	235
BROADLEAVED SEED			
Great Britain	200,779	218,044	33,497
England	137,054	152,945	26,990
Scotland	9,093	16,408	3,311
Wales	54,447	47,912	2,814
Research Nurseries	185	779	382

STOCKS OF TRANSPLANTS AND SEEDLINGS

Table 15 — At 30th September — Thousands of Plants

	1953	1954	1955
TOTAL TRANSPLANTS			
Great Britain	191,407	189,117	162,706
England	55,506	58,006	49,985
Scotland	88,568	91,052	81,013
Wales	44,933	39,527	31,105
Research Nurseries	2,400	532	603
CONIFEROUS			
Total, Great Britain ...	179,075	180,270	147,054
England	47,150	52,058	39,211
Scotland	87,360	89,701	78,949
Wales	42,335	38,059	28,476
Research Nurseries	2,230	452	418
BROADLEAVED			
Total, Great Britain ...	12,332	8,847	15,652
England	8,356	5,948	10,774
Scotland	1,208	1,351	2,064
Wales	2,598	1,468	2,629
Research Nurseries ...	170	80	185
TOTAL SEEDLINGS			
Great Britain	279,651	316,029	276,035
England	90,993	84,590	70,415
Scotland	134,769	156,316	129,200
Wales	49,416	71,639	73,795
Research Nurseries	4,473	3,484	2,625
CONIFEROUS			
Total, Great Britain ...	264,319	293,712	264,812
England	81,597	72,100	63,888
Scotland	132,963	153,117	126,938
Wales	45,374	65,416	71,431
Research Nurseries	4,385	3,079	2,555
BROADLEAVED			
Total, Great Britain ...	15,332	22,317	11,223
England	9,396	12,490	6,527
Scotland	1,806	3,199	2,262
Wales	4,042	6,223	2,364
Research Nurseries ...	88	405	70

SALES OF NURSERY PLANTS

Table 16 — Year ended 30th September, 1955 — Thousands

ALL SPECIES: TOTAL	11,510
Coniferous: Total	11,327
Scots pine	1,465
Corsican pine	485
European larch	447
Japanese larch	1,531
Douglas fir	584
Norway spruce	3,935
Sitka spruce	2,393
Other conifers	487
Broadleaved: Total	183
Ash	2
Oak	58
Beech	28
Other broadleaved species	95

Plantations

As previously recorded (page 31) the weather during the first six months of the forest year greatly delayed the progress of preparing ground and planting. As a result planting was carried on much beyond the usual date and in many parts of the country extended into May, and in a few forests, as late as June. In spite of this and a dry summer, the plantations made during the year were generally satisfactory, though in dry situations where the effect of drought was accentuated there was a higher percentage of deaths than usual among the young trees; the species which suffered most were Corsican pine, Japanese larch, Douglas fir, Lawson cypress and *Thuja plicata*. Growth of the older plantations was less than usual and a noticeable effect of the cold winter winds was the browning and defoliation of pines over considerable areas. Late spring frosts occurred in May and June but damage was not severe. Deaths from summer drought have also been noted in crops planted five to eight years ago; the full extent of damage by drought will not be known till next year.

New plantations formed during the year totalled 67,906 acres. After increasing steadily each year since the war, it is disappointing to record a decrease of 2,531 acres compared with last year's record figure of 70,437 acres. The reasons for the reduction of the programme are discussed in the General Review (page 7).

Planting in Scotland amounted to 34,042 acres and accounted for 50 per cent. of the total planted by the Commission; in England 21,222 acres, 31 per cent. of the total, were planted, while Wales contributed 12,642 acres, close on 19 per cent. of the total. Details, by Conservancies, of the acreages planted in each country are given in Table 17 below, while the planting in individual forests is detailed in Appendices 12 to 14 on pages 67 to 76.

AREAS PLANTED AND UNDERPLANTED

Table 17 — Year ended 30th September, 1955 — Acres

Country or Conservancy	Planted	Under-planted	Country or Conservancy	Planted	Under-planted
GREAT BRITAIN	67,906	480	SCOTLAND: Total	34,042	127
ENGLAND: Total	21,222	273	Conservancy:		
Conservancy:			North	8,727	17
North West	3,782	63	East	7,568	68
North East	8,271	66	South	10,032	14
East	3,002	118	West	7,715	28
South East	2,343	—	WALES: Total	12,642	80
South West	2,961	4	Conservancy:		
New Forest	609	22	North	7,167	19
Dean Forest	254	—	South	5,475	61

Table 18 below gives an analysis of the 67,906 acres planted during the year. From this it will be seen that 61,714 acres were planted with conifers and 6,192 acres with broadleaved species, representing proportions of 91 per cent. conifers and 9 per cent. broadleaved species; these proportions have varied little over the past few years. Broadleaved plantations require better soil and more favourable conditions than coniferous, and thus the bulk of the broadleaved planting is done in England where 4,739 acres were completed; Wales and Scotland planted 940 acres and 513 acres respectively.

AFFORESTATION AND REPLANTING

Table 18 — Year ended 30th September, 1955 — Acres

	Great Britain	England	Scotland	Wales
TOTAL PLANTED:				
All species ...	67,906	21,222	34,042	12,642
Conifers ...	61,714	16,483	33,529	11,702
Broadleaved ...	6,192	4,739	513	940
AFFORESTED:				
All species ...	40,902	9,924	23,225	7,753
Conifers ...	40,113	9,473	23,090	7,550
Broadleaved ...	789	451	135	203
RE-PLANTED:				
All species ...	27,004	11,298	10,817	4,889
Conifers ...	21,601	7,010	10,439	4,152
Broadleaved ...	5,403	4,288	378	737

Table 18 also shows that the year's planting was divided between 40,902 acres afforested i.e. the planting of land which was not previously woodland, and 27,004 acres replanting of cleared woodlands; this latter figure includes 259 acres replanted after destruction by fire.

The ratio between afforestation and replanting is thus 60 per cent. and 40 per cent. These proportions show little change from those of the previous year.

Plants Used for Planting and Beating-up

A total of 118·4 million young trees were planted in the Commission's forests during the year; 103·5 million were used in the formation of new plantations and 14·9 million for beating-up, that is, for replacing failures in the more recently formed plantations. For comparison, the numbers used last year were: in new plantations, 107·5 million; for beating-up, 14·9 million.

The proportions in which the main species have been used for planting and beating-up are given below:

	Per cent.		*Per cent.*
Sitka spruce ...	24	Oak ...	4
Scots pine ...	19	Douglas fir ...	4
Japanese larch	13	Beech ...	3
Norway spruce	10	European larch ...	2
Lodgepole pine	9	Other conifers ...	6
Corsican pine ...	5	Other broadleaved species	1

Slight changes only have taken place compared with the previous year; the numbers of Corsican pine used have decreased slightly, while lodgepole pine was used to a somewhat greater extent; fewer broadleaved species were planted, particularly beech on account of the shortage of seed in the past few years.

The numbers of the main species used in each Conservancy are given in Appendix 9, page 64, and a summary by species of the numbers used for planting and beating-up is given for each country in Appendix 10, page 66.

Progress of Planting to date

Table 19 below sets out, by periods, the total area planted to date.

AREAS PLANTED TO DATE

Table 19 — Year ended 30th September — Acres

	Total	Afforested	Re-planted
Total, 1920–1955	964,486	667,896	296,590
1920–29	138,271	101,976	36,295
1930–39	230,607	174,428	56,179
1940–49	217,122	149,868	67,254
1950	53,737	37,355	16,382
1951	57,164	38,018	19,146
1952	61,632	39,656	21,976
1953	67,610	42,665	24,945
1954	70,437	43,028	27,409
1955	67,906	40,902	27,004

The total of 964,486 acres shown in the above table is the gross acreage planted by the Commission without taking account of losses from fire, wind, fellings, disposals and other causes; the actual area of plantations existing at the end of the year was 923,900 acres (see Table 3, page 27). Included in the total of 296,590 acres shown above as replanted are 19,513 acres which were replanted after destruction by fires.

Expenditure. Direct expenditure on preparatory work and the formation of plantations, which includes clearing the ground and ploughing if necessary, making drains, and putting up fences, along with charges for the provision of plants and the cost of planting, amounted to £2,205,000. Expenditure on maintenance of plantations was £1,028,000; this similarly, in addition to the cost of beating-up, weeding and clearing plantations, the maintenance of ditches and fences, and underplanting, includes charges for the plants used. (Appendix 3, page 61.)

Forest Protection

Direct expenditure on forest protection was £420,000 (Appendix 3); of this £233,000 was expended on fire protection, including making and maintaining fire lines, fire patrols and the actual work of fire fighting, while £187,000 was in respect of other protective works such as the destruction of rabbits, squirrels and vermin, and also measures taken against injurious insects and fungi.

Fire Protection

The year under review will be remembered by our Foresters and District Officers for the long duration of the fire danger period and for the great number of outbreaks. Fire danger started in earnest in March during which there were 421 outbreaks, in April there were 566, some relief came in May and June when the numbers fell to 147 and 97 respectively. In July conditions again became dry and the number of outbreaks rose to 741; acute danger extended into August when a further 726 fires occurred. In all 2,834 fires which damaged or threatened to damage the Commission's plantations were dealt with. The Commission's fire fighting organisation had thus

to be maintained in a high state of readiness for a great part of the year and it is satisfactory to report that 92 per cent of these 2,834 outbreaks were brought under control before damaging the plantations. In spite of the number of fires being considerably more than twice the average for the four previous years, the area of plantations destroyed, namely 276 acres, was approximately two-thirds only of the average for the same period. No individual fire in plantations was extensive, the five largest were between 10 acres and 33 acres, and these accounted for approximately one third of the plantations lost. The assessed damage from fires was £19,000. Table 20 below gives for comparison statistics for the previous four years in respect of number of fires, area of plantations burned and the loss sustained.

NUMBER AND EXTENT OF FOREST FIRES, 1951–1955

Table 20 — Years ended 30th September

	Number of Fires	Area Burned (acres)	Assessed Damage £
1951	1,327	348	12,000
1952	1,130	455	16,000
1953	1,253	532	15,000
1954	1,344	390	16,000
1955	2,834	276	19,000

The fires which occurred during the year are classified by causes in Table 21 below.

CAUSES OF FOREST FIRES

Table 21 — Year ended 30th September, 1955

	Number of Fires	Area Burned (acres)
Total	2,834	276
Railways	2,262	63
Adjoining Land	261	56
General Public	130	89
Commission Employees	28	19
Incendiarism	2	1
Miscellaneous	15	3
Unknown	136	45

This classification of causes of the 2,834 fires which occurred during the year shows that, as in previous years, railways have been the cause of by far the greatest number of fires; the 2,262 fires from this cause accounted for 80 per cent. of all fires, and for 23 per cent. of the area of plantations burned. The number of fires from railways is well over twice the number in the previous year; fires from the other causes listed also show increases, in particular those attributed to the general public. This was to be expected as the fine summer attracted more people out of doors. Fires caused by the Commission's workers amounted to 28; 15 of which resulted from authorised burning operations, 7 were due, or probably due, to smoking, 4 arose from sparks from tractors, and 2 from other causes; the loss of plantations was 19 acres.

During the year the use of V.H.F. radio equipment was extended and this is now in use in the New Forest and other forests. The co-operation of the County Fire Services during this arduous year was much appreciated.

Protection against Damage by Animals and Insects

The effects of myxomatosis are now showing up in the smaller numbers of rabbits being destroyed by the Commission's trappers and warreners. In recent years the numbers killed annually had been increasing; 215,000 in 1952, 267,000 in 1953, 292,000 in 1954; in 1955, however, 154,000 only were destroyed. England accounted for 41,000, Scotland for 102,000 and Wales for 11,000; the corresponding figures for last year were: England 85,000, Scotland 174,000, Wales 33,000. The number of hares taken has increased from 13,000 to 17,000 in the present year.

The extermination of rabbits by myxomatosis and persistent trapping has permitted the planting of considerable areas without the protection of small mesh netting. Their reappearance in areas thought to be clear and the possibility of a less virulent strain of the disease developing indicates that caution and vigilance are necessary; future development of planting large areas without the protection of netting will depend on the effectiveness of the general control of rabbits exercised by all concerned with the management of land.

The campaign against the grey squirrel is being continued vigorously in the Commission's forests, and the numbers being destroyed are everywhere declining. Last year, 43,900 were killed; in the present year the number dropped to 23,400, of this number 22,000 were killed in England, most of them south of a line from Gloucester to London, the greatest numbers being taken in the New and the Dean Forests and in South East conservancy; these regions each accounted for some 6,000 squirrels. The number taken in Scotland was 900, divided almost equally between the East and West conservancies; none was killed in North and South conservancies. In Wales, just over 1,000 were killed, three quarters of them in the South conservancy.

In the interests of our tenants and neighbours, 5,900 foxes and cubs were destroyed; last year the total was 4,600.

Surveys of pine areas throughout the country have shown that populations of the Pine Looper Moth have decreased, and that over the areas at Cannock Chase, Staffordshire, and at Culbin Forest, Morayshire, which were sprayed with insecticide from aeroplanes last year, the population of this defoliator is now down to endemic level.

An epidemic of the Pine Shoot Beetle in the gale-damaged areas of North-East Scotland has resulted in widespread crown damage to adjacent young pine crops. This outbreak is expected to decline naturally and rapidly.

For further accounts of pathological and entomological work done by the Research Branch see pages 51 to 56.

PREPARATION AND SALE OF PRODUCE

Thinning

The area thinned during the year—39,542 acres—showed an increase of almost 3,000 acres compared with the previous year. This increase was wholly in England and Scotland; in England, while the overall increase was of the order of 5 per cent., a reduction in North-East was more than offset by increases in South-West and East. In Scotland the increase was substantial in East and North, due to the return to normal working after windblow operations: in South and West the area thinned fell away, in the former partly on account of arrears having been overtaken; in the West the restriction of the programme was deliberate in order to concentrate on reducing an accumulation of felled thinnings carried over from the previous year.

Over the country as a whole about 6 per cent. of the area thinned was in broadleaved species, the other 94 per cent. being conifers. There was a substantial reduction compared with 1954 in the area of broadleaved species thinned. The area of plantations in which first thinnings were made increased from 13,835 acres in 1954 to 14,592 acres in 1955.

Of the area recorded as thinned during the year, timber merchants worked 6,878 acres or some 17 per cent. This is an increased proportion compared with the previous two years; larger areas were worked by merchants in all three countries, though the biggest increase was in Scotland where the satisfactory windblow clearance situation allowed a resumption of standing thinning sales to the trade.

Clear Felling

The area clear felled was 6,985 acres, made up of 1,599 acres of high forest, 4,671 acres of scrub and devastated woodlands and 715 acres of coppice and coppice-with-standards. The area clear felled in the previous year was 5,236 and the increase this year is accounted for by a larger programme of fellings in high forest, and in the scrub and devastated categories in England.

Table 22 below sets out the areas thinned and felled in each Conservancy.

AREAS THINNED AND FELLED

Table 22 — Year ended 30th September, 1955 — Acres

	Thinned	Felled		Thinned	Felled
GREAT BRITAIN: Total	39,542	6,985	SCOTLAND: Total ...	11,813	1,085
ENGLAND: Total ...	22,526	4,394	Conservancy:		
Conservancy:			North	3,256	726
North West ...	4,199	234	East	3,480	247
North East ...	3,184	242	South	1,306	13
East	7,677	698	West	3,771	99
South East ...	1,650	1,716	WALES: Total ...	5,203	1,506
South West ...	2,511	901	Conservancy:		
New Forest ...	1,745	445	North	3,084	807
Dean Forest ...	1,560	158	South	2,119	699

Disposal of Forest Products

The volume of timber and thinnings disposed of standing amounted to 3·92 million cubic feet, compared with 1·99 million cubic feet in 1954. The increase was largely in Scotland with the return to normal working after the windblow, though significant increases in standing sales were recorded in England and Wales. The following are the increases by countries compared with 1954:

	Million cubic feet
England ...	·48 (+ 48 per cent.)
Scotland ...	1·30 (+ 186 per cent.)
Wales	·15 (+ 50 per cent.)

Sales of round timber and sawlogs increased from 3·39 to 3·60 million cubic feet, and the quantity of telegraph and transmission poles disposed of was more than double the 1954 volume. With the exception of pulpwood and boardmill material all other items of classified produce sold recorded increased

quantities compared with 1954. The main items and comparative figures are as follows:—

	Million cubic feet	
	1954	*1955*
Mining Timber	3·41	3·56
Posts, stakes, unselected poles	1·82	2·03
Pulpwood and boardmill	1·36	1·33
Firewood, cordwood, etc.	1·58	1·80

Disposals of mining timber increased significantly in England and in Wales, but fell off in Scotland where the quantity of material converted by direct labour to mining timber specifications was reduced. The increases in other categories of forest produce were mainly in England.

Experience in the demand for harvest poles was variable. For instance North-west England reported a reduced demand on account of the dry summer, whereas North-east England recorded an increased demand because of the simultaneous ripening of crops such as peas and barley. Pulpwood and boardmill sales were affected by plant problems at consumers' works.

Prices of standing timber and thinnings held up and even hardened in some cases. The demand from the trade for standing thinnings was generally keen, though in Wales and in West Scotland interest was limited. It is worth noting that the proportion of first thinnings of conifers sold standing exceeded one quarter of the total softwood standing thinning sales. In Scotland the proportion was as high as 40 per cent.

Income in 1955 from sales of standing timber amounted to £280,000. £1,810,000 was realised from other sales of produce, ranging in variety from tree lengths sold at stump to finished products, e.g. pitprops, delivered to customers; minor produce, etc., which includes Christmas trees, realised £125,000; and material to the value of £162,000 was used within the Commission for fencing, estate work and other purposes. Stocks and work in progress increased during the year by £48,000. Gross income thus amounted to £2,425,000.

Direct expenditure on thinning and clear felling operations, including the felling, preparation and despatch of produce amounted to £1,444,000 (Appendix 3).

ROADS

Weather conditions were generally more favourable than last year for the construction of forest roads and good progress was made. Work was undertaken at 330 forests, and 338 miles of motorable road were completed; last year work was confined to 174 forests in which 277 miles were completed. Roads under construction totalled 115 miles as compared with 86 miles at the end of the previous year. The work carried out in each county is given in Table 23 below.

FOREST ROADS

Table 23 Year ended 30th September, 1955

	Length of Road (Miles)		Number of Forests at which work was undertaken
	Completed	Under Construction	
GREAT BRITAIN: Total ...	338	115	330
England	104	52	135
Scotland	181	26	154
Wales	53	37	41

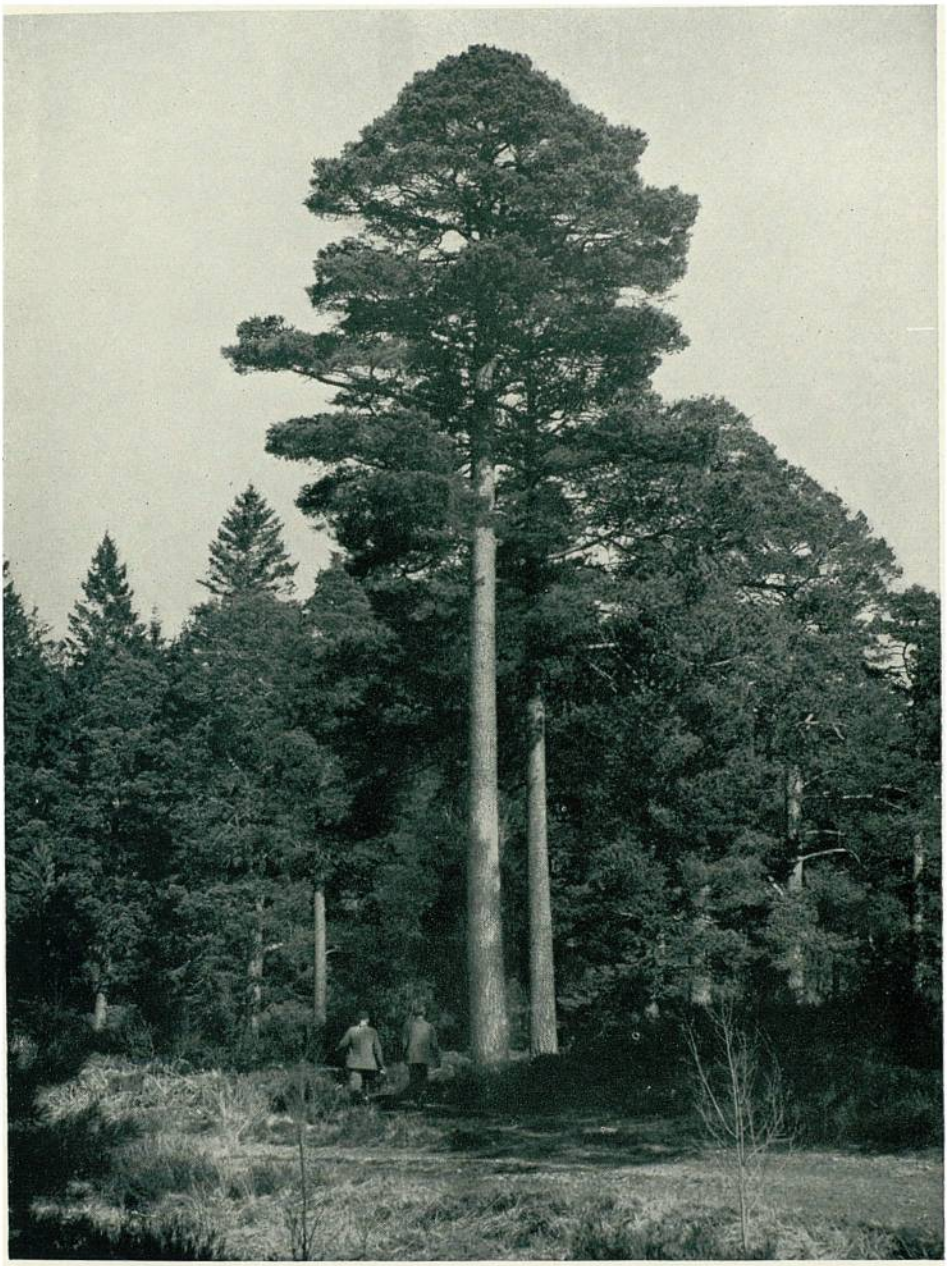


PHOTO 1. Old Scots Pine in the Black Wood of Rannoch, Perthshire.

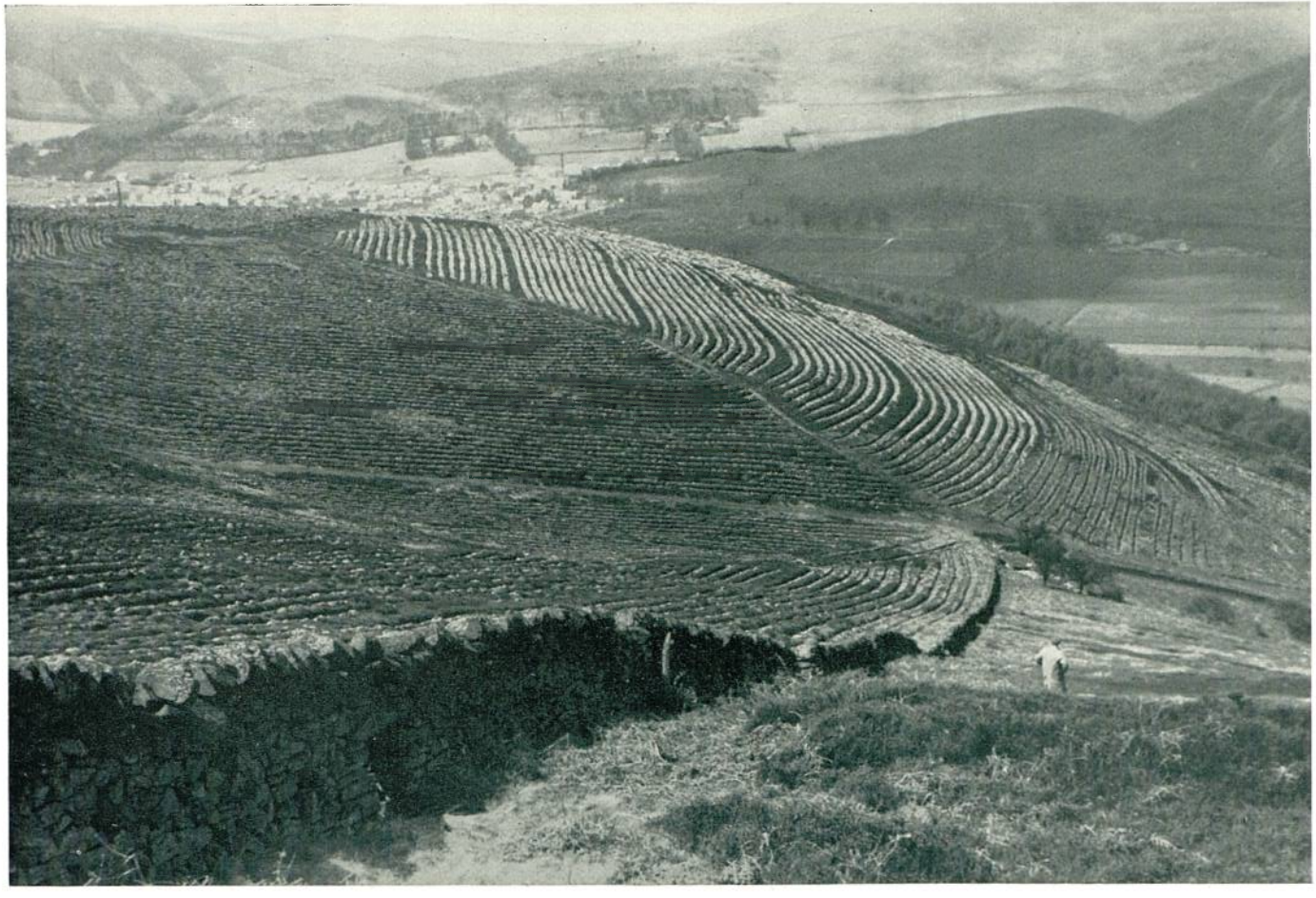


PHOTO 2. Contour ploughing for planting designed to avoid erosion and to conserve water on the brashy soils at Elibank and Traquair Forest in the south of Scotland.

PHOTO 3. Newborough Forest, Anglesey. The brushwood screen causes sand blown from the seashore on the right to build up a littoral dune, now twenty feet high, which protects sand fixation works and tree planting further inland.

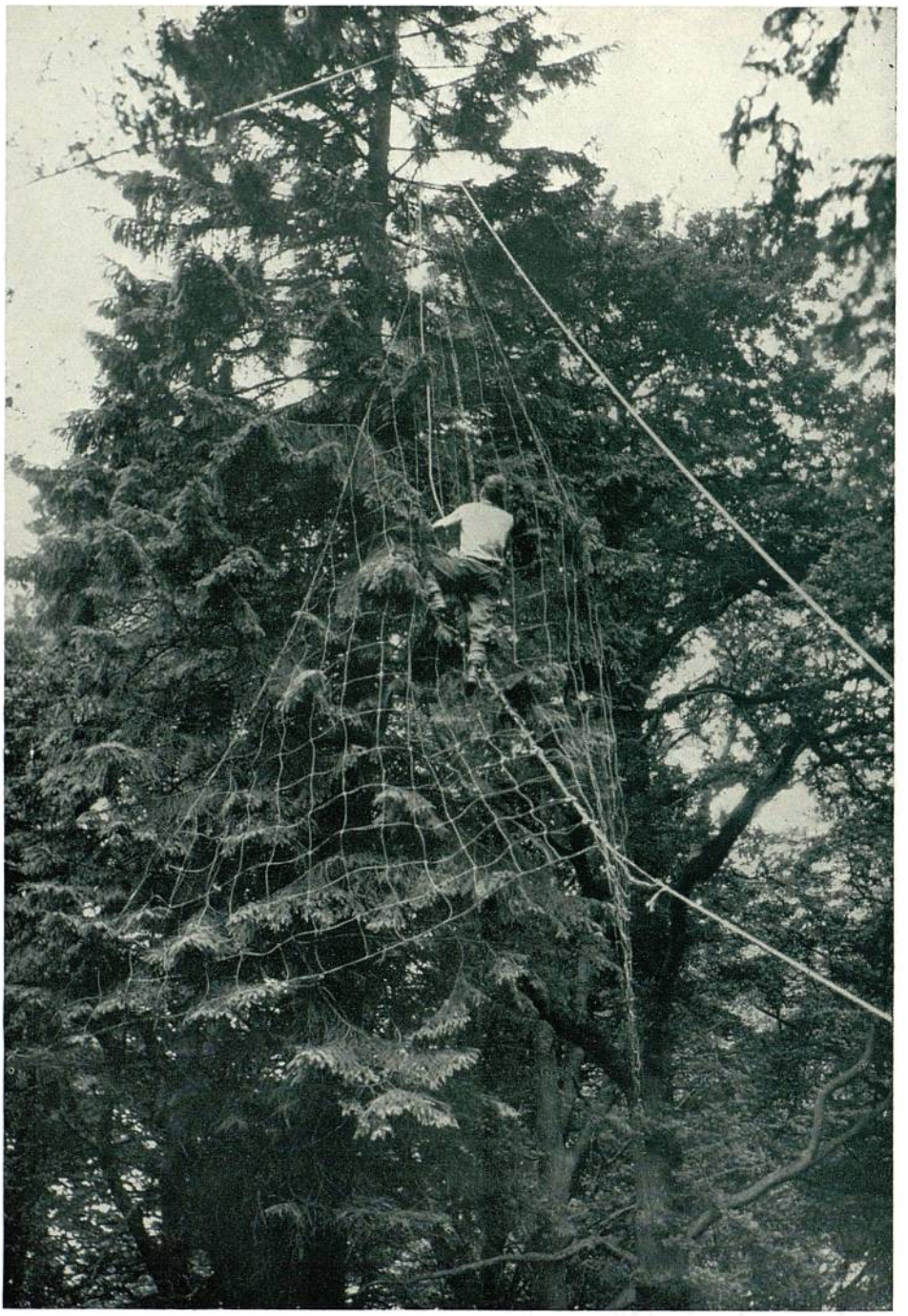


PHOTO 4. Seed collection; special methods; a scrambling net provides a means of collecting cones from the ends of light branches.

The general nature of the road-work undertaken remains unchanged and, with few exceptions, stone is got locally from river beds, spoil heaps and natural deposits; the use of quarried crushed stone is kept as low as possible.

The costs of constructing forest roads vary greatly according to the difficulty of conditions; in difficult conditions such as are met with in the north and west of Scotland and in north Wales, costs per mile have averaged £3,000; under the relatively easy conditions met with in east Scotland, costs per mile have been very much lower with an average of £1,100.

Including the new roads constructed since 1947, the net-work of forest roads for which the Commission is responsible now amounts to some 3,135 miles. Maintenance work on these is done as required.

Capital expenditure on roads and bridges was £785,000 (Appendix 2, page 61). The maintenance of roads and bridges amounted to £147,000; in addition £38,000 was spent on the formation and maintenance of forest tracks; this expenditure is charged mainly to forestry operations.

ESTATE MANAGEMENT

Properties in the charge of the Commission show the usual diversity associated with large estates. In addition to the 1,007,300 acres of plantations and nurseries, other land in the charge of the Commission amounts to 726,700 acres; this includes 272,000 acres of land which will be planted up in due course, but the major part consists of farms, forest workers holdings, and unplantable land. The number of lettable subjects, including easements and permissions, is 12,184; these are detailed by categories in Table 24 below.

TENANCIES

Table 24 — At 30th September, 1955 — Number

Description	Great Britain	England	Scotland	Wales
Houses for Supervisors and Forest Workers	4,523	1,754	2,130	639
Foresters and Foremens Houses	699	288	282	129
Forest Workers Holdings	1,186	515	446	225
Forest Workers Houses	2,638	951	1,402	285
Other properties ...	4,168	1,751	1,621	796
Agricultural, with house	595	173	201	221
Agricultural, land only	1,658	696	614	348
Houses and other premises ...	691	354	236	101
Sporting lettings	1,224	528	570	126
Miscellaneous:				
Easements, permissions, etc. ...	3,493	1,901	1,190	402

From the table above it will be seen that 4,523 houses have been provided for the forest staff; houses for Foresters and Foremen number 699, while holdings and houses for forest workers now amount to 3,824. Other properties, under which are included farms, agricultural land, houses and other premises, together total 2,944, while lettings of sportings were 1,224 in number. Miscellaneous easements, permissions and the like total 3,493.

Changes of tenants have not been significantly different from previous years, but worker tenants are more difficult to obtain for isolated situations and for houses which are not up to date in convenience and accommodation.

During the year agricultural properties held by the Commission have been examined in order that those not integral with the forest may be disposed of, and progress has been made.

Buildings

Progress in the construction of new houses has been disappointing. During the year 176 new houses, including houses obtained by the conversion of larger properties, were completed; in addition 108 houses were in course of erection at the end of the year. The numbers in each of the three countries are as follows:

	Houses completed	*Houses in course of erection*
England	74	47
Scotland	79	38
Wales	23	23

Development follows approved plans and where practicable new houses form additions to existing communities. For example, in England, 26 of the houses completed were additions to Kielder Forest village, and with these the first phase of the building of the new North Tyne villages of Kielder, Byrness (Redesdale Forest) and Stonehaugh (Wark Forest) is nearing completion. Attention has been given to the encouragement of social life in these new communities, and with the completion during the year of village halls at Byrness and Stonehaugh, each of these three new villages has now its social centre. A village hall was also opened at Santon Downham in Thetford Forest, East Anglia. Similar development has been taking place in Scotland, and 22 of the houses completed during the year comprised the first phase of the new community at Bonchester Bridge which will serve Wauchope Forest in Roxburghshire.

Repair and maintenance work continued to be difficult in outlying situations and costs are high. The dry summer affected the water supplies of a number of properties and remedial measures were undertaken by connecting to mains supplies where practicable; other improvements such as modernisation of sanitation and of hot water supplies were also undertaken.

Capital expenditure on buildings, including Forest Workers Holdings, was £517,000 (Appendix 2, page 61). Repairs and maintenance amounted to £134,000. Income from rents and royalties was £213,000.

PRIVATE FORESTRY

Expenditure on services to woodland owners was £610,000. The greater part of this expenditure was in respect of payments under the Dedication Scheme, which totalled £315,000. Payments for planting done outside the Dedication Scheme amounted to £59,000, of which Small Woods Planting Grants accounted for £35,000. Other payments included Thinning Grants (£39,000), Scrub Clearing Grants (£17,000) and grants to co-operative forestry societies (£3,000). The expenses of administration and of advisory services was £167,000. (Appendix 4, page 62.)

The Dedication Scheme

Progress in dedication slowed up during the year ; no doubt decisions were held up by some uncertainty about the form of the new dedication deed. The area dedicated was 67,650 acres as compared with 116,667 acres in the previous year ; reductions in the area newly dedicated during the year, of 37 and 49 per cent. occurred in England and Scotland respectively, while the figure for Wales was only slightly less than last year. The number of estates and the area dedicated are given below for each of the three countries. As an indication of future dedications, at the end of the year Plans of Operations put forward by 159 estates covering 48,111 acres of woodlands had been agreed, and for most of these the dedication deeds were being prepared, while a further 129 estates with 58,000 acres of woodlands were in course of preparing Plans of Operations ; in both cases compared with last year they show reductions.

The rates of the grants payable under the Dedication Scheme remained unchanged ; the last increase being in October, 1953, when the planting grant was increased to the present rate of £15 per acre and the maintenance grant to 5s. per acre.

The total area now dedicated amounts to 410,271 acres, and from the point of view of forest management in Britain it is encouraging to note that, taking into account the area of Approved Woodlands, there are now close on half a million acres of private woodlands under management, without taking into account estates already working to a plan which have not been put forward for inclusion in either of these schemes. The progress of dedication since its inception is shown in Table 25 below.

PROGRESS OF DEDICATION

Table 25 — Year ended 30th September

	Great Britain		England		Scotland		Wales	
	Number of Dedi-cations	Area (acres)	Number of Dedi-cations	Area (acres)	Number of Dedi-cations	Area (acres)	Number of Dedi-cations	Area (acres)
Total, 1948–55	875	410,271	544	193,580	272	203,540	59	13,151
1948–52 ...	252	149,144	118	51,656	116	93,223	18	4,265
1953	227	76,810	143	42,963	61	28,255	23	5,592
1954	253	116,667	180	60,611	61	54,393	12	1,663
1955	143	67,650	103	38,350	34	27,669	6	1,631

Approved Woodlands

The term "Approved Woodlands" signifies woodlands which will be managed by their owners according to a Plan of Operations approved by the Commission. For planting carried out under this scheme, grants are available at half the rate fixed for planting in dedicated woodlands. There are now 82,890 acres of woodland on 268 estates which have been accepted as Approved Woodlands. These are distributed as follows: England, 210 estates with 57,244 acres of woodland; Scotland, 45 estates with 23,088 acres; Wales, 13 estates with 2,558 acres of woodland. The additions during the year were: England, 102 estates with 29,021 acres of woodland; Scotland, 20 estates with 9,770 acres; Wales, 2 estates with 192 acres of woodland. In Wales two estates covering a woodland area of 484 acres withdrew from the scheme; one on account of the estate being sold and the other (377 acres) in order to dedicate. At the end of the year 112 estates were preparing Plans of Operations, covering 46,700 acres of woodland, for acceptance under this scheme.

Planting on Private Estates

In addition to planting grants available for Dedicated and Approved Woods, grants are available for planting undertaken in woods coming within the category of Small Woods, and also for planting poplars in blocks or in lines.

A summary, by number and area, of planting grant schemes which were inspected and passed for payment during the year is given in Table 26 below.

PLANTING UNDER GRANT-AIDED SCHEMES

Table 26 — Areas inspected and passed for payment, Year ended 30th September, 1955

	Planting under Dedication	Small Woods Planting	Approved Woods Planting	*Poplar Planting	Total
GREAT BRITAIN					
Number of Schemes	771	524	184	90	1,569
Total Area, acres ...	15,261	2,969	2,735	356	21,321
Conifers	11,071	1,724	1,543	—	14,338
Broadleaved ...	758	206	189	356	1,509
Mixed	3,432	1,039	1,003	— (4,358 trees)	5,474
ENGLAND					
Number of Schemes	483	282	135	86	986
Total Area, acres ...	5,900	1,627	1,377	333	9,237
Conifers	2,480	586	357	—	3,423
Broadleaved ...	665	170	175	333	1,343
Mixed	2,755	871	845	— (4,150 trees)	4,471
SCOTLAND					
Number of Schemes	242	135	41	2	420
Total Area, acres ...	8,070	813	1,286	2	10,171
Conifers	7,456	678	1,121	—	9,255
Broadleaved ...	84	30	12	2	128
Mixed	530	105	153	— (208 trees)	788

* Numbers of poplar trees relate to grants made on the "per tree" basis, and are additional to trees covered by acreage grants.

Table 26—*cont.*

	Planting under Dedication	Small Woods Planting	Approved Woods Planting	Poplar Planting	Total
			WALES		
Number of Schemes	46	107	8	2	163
Total Area, acres ...	1,291	529	72	21	1,913
Conifers	1,135	460	65	—	1,660
Broadleaved ...	9	6	2	21	38
Mixed	147	63	5	—	215

This table, it should be noted, does not give a complete picture of the planting done during the year as it includes some planting done in earlier years but not inspected till the year under review, while some of the present year's planting, not yet inspected, is not included.

The total acreage of the plantings inspected and passed was 21,321 acres, as compared with 16,824 acres in 1954. The increase of 4,497 acres is made up of an additional 2,075 acres in Dedicated Woodlands, and 2,267 acres in Approved Woods; there was also an increase in the extent of poplar plantings, but little change in the area planted under the Small Woods Scheme.

Table 27 below, compiled from information supplied by Conservators, provides an estimate of the planting done during the year on private estates, including planting without the aid of grants.

ESTIMATED AREA OF PRIVATE PLANTING

Table 27 — Year ended 30th September, 1955 — Acres

	Grant-aided	Planted without the aid of Grants	Total
GREAT BRITAIN	19,600	2,500	22,100
England	8,700	1,600	10,300
Scotland	9,700	900	10,600
Wales	1,200	—	1,200

The area planted on private estates in the year under review is estimated at some 22,100 acres, of this 19,600 acres are known to have been planted under grant schemes, while 2,500 acres is an estimate, possibly conservative, of the area planted without any grant being asked for. Last year the total planting was estimated at 19,100 acres, of which 15,700 were under grant schemes and 3,400 acres without grants.

Scrub Clearance Grants

Much more use was made of this scheme for assisting owners to clear unproductive scrub areas for planting than in the previous year. The scheme applies to Dedicated Woodlands, Approved Woodlands and also to Small Woods. The grant payable depends on the estimated cost of clearing; it is at the rate of £7 10s. 0d. per acre for areas estimated to cost more than £15 but less than £25 per acre; a higher rate of £12 10s. 0d. is payable where

the estimated cost of clearing exceeds £25 per acre. The planting grant appropriate to each description of woodland is payable in addition. The number of scrub clearance schemes inspected and passed for payment during the year was 241; the area cleared was 1,830 acres; last year there were 85 schemes covering 574 acres. Details by countries of the schemes passed during the year are given below.

SCRUB CLEARANCE GRANTS

Table 28 — Schemes inspected and passed for First Payment
Year ended 30th September, 1955

	Number of Schemes	Area (acres)
GREAT BRITAIN	241	1,830
England	151	1,091
Scotland	34	370
Wales	56	369

An analysis of the areas cleared shows that 1,209 acres were in Dedicated Woodlands, 276 acres in Approved Woodlands and 345 acres in Small Woods.

Thinning Grants

Under present regulations a grant of £3 15s. 0d. per acre is available for first and second thinnings made in stands coming within certain limits of height or, alternatively, of girth. Table 29 below gives details for each country of the schemes inspected and passed for payment.

THINNING GRANTS

Table 29 — Schemes Inspected and Passed for Payment
Year ended 30th September, 1955

	Number of Schemes	Area (acres)	Estimated Volume (cubic feet)
GREAT BRITAIN	844	10,831	2,997,598
England	551	6,061	1,575,561
Scotland	200	3,988	1,144,202
Wales	93	782	277,835

A comparison with last year's figures for the country as a whole shows no significant change; the totals for 1954 were: 807 schemes, 10,180 acres thinned, with an estimated yield of 2·9 million cubic feet. An examination of the figures for individual countries, however, shows that a decrease in the acreage thinned in England and Wales was more than made up for by an increase of 1,470 acres in Scotland, an indication, no doubt, that estates are resuming thinnings now that the clearing up of the windblow has been effected.

Licensing of Timber Felling

Licences issued during the year were 6,643 in number and authorised the felling of 38·439 million cubic feet of timber. The corresponding figures for the previous year were: 6,386 licences covering 40·631 million cubic feet. Details of the licences issued in the year under report are given below.

	Cubic feet quarter-girth over bark (millions)	
Conifers		
Counting against Quota		
Over 6 inches quarter-girth at breast height ...	6·700	
Not counting against Quota		
Thinnings over 6 inches quarter-girth at breast height	2·644	
6 inches quarter-girth and under at breast height ...	6·517	
		15·861
Broadleaved species		
Counting against Quota		
Over 6 inches quarter-girth at breast height ...	21·346	
Not counting against Quota		
6 inches quarter-girth and under at breast height ...	1·232	
		22·578
Total		38·439

As noted earlier in this Report (page 12) the felling quotas for coniferous timber and also for broadleaved timber were not all taken up; the balance available was 0·2 million cubic feet of coniferous and 4·654 million cubic feet of broadleaved timber. The quantities of windblown timber included in the above and counted against the quotas were 1·017 million cubic feet of coniferous and 0·188 million cubic feet of broadleaved timber.

The volume of timber not coming within the quota restrictions for which licences were issued was 10·393 million cubic feet, which is just over half a million more than last year; practically the whole of the increase was in conifer thinnings over six inches quarter-girth.

Of the 6,643 licences issued, 2,109 authorised the clear felling of 21,016 acres; an analysis of these shows that 1,457 licences covering 14,125 acres are subject to replanting and maintenance conditions, that 320 covering 2,518 acres were issued to dedicated estates and that 332 in respect of 4,373 acres, to which no replanting and maintenance conditions were attached, were issued to other estates. As 2,732 acres of the area covered by unconditional licences will be acquired for replanting by the Commission, and as one licence concerned the removal of the overwood from an established crop, the restocking in due course is assured for 19,487 acres out of the 21,016 acres authorised during the year for clear felling.

In addition, 225 replacement licences were issued in respect of time-expired licences; these covered the felling of 4,924 acres, of which 3,750 acres carry restocking and maintenance conditions; 119 acres are on dedicated estates; and 1,174 acres, of which 501 acres will be acquired for restocking by the Commission, had no replanting and maintenance conditions attached.

The administrative cost of licensing during the year under report was £39,000. (Appendix 7, page 63.)

RESEARCH AND EXPERIMENT

Research work and special investigations into forestry problems were continued at the Forest Research Station, Alice Holt Lodge, near Farnham, Surrey, and also in experimental areas in many forests in England, Scotland and Wales. Expenditure amounted to £234,000, for details see Appendix 5, page 62.

Brief notes of the work done during the year are given in the following paragraphs. Detailed accounts of the activities of the various sections of the Research Branch will be found in the *Report on Forest Research for the year ending March,* 1955 (H.M.S.O. 5s. 6d.).

Visitors to the Research Station continue to increase in number ; last year there were 406, and in the year under report, 504. These visitors included students from home universities and other institutions, the staff of the East Malling Research Station, members of the Association of Applied Biologists, and members of a Forestry Course arranged by the British Council, and also forest officers, research workers and scientists from many parts of the world, including: Austria, Australia, Canada, Cyprus, Denmark, Finland, France, Germany, India, Italy, Israel, Japan, Kenya, Netherlands, New Zealand, Nigeria, Norway, Pakistan, South Africa, Sweden, Tasmania, Turkey, and the United States of America.

Silviculture

The Seed Testing Laboratory of the Research Station made 1,247 germination tests of samples of home and imported seed ; in addition 678 other tests were carried out, including determinations of the purity and the moisture content of seed samples and of the seed content of cones before general collection took place. Investigations into storage methods for both conifer and broadleaved tree seeds have been continued ; these tests to date show that conifer seed dried to an appropriate moisture content and stored in sealed containers at a steady low temperature can be kept for four years at least, with little drop in germinative capacity.

In the nurseries further trials with formalin and chloropicrin for the partial sterilisation of soils were undertaken. Chloropicrin, although giving as good or better responses than formalin caused, in some cases, a serious reduction in the number of seedlings. This may have been due to the seed being sown before all traces of the sterilant had left the ground. Further tests are in progress to establish the best rate of application and the safe period to allow before the seed is sown. Seedbed compaction trials confirmed that rolling seedbeds with a medium 12-inch roller, weighing 1 to 4 cwt., before sowing, is a satisfactory procedure. Three years work with Sitka spruce on a wide variety of nursery sites, and covering a range of climatic conditions, has confirmed that, of the nitrogenous fertilisers tested, two top dressings of "Nitrochalk" in either July or August, or one in each month, give the greatest stimulus to height growth. Long term fertility demonstration experiments, now in their fifth year, again showed that of the various treatments the combination of organic and inorganic fertilisers gave the biggest seedlings, but in Newton and Teindland Nurseries (Morayshire) the compost-treated plots gave for the first time larger plants than the plots manured with artificial fertilisers. Experiments continued on problems of weed control, irrigation by overhead spray lines and the undercutting of seedlings.

Pilot plots planted on difficult peat areas in the north are still making good growth, and evidence shows that exposure to wind is a more serious factor than poor soil conditions. To determine what degree of exposure to wind might be considered as limiting for the planting of further species trials, a scheme for evaluating the exposure factor by noting the rate of tattering of un-hemmed flags of a standard pattern has been put into effect over a wide range of sites.

On the Lizard peninsula, on soils over serpentine rock, further trial plots of some nineteen species have been laid down, including mixtures with the hardiest species for protection against sea winds. As direct sowings made in the previous year were unsuccessful, fresh sowings are being experimentally

protected by a spray of bituminous emulsion after sowing. Bituminous emulsion sprays are also being tried for fixing sand dunes at Newborough Warren in Anglesey. Other silvicultural investigations include trials with the Australian "Majestic" plough, the use of triple superphosphate for manuring at the time of planting, mixture experiments, and the establishment of hardwoods in Scotland. Provenance work on lodgepole pine, Sitka spruce and Douglas fir was extended, and further experiments on the chemical control of woody weeds, and on the value of animal repellents for the protection of young trees, were made.

Forest Genetics

A survey of seed sources in Scotland, which was commenced in 1951, has now been completed. Six hundred and fifty-seven plantations have been classified, and a Register of Seed Sources compiled for each Conservancy. The selection for propagation of individual "plus" trees was continued; over ten thousand grafts, of which sixty per cent. were successful, have been made from these trees. Some success was obtained in the propagation of the larches by summer wood cuttings, using a propagating frame incorporating sub-irrigation and electrical soil warming.

Six seed orchards have now been established and a further three are in course of formation; the total area of these will then amount to fifty-five acres. The species being used are Scots pine, the larches, Douglas fir and beech. In the Alice Holt seed orchard, some four-year-old grafts of beech produced flowers in April, 1954; these were fertilised with pollen collected from mature beech and gave viable seed from which some strong seedlings have now been raised.

Studies of Growth and Yield

The number of permanent sample plots which are measured periodically is now 629; during the year 69 new plots, including samples of the less common conifers such as *Tsuga* and *Thuja* and of hardwoods, were established, and 243 permanent plots were remeasured. Details are given below.

PERMANENT SAMPLE PLOTS

Table 30

	Great Britain	England	Scotland	Wales
Number at 1st October, 1954	629	319	216	94
New plots established during the year ...	69	25	9	35
Plots previously written off—reclaimed ...	4	2	2	—
Plots abandoned (felled, blown, etc.) during the year	8	3	2	3
Number at 30th September, 1955	694	343	225	126
Remeasured during the year	243	74	101	68

To supplement the data from the permanent sample plots, 95 temporary plots were measured in stands of coniferous species for which no yield tables for this country have yet been prepared. Following a review of sample plot methods, undertaken with the object of reducing the work involved without sacrificing information, a revised code of procedure has been drafted. In the new procedure use is made of a new type of dendrometer, the development of which was initiated at the Research Station. This instrument enables heights and diameters, at intervals up the stem of standing sample trees, to be ascertained with sufficient accuracy by an observer standing on the ground.

The Statistical Section, in addition to internal advisory and computational work, has made special studies of designs for experiments to suit forestry problems.

The revision of the 1947–49 Census of Woodlands was continued according to programme; the field work in the counties of Ross and Cromarty, Flintshire, and Berkshire was completed during the year.

Forest Pathology

During the year fungal diseases were much in evidence. Heavy attacks by *Lophodermium pinastri,* which affects the needles of pines, started to appear at the end of March, and *Keithia thujina* was unusually virulent and damaging to *Thuja* in nurseries. *Rhabdocline pseudotsugae,* a disease causing leaf-cast, appeared for the first time on Douglas fir of coastal origin, and *Meria laricis,* which causes the leaf-cast of European larch, was recorded for the first time in this country on both Japanese and Hybrid larch. Investigations continue into the causes of group dying of Sitka spruce; this has been found to be almost always associated with areas where there have been fires and with the fungus *Rhizina inflata.*

Forest Entomology

A survey of the numbers of pupae of the Pine Looper Moth (*Bupalus piniarius* L.) was again carried out, and showed that there had been a general decrease in numbers in the pine woods throughout the country; while assessments of the effects of the spraying of insecticide from the air at Cannock Chase and at Culbin forest, undertaken in September, 1954, showed that over the sprayed areas the population of this pest had been reduced to an endemic level. General field and laboratory studies of this defoliator of pines are being continued.

Developments in the insect situation in the gale-damaged areas in north-east Scotland were also kept under observation. Last year it was reported that the stage was set for an epidemic in 1955 of the Pine Shoot Beetle, *Myelophilus piniperda,* as large numbers had bred in the blown pine trees still remaining. The huge population which resulted did, in fact, cause serious and widespread crown damage and deformation in younger standing pine woods in 1955. Most fortunately, and rather unexpectedly, very little breeding has occurred in standing trees, as these, even in a drought year, have in most cases successfully resisted beetle invasion. The epidemic can now be expected to decline naturally and rapidly though the results of the attack will be evident for some years to come.

A larch bark beetle, *Ips cembrae,* has been discovered for the first time in Britain in a number of localities mainly in Morayshire. This species on occasion causes considerable damage to larch woods on the Continent, particularly in the drier regions and in drought years, and the assumption is that it was brought in on the German timber imported in 1946–48 since when it has, unobserved, existed at low population levels. The conditions in north-east Scotland following the windblow in 1953 have favoured an increase in numbers, and while so far this beetle has not been found breeding in standing trees, this is a possibility and these outbreaks are being investigated.

Machinery Research

The introduction of modifications to agricultural tractors to increase their scope for forestry operations, especially on soft ground, has been one of the main fields of investigation; at the same time a new British tractor designed for work on soft ground has been under trial. While, for the better cultivation of hard stony ground prior to planting, new designs of tine plough and mouldboards are being experimented with.

In the field of timber extraction, a specially designed portable power-operated winch has been giving satisfactory service ; it is considered that if it were lighter its usefulness would be extended, and consideration is being given how best to effect this. For the transport of logs over short distances in the forest, a Canadian design of cableway over which the logs move by gravity alone is being tested. The mechanisation of nursery operations is receiving attention ; trials are in hand of a transplanting machine, a new type of plough for lining-out, and a machine for the mechanical weeding and cultivating of the narrow rows between plants in the nursery ; the mechanical weeding machine at present undergoing tests has been designed to cultivate between six rows of plants, and initial results are encouraging.

User trials of other machines have been made, including power saws for felling and cross-cutting, and also machines for the clearing of scrub in derelict woodlands.

Utilisation Development

The Advisory Committee on the Utilisation of Home Grown Timber met at Thetford during October, and in London during January and July to review progress and to plan future work.

The two-roomed office constructed from small-sized thinnings, to which reference was made in last year's report, has now been erected and is in use at Santon Downham near Thetford. The behaviour of the timber is being carefully recorded.

Following favourable reports from the Forest Products Laboratory, Madison, U.S.A., on the pulping qualities of the principal British hardwoods, progress has been made by firms investigating the possibility of establishing hardwood pulp mills in Britain ; the planning of one mill has now reached an advanced stage.

In co-operation with the leather industry, investigations were continued into the possible use for tanning of the bark of the principal commercial species of trees grown in this country ; in particular a study was made of the tannin content of Sitka spruce bark from different localities.

A survey of the use of home grown timber in the box, packing case and pallet making trades in Scotland was completed during the year.

Advisory Committee on Forest Research

The Research Advisory Committee met twice during the year, a one day meeting being held in London in December and the summer meeting at Bangor in July. From Bangor, experimental work at Beddgelert, Gwydyr, and Newborough Forests was inspected. A sub-committee under the chairmanship of Sir William Ogg has been set up to advise on soil research within the Commission and on the co-ordination of the wide range of investigations into forest soil problems now being undertaken at a number of universities and other institutions.

It is with regret that we have to report the resignation of Professor Walton, Chairman of the Committee, owing to ill health.

Grants to Universities and other Institutions

The Commissioners have continued to make grants to Forestry Departments of Universities and other Institutions for research work in special forestry problems of a fundamental scientific nature. The Macaulay Institute, Aberdeen, the Imperial Forestry Institute, Oxford, and the Rothamsted Experimental Station received grants for biological and physiochemical research in forest soils, and Dr. I. Levisohn, Bedford College, London, for

soil mycological investigations. Grants were also made to Edinburgh University for bioclimatic studies of the Pine Looper Moth, and for the study of shelterbelts; to Cambridge University and to Southampton University for mycological research on nursery soils and for studies on European larch canker respectively, and to Aberdeen University for investigations into the variation in the lodgepole pine, *Pinus contorta.*

Tests of Home Grown Timbers

Comprehensive tests of timbers of the main species used for afforestation were continued by the Forest Products Research Laboratory on behalf of the Commission. During the year tests were made of consignments of Douglas fir (*Pseudotsuga taxifolia*) from three sites, of western red cedar (*Thuja plicata*) from two sites and of Corsican pine (*Pinus nigra* var. *calabrica*), lodgepole pine (*Pinus contorta*), and western hemlock (*Tsuga heterophylla*) from one site each.

EDUCATION

Expenditure on Forester Training Schools, Short courses for Forest Workers, the Forestry Apprenticeship Scheme and Northerwood House was £142,000. Income amounted to £33,000, of which £23,000 represents work done in the Commission's forests by students at the Forester Training Schools. (Appendix 6, page 62.)

Forester Training Schools

Five Forester Training Schools are maintained to provide trained men for the subordinate grades of the Forestry Commission and for similar posts in private forestry. Two of these schools are in England, two in Scotland and one in Wales.

The course of training at these schools extends over two years, and at the beginning of the year 235 men were under instruction; 121 in their first year and 114 in their second year. The two-year course was completed by 109 men, of whom 105 were awarded Forester Certificates while 4 who did not reach that standard were awarded Foreman Certificates. 95 of these men took up posts in forestry, 78 with the Forestry Commission, 2 in private forestry, 7 with Colonial and Commonwealth Forest Services, while 8 students who had been nominated by the Government of Northern Ireland returned to posts in that country; 14 took up other employment.

Short Courses for Forest Workers

Two courses of six weeks duration each were again held at Chatsworth Estate, Derbyshire, through the courtesy of His Grace the Duke of Devonshire. The object of these courses is to provide selected forest workers with training in the theory and practice of forestry to fit them for supervisory duties on private estates. A total of twenty-seven men attended these courses and were awarded certificates of efficiency by the Forestry Commission; these men also took the examination for the Woodman's Certificate of the Royal Forestry Society of England and Wales and all but one passed. A similar course planned to be held on the Darnaway Estate, Morayshire, through the courtesy of the Earl of Moray, had to be cancelled through lack of support.

Forestry Apprenticeship Scheme

The first five apprentices under this scheme, which was started in the Forest of Dean, Gloucestershire, in May, 1953, satisfactorily completed their apprenticeship and were awarded certificates as skilled forest workers.

There are now 44 apprentices in training under this Scheme which has been extended to other parts of the country. The Local Education Authorities co-operate by admitting apprentices to classes on one day a week for further general education.

Northerwood House

Northerwood House in the New Forest has continued to be used as a centre where special courses on forestry are given and for accommodating University students studying working plans and silviculture in the Forest.

Twenty-one courses of instruction, each lasting a week, were held for the Commission's staff; the subjects covered were Nursery Work (2), Silviculture (3), Forest Management (2), Utilisation (2), Fire Protection (2), Private Woodlands (2), Research Work (2), Study of Poplars (1), Radio Telephony for fire fighting (1) and Introductory Courses for New Entrants (4). Courses on forestry practice were also arranged for others with forestry interests; these included three courses for landowners and agents, two for County Planning Officers, one for timber merchants, and one for schoolteachers. A week-end course was also arranged for members of the Hampshire Federation of Young Farmers' Clubs.

Students from the Universities of Oxford, Edinburgh, Aberdeen and the University College of North Wales, Bangor, were in residence for a period of 18 weeks.

Distinguished visitors interested in the Commission's educational work included the Prime Minister of Burma who was shown over the Forester Training School at Faskally, Perthshire, and the Prime Minister of Thailand who paid a visit to Northerwood House.

PUBLICATIONS

Eleven new publications for sale were issued through H.M. Stationery Office;* in addition, eighteen of the publications for sale, and six free pamphlets circulated directly by the Commission,† were revised and reprinted.

Four of the new publications were bulletins presenting the results of original research into fundamental aspects of forest science, namely:

(1) Bulletin 21. Tree Root Development on Upland Heaths.
(2) Bulletin 23. Mull and Mor Formation in Relation to Forest Soils.
(3) Bulletin 24. The Volume—Basal Area Line. A Study in Forest Mensuration.
(4) Bulletin 25. Studies of North-West American Forests in relation to Silviculture in Great Britain.

The Leaflet and Forest Record series were added to by the following:

(5) Leaflet 33. Collection of Ash, Sycamore, and Maple Seed.
(6) Leaflet 34. Badgers in Woodlands.
(7) Leaflet 35. Pine Sawflies.
(8) Forest Record 29. Use of Forest Produce in Sea and River Defence.

* Published by H.M.S.O. at the following prices: No. 1, 10s. 6d.; No. 2, 10s. 0d.; No. 3, 9s. 0d.; No. 4, 6s. 0d.; No. 5, 6d.; No. 6, 9d.; No. 7, 9d.; No. 8, 1s. 6d.; No. 9, 3s. 6d.; No. 10, 5s. 0d.; No. 11, 6d.; No. 12, 4s. 0d.; No. 13, 5s. 0d.; No. 14, 5s. 0d.

† Copies obtainable on request from the Secretary, Forestry Commission, 25, Savile Row, London, W.1. A full list of publications is also available free of charge.

Among the free pamphlets, *Forestry in Wales*, which has enjoyed a wide circulation, was revised to record recent developments, and re-issued in both English and Welsh language versions.

Other new publications comprised :

(9) Annual Report of the Forestry Commissioners, 1954 (H.C. 18, 1955).
(10) Report on Forest Research, 1953.
(11) Agreements on Afforestation in the Lake District.

The continued demand for guide books to the National Forest Parks necessitated the re-issue of three of these in new editions, each with a revised text, new illustrations, and an improved map. The Guides concerned were :

(12) Argyll. Third Edition.
(13) Glen Trool (Galloway). Second Edition.
(14) Snowdonia. Second Edition.

A number of papers prepared by the Commission's staff were presented at the World Forestry Conference held in India and at the British Association for the Advancement of Science. The Commission's staff also contributed numerous articles to technical and scientific publications.

PUBLICITY AND PUBLIC RELATIONS

The Commissioners are pleased to note the interest in forestry now being taken by schools and other educational establishments, to which display and other material was loaned. Steps were taken to make known more widely the opportunities available to schools to learn more about forestry at first hand and by this means to make the younger generation more conscious of the place of forestry in the country's economy. For example, schools may adopt forest plots in Commission woodlands in which the pupils carry out planting and other work ; one school in Glamorgan, in particular, which has a plot in Coed Morgannwg (Forest of Glamorgan) has shown how almost every subject in the school curriculum can be linked in one way or another with their forestry work. Another scheme enables schools to obtain gifts of surplus forest trees from the Commission for planting in school grounds for educational purposes.

Statements were issued from time to time to the Press ; conferences were held and representative parties were taken round to see for themselves something of the scope and economic importance of forestry. Commission officers, by invitation, have contributed special articles to a number of publications. On several occasions forestry was featured in B.B.C. sound and television programmes.

Nearly 200 lectures were given by Forest Officers to schools and various bodies ; and numerous parties from schools and other organisations were escorted on forest tours. Films on forestry were also made available on loan.

Exhibits were arranged at 15 major agricultural shows, including the Royal Show at Nottingham ; the Royal Highland Show at Edinburgh ; the Royal Welsh Show at Haverfordwest ; and the Bath and West Show at Launceston. Assistance was also given to the organisers of the Kent County Show in the arrangement of a forestry exhibit for the first time. Additionally, exhibits were provided at certain smaller agricultural shows, including a number in Wales. Displays were arranged at several exhibitions, including two in Wales on the subject of careers for young people.

Publicity for the grey squirrel campaign was again undertaken and included the issue of material to the Press, and the distribution of posters and leaflets ; in Scotland a special trapping demonstration was attended by estate owners and the Press.

In much of the general publicity undertaken during the year the danger of forest fires was stressed and in this connection special thanks are due to the Press for their co-operation and to the B.B.C. for the inclusion of fire danger warnings in news bulletins at holiday times.

NATIONAL FOREST PARKS

In September, 1955, the National Parks Commission and the Forestry Commission jointly announced the creation of two National Parks along the Border between England and Scotland. One of these, designated the Northumberland National Park, and administered by the National Parks Commission, lies wholly in Northumberland; it extends from The Cheviot south to the Roman Wall and includes portions of Wark, Redesdale, Rothbury, Kidland and Harwood Forests. The other, the Border National Forest Park, is administered by the Forestry Commission. This park lies partly in Northumberland, partly in Cumberland, and partly in the Scottish county of Roxburghshire. It embraces Kielder Forest and parts of Redesdale and Wark Forests (all in Northumberland); Kershope Forest in Cumberland; and the Newcastleton and Wauchope Forests on the Scottish side. The total area of this Border Forest Park is nearly 123,000 acres, or some 192 square miles. It is thus one of the largest of the National Forest Parks, being exceeded only by Glen Trool, with 130,000 acres.

The Forestry Commission has now designated eight areas, amounting to some 428,000 acres of woodland and mountain, as National Forest Parks. The first of these, the Argyll Forest Park, was formed in 1936 and the others have followed at intervals since; a list of forest parks in the order of their formation is given below.

NATIONAL FOREST PARKS

Name	*Situation*	*Area in Acres*
Argyll ...	Cowal Peninsula of Argyll	58,000
Snowdonia	Caernarvonshire	22,500
Forest of Dean ...	Gloucestershire, Herefordshire and Monmouth	33,500
Hardknott	Lake District; Cumberland and Lancashire	7,000
Glen Trool	Galloway; Ayrshire and Kirkcudbrightshire	130,000
Glen More	Cairngorm Mountains; Inverness-shire	12,500
Queen Elizabeth ...	Ben Lomond, Loch Ard, and the Trossachs; Perthshire and Stirlingshire	41,500
Border ...	Northumberland, Cumberland and Roxburghshire	123,000
	Total area ...	428,000 acres

The public are given the freest possible access to these areas consistent with the protection of the plantations, particularly from fires, and encouraged by the fine summer of 1955 visitors have made use of the camping facilities provided at most of the forest parks in greater numbers than ever before.

The New Forest, Hampshire, while not designated a forest park, provides an additional area of 65,000 acres of woodland and heath for the enjoyment of the public. Proximity to London makes the New Forest a very popular resort for day visitors as well as for campers, but in dry spells during the holiday season the great numbers of visitors attracted to this and to other forests are the cause of some anxiety on account of the additional fire risk.

RADNOR (*Chairman*).
J. M. BANNERMAN.
R. C. G. COTTERELL.
LLOYD O. OWEN.
JOHN STIRLING.
W. H. VAUGHAN.
STANLEY LONGHURST.
A. P. F. HAMILTON.
D. C. BOWSER.

H. A. TURNER, *Secretary*,
25, Savile Row,
London, W.1.

APPENDICES

Year Ended 30th September, 1955.

FINANCIAL STATEMENT

Appendix 1

		£000's
TO BE ACCOUNTED FOR		
Forestry Fund ...		8,473
Other expenditure:		
Provision for depreciation, pensions and gratuities ...	793	
Net variation in work in progress, stocks, debtors, sundry balances and cash — deduct	117	
		676
		9,149
SUMMARY OF EXPENDITURE		
Capital Expenditure (Appendix 2)	2,071	
Forestry Operations (Appendix 3)	5,378	
Private Forestry (Appendix 4)	610	
Research (Appendix 5)	234	
Education (Appendix 6)	109	
General Administration (Appendix 7) ...	418	
Special Expenditure (Appendix 8)	329	
		9,149

CAPITAL EXPENDITURE

Appendix 2

Land	267
Standing Timber	125
Buildings	517
Roads and Bridges	785
Vehicles, Machines and Equipment	350
Miscellaneous	27
	2,071

FORESTRY OPERATIONS: EXPENDITURE

Appendix 3

Preparatory work and formation of plantations ...		2,205
Maintenance of plantations		1,028
Forest protection		420
Preparation of produce		1,444
Overhead expenses		2,706
		7,803
Deduct:		
Sales of timber and other forest produce	2,377	
Increase in stocks of felled timber and other forest produce	48	
		2,425
		5,378

PRIVATE FORESTRY: EXPENDITURE

Appendix 4

		£000's
Grants under Dedication Schemes ...	315	
Small Woods Planting Grants	35	
Approved Woodlands Planting Grants ...	17	
Poplar Planting Grants	2	
Other Planting Grants	5	
		374
Thinning Grants	39	
Scrub Clearance Grants	17	
Grants to Co-operative Societies ...	3	
Grey Squirrel Bonus	7	
Miscellaneous	3	
		69
Administration, including Advisory Services		167
		610

RESEARCH: EXPENDITURE

Appendix 5

	£000's
Silviculture, including nursery work	121
Genetics	16
Mensuration, Census, etc.	31
Pathology and Entomology ...	26
Machinery	5
Utilisation	10
Grants to Institutions	13
Miscellaneous	12
	234

EDUCATION: EXPENDITURE

Appendix 6

		£000's
Forester Training Schools		124
Short Courses		5
Forestry Apprenticeship Scheme ...		1
Northerwood House		9
Miscellaneous		3
		142
Deduct:		
Value of student labour	23	
Other	10	
		33
		109

GENERAL ADMINISTRATION: EXPENDITURE

	£000's
Appendix 7	
Directorate Offices	208
Headquarters	173
Administration of Felling Licensing	39
Information and Shows	8
	428
Deduct:	
Miscellaneous Income	10
	418

SPECIAL EXPENDITURE

Appendix 8	
Assistance towards cost of transporting Scottish windblown trees ...	329

Appendix 9

Country or Conservancy	Total Area Planted (Acres)	Details of Area Planted (Acres)					
		Coniferous Total	Broad-leaved, Total	Afforested		Replanted	
				Conifers	Broad-leaved	Conifers	Broad-leaved
GREAT BRITAIN ...	67,906	61,714	6,192	40,113	789	21,601	5,403
ENGLAND: ...	21,222	16,483	4,739	9,473	451	7,010	4,288
Conservancy:							
North West ...	3,782	3,071	711	1,476	73	1,595	638
North East ...	8,271	7,423	848	6,567	108	856	740
East	3,002	1,692	1,310	521	165	1,171	1,145
South East ...	2,343	1,388	955	54	54	1,334	901
South West ...	2,961	2,196	765	491	39	1,705	726
New Forest ...	609	536	73	340	8	196	65
Dean Forest...	254	177	77	24	4	153	73
SCOTLAND: ...	34,042	33,529	513	23,090	135	10,439	378
Conservancy:							
North ...	8,727	8,695	32	4,543	6	4,152	26
East	7,568	7,327	241	3,257	58	4,070	183
South ...	10,032	9,909	123	8,738	8	1,171	115
West	7,715	7,598	117	6,552	63	1,046	54
WALES:	12,642	11,702	940	7,550	203	4,152	737
Conservancy:							
North ...	7,167	6,683	484	4,474	113	2,209	371
South ...	5,475	5,019	456	3,076	90	1,943	366

ENDED 30TH SEPTEMBER, 1955—SUMMARY BY CONSERVANCIES

Total plants used	Species Planted, including Beating Up (Thousands of plants)										
	Scots Pine	Corsican Pine	European Larch	Japanese Larch	Douglas Fir	Norway Spruce	Sitka Spruce	Oak	Beech	Other Species	
										Conifers	Broad leaved
118,452	22,220	6,190	2,395	15,447	4,127	11,960	28,408	4,696	4,112	17,757	1,140
35,564	5,495	3,995	527	2,661	1,990	3,648	6,126	3,482	2,802	4,218	620
6,016	1,779	500	13	589	315	119	1,008	600	102	793	198
12,996	2,695	192	166	1,484	342	502	4,962	354	227	1,866	206
5,613	568	1,387	182	43	323	1,181	6	1,002	516	279	126
4,020	209	410	52	138	705	435	3	637	1,049	316	66
5,290	124	859	95	380	172	1,261	146	706	746	797	4
1,063	72	615	—	4	87	10	1	6	148	110	10
566	48	32	19	23	46	140	—	177	14	57	10
59,863	15,695	690	1,765	8,463	1,394	5,716	15,463	321	472	9,462	422
16,918	8,336	124	393	1,722	497	629	3,078	19	24	2,065	31
14,903	5,537	313	885	1,852	361	1,165	1,069	78	198	3,154	291
15,540	547	127	135	3,411	389	2,215	5,978	152	121	2,431	34
12,502	1,275	126	352	1,478	147	1,707	5,338	72	129	1,812	66
23,025	1,030	1,505	103	4,323	743	2,596	6,819	893	838	4,077	98
12,558	571	661	99	1,112	498	1,073	4,629	511	391	2,952	61
10,467	459	844	4	3,211	245	1,523	2,190	382	447	1,125	37

SUMMARY OF SPECIES USED FOR PLANTING AND BEATING UP

Appendix 10

Thousands of plants

Year ended 30th September 1955

Species	Great Britain			England			Scotland			Wales		
	Total	Planting	Beating up	Total	Planting	Beating up	Total	Planting	Beating up	Total	Planting	Beating up
All Species	118,452	103,506	14,946	35,564	31,311	4,253	59,863	53,187	6,676	23,025	19,008	4,017
Scots Pine	22,220	18,689	3,531	5,495	4,585	910	15,695	13,574	2,121	1,030	530	500
Corsican Pine	6,190	4,750	1,440	3,995	3,329	666	690	339	351	1,505	1,082	423
European Larch	2,395	2,110	285	527	490	37	1,765	1,539	226	103	81	22
Japanese Larch	15,447	12,861	2,586	2,661	2,118	543	8,463	7,135	1,328	4,323	3,608	715
Douglas Fir	4,127	3,410	717	1,990	1,616	374	1,394	1,164	230	743	630	113
Norway Spruce	11,960	11,083	877	3,648	3,454	194	5,716	5,300	416	2,596	2,329	267
Sitka Spruce	28,408	26,261	2,147	6,126	5,676	450	15,463	14,573	890	6,819	6,012	807
Tsuga heterophylla ...	1,543	1,407	136	1,187	1,080	107	151	147	4	205	180	25
Thuja plicata	763	603	160	269	249	20	191	172	19	303	182	121
Lodgepole pine	10,934	9,447	1,487	1,892	1,699	193	6,849	6,093	756	2,193	1,655	538
Hybrid Larch	1,479	1,338	141	—	—	—	1,441	1,301	140	38	37	1
Lawson Cypress	502	330	172	355	269	86	40	26	14	107	35	72
Picea omorika	379	355	24	158	148	10	140	130	10	81	77	4
Abies grandis	645	591	54	181	164	17	91	81	10	373	346	27
Spanish Chestnut	87	52	35	65	32	33	—	—	—	22	20	2
Birch	280	198	82	160	90	70	116	106	10	4	2	2
Beech	4,112	3,631	481	2,802	2,493	309	472	399	73	838	739	99
Oak	4,696	4,377	319	3,482	3,311	171	321	295	26	893	771	122
Sycamore	308	270	38	169	149	20	133	115	18	6	6	—
Other Conifers	1,512	1,317	195	176	144	32	559	542	17	777	631	146
Other Broadleaved ...	465	426	39	226	215	11	173	156	17	66	55	11

SUMMARY AREA STATEMENT OF LAND USE: BY CONSERVANCIES

Appendix 11 At 30th September, 1955 Acres

Country or Conservancy	Total	Planted during year ended 30th September, 1955		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
GREAT BRITAIN	2,102,276	40,902	27,004	1,005,233	312,545	784,498
ENGLAND:	669,034	9,924	11,298	399,368	107,065	162,601
North West Conservancy	108,881	1,549	2,233	63,788	19,814	25,279
North East Conservancy	215,821	6,675	1,596	113,865	37,714	64,242
East Conservancy ...	111,102	686	2,316	80,149	12,309	18,644
South East Conservancy	57,163	108	2,235	38,161	16,586	2,416
South West Conservancy	72,380	530	2,431	49,906	16,814	5,660
New Forest	77,095	348	261	31,993	2,561	42,541
Dean Forest	26,592	28	226	21,506	1,267	3,819
SCOTLAND:	1,135,116	23,225	10,817	427,181	150,955	556,980
North Conservancy ...	426,806	4,549	4,178	108,849	45,726	272,231
East Conservancy ...	204,528	3,315	4,253	122,571	33,355	48,602
South Conservancy ...	237,387	8,746	1,286	93,514	52,542	91,331
West Conservancy ...	266,395	6,615	1,100	102,247	19,332	144,816
WALES:	298,126	7,753	4,889	178,684	54,525	64,917
North Conservancy ...	162,421	4,587	2,580	94,069	25,260	43,092
South Conservancy ...	135,705	3,166	2,309	84,615	29,265	21,825

Note.—In Appendices 12–14, former Crown Woods are indicated by asterisks.

AREA STATEMENT OF LAND USE: BY FORESTS—ENGLAND

Appendix 12 At 30th September, 1955 Acres

Forest	Total	Planted during year ended 30th September, 1955		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH WEST CONSERVANCY: TOTAL	108,881	1,549	2,233	63,788	19,814	25,279
Arden, Warwick	698	—	51	51	647	—
Bagot, Staffs	1,221	—	84	504	717	—
Bawtry, Notts	586	—	—	398	137	51
Blengdale, Cumberland ...	1,138	—	—	939	135	64
Bowland, Lancs & Yorks ...	936	—	30	197	698	41
Cannock, Staffs	6,118	—	70	5,818	247	53
Cartmel, Lancs	883	—	—	42	797	44
Causeway Wood, Salop ...	278	—	58	58	220	—
Charnwood, Leicester ...	275	—	111	200	75	—
Corvedale, Salop	350	6	21	137	191	22
Cotgrave, Notts	529	12	—	367	161	1
Dalton, Westmorland ...	833	6	81	570	177	86
Delamere, Cheshire* ...	1,957	4	14	1,935	—	22
Ennerdale, Cumberland ...	7,581	10	—	2,568	52	4,961
Foremark Woods, Derby ...	390	—	—	6	384	—
Foulshaw Wood, Westmorland	601	59	—	118	483	—
Gisburn, Yorks	3,040	326	—	2,198	717	125
Greystoke, Cumberland ...	2,047	—	40	1,693	112	242
Grizedale, Lancs	6,440	179	18	4,616	895	929

Appendix 12—*continued*

Forest	Total	Planted during year ended 30th September, 1955		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Habberley, Salop	771	84	87	288	463	20
Hardknott, Cumberland & Lancs	8,055	72	—	1,582	385	6,088
Hope, Derby	2,987	—	—	669	346	1,972
Inglewood, Cumberland ...	1,303	—	205	472	782	49
Irton, Cumberland ...	539	169	—	169	344	26
Kershope, Cumberland ...	12,504	13	—	9,278	172	3,054
Kinver, Staffs	1,023	—	—	587	406	30
Long Mynd, Salop ...	926	72	18	705	175	46
Longtown, Cumberland ...	271	—	30	114	92	65
Lyth, Westmorland ...	629	—	—	—	253	376
Matlock, Derby	804	—	—	95	709	—
Mortimer, Hereford & Salop	8,583	—	348	8,111	137	335
Oakamoor, Staffs	1,030	—	102	265	763	2
Packington, Warwick ...	402	—	21	152	250	—
Sherwood, Derby, Notts & Yorks	14,628	191	460	11,215	3,041	372
Spadeadam, Cumberland...	8,909	345	1	849	3,050	5,010
Swynnerton, Staffs ...	2,160	—	193	1,335	804	21
Thornthwaite, Cumberland	5,521	1	190	3,966	400	1,155
Walcot, Salop	1,629	—	—	1,521	91	17
Walton Woods, Cumberland	306	—	—	—	306	—
NORTH EAST CONSERVANCY: TOTAL	215,821	6,675	1,596	113,865	37,714	64,242
Allendale, Northumberland	63	—	—	—	62	1
Allerston, Yorks	10,864	—	34	9,287	719	858
Ampleforth, Yorks ...	4,662	130	146	2,740	1,664	258
Arkengarthdale, Yorks ...	1,599	—	—	1,121	342	136
Cawthorne, Yorks... ...	443	—	—	63	380	—
Chopwell, Durham* ...	2,047	—	127	1,100	871	76
Cleveland, Yorks	3,800	191	58	885	2,863	52
Doncaster, Yorks	764	—	160	406	351	7
Hambleton, Yorks ...	3,175	55	20	651	2,221	303
Hamsterley, Durham ...	6,074	—	105	5,356	342	376
Harwood, Northumberland	8,312	644	6	3,143	3,816	1,353
Holmfirth, Yorks	566	—	—	79	487	—
Jervaulx, Yorks	1,470	3	143	354	1,112	4
Kidland, Northumberland	1,477	280	51	625	846	6
Kielder, Northumberland...	70,875	2,023	—	40,400	4,404	26,071
Knaresborough, Yorks ...	533	68	—	411	122	—
Langdale, Yorks	14,608	183	19	5,477	1,084	8,047
Londesborough, Yorks ...	583	—	12	287	296	—
Ray, Northumberland ...	1,362	369	—	1,111	251	—
Redesdale, Northumberland	17,627	539	—	10,924	730	5,973
Rievaulx, Yorks	511	—	—	22	480	9
Rosedale, Yorks	10,961	630	16	5,344	1,869	3,748
Rothbury, Northumberland	3,436	123	157	2,187	1,126	123
Scardale, Yorks	972	—	14	649	31	292
Selby, Yorks	1,045	—	12	875	168	2
Slaley, Northumberland ...	2,452	—	—	1,304	919	229
Tong Woods, Yorks ...	195	12	71	149	46	—
Wark, Northumberland ...	36,353	1,425	—	17,165	6,092	13,096
Weardale, Durham ...	4,386	—	—	—	1,317	3,069
Wharncliffe, Yorks ...	1,105	—	109	426	621	58
Widehaugh, Northumberland	70	—	—	—	—	70
Wynyard, Durham ...	1,573	—	210	391	1,177	5
York, Yorks	1,858	—	126	933	905	20

Appendix 12—*continued*

Forest	Total	Planted during year ended 30th September, 1955		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
EAST CONSERVANCY: TOTAL	111,102	686	2,316	80,149	12,309	18,644
Ampthill, Beds	1,115	63	1	463	571	81
Bardney, Lincoln	3,980	95	156	3,195	639	146
Bernwood, Oxford ...	1,135	—	106	382	753	—
Bramfield, Herts	688	—	86	486	180	22
Brooke Woods, Norfolk ...	157	—	—	8	149	—
Burwell, Lincs	581	—	95	440	141	—
Chilterns, Bucks & Oxford	3,068	—	229	1,550	1,482	36
Ditton, Cambridge ...	181	—	46	99	82	—
Dunwich, Suffolk	1,516	—	56	1,152	337	27
Gaywood, Norfolk ...	711	24	59	423	268	20
Hazelborough, Bucks & Northants*	2,518	—	65	2,075	92	351
Hevingham, Norfolk ...	1,357	2	123	728	596	33
Kesteven, Lincoln & Rutland	4,392	3	213	2,653	1,307	432
The King's Forest, Suffolk	5,953	—	59	5,171	489	293
Laughton, Lincoln ...	2,144	—	11	2,026	51	67
Lavenham, Suffolk ...	163	—	—	1	162	—
Nassburgh, Northants ...	332	—	48	93	126	113
Pytchley, Northants ...	346	—	38	88	258	—
Rendlesham, Suffolk ...	4,754	19	—	3,669	117	968
Rockingham, Northants ...	5,723	29	142	4,765	450	508
Salcey, Bucks & Northants*	1,279	—	19	1,214	34	31
Shouldham, Norfolk ...	1,290	39	59	957	248	85
Swaffham, Norfolk ...	3,813	12	20	3,263	11	539
Swanton, Norfolk	2,137	56	69	1,585	329	223
Thetford Chase, Norfolk & Suffolk	49,747	184	143	35,207	1,673	12,867
Tunstall, Suffolk	3,389	83	26	2,833	23	533
Walden, Essex	490	—	35	157	307	26
Walsham, Norfolk ...	811	46	92	403	404	4
Waveney, Suffolk	284	30	20	230	15	39
Whaddon Chase, Bucks ...	152	—	—	—	152	—
Wigsley, Lincoln & Notts ...	2,184	—	153	1,511	276	397
Willingham, Lincoln ...	2,469	1	115	1,879	483	107
Yardley Chase, Beds & Northants	2,243	—	32	1,443	104	696
SOUTH EAST CONSERVANCY: TOTAL	57,163	108	2,235	38,161	16,586	2,416
Abinger, Surrey	1,035	—	40	384	492	159
Alice Holt, Hants* ...	2,329	—	—	1,997	55	277
Alton, Hants	948	—	76	790	45	113
Andover, Hants	1,184	—	54	864	173	147
Arundel, Sussex	2,566	35	65	2,216	320	30
Ashley Hill, Berks	301	—	54	154	144	3
Badbury, Berks	578	—	—	146	432	—
Basing, Hants	211	—	—	204	7	—
Bedgebury, Kent & Sussex*	2,375	—	43	2,034	123	218
Bere, Hants*	1,712	15	—	1,374	312	26
Bishopstoke, Hants ...	299	—	54	285	14	—
Bramshill, Berks & Hants ...	4,483	—	66	4,038	343	102
Brightling, Sussex	1,450	4	164	418	1,015	17
Bucklebury, Berks ...	285	—	30	176	109	—
Challock, Kent	1,795	22	95	1,564	225	6

Appendix 12—*continued*

Forest	Total	Planted during year ended 30th September, 1955		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c
Charlton, Sussex	2,534	—	55	1,592	942	—
Chiddingfold, Surrey & Sussex	2,196	—	6	1,772	418	6
Chilworth, Hants	205	—	—	—	205	—
Corhampton, Hants ...	525	—	31	66	459	—
Crawley, Hants	315	—	—	315	—	—
Effingham, Surrey	451	—	61	157	293	1
Friston, Sussex	2,141	—	—	1,723	393	25
Gravetye, Sussex	910	—	1	381	36	493
Groombridge, Sussex ...	112	—	—	103	—	9
Havant, Hants	1,343	—	152	375	966	2
Hemsted, Kent	1,024	—	27	983	7	34
Hursley, Hants	2,360	—	161	1,086	1,274	—
Joydens Wood, Kent ...	333	—	—	3	330	—
Lyminge, Kent	2,495	—	50	2,377	54	64
Marden, Sussex	1,338	26	25	864	373	101
Maresfield, Sussex... ...	738	—	75	250	486	2
Micheldever, Hants ...	2,948	—	151	2,106	713	129
Mildmay, Kent	272	6	27	161	111	—
Orlestone, Kent	867	—	37	793	72	2
Pen, Hants	221	—	56	76	144	1
Queen Elizabeth Forest, Hants & Sussex ...	2,593	—	—	1,432	887	274
Rochester, Kent	536	—	—	—	513	23
Rogate, Sussex	600	—	63	327	241	32
St. Leonards, Sussex ...	958	—	46	374	556	28
Shipbourne, Kent	458	—	43	284	172	2
Slindon, Sussex	1,358	—	57	1,004	354	—
Southwater, Sussex ...	395	—	27	359	35	1
Vinehall, Sussex	974	—	95	859	98	17
Westbury, Hants	490	—	71	421	59	10
Westerham, Kent	32	—	—	—	32	—
Wilmington, Sussex ...	881	—	51	316	527	38
Winterfold, Surrey ...	321	—	68	139	182	—
Witley Park, Surrey ...	611	—	58	192	419	—
Woolmer, Hants*	2,073	—	—	627	1,426	20
Woking Office Grounds ...	4	—	—	—	—	4
SOUTH WEST CONSERVANCY: TOTAL	72,380	530	2,431	49,906	16,814	5,660
Aconbury, Hereford ...	613	—	32	32	581	—
Bentley, Hants & Wilts ...	1,976	—	229	564	1,402	10
Blandford, Dorset	2,825	—	227	1,221	1,391	213
Bodmin, Cornwall... ...	1,491	—	22	1,226	98	167
Bradon, Wilts	1,160	—	109	621	538	1
Brendon, Somerset ...	2,687	34	66	2,147	242	298
Bruton, Somerset & Wilts	975	—	27	966	4	5
Charmouth, Devon & Dorset	920	40	29	649	227	44
Collingbourne, Wilts ...	1,239	—	1	1,221	8	10
Cowley Woods, Gloucester	179	—	25	75	103	1
Croft Pascoe, Cornwall ...	112	2	—	12	100	—
Dartmoor, Devon	2,287	—	—	1,689	—	598
Dunster, Somerset ...	2,023	120	1	1,199	407	417
Dymock, Gloucester & Hereford*	1,721	—	12	1,512	137	72
Eggesford, Devon	1,041	—	—	856	167	18
Erme, Devon	642	—	26	124	516	2
Fernworthy, Devon ...	1,505	—	2	1,501	—	4

Appendix 12—*continued*

Forest	Total	Planted during year ended 30th September, 1955		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Gardiner, Dorset & Wilts	1,706	—	131	876	821	9
Glynn, Cornwall	2,518	5	131	1,830	559	129
Haldon, Devon	3,657	—	183	3,300	305	52
Halwill, Devon	4,590	—	40	3,740	102	748
Hartland, Devon	2,567	103	—	1,712	234	621
Haugh, Hereford	1,008	—	29	768	220	20
Herodsfoot, Cornwall ...	776	18	64	586	163	27
Honiton, Devon	969	4	55	279	661	29
Lydford, Devon	597	—	2	548	7	42
Mendip, Somerset	1,223	—	—	1,139	—	84
Middlemarsh Woods, Dorset	141	—	—	—	141	—
Moccas, Hereford	794	—	62	103	691	—
Molton Woods, Devon ...	395	6	30	177	218	—
Neroche, Somerset ...	2,235	—	75	772	1,408	55
Okehampton, Devon ...	519	5	12	476	4	39
Pershore, Worcs	361	—	30	85	275	1
Plym, Devon	1,392	1	156	1,118	270	4
Poorstock, Dorset	654	—	70	353	301	—
Purbeck, Dorset	1,595	9	34	1,270	224	101
Quantock, Somerset ...	2,747	15	21	2,179	212	356
St. Clement, Cornwall ...	282	—	70	211	66	5
Savernake, Wilts	4,444	—	117	2,528	1,644	272
Sedgemoor, Somerset ...	385	12	28	248	137	—
Shepton, Somerset ...	160	—	—	155	3	2
Stanway, Gloucester ...	1,150	14	8	355	151	644
Stokeleigh, Somerset ...	639	—	19	415	217	7
Wareham, Dorset	5,785	142	103	3,963	1,726	96
West Woods, Wilts ...	1,192	—	42	877	32	283
Wilsey Down, Cornwall ...	1,182	—	—	1,118	—	64
Wyre, Worcester	3,321	—	111	3,110	101	110
NEW FOREST: TOTAL	77,095	348	261	31,993	2,561	42,541
Brighstone, Isle of Wight...	1,529	57	19	1,275	77	177
Combley, Isle of Wight ...	559	—	—	548	—	11
Ferndown, Dorset... ...	1,633	8	—	1,001	117	515
Hurn, Hants	1,957	244	1	557	607	793
New Forest, Hants* ...	65,448	—	208	23,594	1,442	40,412
Osborne, Isle of Wight ...	188	—	17	118	70	—
Parkhurst, Isle of Wight*	1,312	—	14	952	55	305
Ringwood, Dorset & Hants	3,962	15	—	3,719	6	237
Shalfleet, Isle of Wight ...	507	24	2	229	187	91
DEAN FOREST: TOTAL	26,592	28	226	21,506	1,267	3,819
Dean Forest, Gloucester, Hereford & Monmouth*	25,335	28	206	20,295	1,267	3,773
Tidenham Chase, Gloucester	1,257	—	20	1,211	—	46

AREA STATEMENT OF LAND USE: BY FORESTS—SCOTLAND

Appendix 13 At 30th September, 1955 Acres

Forest	Total	Planted during year ended 30th September, 1955		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH CONSERVANCY: TOTAL	426,806	4,549	4,178	108,849	45,726	272,231
Achnasheen, Ross	754	—	55	71	543	140
Achnashellach, Ross ...	19,674	—	12	934	20	18,720
Aigas, Inverness	1,593	—	155	330	604	659
Ardross, Ross	5,598	—	—	3,752	813	1,033
Assich, Nairn	1,119	10	20	802	1	316
Balblair, Sutherland & Ross	6,099	—	61	1,480	829	3,790
Battan, Inverness	1,739	25	187	857	601	281
Boblainy, Inverness ...	2,690	—	400	1,935	656	99
Borgie, Sutherland ...	2,706	—	60	1,176	137	1,393
Ceannacroc, Inverness ...	19,881	289	16	1,117	3,041	15,723
Clach Liath, Ross	2,187	100	104	747	1,129	311
Clunes, Inverness	6,055	—	106	1,535	71	4,449
Craig nan Eun, Inverness	1,922	—	—	1,370	—	552
Craig Phadrig, Inverness ...	573	—	2	500	—	73
Craigs, Ross	2,022	153	109	913	996	113
Culloden, Inverness ...	2,447	—	127	2,305	91	51
Dornoch, Sutherland ...	2,966	8	—	679	1,145	1,142
Dunnet, Caithness... ...	879	76	—	76	732	71
Eilanreach, Inverness ...	922	—	—	835	—	87
Farigaig, Inverness ...	7,591	190	20	1,530	1,922	4,139
Ferness, Nairn	1,538	—	12	1,019	6	513
Findon, Ross	2,366	—	4	2,244	10	112
Fiunary, Argyll	18,339	210	2	4,087	1,678	12,574
Glen Affric, Inverness ...	53,871	213	347	3,222	5,364	45,285
Glen Brittle, Skye, Inverness	8,858	35	—	1,557	18	7,283
Glen Cripesdale, Argyll ...	6,650	106	28	134	2,034	4,482
Glen Garry, Inverness ...	22,077	141	18	4,431	628	17,018
Glen Hurich, Argyll ...	15,180	63	—	3,008	793	11,379
Glen Loy, Inverness ...	2,547	10	—	1,938	101	508
Glen Righ, Inverness ...	5,883	77	—	2,402	128	3,353
Glen Shiel, Ross	3,653	—	—	765	—	2,888
Glen Urquhart, Inverness	16,276	—	252	3,185	1,941	11,150
Glen Varragill, Skye, Inverness	8,530	80	—	80	191	8,259
Guisachan, Inverness ...	5,645	159	—	1,653	1,349	2,643
Healaval, Skye, Inverness	659	—	—	—	492	167
Inchnacardoch, Inverness	9,145	49	11	2,285	341	6,519
Inshriach, Inverness ...	16,862	—	260	2,267	2,453	12,142
Inverinate, Ross	1,234	—	—	1,038	—	196
Kessock, Ross	1,208	—	4	1,071	52	85
Kilcoy, Ross	3,423	111	19	2,933	24	466
Lael, Ross	3,495	12	—	1,943	604	948
Laiken, Nairn	838	—	119	821	6	11
Leanachan, Inverness ...	7,546	321	—	3,317	1,543	2,686
Loch Ericht, Inverness ...	933	—	—	183	506	244
Longart, Ross	1,522	34	—	1,179	267	76
Millbuie, Ross	7,336	—	211	6,731	8	597
Morangie, Ross	6,195	130	407	3,528	1,078	1,589
Nevis, Inverness	7,659	—	—	980	—	6,679
North Strome, Ross ...	1,969	2	—	876	5	1,088
Oykell, Ross & Sutherland	2,754	171	99	734	1,781	239
Portclair, Inverness ...	5,500	—	—	2,353	—	3,147
The Queen's Forest, Inverness	12,500	—	104	3,172	70	9,258
Raasay, Isle of Raasay, Inverness	715	—	42	517	2	196

Appendix 13—*continued*

Forest	Total	Planted during year ended 30th September, 1955		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Ratagan, Inverness & Ross	2,481	—	—	1,561	14	906
Rumster, Caithness ...	2,362	110	—	805	95	1,462
Salen, Mull, Argyll ...	17,955	503	—	3,941	2,061	11,953
Shin, Sutherland	13,888	467	55	2,248	1,090	10,550
Slattadale, Ross	1,395	14	45	762	105	528
South Laggan, Inverness ...	4,110	—	—	1,127	—	2,983
South Strome, Ross ...	3,556	22	—	1,182	33	2,341
Strath Conon, Ross ...	6,665	204	—	1,719	966	3,980
Strath Dearn, Inverness ...	2,433	—	191	1,337	169	927
Strath Mashie, Inverness ...	2,615	—	120	651	1,406	558
Strath Nairn, Inverness ...	4,314	79	121	1,612	447	2,255
Strathy, Sutherland ...	504	56	—	110	171	223
Struie, Ross	944	98	52	624	213	107
Sunart, Argyll	2,569	99	88	839	1,190	540
Torrachilty, Ross	7,636	120	129	866	885	5,885
Urray, Ross	998	2	4	822	67	109
Hoy Experiments, Orkney	32	—	—	32	—	—
Lewis Experiments, Isle of Lewis, Ross	16	—	—	14	—	2
Morefield Experiments, Ross	10	—	—	—	10	—
EAST CONSERVANCY: TOTAL	204,528	3,315	4,253	122,571	33,355	48,602
Allean, Perth	2,882	109	12	1,572	1,003	307
Alltcailleach, Aberdeen ...	3,833	—	—	3,497	220	116
Bin, Aberdeen	7,666	100	—	5,534	1,138	994
Blackcraig, Perth	2,451	—	3	1,505	456	490
Blackhall, Kincardine ...	3,864	—	263	2,715	1,013	136
Blairadam, Fife & Kinross	2,065	25	11	1,700	129	236
Carden, Fife	547	—	—	525	—	22
Clashindarroch, Aberdeen	18,532	197	—	9,763	726	8,043
Corrennie, Aberdeen ...	1,913	136	98	1,315	400	198
Countesswells, Aberdeen ...	751	—	11	605	113	33
Craigvinean, Perth... ...	4,461	78	10	3,261	144	1,056
Culbin, Moray & Nairn ...	7,708	—	341	6,776	320	612
Dallas, Moray	2,073	3	—	959	346	768
Forest of Deer, Aberdeen ...	2,251	—	5	2,082	18	151
Delgaty, Aberdeen ...	1,148	157	33	884	260	4
Drummond Hill, Perth ...	6,196	106	30	4,104	291	1,801
Drumtochty, Kincardine ...	9,685	398	2	3,465	4,303	1,917
Durris, Kincardine ...	4,443	—	270	3,866	295	282
Edensmuir, Fife	1,701	—	8	1,548	13	140
Elchies, Moray	4,215	—	97	378	2,509	1,328
Faskally, Perth	242	—	—	129	51	62
Fetteresso, Kincardine ...	8,773	347	54	4,327	1,780	2,666
Fonab, Perth	2,237	256	—	809	931	497
Glendevon, Perth & Kinross	915	—	—	876	—	39
Glendoll, Angus	3,713	106	—	528	950	2,235
Glenerrochty, Perth ...	2,509	48	59	552	1,149	808
Glenisla, Angus	11,392	439	—	2,181	3,040	6,171
Glenlivet, Banff	6,747	464	2	4,792	521	1,434
Hallyburton, Angus & Perth	1,997	—	255	1,629	355	13
Inglismaldie, Kincardine ...	1,414	—	11	1,150	257	7
Keillour, Perth	1,926	—	35	1,630	247	49
Kemnay, Aberdeen ...	1,320	—	93	1,259	43	18
Kinfauns, Perth	826	—	2	774	51	1
Kirkhill, Aberdeen ...	2,011	—	92	1,790	83	138
Ledmore, Perth	137	—	—	—	—	137
Lossie, Moray	1,904	—	—	1,670	—	234

Appendix 13—*continued*

Forest	Total	Planted during year ended 30th September, 1955		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Midmar, Aberdeen ...	1,340	—	99	901	141	298
Monaughty, Moray ...	4,345	13	—	3,802	185	358
Montreathmont, Angus ...	2,652	—	25	2,340	269	43
Newton, Moray	175	—	—	—	—	175
Newtyle, Moray	1,928	78	225	1,599	11	318
Pitfichie, Aberdeen ...	5,067	—	310	3,107	895	1,065
Pitmedden, Fife	2,118	—	85	1,796	206	116
Rannoch, Perth	4,457	163	58	2,025	1,638	794
Rosarie, Banff	6,585	57	281	3,887	1,263	1,435
Roseisle, Moray	2,322	—	—	2,048	—	274
Scootmore, Banff & Moray	820	—	—	804	11	5
Speymouth, Moray ...	12,377	—	877	7,857	3,098	1,422
Strathord, Perth	1,156	—	9	1,150	3	3
Teindland, Moray	3,155	—	199	1,902	483	770
Tentsmuir, Fife	4,239	—	—	3,563	16	660
Tilliefoure, Aberdeen ...	4,532	35	17	2,609	241	1,682
Tornashean, Aberdeen ...	9,278	—	271	1,826	1,740	5,712
Whitehaugh, Aberdeen ...	1,534	—	—	1,205	—	329
SOUTH CONSERVANCY: TOTAL	237,387	8,746	1,286	93,514	52,542	91,331
Forest of Ae, Dumfries ...	10,733	1,137	12	9,954	268	511
Auchenroddan, Dumfries...	777	—	47	752	—	25
Bareagle, Wigtown ...	1,852	—	—	294	1,137	421
Brownmoor, Dumfries	464	—	98	433	23	8
Cairn Edward, Kirkcudbright	28,482	775	—	9,067	9,643	9,772
Cardrona, Peebles... ...	1,860	—	—	1,413	—	447
Carrick, Ayr	32,605	959	—	5,073	3,106	24,426
Castle O'er, Dumfries ...	2,887	42	14	2,412	113	362
Changue, Ayr	2,389	31	33	1,688	53	648
Clauchrie, Dumfries ...	639	3	—	567	67	5
Clydesdale, Lanark ...	721	79	—	187	527	7
Corriedoo, Kirkcudbright	1,022	—	—	955	21	46
Craigieburn, Dumfries ...	586	—	—	530	5	51
Craik, Roxburgh	4,250	470	—	3,249	405	596
Dalbeattie, Kirkcudbright	5,712	58	103	4,225	859	628
Dalmacallan, Dumfries ...	1,477	193	13	979	398	100
Dreva, Peebles	1,205	—	120	423	755	27
Dundeugh, Kirkcudbright	5,965	545	—	2,524	1,982	1,459
Duns, Berwick	760	25	74	322	413	25
Edgarhope, Berwick ...	1,712	—	11	1,159	47	506
Elibank & Traquair, Selkirk & Peebles	5,594	300	—	2,480	1,380	1,734
Fleet, Kirkcudbright ...	1,491	1	48	1,114	168	209
Garcrogo, Kirkcudbright...	1,914	37	—	1,506	192	216
The Garraries, Kirkcudbright	7,712	305	—	305	4,853	2,554
Glengap, Kirkcudbright ...	2,265	285	—	1,612	183	470
Glentress, Peebles	2,349	—	5	1,969	6	374
Glen Trool, Kirkcudbright	55,505	1,413	30	9,273	10,252	35,980
Greskine, Dumfries ...	2,459	—	182	1,316	926	217
Kilgrammie, Ayr	568	15	72	543	25	—
Kilsture, Wigtown... ...	511	—	—	504	3	4
Kirroughtree, Kirkcudbright	10,914	326	44	4,268	3,422	3,224
Laurieston, Kirkcudbright	4,405	308	11	2,249	1,131	1,025
Leithope, Roxburgh ...	1,165	202	—	942	223	—
Mabie, Kirkcudbright ...	3,015	71	133	2,299	498	218
Newcastleton, Roxburgh & Dumfries...	4,957	24	—	4,583	76	298

Appendix 13—*continued*

Forest	Total	Planted during year ended 30th September, 1955		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Penninghame, Wigtown ...	5,430	368	4	1,508	2,365	1,557
Saltoun, East Lothian ...	834	—	75	129	663	42
Selm Muir, Midlothian ...	291	—	55	150	140	1
Stenton, East Lothian ...	540	—	95	355	167	18
Twiglees, Dumfries ...	5,137	—	—	4,708	72	357
Wauchope, Roxburgh ...	12,079	579	—	4,467	4,862	2,750
Yair Hill, Selkirk	2,145	195	7	1,028	1,113	4
Bush Nursery, Midlothian	9	—	—	—	—	9
WEST CONSERVANCY: TOTAL	266,395	6,615	1,100	102,247	19,332	144,816
Achaglachgach, Argyll ...	2,225	—	67	1,816	101	308
Ardfin, Jura, Argyll ...	1,178	36	—	56	900	222
Ardgartan, Argyll	18,124	93	—	4,450	727	12,947
Asknish, Argyll	5,901	22	—	3,745	—	2,156
Barcaldine, Argyll	5,675	—	—	3,848	1	1,826
Benmore, Argyll	9,584	70	—	2,905	438	6,241
Carradale, Argyll	11,013	416	79	4,442	298	6,273
Carron Valley, Stirling ...	6,640	30	—	4,488	36	2,116
Corlarach, Argyll	5,503	262	12	1,851	462	3,190
Creran, Argyll	2,031	8	71	79	664	1,288
Dalmally, Argyll	1,046	375	—	375	612	59
Devilla, Fife & Clackmannan	2,506	—	280	1,676	751	79
Fearnoch, Argyll	1,342	—	—	1,133	—	209
Garadhban, Stirling ...	1,297	—	42	1,148	98	51
Garelochhead, Dunbarton	835	6	45	440	267	128
Garshelloch, Stirling ...	424	225	—	225	144	55
Glenbranter, Argyll ...	8,712	53	—	3,411	345	4,956
Glencoe, Argyll	380	5	63	247	119	14
Glendaruel, Argyll ...	6,995	216	8	1,636	1,409	3,950
Glenduror, Argyll	8,319	61	3	2,622	50	5,647
Glenfinart, Argyll	8,712	111	31	2,915	246	5,551
Glenrickard, Arran, Buteshire	2,687	81	—	450	633	1,604
Inverinan, Argyll	12,796	379	25	4,672	1,437	6,687
Inverliever, Argyll* ...	29,520	225	78	5,898	1,129	22,493
Kilmichael, Argyll... ...	10,931	—	—	4,688	995	5,248
Kilmory, Argyll	3,169	1,460	—	1,830	615	724
Knapdale, Argyll	19,701	59	43	6,697	25	12,979
Lennox, Stirling	778	—	3	576	146	56
Loch Ard, Perth & Stirling	32,051	1,270	135	15,726	2,734	13,591
Loch Eck, Argyll	5,502	—	—	2,412	30	3,060
Minard, Argyll	5,193	370	30	3,154	400	1,639
Rowardennan, Stirling ...	9,464	218	10	1,344	2,017	6,103
Saddell, Argyll	4,917	32	13	1,498	15	3,404
St. Fillans, Perth	753	138	—	352	325	76
Strathlachlan, Argyll ...	7,616	251	—	2,654	276	4,686
Strathyre, Perth	10,613	10	62	5,702	85	4,826
Tighnabruaich, Argyll ...	1,174	120	—	227	802	145
Torrie, Perth	976	13	—	859	—	117
Tulliallan, Fife	112	—	—	—	—	112

AREA STATEMENT OF LAND USE: BY FORESTS—WALES

Appendix 14 At 30th September, 1955 Acres

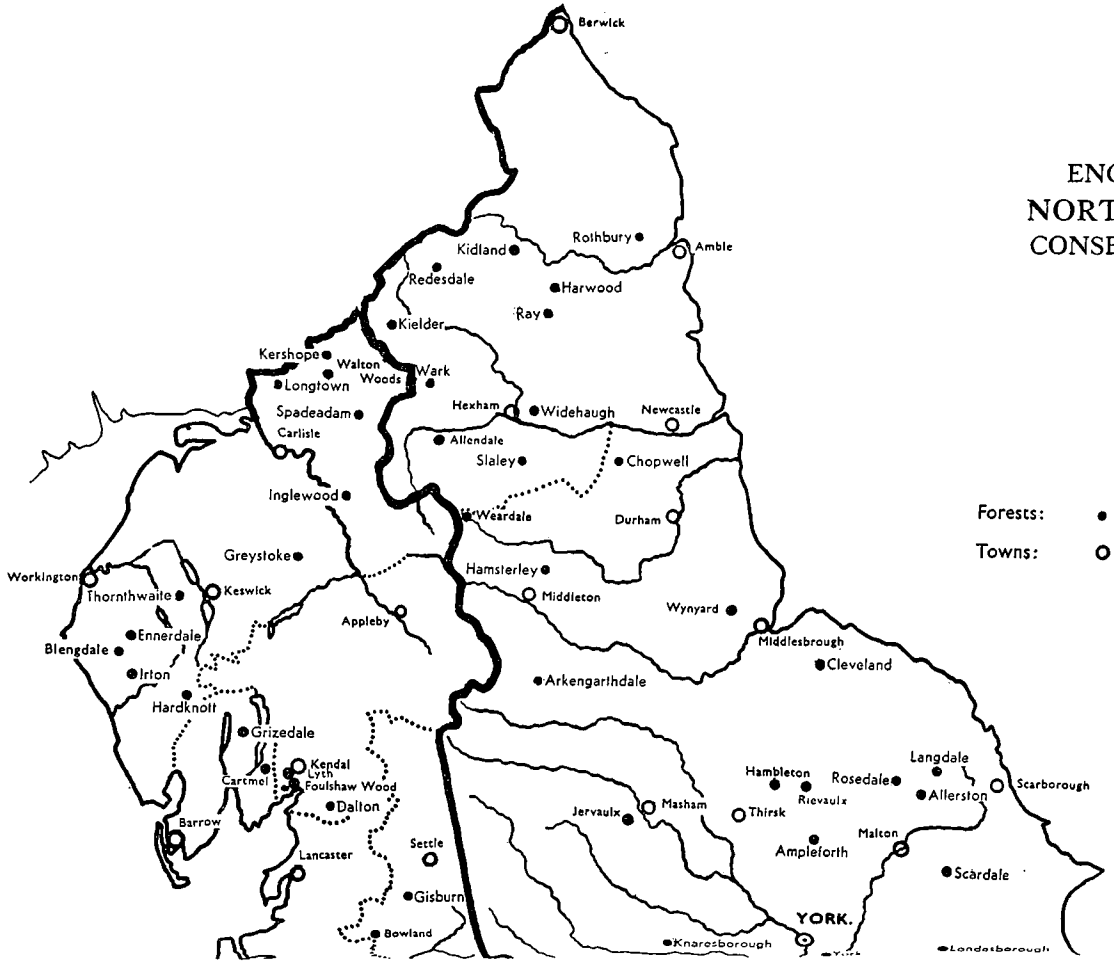
Forest	Total	Planted during year ended 30th September, 1955		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH CONSERVANCY: TOTAL	162,421	4,587	2,580	94,069	25,260	43,092
Aberhirnant, Merioneth ...	6,487	304	10	2,242	873	3,372
Aeron, Cardigan	1,150	100	30	345	745	60
Bechan, Montgomery ...	564	—	55	364	198	2
Beddgelert, Caernarvon ...	2,929	15	76	1,807	63	1,059
Brynmawr, Cardigan ...	3,889	137	119	2,007	1,430	452
Carno, Montgomery ...	915	153	51	721	136	58
Ceiriog, Denbigh	1,533	492	43	567	718	248
Clocaenog, Denbigh & Merioneth	15,323	566	38	10,746	1,216	3,361
Coed Clwyd, Denbigh ...	1,781	47	100	1,189	237	355
Coed Sarnau, Radnor ...	4,877	224	7	3,552	313	1,012
Coed y Brenin, Merioneth	18,279	368	234	9,933	1,472	6,874
Coed y Goror, Denbigh & Salop	997	18	21	895	77	25
Commins Coch, Montgomery	1,220	17	60	903	60	257
Cynwyd, Merioneth ...	1,831	—	—	1,640	74	117
Derry Ormond, Cardigan	1,422	—	—	909	315	198
Dovey, Merioneth & Montgomery	16,818	287	204	12,182	1,801	2,835
Dyfnant, Montgomery ...	7,801	327	50	2,469	2,362	2,970
Elwy, Denbigh	1,347	6	224	932	396	19
Glanllyn, Merioneth ...	861	—	—	603	215	43
Gwydyr, Caernarvon & Denbigh	19,643	219	76	11,528	704	7,411
Hafod Fawr, Merioneth*...	2,088	120	—	743	528	817
Hafren, Montgomery ...	10,899	382	42	6,962	1,325	2,612
Kerry, Montgomery & Salop	2,615	25	60	2,395	93	127
Llangollen, Denbigh ...	844	7	158	732	101	11
Lleyn, Caernarvon ...	964	51	44	303	593	68
Maelor, Flint	191	—	—	1	181	9
Mathrafal, Montgomery ...	2,863	51	149	1,477	1,299	87
Myherin, Cardigan ...	5,655	30	—	2,840	24	2,791
Newborough, Anglesey ...	2,547	66	—	1,164	723	660
Pencerrig, Radnor ...	151	—	—	2	149	—
Penllyn, Merioneth ...	932	32	135	490	284	158
Pentraeth, Anglesey ...	837	10	36	403	394	40
Radnor, Radnor	6,072	95	250	4,316	525	1,231
St. Asaph, Denbigh & Flint	961	30	41	491	392	78
Taliesin, Cardigan... ...	6,530	3	139	996	3,825	1,709
Tanat, Denbigh	667	—	—	233	351	83
Tarenig, Cardigan & Montgomery	2,992	126	—	1,684	160	1,148
Ystwyth, Cardigan ...	4,942	279	128	3,303	908	731
Chirk Depot, Denbigh ...	4	—	—	—	—	4
SOUTH CONSERVANCY: TOTAL	135,705	3,166	2,309	84,615	29,265	21,825
Abergavenny, Monmouth	210	—	—	—	203	7
Brechfa, Carmarthen ...	16,132	49	108	11,995	502	3,635
Brecon, Brecon	1,870	—	—	1,575	—	295
Caio, Carmarthen	4,360	33	140	2,914	370	1,076

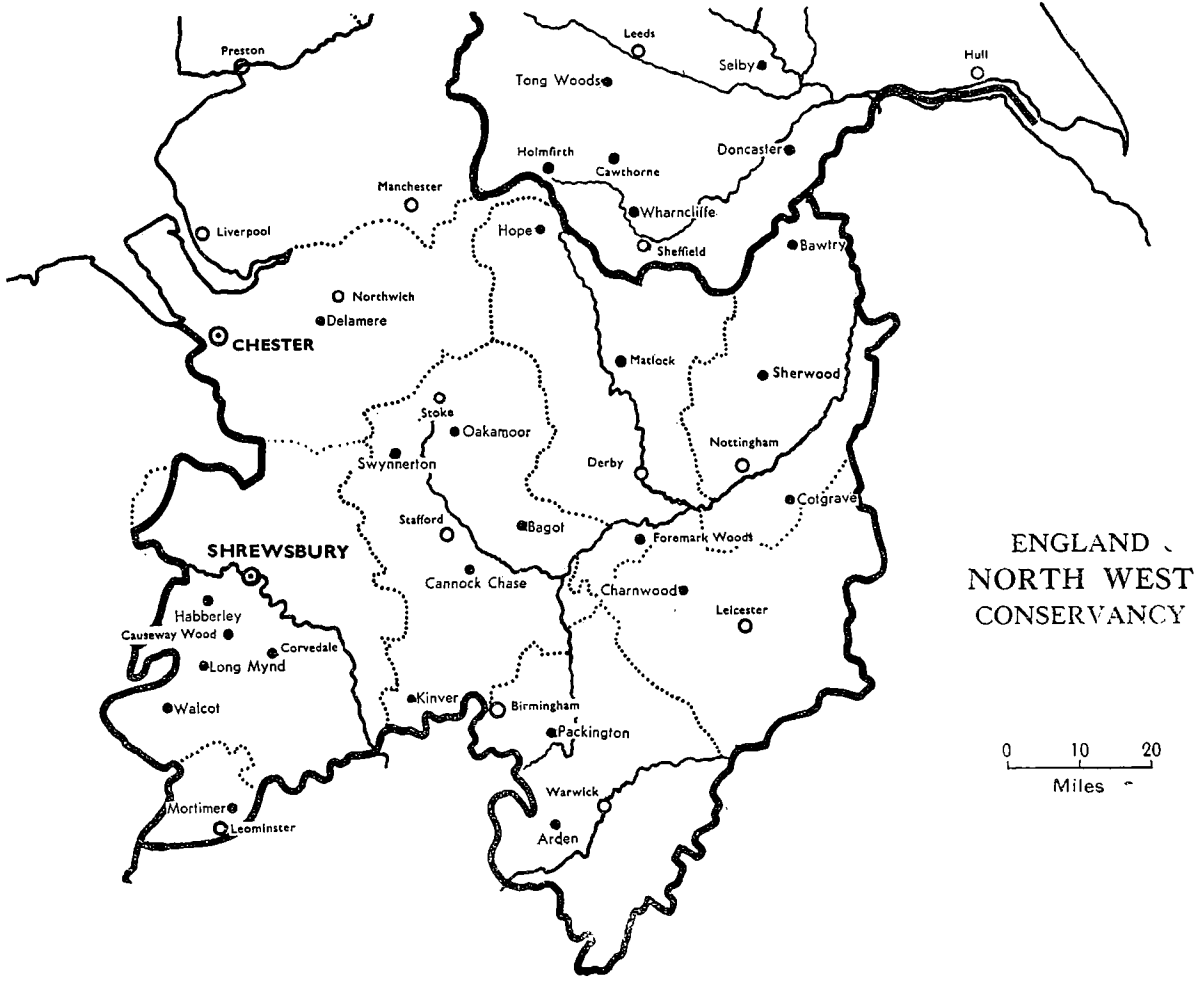
Appendix 14—*continued*

Forest	Total	Planted during year ended 30th September, 1955		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Chepstow, Monmouth ...	2,121	36	54	1,584	532	5
Cilgwyn, Carmarthen ...	1,060	42	112	640	419	1
Cilsant, Carmarthen ...	178	21	—	60	116	2
Coed Caerdydd, Glamorgan	918	—	76	298	601	19
Coed Morgannwg, Glamorgan	35,630	1,323	138	23,702	5,417	6,511
Coed Taf Fawr, Brecon ...	2,342	200	—	1,004	708	630
Coed y Brithdir, Glamorgan	310	—	—	—	308	2
Coed y Rhaiadr, Brecon ...	2,341	132	10	1,049	1,040	252
Conwil Elvet, Carmarthen	43	—	—	—	43	—
Crychan, Brecon & Carmarthen	10,843	149	136	7,489	811	2,543
Daugleddau, Pembroke ...	1,007	—	38	166	684	157
Draethen, Glamorgan ...	1,319	—	64	448	852	19
Ebbw, Monmouth... ...	586	42	3	404	132	50
Gamrhiw, Brecon	741	71	123	499	205	37
Giedd, Brecon	746	—	—	589	16	141
Glasfynydd, Brecon ...	3,457	—	111	2,961	392	104
Glyn Tarell, Brecon ...	290	116	34	250	40	—
Gower, Glamorgan ...	426	—	8	313	110	3
Goytre, Monmouth ...	607	—	60	320	283	4
Hay, Brecon & Hereford ...	1,520	51	—	976	470	74
Hensol, Glamorgan ...	694	—	16	509	90	95
Irfon, Brecon	3,302	201	—	596	2,185	521
Llandowror, Carmarthen ...	523	6	48	351	126	46
Llandeilo, Carmarthen ...	987	118	25	624	90	273
Llanover, Monmouth ...	3,801	57	60	2,853	667	281
Llantrisant, Glamorgan ...	801	—	2	798	—	3
Machen, Monmouth ...	1,132	—	125	215	842	75
Monmouth, Monmouth ...	1,286	—	96	595	603	88
Mynydd Ddu, Brecon & Monmouth	3,085	111	—	2,101	256	728
Nethergwent, Monmouth...	536	—	67	79	443	14
Pembrey, Carmarthen ...	4,680	—	—	1,964	574	2,142
Penllergaer, Glamorgan ...	538	—	30	444	66	28
St. Gwynno, Glamorgan ...	3,767	—	—	2,897	156	714
Sirhowy, Monmouth ...	594	21	47	197	358	39
Slebech, Pembroke ...	1,837	—	238	1,088	701	48
Taf Fechan, Brecon ...	1,131	—	—	1,101	5	25
Tair Onen, Glamorgan ...	189	—	—	52	—	137
Talybont, Brecon	3,506	241	58	1,832	1,543	131
Teifi, Carmarthen	631	—	101	427	204	—
Tintern, Monmouth* ...	5,109	—	95	4,515	156	438
Towy, Cardigan & Brecon	6,840	146	—	809	5,627	404
Wentwood, Monmouth ...	1,679	—	86	1,332	319	28

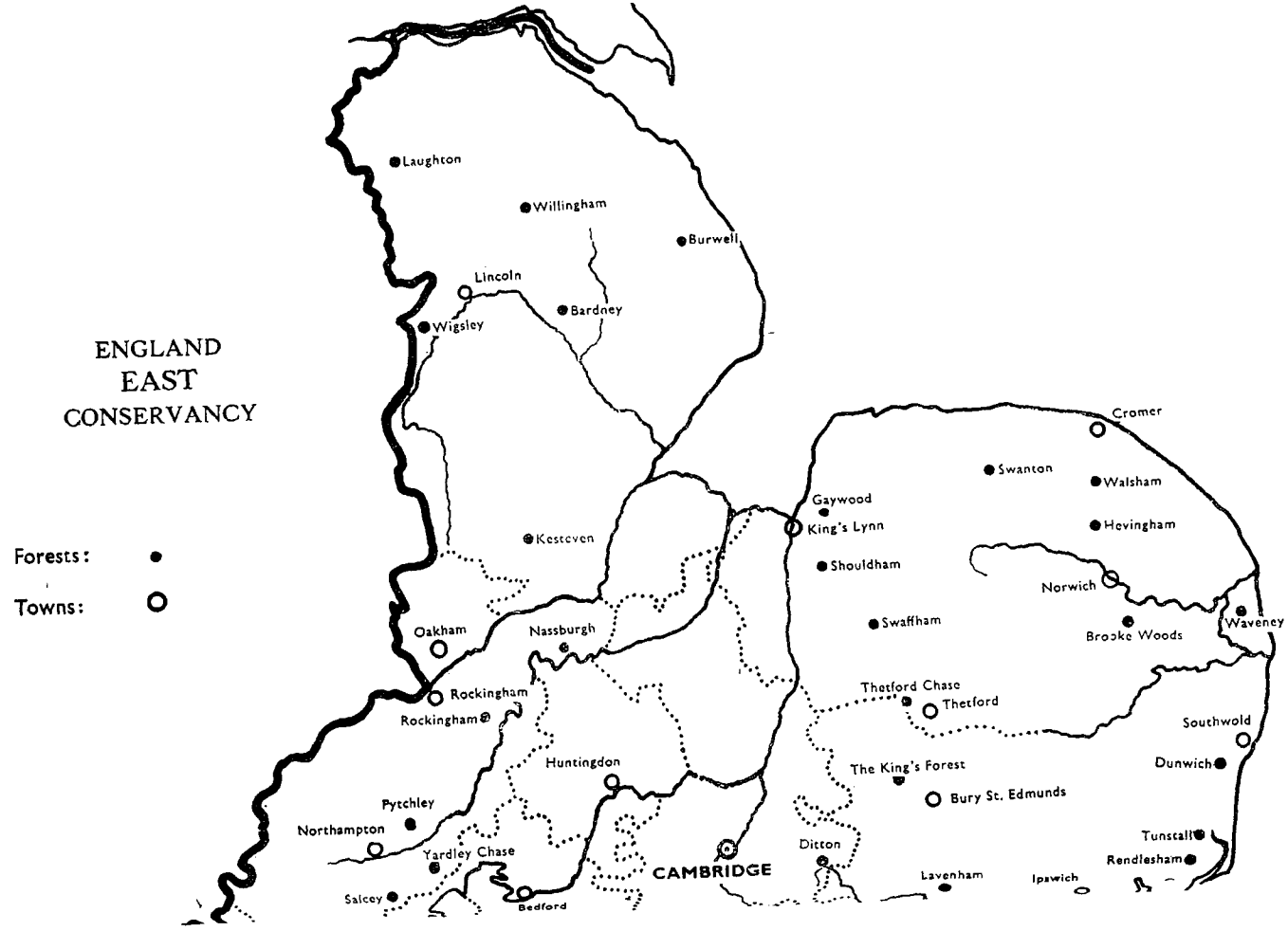
MAPS

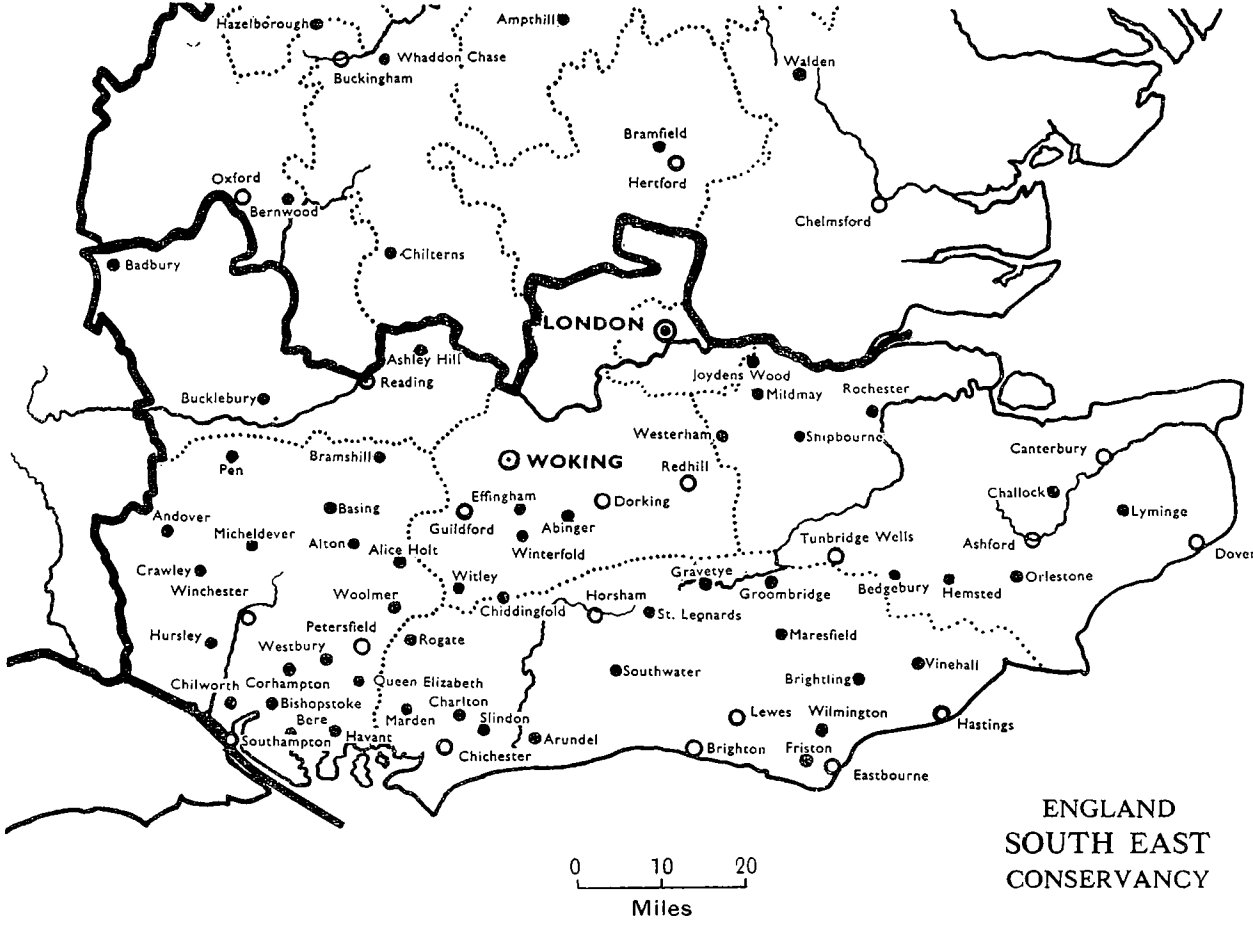
Outline maps showing the distribution of the Commission forests, and the boundaries of the Conservancies, as at 30th September 1955, follow overleaf.


ENGLAND
NORTH EAST
CONSERVANCY
Forests:
Towns:
Berwick
Rothbury
Amble
Kidland
Redesdale
Harwood
Ray
Kielder
Kershope
Walton Woods
Wark
Longtown
Spadeadam
Carlisle
Hexham
Widehaugh
Newcastle
Allendale
Slaley
Chopwell
Inglewood
Weardale
Durham
Greystoke
Workington
Thornthwaite
Keswick
Hamsterley
Middleton
Wynyard
Appleby
Middlesbrough
Ennerdale
Blengdale
Irton
Cleveland
Arkengarthdale
Hardknott
Grizedale
Kendal
Lyth
Foulshaw Wood
Cartmel
Dalton
Barrow
Lancaster
Settle
Gisburn
Bowland
Hambleton
Rosedale
Rievaulx
Langdale
Scarborough
Allerston
Jervaulx
Masham
Thirsk
Malton
Ampleforth
Scardale
YORK.
Knaresborough


Preston
Leeds
Selby
Hull
Tong Woods
Holmfirth
Cawthorne
Doncaster
Manchester
Wharncliffe
Liverpool
Hope
Sheffield
Bawtry
Northwich
Delamere
CHESTER
Matlock
Sherwood
Stoke
Oakamoor
Swynnerton
Derby
Nottingham
Colgrave
Stafford
Bagot
Foremark Woods
SHREWSBURY
Cannock Chase
Charnwood
Leicester
Habberley
Causeway Wood
Corvedale
Long Mynd
Walcot
Kinver
Birmingham
Packington
Warwick
Mortimer
Leominster
Arden
ENGLAND
NORTH WEST
CONSERVANCY
0 10 20
Miles

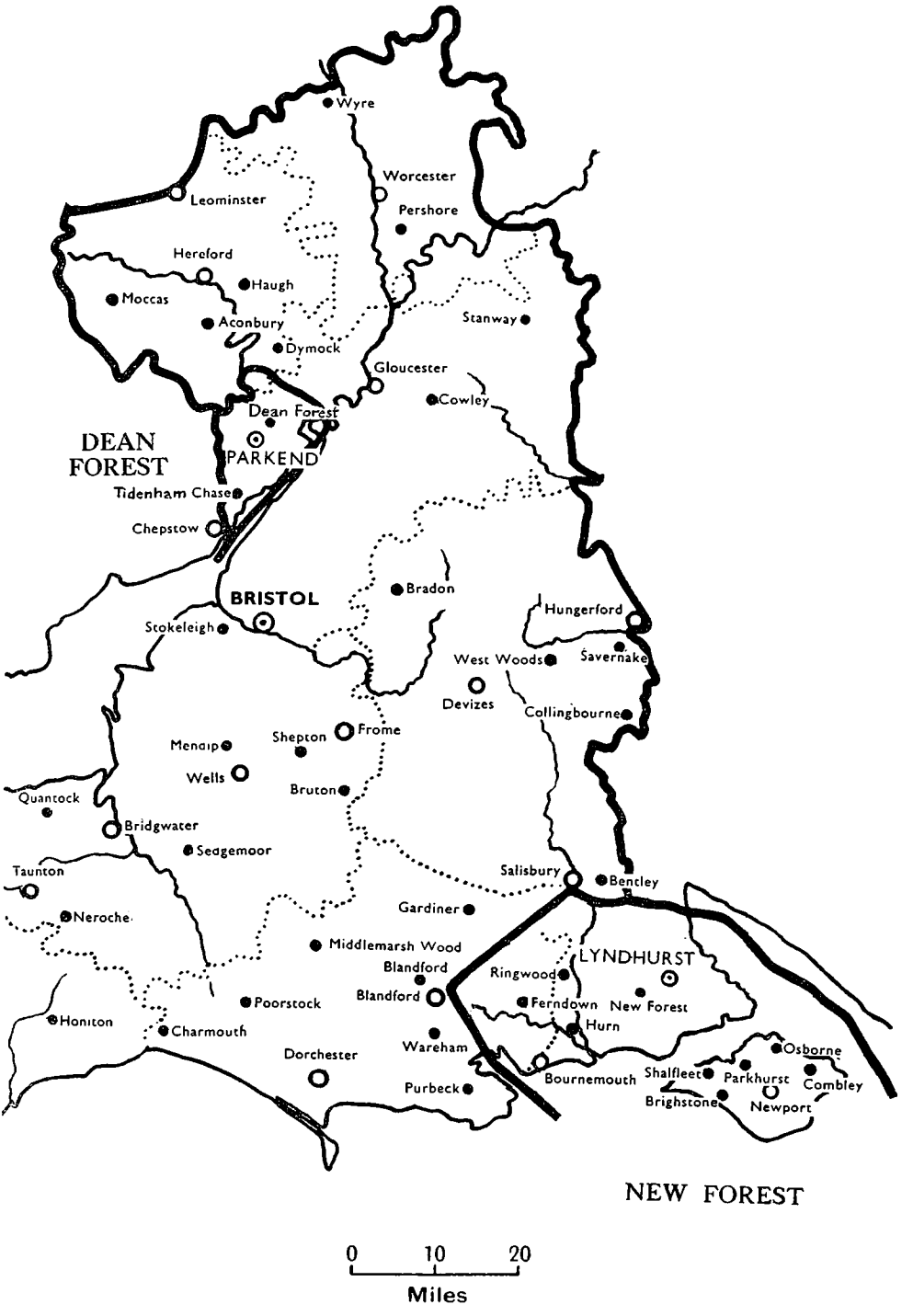
ENGLAND EAST CONSERVANCY

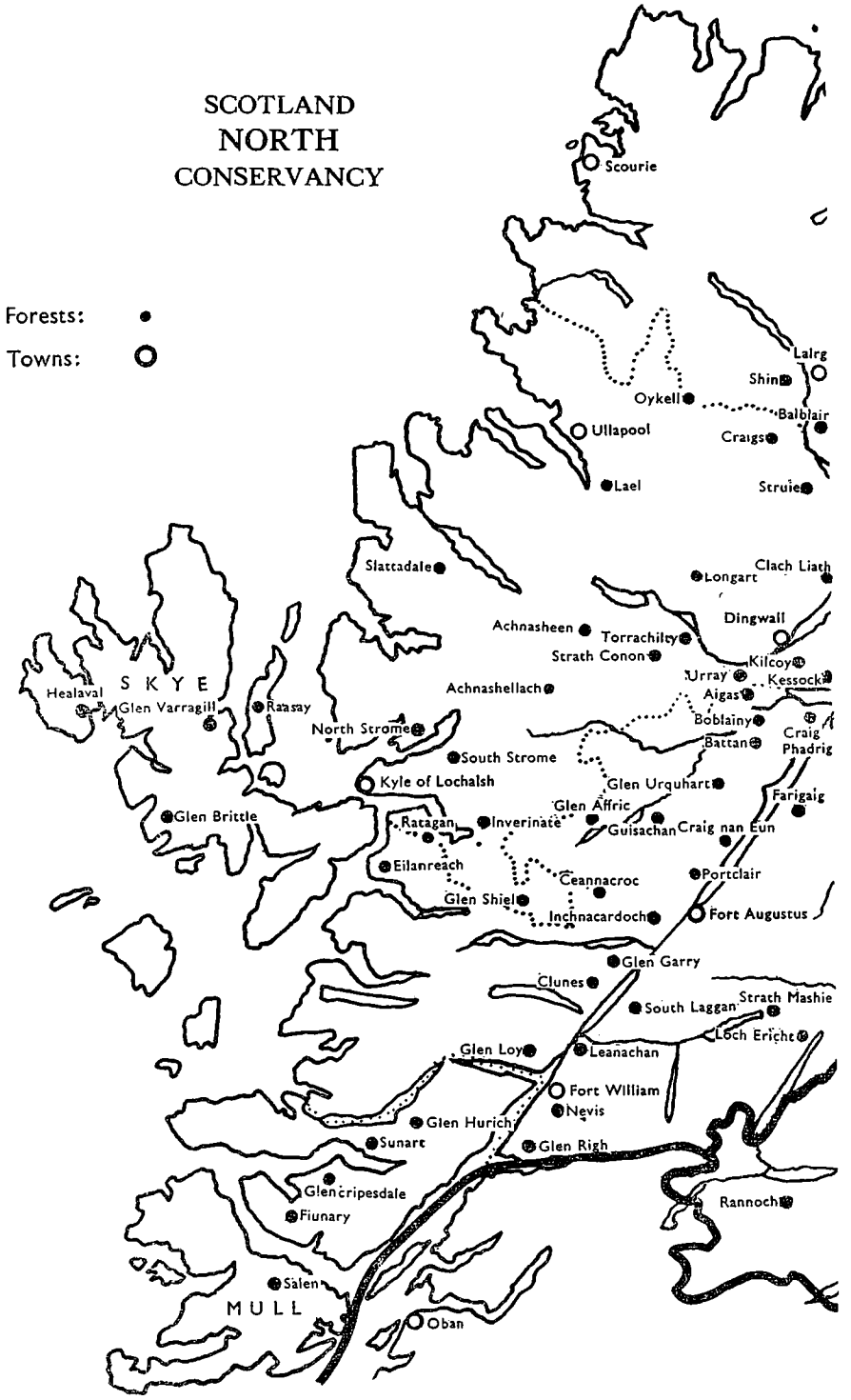


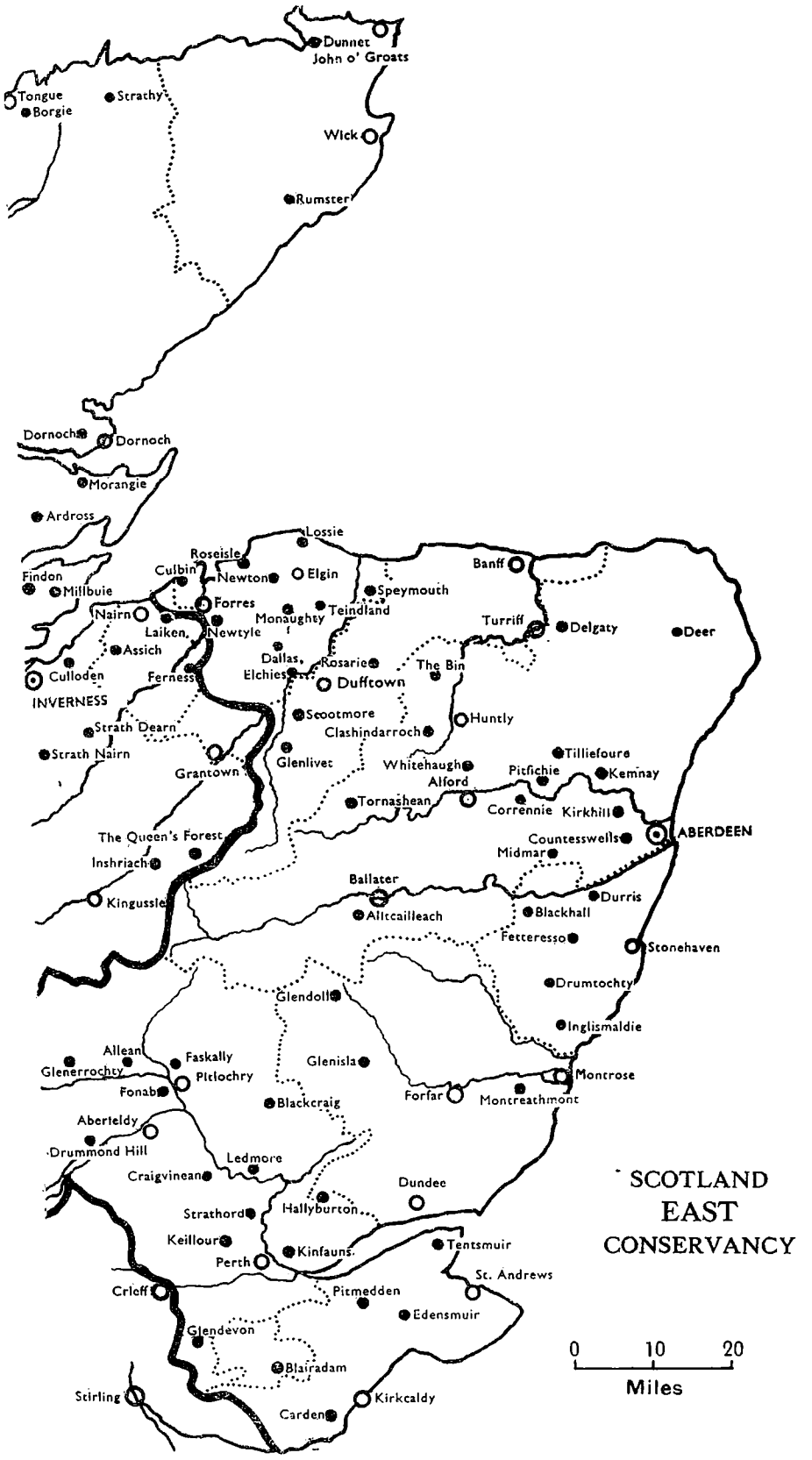


ENGLAND
SOUTH EAST
CONSERVANCY

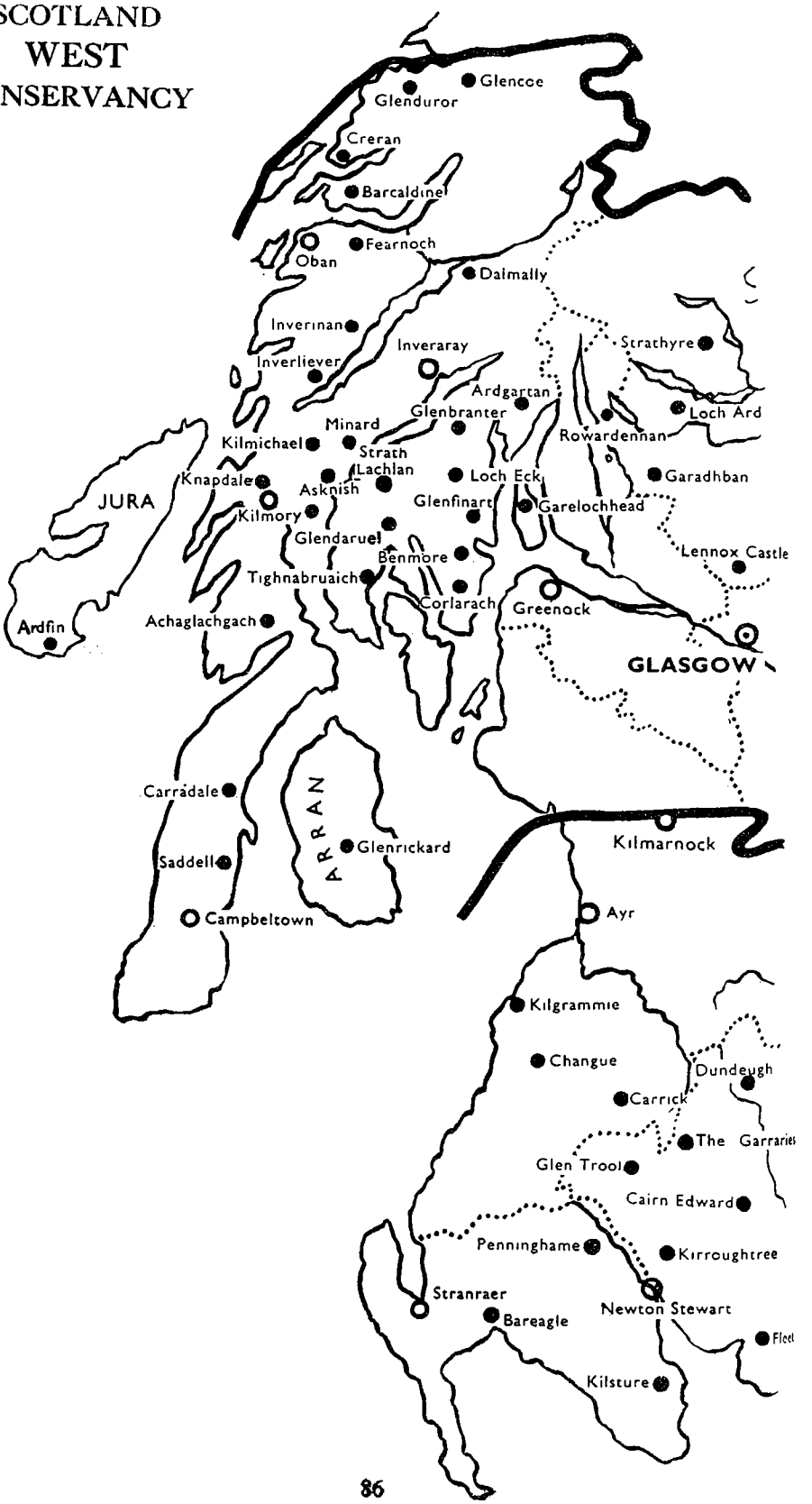

Forests:
Towns:
ENGLAND
SOUTH WEST
CONSERVANCY
Minehead
Dunster
Brendon
Molton Woods
Barnstaple
Hartland
Eggesford
Halwill
Okehampton
Exeter
Okehampton
Fernworthy
Lydford
Dartmoor
Haldon
Wilsey Down
Bodmin
Glynn
Bodmin
Plym
Herodsfoot
Plymouth
Erme
St. Clement
Truro
Croft Pascoe

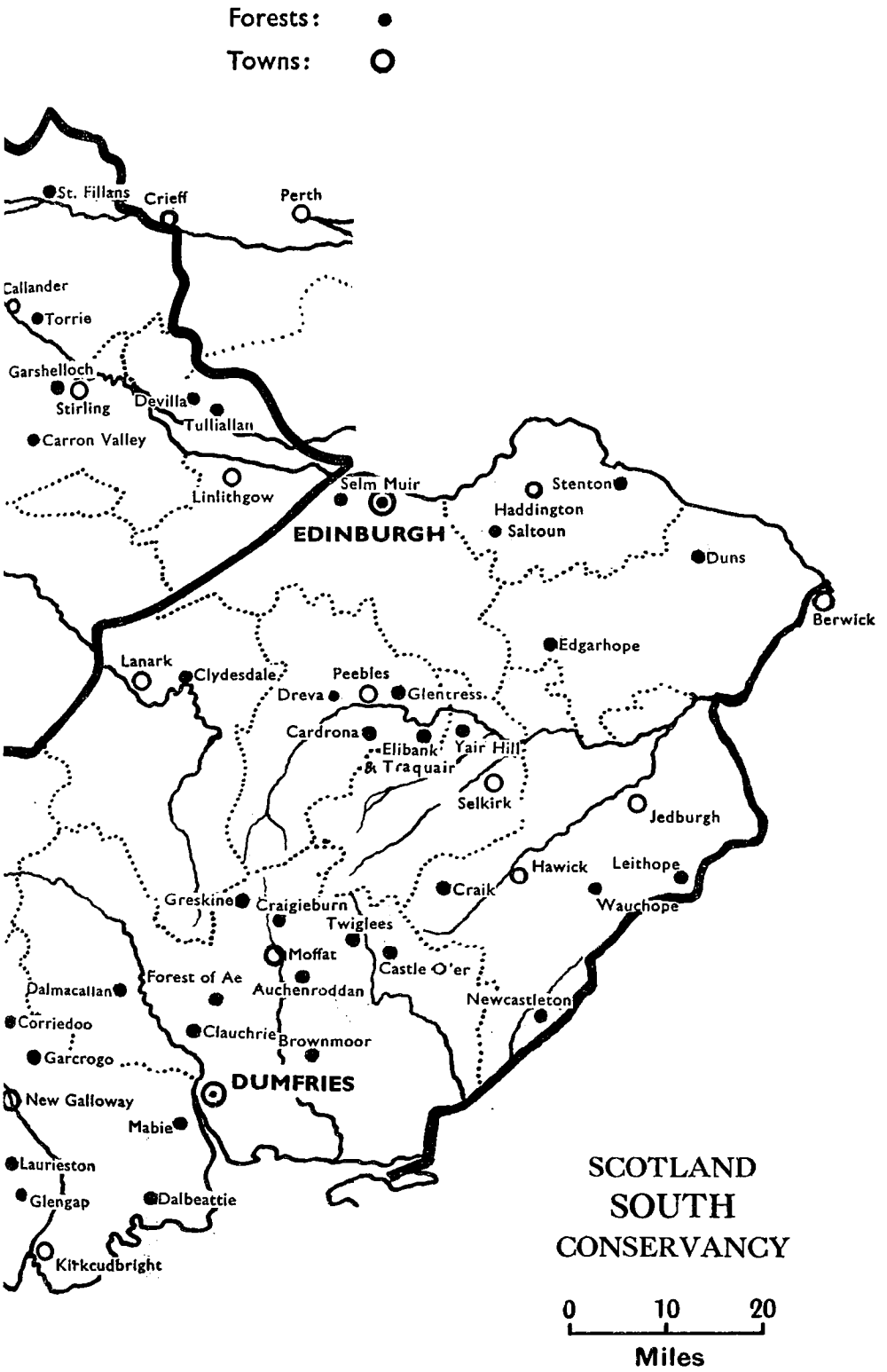

Wyre
Worcester
Leominster
Pershore
Hereford
Haugh
Moccas
Aconbury
Stanway
Dymock
Gloucester
Cowley
Dean Forest
DEAN FOREST
PARKEND
Tidenham Chase
Chepstow
BRISTOL
Bradon
Hungerford
Stokeleigh
West Woods
Savernake
Devizes
Collingbourne
Shepton
Frome
Mendip
Wells
Bruton
Quantock
Bridgwater
Seagemoor
Taunton
Salisbury
Bentley
Neroche
Gardiner
Middlemarsh Wood
LYNDHURST
Blandford
Ringwood
Blandford
Poorstock
Ferndown
New Forest
Hurn
Honiton
Charmouth
Wareham
Dorchester
Osborne
Bournemouth
Shalfleet
Parkhurst
Combley
Purbeck
Brighstone
Newport
NEW FOREST
0
10
20
Miles


SCOTLAND
NORTH
CONSERVANCY
Forests:
Towns:
Scourie
Lairg
Shin
Oykell
Balblair
Ullapool
Craigs
Lael
Struie
Slattadale
Clach Liath
Longart
Dingwall
Achnasheen
Torrachilty
Strath Conon
Kilcoy
Urray
Kessock
Aigas
Achnashellach
Boblainy
Craig Phadrig
Battan
Healaval
SKYE
Glen Varragill
Raasay
North Strome
South Strome
Kyle of Lochalsh
Glen Urquhart
Farigaig
Glen Affric
Glen Brittle
Ratagan
Inverinate
Guisachan
Craig nan Eun
Eilanreach
Ceannacroc
Portclair
Glen Shiel
Inchnacardoch
Fort Augustus
Glen Garry
Clunes
South Laggan
Strath Mashie
Loch Eriche
Glen Loy
Leanachan
Fort William
Nevis
Glen Hurich
Sunart
Glen Righ
Glencripesdale
Fiunary
Rannoch
Salen
MULL
Oban

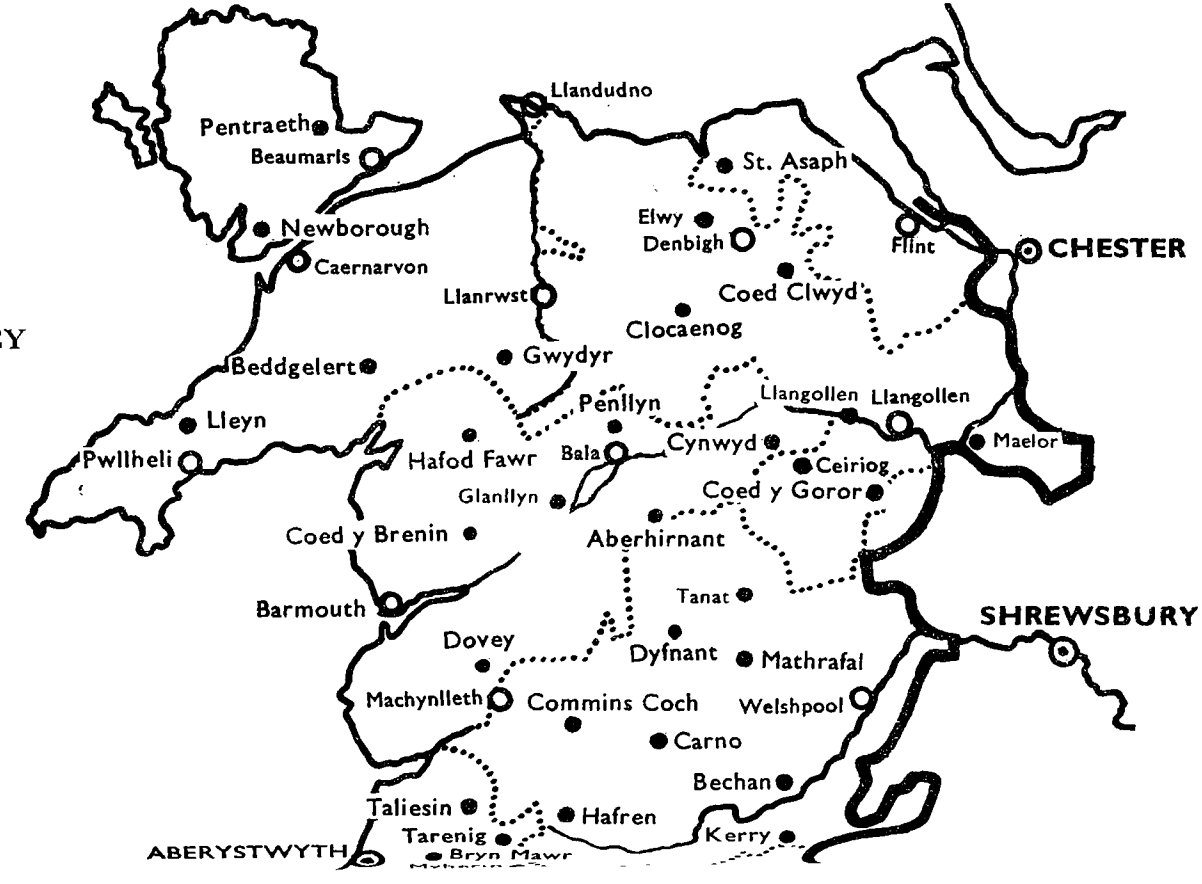

Dunnet
John o' Groats
Tongue
Borgie
Strathy
Wick
Rumster
Dornoch
Dornoch
Morangie
Ardross
Lossie
Roseisle
Findon
Culbin
Newton
Elgin
Banff
Speymouth
Milltuie
Forres
Nairn
Monaughty
Teindland
Laiken
Newtyle
Turriff
Delgaty
Deer
Assich
Dallas
Rosarie
The Bin
Culloden
Ferness
Elchies
Dufftown
INVERNESS
Scootmore
Huntly
Strath Dearn
Clashindarroch
Strath Nairn
Glenlivet
Tilliefoure
Whitehaugh
Pitfichie
Kemnay
Grantown
Alford
Tornashean
Corrennie
Kirkhill
The Queen's Forest
ABERDEEN
Countesswells
Inshriach
Midmar
Ballater
Durris
Kingussie
Allt-caillleach
Blackhall
Fetteresso
Stonehaven
Drumtochty
Glendoll
Inglismaldie
Allean
Faskally
Glenisla
Glenerrochty
Pitlochry
Montrose
Fonab
Forfar
Montreathmont
Blackcraig
Aberfeldy
Drummond Hill
Ledmore
Craigvinean
Dundee
Strathord
Hallyburton
Keillour
Kinfauns
Tentsmuir
Perth
St. Andrews
Crieff
Pitmedden
Edensmuir
Glendevon
Blairadam
Stirling
Kirkcaldy
Carden
SCOTLAND
EAST
CONSERVANCY
0
10
20
Miles

SCOTLAND
WEST
CONSERVANCY



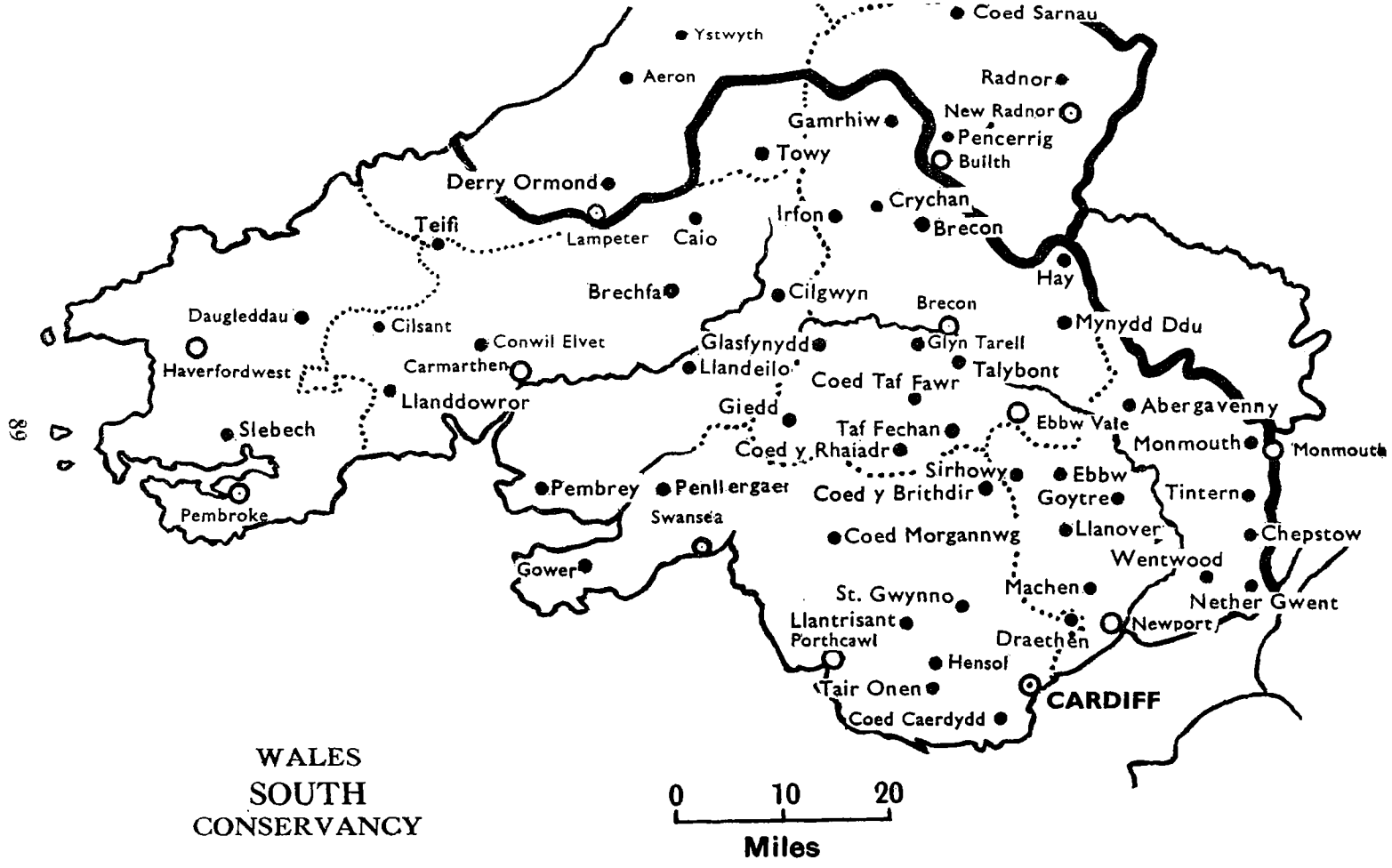

Forests:
Towns:
St. Fillans
Crieff
Perth
Callander
Torrie
Garshelloch
Stirling
Devilla
Tulliallan
Carron Valley
Linlithgow
Selm Muir
EDINBURGH
Stenton
Haddington
Saltoun
Duns
Berwick
Edgarhope
Lanark
Clydesdale
Peebles
Dreva
Glentress
Cardrona
Elibank & Traquair
Yair Hill
Selkirk
Jedburgh
Hawick
Leithope
Craik
Wauchope
Greskine
Craigieburn
Twiglees
Moffat
Castle O'er
Forest of Ae
Auchenroddan
Dalmacallan
Newcastleton
Corriedoo
Clauchrie
Brownmoor
Garcrogo
DUMFRIES
New Galloway
Mabie
Laurieston
Glengap
Dalbeattie
Kirkcudbright
SCOTLAND
SOUTH
CONSERVANCY
0
10
20
Miles

WALES
NORTH
CONSERVANCY



Forests: ●

Towns: ○



WALES
SOUTH
CONSERVANCY

Addresses of the Main Offices of the Forestry Commission

Headquarters of the Forestry Commission :

25, Savile Row, London, W.1. (*Regent* 0221.)

Director of Forestry for England :

1, Princes Gate, London, S.W.7. (*Kensington* 9691.)

Director of Forestry for Scotland :

25, Drumsheugh Gardens, Edinburgh 3. (*Edinburgh Caledonian* 4782.)

Director of Forestry for Wales :

Victoria House, Marine Terrace, Aberystwyth. (*Aberystwyth* 367.)

Director of Research and Education :

25, Savile Row, London, W.1. (*Regent* 0221.)

Conservancy Offices

England :

North-West: Upton Grange, Upton Heath, Chester. (*Chester* 24006.)

North-East: Briar House, Fulford Road, York. (*York* 24684.)

East: Brooklands Avenue, Cambridge. (*Cambridge* 54495.)

South-East: Danesfield, Grange Road, Woking. (*Woking* 2270.)

South-West: Flowers Hill, Brislington, Bristol 4. (*Bristol* 78041–5.)

New Forest: The Queen's House, Lyndhurst, Hants. (*Lyndhurst* 300.)

Dean Forest : Whitemead Park, Parkend, Lydney, Glos. (*Whitecroft* 305.)

Scotland:

North: 60, Church Street, Inverness. (*Inverness* 223, 608.)

East: 6, Queen's Gate, Aberdeen. (*Aberdeen* 33361.)

South: Greystone Park, Moffat Road, Dumfries. (*Dumfries* 2425.)

West: 112, West George Street, Glasgow, C.2. (*Glasgow Douglas* 7261.)

Wales:

North: 15, Belmont, Shrewsbury. (*Shrewsbury* 4071.)

South: St. Agnes Road, Gabalfa, Cardiff. (*Cardiff* 33051.)

Research Station

Alice Holt Lodge, Wrecclesham, Farnham, Surrey. (*Bentley* 2255.)

(32354) Wt. 888—2317 K30 11/56 D.L.