

FORESTRY COMMISSION

THIRTY-THIRD
ANNUAL REPORT OF THE
FORESTRY COMMISSIONERS
FOR THE YEAR ENDED
SEPTEMBER 30TH
1952

*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
14th April 1953*



LONDON
HER MAJESTY'S STATIONERY OFFICE
THREE SHILLINGS NET

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

17th February, 1953

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 33rd Annual Report of the Forestry Commissioners covering the Forest Year ended 30th September 1952.

I am,

Gentlemen,

Your obedient Servant,

(Sd.) RADNOR,

Chairman.

CONTENTS

	<i>Page</i>
TRIBUTE TO THE LATE LORD ROBINSON ...	7
GENERAL REVIEW ...	7
The Call for Economy ...	7
Forestry Commission Operations	8
Private Forestry	9
The Dedication Scheme	9
Approved Estates	10
Planting	11
Underplanting	11
Thinning Grant	11
Assistance to Co-operative Societies...	11
Operation of the Forestry Act, 1951	12
Timber Production	13
The Felling Quota	13
Pitwood Prices	13
Utilisation of Forestry Commission Produce	14
National Land Fund	16
Regional Surveys	16
Scotland	16
Wales	17
Accounting	18
Working Plans	18
Wages and Holidays of Industrial Employees	19
Forest Villages	20
The Windblow in Scotland	21
Grey Squirrels	22
Conferences and Visits Overseas	23
SUMMARY OF THE YEAR'S WORK ...	25
ORGANISATION	28
The Forestry Commissioners	28
The National Committees	28
The Regional Advisory Committees	29
The Home Grown Timber Advisory Committee ...	30
The Commissioners' Staff	31
Professional and Technical Staff	31
Administrative, Executive and Clerical Staff	31
Labour Employed	31
THE YEAR'S WORK	32
The Forestry Fund	32
Financial Tables	32
Acquisition and Utilisation of Land... ..	33
Land not Placed at the Disposal of the Commissioners ...	34
Forest Units	34
Acquisition of Land during the Year	35
Progress of Acquisition of Plantable Land	35
Land Acquired to Date	36

	<i>Page</i>
Cultural Operations	37
Forest Nurseries	37
Seed Supply	37
Home Collection of Seed	37
Imports of Seed	38
Sales of Seed	39
Provision of Plants from Nurseries	39
Expenditure	39
Nursery Area	39
Use of Nursery Ground	40
Amount of Seed Sown	40
Stocks of Seedlings and Transplants	41
Sales of Nursery Plants	41
Plantations	42
Plants used for Planting and Beating Up	43
Planting Progress to Date	44
Forest Protection	44
Fire Protection	44
Protection against Damage by Animals	45
Preparation and Sale of Produce	46
Thinning and Clear Felling	46
Sales of Forest Produce	46
Licensing of Timber Felling	47
Roads	48
Buildings and Estate Management	48
Tenancies	49
Stores	49
Miscellaneous Expenditure	49
Private Forestry	49
The Dedication Scheme	50
Approved Estates	50
Planting on Private Estates	51
Thinning Grants	52
Research and Experiment	53
Silviculture	53
Forest Genetics	54
Studies of Growth and Yield	54
Forest Pathology	55
Forest Entomology	55
Machinery Research	55
Utilisation Research	55
Advisory Committee on Forest Research	56
Grants to Universities and Other Institutions	56
Education	56
Forester Training Schools and Short Courses	57
Forest Workers Training Scheme	57
Northerwood House	57
Grants to Educational Institutions	57
Publications	58
Publicity and Public Relations	59
National Forest Parks	59
Acknowledgment to Staff	60

APPENDICES

1	Payments by Heads of Account, and Receipts	...	...	...	...	61
2	Expenditure and Income	...	...	...	...	61
3	Forestry Operations	...	...	...	...	62
4	Cultural Operations	...	...	...	...	62
5	Private Forestry	...	...	...	...	62
6	Research and Experiment	...	...	...	...	63
7	Education	...	...	...	...	63
8	Special Services	...	...	...	...	63
9	Plantations made during the Year ended 30th September, 1952— Summary by Conservancies	...	...	...	...	64
10	Summary of Species used for Planting and Beating Up	...	...	...	...	66
11	Summary Area Statement of Land Use: By Conservancies	...	...	...	...	67
	Area Statements of Land Use: By Forests:—					
12	England	...	...	...	...	67
13	Scotland	...	...	...	...	71
14	Wales	...	...	...	...	75
MAPS						
	Outline Maps showing Distribution of Forests	...	...	...	...	78
	England	...	...	...	...	78
	Scotland	...	...	...	...	84
	Wales	...	...	...	...	88
	Addresses of Main Offices of the Forestry Commission	...	...	...	...	90

THIRTY-THIRD ANNUAL REPORT

OF THE

FORESTRY COMMISSIONERS

FOR THE YEAR ENDED

SEPTEMBER 30th 1952

TRIBUTE TO THE LATE LORD ROBINSON

It is with deep regret that the Commissioners have to record the death on the 5th of September, 1952, of their Chairman, Lord Robinson. As Technical Commissioner from 1919 to 1932, and Chairman for the past 20 years, Lord Robinson played a great part in organizing the Forestry Commission and in shaping its policy. He, more than any other, has advanced the cause of forestry in this country, and his colleagues owe much to his wise guidance and unrivalled technical knowledge.

GENERAL REVIEW

The Call for Economy

In response to the stress laid by the Chancellor of the Exchequer on the urgent need for economy in national expenditure, the Commissioners have closely reviewed their present as well as their future commitments. To a large extent these commitments are linked up with the expanding programme to which the Commissioners have been working since 1945. The progressive annual increase in the area planted—this has risen from 26,000 acres in the Forest Year 1947 to over 61,000 acres in the year under report—has involved corresponding increases in nursery ground and plant stocks, as well as in housing for the accommodation of forest workers and supervisory staff. Moreover, the steady progress of the Dedication Scheme necessarily involves more money in the form of planting and maintenance grants to private owners, while on the administrative side the Forestry Act of 1951 has laid new duties upon the Commissioners in connection with felling licences. The rise in the wages of forest workers which has taken place has been a further factor, so it will be realised that the task of avoiding a substantially larger call on the national funds was by no means an easy one.

In approaching the problem the Commissioners were governed by the following considerations. Firstly, the maintenance, tending and protection of their existing woods and plantations must have priority, though it was recognised that there might be scope for economy in matters of technique. Secondly, that whatever cuts had to be made the Commissioners would strive to maintain the present rate of planting. Any substantial reduction in planting area would involve the sacrifice of great numbers of nursery plants as well as much other preparatory work, e.g., fencing, ploughing and draining, and the forward planning of the Commissioners would be thrown out of gear.

Subject to these two considerations the Commissioners' endeavour has been to effect the maximum possible economies, and the following measures were taken:

- (1) Commitments on new houses have been curtailed, the contracts placed during the year under review being only one quarter of those placed in the previous year. This step has had to be taken to avoid mortgaging an undue proportion of the Commissioners' future funds.

- (2) Expenditure on roads has been reduced to a minimum.
- (3) Apart from the Foreman grade, the number of non-industrial staff was substantially the same throughout the year, recruitment being virtually limited to replacing wastage ; a number of staff cuts have also been made.
- (4) Economies have been effected in many detailed matters of technique as well as in general administration.

All this was not achieved without considerable strain, and some sacrifice especially as regards the housing programme. However, as a net result of the above measures, reinforced by substantially increased revenue from the sale of forest produce, the Commissioners have been able to maintain their existing forest estate and to form in the year under review over 61,000 acres of new plantations, without making any substantially larger call on the public funds than in the previous year.

Forestry Commission Operations

The table below gives in summary form the areas acquired, planted, and thinned, the number of houses completed, and miles of motorable road constructed in the Commissioners' forests. Data for the previous year are given for comparison.

STATISTICAL SUMMARY

Table 1

FOREST YEAR 1951				FOREST YEAR 1952		
Great Britain... ..	56,100		Plantable land acquired (acres)	Great Britain	53,600	
England	16,000			England	18,300	
Scotland	33,500			Scotland	27,000	
Wales	6,600			Wales	8,300	
Great Britain	57,200		Total area planted (acres)	Great Britain	61,600	
England	17,500			England	18,000	
Scotland	27,000			Scotland	31,000	
Wales	12,700			Wales	12,600	
Great Britain	38,000		Afforested (acres)	Great Britain	39,600	
England	9,600			England	9,500	
Scotland	18,100			Scotland	20,700	
Wales	10,300			Wales	9,400	
Great Britain	19,200		Replanted (acres)	Great Britain	22,000	
England	7,900			England	8,500	
Scotland	8,900			Scotland	10,300	
Wales	2,400			Wales	3,200	
Great Britain	32,900		Area thinned (acres)	Great Britain	37,300	
England	19,200			England	20,600	
Scotland	9,400			Scotland	12,200	
Wales	4,300			Wales	4,500	
Great Britain	324		Houses built (number)	Great Britain	427	
England	54			England	138	
Scotland	210			Scotland	222	
Wales	60			Wales	67	
Great Britain	291		Motorable roads constructed (miles)	Great Britain	344	
England	115			England	151	
Scotland	121			Scotland	128	
Wales	55			Wales	65	

The first set of figures shows that in spite of the sustained efforts of the acquisition staff the net area of plantable land acquired in 1952 was 2,500 acres less than in 1951. Reference to the data for the individual countries shows that acquisitions in Scotland fell by over 6,000 acres, a drop which was offset to some extent by small increases in England and Wales. It is necessary to point out, however, that owing to the long time which it often takes to secure the legal completion of a land transfer, much of the land shown as acquired during the year under report was actually approved for acquisition before the beginning of the forest year, and there was at the 30th September, 1952, a substantial pool of approved acquisitions awaiting completion. Consequently the Commissioners felt able to continue their expanding planting programme and, as will be seen from the next set of figures in the table, have planted nearly 62,000 acres in the year, an increase of 4,400 acres on 1951.

Besides giving the total area planted the table also shows how this is apportioned as between *afforestation*, i.e. the planting of bare land, and *replanting*, i.e. the restocking of felled or devastated woodland, or scrub.

Out of the 61,600 acres planted, 22,000 acres (36 per cent.) consisted of replanting; this is the highest proportion which has been reached to date.

The next set of figures in the table shows that there has been an increase of 4,400 acres in the area thinned in the Commissioners' plantations, the greater part of the increase occurring in Scotland. An increased quantity of thinnings, both standing and felled, has been offered to the home timber trade; tendering was brisk in the early part of the year, but in the later months, when prices showed a tendency to fall, interest slackened appreciably and in a number of cases no tenders were received.

The last two groups of figures in the table show the progress in new housing and in road construction. The number of houses completed has risen from 324 in 1951 to 427 in 1952. As stated previously, it has been necessary as an economy measure to reduce the number of new contracts placed during the year.

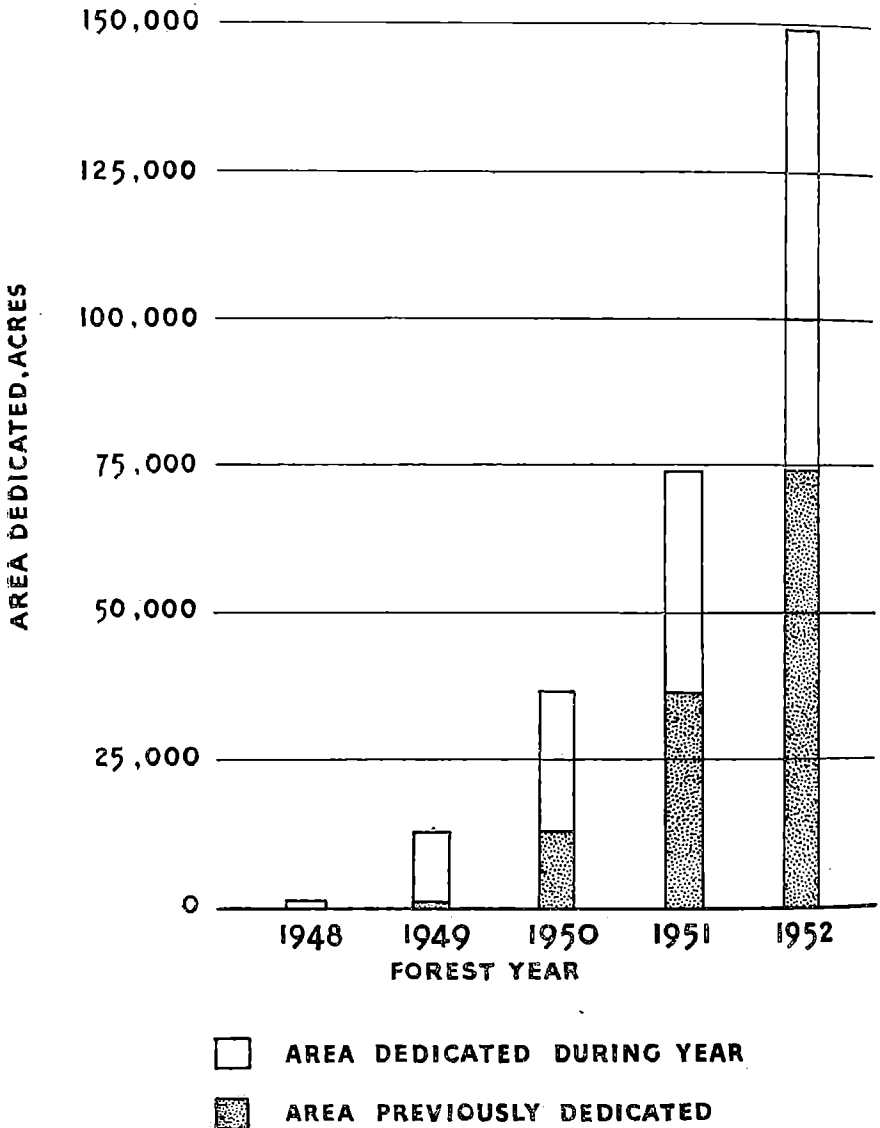
Good weather conditions and a greater use of mechanical equipment are largely responsible for the increased mileage of roads constructed, and there is road access now to most of the blocks at present being thinned. Besides their important role in fire protection these roads are paying good dividends in the form of better prices for the thinnings.

Private Forestry

Although the hopes expressed in the 1943 White Paper that by five years after the war replanting in private woodlands would have reached 25,000 acres per annum, have not been fulfilled, there is no doubt that the interest among woodland owners and their agents in better woodland management is steadily increasing. Great interest has been shown in the short courses run by the Commission and the Forestry Societies, and the thinning grant coupled with better prices for small produce has encouraged estates to improve their younger and middle-aged plantations. But this growing interest has still hardly touched those estates with a very small woodland acreage and the farmer owners.

THE DEDICATION SCHEME.—The Dedication Scheme is now making substantial headway. During the year the number of estates to complete dedication increased from 132 to 252 and the area of woodland from 74,000 acres to over 149,000 acres. At the 30th September, 1952, plans of operation covering a further 69,000 acres had been approved, and the majority of the deeds concerned were with the solicitors for completion. The diagram overleaf illustrates the progress made since 1948.

PROGRESS OF DEDICATION OF WOODLANDS



Consultations with the United Kingdom Forestry Committee are proceeding on modifications in the Deed of Covenant which the Commissioners are advised are necessary to take account of the objection that certain of the restrictive covenants are not binding on successors to the original signatory of the deed.

APPROVED ESTATES.—A new class of estate appears this year for the first time, termed for convenience "Approved Estates". It embraces estates whose owners have decided not to dedicate but to manage their woodlands

in accordance with a working plan approved by the Commissioners; these owners are then entitled, under Section 10 of the Forestry Act, 1951, to certain concessions in connection with felling licences. Working plans have been approved for 10 such estates in England and Wales with a total area of 1,400 acres of woodland, and there are more plans in course of preparation.

PLANTING.—Private planting, according to the best estimate available, amounted to 15,100 acres, an increase of 2,800 acres over the area planted in the previous year. This cannot be considered satisfactory progress; but the latest statistics regarding the issue of conditional licences for clear felling suggest that the rate of planting is likely to increase substantially in the near future. In the year under review conditional licences have been issued in respect of 16,500 acres of woodland, and restocking conditions have been agreed with the owners concerned. When to this is added the planting going on under dedication as well as in approved woodlands, small woods, etc., the total should approach more nearly the figure of 25,000 acres given in the Commissioners' Post-War Forest Policy Report as the objective for private planting in the fifth to tenth years of the new programme.

UNDERPLANTING.—In response to a request from estate owners the Commissioners have agreed to regard certain types of underplanting as qualifying for a *pro rata* planting grant.

THINNING GRANT.—The revised form of thinning grant which came into force this year is intended to encourage owners to thin their young plantations. This grant is now restricted to plantations not exceeding 35 feet in height (for broadleaved species the limit is 40 feet) or 4 inches average quarter girth at breast height (broadleaved 6 inches), and so excludes the older woods, thinnings from which are likely to be more readily saleable. In most parts of the country, owners have been quick to avail themselves of the new grant though there is still much leeway to be made up. In all, 887 schemes covering an area of 14,300 acres were inspected and passed for payment, and it was estimated that these thinnings would yield about $4\frac{3}{4}$ million cubic feet in the form of poles.

ASSISTANCE TO CO-OPERATIVE SOCIETIES.—The Forestry Co-operative Society in Scotland continues to prosper and the Commissioners have agreed to extend their guarantee against loss for a further period though on a slightly reduced scale. No call has hitherto been made upon this guarantee. The Commissioners have also made a loan of £800 to the Society to provide working capital for a recently-formed subsidiary society operating in Argyll.

The Society working in the North of England, known as Northern Forest Products Ltd., made substantial trading losses in 1948 and 1949, but following on a re-organisation of the Society in 1950 the Commissioners undertook to make a grant of £600 per annum for two years and to guarantee the Society against loss up to a maximum of £1,500 per annum for the same period. The results have been encouraging, the Society is functioning actively, it has not required to call upon the guarantee, and the last accounts show a substantial trading profit.

The Commissioners have continued their grant to the Welsh Agricultural Organisation Society which is playing an important role in helping to start forestry co-operative movements in different parts of Wales. The Society's officers have been responsible for drawing up the constitution and rules of new societies, and have done much useful preparatory work. As a direct outcome of the Llandoverly Woodland Survey, a body known as the Llandoverly and District Woodlands Society, Limited, has been formed with a

full-time qualified manager. In order to help this society to become firmly established the Commissioners have made a grant of £750 for the year 1952-53 and have promised further grants on a slightly diminishing scale for the next two years, subject to progress being satisfactory.

OPERATION OF THE FORESTRY ACT, 1951.—The main provisions of the Act and the regulations relating to felling licensing came into force on 1st October, 1951. Despite a rather large carry-over of applications outstanding at the end of the previous year, and some shortage of trained staff, it may be said that on the whole the administration of the Act has gone fairly smoothly. The inevitable teething troubles in the change-over to the new licensing system have now been largely overcome, and although there has been some criticism—mainly on the ground of delay in dealing with applications—most of the complaints have been capable of a satisfactory explanation. It is only right to add that co-operation on the part of the estate owners and timber merchants has contributed greatly to the smooth running of the control. The Commissioners desire also to pay a tribute to the work of the Regional Advisory Committees which have frequently helped to resolve local difficulties arising out of the administration of the Act.

Nearly 13,000 applications, including some 2,000 carried over from the previous year, were considered during the year under report, about three-quarters of the total being in respect of fellings in England. The number outstanding at the end of the year dropped to 1,350.

A decision on most applications has been given within three months, and in many cases, especially where hedgerow trees are concerned, much sooner. But some decisions had to be delayed up to six months (longer in a few exceptional cases) where there was an amenity or an agricultural interest, or where the owner was opposed to replanting conditions.

Twenty per cent. of the applications were the subject of consultations about amenity with the local planning authorities and in 53 cases applications for licence to fell trees which were subject to a Tree Preservation Order were referred to the local planning authority under Section 13 (4) of the Act; this means in effect that the Commissioners were prepared to leave the decision wholly to the authority, there being no forestry interest in the trees. The fact that no application was referred to the Minister of Housing and Local Government under Section 13 (2) of the Act shows that there was no irreconcilable conflict of view between the Conservators and the local authorities responsible for Tree Preservation Orders.

The Commissioners' policy with regard to replanting conditions is to make all licences authorising the clear felling of more than one acre of woodland subject to restocking and maintenance conditions, in accordance with Section 3 (3) of the Act; Directors have, however, discretion to make exceptions to this rule in certain cases. That a substantial area is involved is apparent from the licensing statistics, which show that the conditional licences issued during the year require the restocking of 16,500 acres, of which 9,600 acres are in England, 4,400 acres in Scotland, and 2,500 acres in Wales.

All the Reference Committee Panels (one in each Conservancy) have now been formally appointed by the appropriate Minister after consultation in accordance with Section 4 of the Act. In the year under review only one Reference Committee has been appointed to investigate a particular case of grievance.

Up to the present the Commissioners have not exercised the powers, granted to them under Section 7 of the Act, to give directions requiring an owner to fell trees.

Timber Production

THE FELLING QUOTA.—The Commissioners have continued to seek the advice of the Home Grown Timber Advisory Committee, and in particular on the size of the felling quota. For the year under report the quota, expressed in terms of trees of six inches quarter-girth and over, permitted the felling of not more than 7·1 million cubic feet of coniferous timber and 26 million cubic feet of broadleaved timber. But two severe gales during the winter of 1951–52 caused widespread windblow in Scotland which resulted in large quantities of mainly coniferous timber having to be licensed in excess of the normal quota. In order not to interfere too drastically with normal fellings in Scotland the excess, amounting to nearly $1\frac{1}{4}$ million cubic feet, is to be spread over a period of years.

For the year ending 30th September, 1953, the Commissioners, after considering the views of the Home Grown Timber Advisory Committee, decided to fix the quota at 7,100,000 cubic feet of coniferous timber (less 200,000 cubic feet in respect of the excess timber licensed in Scotland in 1951–52 as a result of the windblow) and 26 million cubic feet of broadleaved timber. But the allowable cut of broadleaved timber may be increased by 2 million cubic feet, if necessary to meet additional applications for licences to fell hedgerow trees that are deteriorating.

PITWOOD PRICES.—In their 31st Annual Report the Commissioners referred to certain negotiations which had been entered into in 1950 with the National Coal Board with a view to fixing round mining timber prices for the country as a whole. Since then there have been further developments, an account of which may now be given.

While the general negotiations mentioned above were in progress the Home Timber Merchants Association of Scotland agreed with the Scottish Division of the National Coal Board a free-on-transport price schedule for home-grown pitprops, other round mining timber and sawn mining timber produced in Scotland. The agreement was to run for one year from 15th July, 1950, and was subject to certain undertakings by both parties, the most important being that the Timber Merchants Association would supply certain minimum quantities per month, and that the Scottish Division of the National Coal Board would take all supplies offered within their specification and stated requirements. The prices agreed for unpeeled softwood pit props were approximately equivalent to a price of 3s. 3d. per hoppus foot for $2\frac{1}{2}$ -inch to 4-inch props and 2s. 9d. per hoppus foot for props of $4\frac{1}{2}$ inches and over, an additional 4d. per hoppus foot being allowed for larch. For peeled props these prices were subject to an increase of 6d. per hoppus foot.

In 1951, after consultations with the private woodland interests and with the Commission, the Home Timber Merchants Association of Scotland negotiated a further agreement with the Scottish Division of the National Coal Board. This fixed prices for unpeeled props which averaged 4s. per hoppus foot for 2-inch to 4-inch props and 4s. 9d. for props of $4\frac{1}{2}$ inches and over, with an addition of 5d. per hoppus foot for larch; peeled props being subject to an additional 7d. per hoppus foot. As in the case of the previous agreement, firm estimates of production by sizes and specifications were made by the Timber Merchants Association with assistance from the Commissioners' staff and from private woodland owners. The prices agreed were on the understanding that deliveries of mining timber, both round and sawn, would average 4,000 standards monthly. The agreement was to run for one year, and the Scottish Division undertook to take all supplies within their requirement.

Meanwhile, the negotiations for a settlement on the basis of a single price agreement for Great Britain having made little progress, the Commissioners and the National Coal Board set up, in November, 1950, a joint pitwood working party which included representatives of the private owners and the home timber trade, as well as officers of the Forestry Commission and the National Coal Board, to study the problem anew and to endeavour to find a basis for a satisfactory settlement. The working party reported in September, 1951, and its main recommendations were: necessity for a high standard of preparation of the props; the zoning of supplies in accordance with a plan of movement drawn up by the National Coal Board which provided for each coalfield to draw its supplies from the nearest available sources; that agreement as to prices, specifications, quantities, etc., should be by negotiation between the National Coal Board and organisations representing the producing interests within specified territories, the said territories to comprise (1) Scotland, (2) the counties in South West England and South Wales which would normally supply the South Western Division of the National Coal Board, and (3) the remainder of England and Wales; lastly, that the principle of free-on-truck prices should be accepted.

The recommendations were generally agreed, and after meetings between representatives of the Commissioners, the Federated Home Timber Association, and the Country Landowners Association, the Federated Home Timber Association negotiated a price agreement for manufactured props to be produced in England and Wales. The price worked out at approximately 6s. free-on-truck per hoppus foot for the usual range of peeled and seasoned coniferous props, with a reduction of 8d. for unpeeled props, prices of larch props and other special specifications were to be negotiated individually, and the agreement to run from 17th December, 1951, to 31st December, 1952.

Efforts were also made to negotiate a price agreement for the supply of pitwood to the South Western Division of the National Coal Board. This division, which includes the South Wales, Forest of Dean and Somerset coalfields, takes the bulk of its supplies in the form of unpeeled pitwood purchased by weight and not by measure, and differs from most of the other coalfields in accepting a proportion of hardwoods.

It proved, however, impossible to negotiate a satisfactory agreement on the price of this class of pitwood, and the Commissioners continued to supply the South Western Division of the National Coal Board with round mining timber at the previously arranged price of 140s. per ton, delivered.

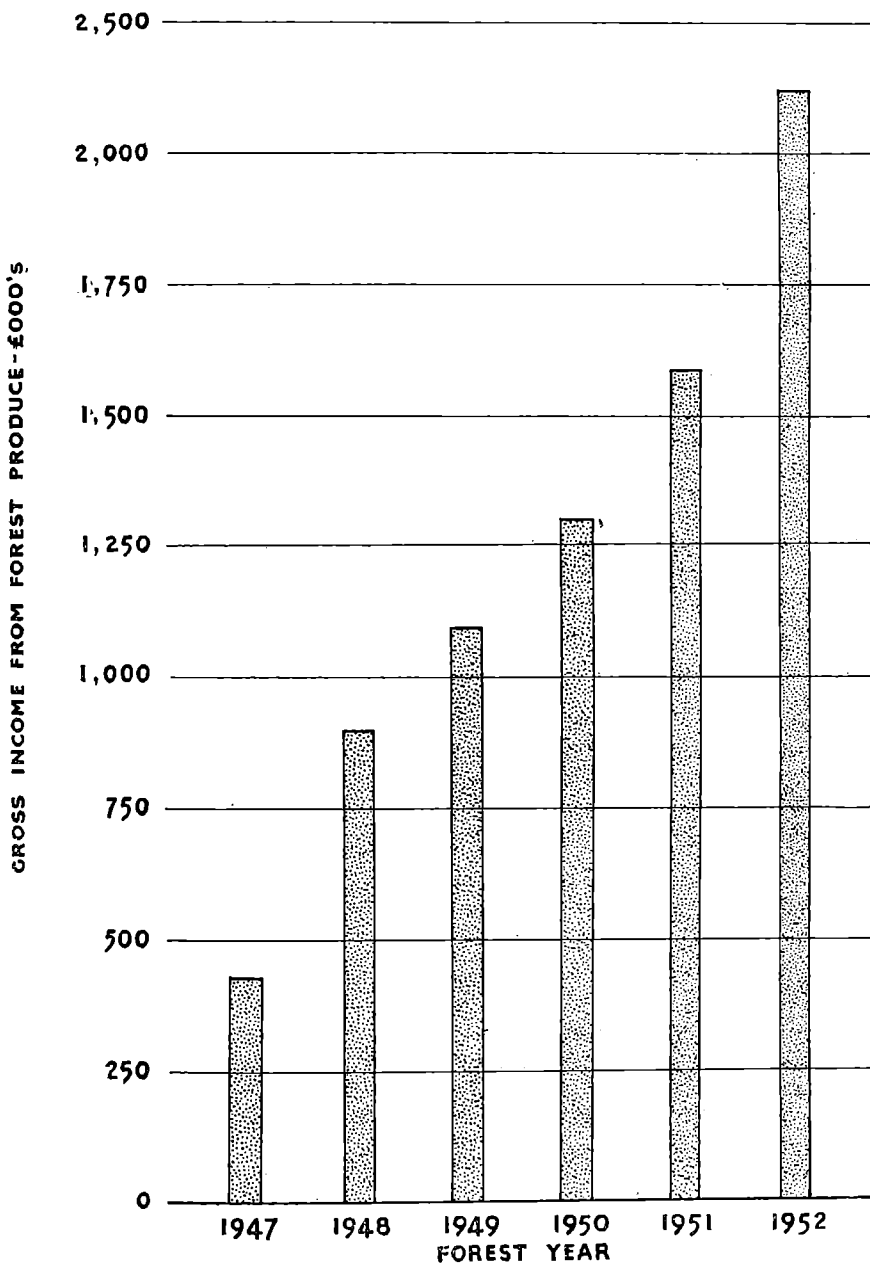
In September, 1952, the National Coal Board exercised the option to terminate the price agreement in respect of home-produced pitprops in England and Wales, and after the end of the year under report representatives of the producing interests met to consider negotiations for a new price agreement with the National Coal Board.

UTILISATION OF FORESTRY COMMISSION PRODUCE.—The steadily increasing flow of produce from the older plantations is a side of the Commissioners' work which is growing in importance. During the year under review the volume of produce sold by the Commissioners, including that used in their own forests, amounted to nearly 12½ million cubic feet, an increase of more than 1½ million cubic feet compared with the previous year. Of the total it is estimated that about 10½ million cubic feet (85 per cent.) represented the output from thinnings, the remaining 15 per cent. coming from clear felling, part of which consisted of mature timber from the former Crown Forests and acquired woodlands, and part from the clearance of scrub or devastated woodlands requiring to be restocked. Sales to the timber trade of standing timber, consisting for the most part of thinnings, increased from 2·2 million cubic feet in 1951 to 3·3 million cubic feet in 1952.

The diagram below illustrates the rapid expansion in the gross income from forest produce over the past six years. Income has risen from less than half a million pounds in Forest Year 1947 to over two million pounds in the year under report.

GROSS INCOME FROM FOREST PRODUCE

1947 - 1952



National Land Fund

The National Land Fund was established under the Finance Act, 1946, which empowers the Treasury, where property is accepted by the Commissioners of Inland Revenue in satisfaction of Death Duties, to pay from the Fund the amount of the duties and to dispose of the property at their discretion.

Up to the end of the year under review the Commission had acquired under this arrangement parts of the Rowardennan Estate in Stirlingshire and of Glanllyn Estate in Merionethshire, extending in all to 13,172 acres, of which 4,695 acres are classed as plantable land, some of which already carries a tree crop.

As a trading department the Forestry Commission reimburses the National Land Fund for the properties it acquires under the Scheme.

Regional Surveys

SCOTLAND.—The Forestry Commission and the Department of Agriculture for Scotland have in the last few years carried out jointly a series of Land Utilisation Surveys in the Highlands of Scotland. The purpose of the surveys is to gain enough information about the land within a reasonably large block of country—usually some 150,000 to 250,000 acres—to produce recommendations for improving agricultural production and for extending forestry.

The areas chosen are those where the land is of poor quality, consisting almost entirely of hill grazing. The economy of these districts is based almost wholly on sheep farming and, because so few men are necessary for shepherding, and communications and amenities are poor, depopulation has become a most serious problem. If forestry schemes can be started they at once provide another source of livelihood and a much higher rate of employment per square mile than sheep farming. It is noteworthy that in parishes where there are large-scale forestry operations the general decline in population has been checked and in some cases increases have been recorded.

The first of the surveys was carried out some four years ago in the Strathoykell area of Sutherland and the adjoining Ross-shire glens. Some 250,000 acres were surveyed, of which 22,500 acres (later reduced to 17,500 acres) were provisionally allocated to forestry. The forestry areas consisted partly of existing woodland, much of which had been felled in the two world wars, and partly of bare land of low grazing value. It was hoped that the woodland owners in the region would manage their woods under the dedication scheme, but so far no agreed scheme has resulted; terms have however been agreed by the Commissioners for the acquisition of blocks totalling upwards of 8,000 acres, about half of which is felled woodland and the remainder bare land.

The Forestry Commission have recently completed their part of the surveys of the Parish of Assynt in Sutherland, the Parishes of Gairloch and Loch Broom and the Balmacara Peninsula in Ross-shire, and the Islands of Mull and Jura in Argyll, bringing the total area of land inspected up to one and a quarter million acres. The Department of Agriculture have made their recommendations for agricultural developments in Loch Broom, Balmacara and Jura, and work on the other areas is continuing. The Commission have recently started work on surveys of East and North Sutherland and of the Isle of Skye.

The areas mentioned above are not those where a high percentage of land suitable for forestry can be found, but they have been chosen because help is badly needed in those districts if the population is not to die out. An area where the forestry possibilities are much greater has also been surveyed—the valley of the River Spey. The catchment area extends to some 750,000 acres and much of it has always been forest land. There would seem to be considerable scope here for an increase in forestry without interfering with agricultural production, but all aspects of the survey have not yet been covered.

WALES.—During the past two years a special form of land survey has been in progress in Wales as a means of getting to grips with the task of rehabilitating the unproductive private woodlands. The 1947 Census showed that in Wales there is a total of 224,000 acres classified as woodland in private ownership. Nearly half this area consists of derelict or recently felled woods serving no more useful purpose than to provide a scanty bite for sheep or a modicum of winter shelter. The remainder is mostly either poorly stocked oak and other hardwoods or very indifferent coppice. Large estates are few and far between, the great majority of the woods being attached to the farms. Many of the larger woodland blocks are held by several owners and it is estimated that the average ownership of private woodland in Wales is not more than 30 acres. With few exceptions the woods are situated on sheltered fertile slopes, and under proper management could be highly productive, but the small acreage in individual ownership, absence of any forestry tradition and lack of skilled supervision are great handicaps.

As a first approach to the problem the whole of Wales has been mapped out into 43 districts, each containing approximately 3,000 acres of privately owned woodland. In 1950 a start was made on the survey of a number of the more densely wooded districts; an area round Llandovery was the first to be tackled, but surveys of other districts such as Dolgelly, North Cardiganshire and Machynlleth soon followed.

The procedure adopted took the form of an initial survey of all the woods in the area, conducted by Forestry Commission staff. In the course of this survey those woodlands which appeared suitable for continued timber production were scheduled. In some cases areas of waste or under-productive land adjoining the woods are tentatively included in order to reduce fencing costs or to improve access. The results of this preliminary survey were then passed to the Land Service of the Ministry of Agriculture for consideration from the agricultural point of view, and in due course agreement was reached as to the areas which ought to be brought under forestry management, and the respective ownerships were ascertained.

The next step was to inform the owners within the area of the Commission's intention to secure the proper management and rehabilitation where necessary, of the scheduled woods. Help was promised in the form of technical advice and monetary grants where applicable. Owners were also encouraged to form a Co-operative Forestry Group with the assistance of the Welsh Agricultural Organisation Society, and they were informed that as the land could not be left derelict, if they were unable to replant by their own efforts they had the alternative of selling or leasing the land for management by the Forestry Commission.

Personal visits are made by officers of the Commission and of the Welsh Agricultural Organisation Society until provision has been made for the treatment of each block of woodland by one means or another.

By the end of the year under report nine survey areas had reached the stage of direct contact with woodland owners and six more are proceeding. There have been already some 6,000 interviews with owners, and as a direct outcome of this work 375 owners have undertaken themselves to replant or rehabilitate woodland totalling 8,500 acres, and agreement has been reached with 126 owners to sell or lease land aggregating 6,200 acres for replanting by the Forestry Commission.

Accounting

The Parliamentary Select Committee, which in 1948/49 examined the Forestry Commission estimates, made the following recommendation in their report* :—

Paragraph 39/2 “ that an accounting system on commercial lines should be introduced in each conservancy and the accounts of the Forestry Commission as a whole should be built up from these accounts ”.

The Commission's accounting system is similar to that of other Government Departments in that it is based on cash expenditure and receipts. An Appropriation Account is prepared showing how the money voted as a grant in aid has been spent, and analysing the expenditure under seven headings showing salaries, forestry operations, etc. For departmental purposes, the main sub-heads are analysed in great detail to facilitate the control of expenditure. Annual trading accounts are prepared on a commercial basis, after making provision for outstanding charges, depreciation, interest on capital, etc. It is acknowledged however, that the accounts are not in a form which provides all the information which ought to be available as and when required for management purposes.

But as the introduction of a new accounting system is bound to involve a good deal of trial and error, not only to find the best form for the accounts but also the appropriate methods by which they should be compiled, the Commissioners decided to start with two pilot schemes, one in the South West Conservancy in England and the other in the South Conservancy in Scotland. Additional accounting and clerical staffs were recruited as the existing system of cash accounts had still to be maintained, and the new system has been in operation during the past year.

So far no insurmountable difficulties have been encountered, although many minor adjustments were found necessary as the work proceeded. The experience already gained has shown that the new accounts are providing useful costing data and general management statistics, particularly those relating to the operation of vehicles, ploughs and other machines.

When the pilot schemes have been fully proved it is hoped to extend the system throughout the Commission; cash accounting will then be reduced to the few essential subheads necessary for comparison with the estimates submitted to Treasury.

Working Plans

The forest working plan is essentially a document which describes the existing tree crops and the conditions under which they are growing, which specifies in more or less detail the work to be carried out during the period of the plan, and which provides for records to show what progress has been made. Working plans can be very elaborate documents, especially in the descriptive section, and there has been a certain tendency among

* *Sixteenth Report from the Select Committee on Estimates. Session 1948-49. H.M.S.O.*

professional foresters to regard only the complete, textbook, type of plan as worthy of the name. But valuable though such plans are for purposes of long-term management, circumstances often make it necessary for the forester to content himself for the time being with a shorter and less detailed statement of his immediate proposals. The Plan of Operations as set out in the Forestry Commission Booklet on the Dedication Scheme is an example of a simplified form of working plan designed to meet the needs of woodland owners who are beginning the systematic management of their woods.

In the majority of the Commissioners' young forests the textbook type of working plan is scarcely practicable, if only for the reason that in many cases the forests are continuing to expand as further land is acquired. But with very few and quite temporary exceptions all the forests work to a plan which includes silvicultural information on the choice of species in relation to sites, a planting programme, a programme for the resumption of land which is tenanted, a thinning plan (where the plantations have reached that stage) and provisions, annually reviewed, for fire control. All the forests are, of course, provided with detailed stock maps. The plans are being steadily elaborated in the longer established forests, many of which are now well documented.

Wages and Holidays of Industrial Employees

The minimum wages and holidays of their forest workers are matters which have been under review by the Commissioners during the past year. Hitherto the practice has been to adopt the rates fixed for England and Wales and for Scotland respectively by the Agricultural Wages Boards for workers employed in agriculture and forestry. This resulted, however, in certain apparent anomalies as, for example, when from time to time an increase in the minimum agricultural wage was awarded by the Wages Board for England and Wales, and some time elapsed before a similar increase was awarded in Scotland; also, in the matter of annual holidays, when the amount of holiday with pay was increased (in 1952) for agricultural and forestry workers in England and Wales but not for those in Scotland.

The Trade Union representatives on the Forestry Commission Industrial and Trade Council, set up in 1944 to regulate the pay and conditions of service of the Commission's industrial workers, considered that there should be uniformity of treatment throughout the Commission and urged that the Commissioners should no longer be automatically tied by the Agricultural Wages Boards' Orders. Agreement was not reached and the matters in dispute were referred to the Industrial Court for settlement.

In November, 1951 the Industrial Court awarded in favour of the Trade Union Side's claim to the extent that the Industrial and Trade Council should be free to fix the wages of Forestry Commission workers. In making this award the Industrial Court stated that it was without prejudice to the extent of the weight to be given to the minimum agricultural rate of pay when fixing the minimum rate of pay for forestry workers employed by the Forestry Commission.

The claim of the Trade Union Side that there should be the same number of holidays with pay in Scotland as in England and Wales was submitted in August 1952 to the Industrial Court. The Court found in favour of the claim and awarded accordingly.

At the end of the year under report the minimum wage of all male adult Forestry Commission workers, as fixed by the Industrial and Trade

Council, was 115/- per week. This compared with a minimum wage of 113/- per week for agricultural workers in England and Wales, and of 108/- per week in Scotland.

The position as regards holidays is that Forestry Commission workers throughout Great Britain are now entitled to 18 days holiday with pay, including 6 public holidays. This is the same as for agricultural workers in England and Wales, but 5 days more than agricultural workers are entitled to in Scotland.

It should be noted that the Industrial and Trade Council is concerned only with the wages and conditions of service of Forestry Commission employees. So far as private forestry employees are concerned these matters continue to be regulated by the Agricultural Wages Boards.

Forest Villages

The Commission's policy is to provide, or to assist in providing, houses for its workers in those districts where the increased employment it provides makes new accommodation essential. At some forests, houses built in connection with the Forest Workers Holdings scheme have met this need. In other districts new houses have been built by, or in co-operation with, the local authorities, often as extensions to existing communities. But at several of the larger and more isolated forests it has become apparent that only a completely new community, or forest village, can meet the requirements of the forest staff. A typical example is Hafren Forest in Montgomeryshire, where planting began in 1937 and now covers 5,600 acres. Sixty men are employed but there is no substantial centre of population nearer than Llanidloes, nine miles away. Plans were therefore made, in 1948, for a new village to be called Llwynygog (The Grove of the Cuckoo), which will eventually comprise eighty houses, a shop, a school, and a village hall, on a carefully selected site close to the new woods. The immediate need was for twenty houses, and these, with a temporary shop and village hall, were completed this year, and formally opened in October, 1951 by Alderman G. F. Hamer, Lord Lieutenant of Montgomeryshire. The architect for the scheme was Mr. T. Alwyn Lloyd, of Cardiff.

In forming a new community such as this, besides erecting modern houses with adequate gardens and access roads, a water supply, lighting, and facilities for the disposal of sewage and refuse, other services have to be organised such as better bus services to the nearest market town (Llanidloes) and improved telephone and postal services. The growing population will soon necessitate a new school, and land has been reserved for this, and also for playing fields. At other villages, sites are being set aside for new churches, and for the possible establishment of an inn or hotel.

A forest village may also provide a convenient place for a forest depot, and as the woodlands become fully productive it is likely to become a centre for sawmills and other timber-using industries which will give increased, and diversified, employment. In order to meet these requirements in a harmonious way, the Commission has engaged experienced town planning consultants to advise on village construction and design.

Another village which reached the stage at which a formal opening could be made during the year was Kielder in Northumberland, opened in May 1952, by the late Lord Robinson. This is part of the comprehensive scheme of development in the Border forests, in which the planning is being carried out by Dr. Thomas Sharp.

The list below shows the forest villages or major forest communities which had been completed, or were in course of development, by the end of Forest Year 1952.

*Number of Houses Erected or in
Course of Construction*

England.

Kielder, Kielder Forest, Northumberland.	76	Formally opened in May, 1952.
Byrness, Redesdale Forest, Northumberland.	49	Approaching completion.
Stonehaughshields, Wark Forest, Northumberland.	35	Under construction.
Santon Downham, Thetford Chase Forest, Norfolk.	41	Extension to existing community. Scheme was completed in 1949.

Scotland.

Village of Ae, Forest of Ae, Dumfriesshire.	30	14 completed in 1950 and 16 in 1951.
Minnoch, Glen Trool Forest, Kirkcudbrightshire.	40	Under construction.
Minnigaff, Kirroughtree Forest, Kirkcudbrightshire.	20	Extension to existing village, under construction.
Barr, Changue Forest, Ayrshire ...	20	Extension to existing village, completed 1952.
Dalavich, Inverliever and Inverinan Forests, Argyll.	31	Opened in October, 1952.

Wales.

Llwynyog, Hafren Forest, Montgomeryshire.	20	Opened in October, 1951.
Esgairgelliog, Dovey Forest, Merioneth.	26	Extension to existing village, completed 1952.
Abertridwr, Lake Vyrnwy Woodlands, Montgomeryshire.	20	Joint scheme with Liverpool Corporation Waterworks Department. Completed 1950.

The Windblow in Scotland

Two westerly gales of hurricane violence occurred during the year under review, both more or less confined to the north and west of Scotland. The first storm occurred on the 30th December, 1951, and the second about a fortnight later.

The severity of these storms may be judged from the wind velocities recorded at meteorological stations in the region.

<i>Station</i>	<i>Wind Velocity</i>	
	<i>On 30.12.51</i>	<i>On 15.1.52</i>
Stornoway, Isle of Lewis	83 miles per hour	108 miles per hour
Tiree, Inner Hebrides	98 "	50 "
Millport, Firth of Clyde	108 "	80 "
Dyce, Central Aberdeenshire	83 "	63 "
Kinloss, Morayshire	88 "	92 "

Besides causing great damage to buildings and other property the storms took considerable toll of the woodlands; at one time almost all the roads

in Perthshire were blocked by fallen trees. But considering the force of the wind the Commission plantations escaped relatively lightly, for though the total volume of timber blown amounted to about 300,000 cubic feet, the damage was scattered over a large number of forests and the majority of the blows were less than an acre in extent. The largest windfalls occurred at Culloden Forest where 17,000 cubic feet of 46-year-old Douglas fir were blown, and at Borgie Forest in the north of Sutherland which lost 5 acres of 32-year-old Scots pine and Norway spruce. In the East Conservancy 19,000 cubic feet of more or less mature Scots pine and European larch were blown at Alltcailleach Forest.

The windfall on private estates amounted to nearly 4 million cubic feet of timber. Although scattered trees, more especially the outstanding specimen trees in the policies, were the chief victims, there were cases in Sutherland and Caithness of whole woods being laid flat. Most of the damage took the form of complete uprooting, but there were also many cases where the trees snapped off, usually on dry sites. All species suffered including Scots pine, and oak and other broadleaved trees. Estates with notable losses included Alvie near Aviemore in Inverness-shire, Fyvie and Keithhall in Aberdeenshire, and the Dunkeld and Doune estates in Perthshire; the last-named property was estimated to have lost upwards of 200,000 cubic feet of timber.

Many of the Commission plantations in the area traversed by the storms had either been recently thinned or were awaiting thinning, so the blows have been studied to see if any connection can be traced between the interval since the plantation was thinned and the incidence of damage. The evidence, however, is somewhat conflicting. At Culloden and some of the other forests in the North Conservancy the damage was greatest in those stands which had been thinned very shortly before the storms occurred and so had not had time to firm up. On the other hand in the West Conservancy no such connection could be found, as all the stands appeared to be equally liable to damage, irrespective of the interval since the previous thinning.

Grey Squirrels

Reports received from the Conservancies and from other sources now enable a clearer picture to be drawn of the present distribution of this pest. In England five northern counties—Cumberland, Westmorland, Lancashire, Northumberland and Durham—appear to be substantially clear; there is another more or less free zone comprising the eastern parts of Lincolnshire, Norfolk and Suffolk, but with the exception of Cornwall the squirrels appear to be established over the whole of the rest of the country. The greater part of Wales is also infested, the only apparently free counties being Caernarvonshire and Anglesey; the status in Pembrokeshire is somewhat uncertain.

In Scotland grey squirrels are confined mainly to the Central Lowlands between Loch Long and the county of Fife, but are reported to be increasing rapidly.

Although the grey squirrel breeds chiefly in broadleaved trees it is an agricultural and horticultural as well as a forestry pest, and in the past few years the Ministry of Agriculture have encouraged their County Pest Officers and the County Agricultural Executive Committees to organise Squirrel Clubs to deal with the menace. An allocation of free cartridges has been made to approved clubs and many squirrels have been killed by this means.

Control measures have also been intensified in the Commission forests, where all known methods of control have been employed. Perhaps the

most successful form of attack, though one that can only be used when the leaf is off the trees, is a small gang of men one or two of whom are provided with sectional aluminium rods and others with guns. This party works systematically through the woods poking out the dreys with the rods, any squirrels present being shot as they leave the drey. In some Conservancies trapping has also proved effective.

In spite of the fact that over the past two years nearly 50,000 grey squirrels have been destroyed in the Commissioners' forests alone the position in the country as a whole is disquieting. There are records of beech and sycamore plantations on private estates where from 60 to 80 per cent. of the trees have been badly ring barked; damage on such a scale is very serious as it jeopardises the whole future of the crop. Oak, ash and even larch are other species which have been attacked. The large population of grey squirrels which is resident in the suburban areas of many of the large cities is a factor which must be reckoned with. These areas are often fairly heavily wooded and form breeding centres from which the squirrels spread to the surrounding countryside, but the multiplicity of small owners concerned makes control measures most difficult.

As a first step towards a more concerted drive against this pest the Commissioners have appointed a Committee under the chairmanship of Sir Richard Cotterell, to study the distribution, spread and control of the grey squirrel and to consider what further investigation or research may be desirable. The Committee includes representatives of the Forestry Commission, private forestry, the Infestation Control Division of the Ministry of Agriculture and Fisheries, and the Game Research Station at Fordingbridge, Hants. The Commissioners have also appointed a member of their Directorate of Research to study existing methods of destroying the squirrels at different seasons of the year and in different types of woodland. A leaflet on the habits and control of the grey squirrel is in course of preparation.

Conferences and Visits Overseas

In August, 1952, the Sixth Commonwealth Forestry Conference opened in Ottawa. The Conference was attended by the late Lord Robinson as head of the United Kingdom delegation, and by the Director General, Mr. A. H. Gosling, and two members of the Commission staff. Other British delegates included the Director of the Forest Products Research Laboratory, the Forestry Adviser to the Colonial Office, and representatives from the Timber Trade, the Universities, the Commonwealth Forestry Bureau and the Empire Forestry Association. Delegates from 21 other Commonwealth countries attended the Conference.

After a formal opening in Ottawa the delegates visited some of the forests in Quebec and Ontario, returning to Ottawa for the main work of the Conference at which problems connected with forest management, conservation of timber resources, and utilisation were the principal subjects under discussion. After the Conference the majority of the overseas delegates visited British Columbia and saw some of the forests and forest industries in the Province.

During October, 1952, the annual meeting of the European Forestry and Forest Products Commission of the Food and Agriculture Organisation of the United Nations was held in Geneva. This was attended by the Director of Forestry for England, Mr. O. J. Sangar, who for the fourth year in succession acted as President of the Commission, and by two Conservators.

The Commission held a preliminary joint session with the Economic Commission for Europe to discuss an important study on Timber Trends which had been drafted by the joint E.C.E./F.A.O. Secretariat.

In May, 1952, at the invitation of the Federal Minister for Food, Agriculture and Forestry, a party from Great Britain, including two members of the Commission staff, made a short tour of German forests and forest industries.

One of the Commissioners' Silvicultural Research Officers, Mr. R. F. Wood, was awarded a Nuffield Fellowship for the study of the silvicultural and other characteristics of tree species used in British forests but native in the Pacific coast region of North America. Mr. Wood has been in British Columbia since August, 1952.

SUMMARY OF THE YEAR'S WORK

The weather over the country as a whole was favourable for forestry operations. There were no serious interruptions by bad weather, and planting and nursery work were completed in good time. A dry spell in the early summer brought about a period of fire danger particularly in the east and south-east of England. The changeable weather throughout the remainder of the year was favourable to the growth of trees in nurseries and in plantations.

Finance.—Payments and receipts for the Forest Years ended 30th September, 1951 and 1952, were:—

	1951	1952
	£	£
Payments	8,012,098	9,277,642
Receipts	1,811,846	2,365,033

The amount paid into the Forestry Fund from Parliamentary Votes during the Forest Year ended 30th September, 1952, was £6,893,000, made up of £3,334,000 from the Vote for the Financial Year 1951-1952, and £3,559,000 from the Vote for 1952-1953. (Page 32.)

Land Acquired.—The net area acquired during the year was 74,243 acres, of which 53,604 acres were classed as plantable. The plantable land comprised 28,868 acres of felled or derelict woodland, 4,553 acres of standing woods and 20,183 acres of bare land for afforestation. (Table 6, page 35.)

The total area of land acquired to 30th September, 1952, through the Forestry Fund and under the Transfer of Woods Act, 1923, was 1,855,700 acres. This comprised 1,122,900 acres classed as "forest land" which is either already planted or will be planted in due course, and 732,800 acres of "other land" which includes nurseries, rough grazing and agricultural land and other land unsuitable for tree planting. The areas of individual categories in each of the three countries are given in Table 3, page 33.

Forest Units.—Twenty-six new forest units were started during the year, eighteen in England, three in Scotland and five in Wales. The total number of forest units is now 437. (Page 34.)

Forest Nurseries.—The area used for forest nurseries was 2,112 acres. The seed sown amounted to 138,970 lb. of broadleaved species and 15,116 lb. of conifer seed. Stocks of forest trees in the nurseries at the end of the year totalled 184 million transplants and 315 million seedlings. (Pages 37 to 42.)

Forestry Commission Planting.—The area of plantations made during the year amounted to 61,632 acres, and is the largest planted in any one year to date. To make these plantations and to replace failures in recently formed plantations over 120 million trees were used. (Pages 42 to 44.)

Forest Protection.—There were 1,130 fires in or threatening Commission forests; of these fires, 90 per cent. were extinguished before causing damage to plantations. 455 acres of plantations were burned and the damage, including the cost of extinguishing fires, was assessed at £16,000. (Page 44.)

More than 250,000 rabbits and hares, and 27,000 grey squirrels were destroyed during the year. (Page 45.)

Preparation and Sales of Produce

Thinning and Clear Felling.—The area of young plantations thinned amounted to 37,250 acres, of which 20,562 acres were in England, 12,192

acres in Scotland, and 4,496 acres in Wales. The area of woods clear felled was 5,045 acres, of which 2,971 acres consisted of scrub or devastated woodlands and 823 acres of coppice or coppice-with-standards. (Page 46.)

Sales of Forest Produce.—The gross income from sales of forest produce was £2,128,553. Expenditure under the corresponding head of account was £883,388.

Produce sold or used for forest purposes totalled 12½ million cubic feet; the main products were mining timber, pulp and boardmill material, saw timber, fencing material, poles and firewood. (Page 46.)

Licensing of Timber Felling.—During the year 9,591 licences were issued, authorising the felling of 45,622,000 cubic feet of timber. Included in this volume are 11,908,000 cubic feet not counted against the felling quota. (Page 47.)

Roads.—Main extraction roads and feeder roads amounting to 344 miles were constructed in 176 forests. (Page 48.)

New Houses.—During the year 427 houses for local supervisors and workmen were completed; at the end of the year work was proceeding on 510 houses. (Page 48.)

The Dedication Scheme.—Dedication deeds were completed during the year by 120 owners in respect of 75,413 acres of woodland, and 191 deeds covering 69,000 acres were in process of completion. The total area dedicated to date was 149,144 acres. (Page 50.)

Planting on Private Estates.—It is estimated that private planting amounted to 15,100 acres, of which 11,300 acres were planted with the aid of grants. (Page 51.)

Research and Experiment.—Research work on forestry problems has been continued at the Forest Research Station, Alice Holt Lodge, near Farnham, Surrey, and in experimental areas in many Commission forests and nurseries. (Page 53.)

In November, 1951, the Forest Research Station was licensed under the Seeds Act, 1920, as a private seed testing station; 1,154 tests were carried out during the year. (Page 53.)

Grants for forest research in specific fields have been made to Rothamsted Experimental Station, the Imperial Forestry Institute, the Macaulay Institute for Soil Research at Aberdeen and to Bedford College, University of London; the main subjects of investigation have been forest soils and problems of forest tree nutrition. (Page 56.)

Education.—The Commissioners maintain five Forester Training Schools at which 124 men completed the two year course; 119 Forester Certificates and 5 Foreman Certificates were awarded. All took up posts in forestry, 97 with the Forestry Commission, 17 with private estates, and 3 with the Colonial Forestry Service, while 7 nominated for training by their Governments returned to their respective countries. (Page 56.)

Three Short Courses of six weeks duration for foresters and woodmen from private estates were attended by a total of 45 men. The Forest Workers Training Scheme, which served a useful purpose in giving a forestry training to 1,630 men released from National Service, was brought to a close in July, 1952. (Page 56.)

The Universities have continued to make extensive use of Northerwood House as a centre for giving practical instruction to forestry students. In addition, 23 special courses were given during the year to members of the Commissioners' staff and to landowners and their agents. A course in general forestry was also arranged for schoolteachers. (Page 57.)

Grants for the purpose of forestry education amounting to £14,104 were made to the Universities of Aberdeen, Cambridge, and Edinburgh, to the Imperial Forestry Institute, Oxford and to the University College of North Wales, Bangor. (Page 57.)

Publications.—Sixteen new publications for sale were issued during the year and nine papers were produced for presentation to the British Commonwealth Forestry Conference held in Canada. (Page 58.)

Publicity and Public Relations.—The work of the Commission, and the need for the protection of the country's woodlands, were brought to the notice of the public by means of Press and B.B.C. announcements, lectures, organised visits to forests, and the provision of display material. Exhibits were provided at nine agricultural shows. (Page 59.)

ORGANISATION

THE FORESTRY COMMISSIONERS

The late Lord Robinson, O.B.E., served as Chairman of the Commission until his death on 5th September, 1952. Lord Radnor was Deputy Chairman throughout the year. Thus the Commissioners holding office at the close of the year under review were :

The Earl of Radnor, K.C.V.O. (*Deputy Chairman*).

Mr. J. M. Bannerman, O.B.E.

Major Sir Richard Cotterell, Bt., J.P.

Mr. J. E. Hamilton, M.C.

Mr. Stanley C. Longhurst, J.P.

Mr. Lloyd O. Owen, J.P.

Major John Stirling of Fairburn, M.B.E.

Mr. W. H. Vaughan, O.B.E., J.P.

Professor J. Walton, F.R.S.E.

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

THE NATIONAL COMMITTEES

The Order appointing members to these Committees expired on 5th December, 1951, and a new order making appointments for a period of three years was made on 6th December, 1951. All members serving on these Committees were re-appointed for a further term of office with the exception that the Earl Cawdor was appointed to the National Committee for Scotland in place of the Duke of Buccleuch and Queensberry, who resigned in November, 1951, owing to pressure of other duties. The Commissioners wish to express their gratitude to the Duke of Buccleuch for the active part he has taken in the work of the Committee, of which he was a member since 1945.

These Committees met monthly throughout the year.

The membership in the year under report was as follows :—

THE NATIONAL COMMITTEE FOR ENGLAND :—

The Earl of Radnor (*Chairman*), The Hon. James W. Best, Major Sir Richard Cotterell, Bt., The Earl of Listowel, Mr. S. C. Longhurst, Major Charles Mitchell.

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

THE NATIONAL COMMITTEE FOR SCOTLAND :—

Major John Stirling of Fairburn (*Chairman*), Mr. J. M. Bannerman, Mr. John A. Cameron, The Earl Cawdor, Mr. J. E. Hamilton, Mr. J. Veitch, Professor J. Walton.

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

THE NATIONAL COMMITTEE FOR WALES :—

Mr. Lloyd O. Owen (*Chairman*), Major Sir Richard Cotterell, Bt., Colonel J. C. Wynne Finch, Mr. David Lewis, Professor R. Alun Roberts, Mr. W. H. Vaughan.

Secretary to the Committee, Mr. G. Childs.

THE REGIONAL ADVISORY COMMITTEES

Under Section 15 of the Forestry Act, 1951, the Commissioners are required to maintain a Regional Advisory Committee for each Conservancy in Great Britain to advise the Commissioners as to the performance of their functions under the Act, and such other of their functions as the Commissioners may determine.

Regional Advisory Committees have in fact been functioning since 1946, but as they now become statutory bodies they have been reconstituted and appointments have been made to the new Committees for a term of three years from November, 1951.

The membership is as follows:—

ENGLAND

North-West.—Viscount Newport (*Chairman*), Alderman J. V. Allen, Mr. P. J. B. Clive, Mr. J. Edwards, Lt.-Col. E. D. Holder, Mr. G. R. Jacob, Mr. C. J. Venables. *Secretary to the Committee*, Mr. T. L. Eadie. The Committee met in February and May, 1952.

North-East.—Lord Bolton (*Chairman*), Professor J. S. Allen, Mr. W. P. Hedley, Mr. A. Kirkup, Jr., Mr. A. M. Leitch, Mr. R. Minto, Jr., Mr. W. Robertson, Mr. R. Stanley, Col. W. St. A. Warde-Aldam. *Secretary to the Committee*, Mr. L. A. Chaplin. Meetings were held in November, 1951, and in February, May, June, and September, 1952.

East.—Major Sir R. G. Proby (*Chairman*), Lt.-Col. M. E. St. J. Barne, Major R. L. Coke, Mr. N. D. G. James, Mr. R. W. B. Newton, Mr. G. Oates, Lt.-Col. E. R. Pratt, Mr. C. H. Thompson, Mr. R. B. Verney. *Secretary to the Committee*, Mr. G. H. Clark. The Committee met in December, 1951, and April, 1952.

South-East.—Lt.-Col. H. S. Eeles (*Chairman*), Mr. J. W. C. Agate, Mr. A. E. Aitkins, Lt.-Col. W. R. Burrell, Mr. G. E. H. Calvert, The Rt. Hon. Viscount Cowdray, Mr. A. L. F. Hills, Mr. W. H. Pearson, Mr. A. D. C. Le Sueur. *Secretary to the Committee*, Mr. H. W. Gulliver. There were meetings in January, May, and August, 1952.

South-West.—Mr. W. E. Hiley (*Chairman*), The Earl of Bathurst, Col. C. M. Floyd, Major H. T. H. Foley, Mr. J. R. Maer, 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 December, 1951, and in March and June, 1952.

SCOTLAND

North.—Mr. G. Brown (*Chairman*), Mr. J. Armstrong, Major D. J. Brodie, Mr. A. Cumming, Mr. A. R. Mackenzie, The Earl of Moray, Mr. A. B. L. Munro-Ferguson, Mr. G. Ralph, Brig. J. Willis-Fleming. *Secretary to the Committee*, Mr. M. Nicolson. The Committee met in December, 1951 and June, 1952.

East.—Professor H. M. Steven (*Chairman*), Mr. A. Anderson, Viscount Dudhope, Lord Glentanar, Sir Ian Forbes Leith, Mr. W. Leven, Mr. W. E. Paterson, Bailie R. A. Raffan, Mr. W. Riddoch. *Secretary to the Committee*, Mr. J. P. Lenman. Meetings were held in January and May, 1952.

South.—The Earl of Haddington (*Chairman*), Sir James Hunter Blair, Bt., Mr. C. J. Cameron, Mr. J. C. Carson, Mr. W. P. Earsman, Commander D. Herries Maxwell, Mr. J. J. Patterson, Professor J. Ritchie. *Secretary to the Committee*, Mr. T. H. McGeorge. There were meetings in January and April, 1952.

West.—Capt. J. Maxwell MacDonald (*Chairman*), Major D. C. Bowser, Sir George I. Campbell, Bt., Mr. P. Campbell, Capt. J. Craig, Professor J. Kirkwood, Mr. P. Murray. *Secretary to the Committee*, Mr. B. Kinnaird. The Committee met in January and July, 1952.

WALES

North.—Col. P. R. Davies-Cooke (*Chairman*), Mr. P. S. Barnie, Alderman H. T. Edwards, Capt. G. L. Bennett Evans, Major W. D. D. Evans, Major J. M. Landers, Professor E. C. Mobbs, Mr. D. Tudor, Lt.-Col. J. F. Williams-Wynne. *Secretary to the Committee*, Mr. K. Mayhew. Meetings took place in January, April and May, 1952.

South.—Major J. D. D. Evans (*Chairman*), Mr. D. G. Badham, Mr. H. H. Busher, Mr. J. C. Deakin, Mr. I. G. Gordon, Mr. H. A. Hyde, Mr. J. E. Lewis, Mr. M. H. Maxwell, Lord Merthyr. *Secretary to the Committee*, Mr. E. H. Bradford. This Committee met in January and May, 1952.

THE HOME GROWN TIMBER ADVISORY COMMITTEE

This Committee met in November, 1951, and in March and June, 1952; the membership at the end of the year was as follows:—

The Earl of Radnor	Forestry Commission (<i>Chairman of the Committee</i>)
Mr. A. H. Gosling	} Forestry Commission
Mr. O. J. Sangar	
Mr. A. P. Long	
Sir Henry C. Beresford-Peirse, Bt.	
Mr. J. Macdonald	
Mr. H. A. Turner	} Ministry of Materials
Sir Edward B. Monkhouse	
Mr. J. Rea Price	} Country Landowners' Association.
Lord Bolton	
Mr. W. E. Hiley	
Mr. R. W. B. Newton	
Major Sir R. G. Proby	} Scottish Landowners' Federation.
The Earl Cawdor	
Mr. T. W. Dagleish	
Capt. J. Maxwell Macdonald	
Viscount Dudhope	} Federated Home Timber Association.
Mr. G. R. Jacob	
Mr. J. R. Maeer	
Mr. C. J. Venables	
Mr. Harold Wright	
Mr. H. N. Sadd	} Home Timber Merchants' Association for Scotland.
Mr. T. Bruce Jones	
Mr. J. T. Smith	} Timber Trades Federation.
Mr. Bryan Latham	

The following changes in membership occurred during the year: Ministry of Materials, Mr. J. Rea Price in place of Mr. J. M. Reynolds; Scottish Landowners' Federation, Viscount Dudhope in place of the Duke of Buccleuch; Federated Home Timber Association, Mr. H. N. Sadd in place of Mr. S. C. Longhurst.

THE COMMISSIONERS' STAFF

PROFESSIONAL AND TECHNICAL 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, the Director of Research and Education, and the Chief Engineer.

The officers holding these appointments throughout the year were:

Director General: Mr. A. H. Gosling, C.B., F.R.S.E.

Deputy Director General: Mr. W. H. Guillebaud, C.B.E.

Director of Forestry for England: Mr. O. J. Sangar, C.B.E., M.C.

Director of Forestry for Scotland: Sir Henry Beresford-Peirse, Bt., F.R.S.E.

Director of Forestry for Wales: Mr. A. P. Long, C.B.E.

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.

The forest and estate staff of the Directors comprised 20 Conservators, the Deputy Surveyor New Forest, the Deputy Surveyor Dean Forest, 34 Divisional Officers, and 194 District Officers. During the year losses of Divisional Officers owing to promotion, retirements and other causes amounted to 6 while 8 promotions to this rank were made. In the District Officer grade, 40 appointments, including 2 promotions from the forester grade, were made; 13 District Officers left the service during the year.

The local supervision of forest work is carried out by Foresters and Foremen, most of whom have been recruited from men trained at one of the Commissioners' Forester Training Schools. The numbers in these grades at the end of the year were:—Foresters, 636; Foremen, 267. There were also 18 Estate Clerks of Works.

The Engineer staff comprised 3 Directorate Engineers, 1 Machinery Research Officer, 2 Planning Officers, 3 Mechanical Engineers, 10 Conservancy Engineers, 33 Assistant Engineers, and 36 Clerks of Works.

ADMINISTRATIVE, EXECUTIVE AND CLERICAL STAFF

At the Headquarters of the Commission, the Secretary's staff consisted of a Principal, a Deputy Establishment Officer, a Principal Information Officer, 13 officers of the rank of Higher Executive Officer and above, and 55 other Executive and Clerical Officers. The Controller of Finance had a staff of 11 officers of the rank of Higher Executive Officer and above, and 42 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 34 officers of the rank of Higher Executive Officer and above, and 458 other Executive and Clerical Officers.

LABOUR EMPLOYED

The number of men, women and boys employed at the 30th September, 1952, was 12,900, of whom 5,400 were in England, 4,600 in Scotland and 2,900 in Wales. The number at the end of the previous year was 12,200.

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 forest 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 (1)	Receipts			Payments (Appendix I) (5)
		Total (2)	From Parliamentary Votes (3)	From Forestry Operations, etc. (Appendix 1) (4)	
GRAND TOTAL, 1920-1952 ...	—	63,357,541	47,545,800	15,811,741	62,982,054
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
1940-46	—	8,785,542	4,439,000	4,346,542	8,864,948
1947	28,619	3,959,062	3,300,000	659,062	3,870,060
1948	117,621	6,675,749	5,606,000	1,069,749	6,622,524
1949	170,846	6,950,425	5,600,000	1,350,425	6,881,257
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	—	—	—	—

The amount drawn from Parliamentary Votes into the Fund during the Forest Year to 30th September, 1952, was £6,893,000, made up of £3,334,000 from the Vote for the Financial Year ended 31st March, 1952, and £3,559,000 from the Vote for the year ending 31st March 1953. Receipts from Forestry Operations, etc., amounted to £2,365,033, and payments to £9,277,642, increases of £553,187 and £1,265,544 respectively compared with last year.

Financial Tables.—Some changes have been made this year in the form and contents of the financial tables given in Appendices 1 to 8, pages 61 to 63. The recording by years and groups of years of the cumulative expenditure and income since 1920 has been omitted because comparison of early and more recent years is to some extent misleading owing to the changes in money values. These tables now give expenditure and income for the current year and the previous year only, together with the cumulative totals to date. A further modification is that all figures in these tables are now rounded off to the nearest £1,000. Other changes are that expenditure and income relating to Forest Workers Holdings, previously given in

a separate Appendix, are now included under the head of Forestry Operations, and there is an additional table giving details of expenditure on private forestry (Appendix 5, Private Forestry, page 62).

As in previous Reports, Appendix 1, page 61, gives the payments, analysed by major heads of account, and the receipts from Forestry Operations, etc. Appendix 2, page 61, is a statement of expenditure and income. In this table amounts due to or by the Commissioners at the end of the Forest Year have been brought to account; salaries and office charges, which are shown separately in Appendix 1, are distributed over the heads to which they are appropriate; income from Forestry Operations, Education, etc., is shown separately, and adjustments have been made between heads of account in respect of transactions not reflected in the cash accounts, such as the value of produce used for forest purposes.

In Appendices 3 to 8, pages 62 to 63, the expenditure and income under the heads shown in Appendix 2 are given in greater detail.

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 individuals, less disposals, was 1,855,700 acres at 30th September 1952. In most acquisitions of land it is unavoidable that in addition to plantable land there is included some agricultural land which it is not intended to plant, and also land unsuitable for planting on account of soil conditions, exposure, etc. Table 3 below gives the present or intended future use of the land so far acquired.

UTILISATION OF LAND

Table 3

At 30th September, 1952

Thousand acres

	Great Britain	England	Scotland	Wales
Total Acquired	1,855·7	593·3	1,019·6	242·8
Forest Land: Total	1,122·9	449·8	492·7	180·4
Acquired Plantations	79·4	53·9	21·0	4·5
Planted by Forestry Commission	720·2	284·0	300·9	135·3
To be planted	323·3	111·9	170·8	40·6
Other Land: Total	732·8	143·5	526·9	62·4
Nurseries	2·1	·8	·9	·4
Rough Grazing and Agricultural Land	469·2	58·4	361·5	49·3
Forest Workers Holdings	12·6	5·7	3·2	3·7
Unplantable and Miscellaneous	248·9	78·6	161·3	9·0

This table shows that of the total area acquired 1,122,900 acres are classed as forest land, comprising 799,600 acres of woods and plantations, and 323,300 acres of land to be planted in due course. The land awaiting planting is held by the three countries as follows:—England, 111,900 acres; Scotland, 170,800 acres; Wales, 40,600 acres; it should be noted that as much as possible of this land is let for grazing until it is actually required.

Land not placed at the disposal of the Commissioners

The acreages of land given in the previous table include land under the management of the Ministry of Agriculture and the Department of Agriculture for Scotland. Details of this land are given below.

LAND NOT PLACED AT THE DISPOSAL OF THE COMMISSIONERS

Table 4

At 30th September, 1952

Acres

	Great Britain	England	Scotland	Wales
Total	357,461	53,169	268,670	35,622
Forest Land	65,525	13,161	49,779	2,585
Agricultural, rough grazing and miscellaneous	291,936	40,008	218,891	33,037

The acreage of land in the charge of the Agricultural Departments at the end of the year was 357,461 acres, comprising 291,936 acres of rough grazing, agricultural and other land, and 65,525 acres of forest land. Much of the latter category is held only temporarily and will be transferred to the Commissioners when the land is required for planting.

Forest Units

There are now 437 forests, a total which includes a small number of central nurseries which have little or no woodland attached. Their general distribution is shown in Table 5.

FOREST UNITS, 1952

Table 5

At 30th September, 1952

	Great Britain	England	Scotland	Wales
Number of Forests:—				
At beginning of year ...	413	157	189	67
At end of year ...	437	175	191	71
Increase during the year	24	18	2	4

For details see the Conservancy lists (pages 67 to 76) and maps (pages 78 to 89).

The following twenty-six new forest units were started during the year.

ENGLAND

Arden, Warwickshire	Ashley Hill, Berkshire
Inglewood, Cumberland	Brightling, Sussex
Irton, Cumberland	Bucklebury, Berkshire
Doncaster, Yorkshire	Effingham, Surrey
Ray, Northumberland	Walderslade, Kent
Tong Woods, Yorkshire	Witley Park, Surrey
Bernwood, Oxfordshire	Bentley, Wilts and Hants
Walsham, Norfolk	Cowley Woods, Gloucestershire
Waveney, Norfolk	Sedgemoor, Somerset

SCOTLAND

Fonab, Perthshire	Selm Muir, Midlothian
Dreva, Peebles-shire.	

WALES

Coed Taliesin, Cardigan	Llandowror, Carmarthen
Coed Caerdydd, Glamorgan	Sirhowy, Monmouth-shire
Coed y Brithdir, Glamorgan	

Two forests have lost their separate identity by being amalgamated with adjoining forests. Thus Glenlivet Forest in East Conservancy, Scotland, now includes the former Tomintoul Forest, and in South Wales Conservancy the Itton block has been merged with Chepstow Forest.

Acquisition of land during the year

The area of land acquired during the year, including land to which entry was secured although the legal contracts had not been actually completed, amounted to 83,796 acres, of which 55,356 acres were classed as plantable. Disposals and adjustments amounted to 9,553 acres of which 8,514 acres were transferred to the Department of Agriculture for Scotland under Agricultural Purposes Appropriation Orders made by the Secretary of State. The net addition during the year was thus 74,243 acres. Details by countries are given in Table 6 below.

LAND ACQUIRED DURING THE YEAR

[NET AREA]

Table 6 Year ended 30th September, 1952 Acres

	TOTAL	PLANTABLE LAND				OTHER LAND
		Total	Bare Land	Land previously under a Tree Crop	Standing Woods	
Great Britain ...	74,243	53,604	20,183	28,868	4,553	20,639
England	19,160	18,345	3,299	12,703	2,343	815
Scotland	45,864	26,927	13,066	12,086	1,775	18,937
Wales	9,219	8,332	3,818	4,079	435	887

The net addition during the year of 74,243 acres comprised 53,604 acres classed as Plantable Land and 20,639 acres of Other Land; this latter category includes agricultural and grazing land which is not intended to plant. The plantable land is made up of 20,183 acres which have not previously been under a tree crop, 28,868 acres of felled or derelict woodlands, and 4,553 acres of standing woods. It will be noted that the bare land accounts for 38 per cent. of the plantable land acquired while felled and derelict woodlands amount to 54 per cent., and standing woods purchased, 8 per cent.

Progress of acquisition of Plantable Land

The progress made in the acquisition of plantable land 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 1920-1952	1,081,425	365,117	716,308
1920-29	310,230	156,759	153,471
1930-39	344,757	60,057	284,700
1940-46	150,709	40,427	110,282
1947	22,322	13,016	9,306
1948	29,945	14,465	15,480
1949	52,749	13,628	39,121
1950	60,996	26,423	34,573
1951	56,113	24,624	31,489
1952	53,604	15,718	37,886

Land acquired to date

Table 8 presents a summary statement of the land acquired to date classified into Plantable (including land already planted before acquisition) and Other Land. The table also shows separately the amounts acquired by lease or feu, and by purchase.

The heading "Entry Secured" relates to properties in which work was able to proceed although legal contracts had not been actually completed.

SUMMARY STATEMENT OF LAND ACQUIRED*

Table 8

At 30th September, 1952

Acres

	Total	By Lease or Feu			By Purchase		
		Total	Plant-able†	Other	Total	Plant-able†	Other
Total:							
Great Britain	1,735,633	520,571	365,117	155,454	1,215,062	716,308	498,754
England ...	491,067	182,121	158,335	23,786	308,946	243,022	65,924
Scotland ...	1,007,124	255,084	139,860	115,224	752,040	354,786	397,254
Wales ...	237,442	83,366	66,922	16,444	154,076	118,500	35,576
Acquisitions completed:							
Great Britain	1,706,130	503,811	350,065	153,746	1,202,319	710,161	492,158
England ...	486,393	178,063	154,424	23,639	308,330	242,474	65,856
Scotland ...	983,615	243,702	129,938	113,764	739,913	349,187	390,726
Wales ...	236,122	82,046	65,703	16,343	154,076	118,500	35,576
Entry Secured:							
Great Britain	29,503	16,760	15,052	1,708	12,743	6,147	6,596
England ...	4,674	4,058	3,911	147	616	548	68
Scotland ...	23,509	11,382	9,922	1,460	12,127	5,599	6,528
Wales ...	1,320	1,320	1,219	101	—	—	—

* 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.

The grand total amounts to 1,735,633 acres of which 520,571 acres were acquired by lease or feu and 1,215,062 acres by purchase. Purchases thus comprise somewhat over two-thirds of the total.

Of the total of 1,735,633 acres, 1,081,425 acres were classified at the time of acquisition as plantable land; of this area 401,357 acres (37 per cent.) are in England, 494,646 acres (46 per cent.) in Scotland and 185,422 acres (17 per cent.) in Wales.

Expenditure during the year in connection with the purchase and lease of land was £517,731, made up as follows:—

	£
Purchase of Land, including buildings and standing timber	391,396
Rents and feu duties	46,858
Redemption of Tithes, etc.	79,477
	517,731

The first item above includes the purchase of buildings and standing timber on land acquired during the year by lease as well as by purchase; in the current year the amounts in respect of buildings and standing timber were £53,948 and £181,300 respectively. It should be noted that the expenditure on the purchase of land cannot be directly related to the area acquired during the year since that area includes land to which entry has been secured pending financial settlement. The average price paid during the year for plantable land, excluding any timber and buildings, was £2 14s. 6d. per acre; the average rent paid for plantable land was 2s. 4d. per acre.

During the year an annual stipend charge of £3,140 was redeemed ; this transaction accounts for £76,622 of the expenditure of £79,477 shown above against redemption of tithes, etc.

Sales of land and buildings amounted to £14,295 (Appendix 3, page 62) of which £9,958 was in respect of land and buildings transferred to the Department of Agriculture for Scotland under Agricultural Purposes Appropriation Orders.

CULTURAL OPERATIONS

Cultural operations include works carried out in the formation of plantations, their maintenance and protection. These operations are conveniently separated into :—Nursery work, including the supply of seed, and the raising of the young trees required for planting ; plantation work, comprising fencing, clearing of ground, ploughing, draining and planting, and subsequent maintenance such as weeding, beating up, protection against fire, etc. Expenditure on Cultural Operations during the year amounted to £2,615,019 an increase of £430,986 compared with that spent in the previous year.

Forest Nurseries

Seed Supply

The Commissioners' policy is to collect from their own woods and plantations and, by arrangement with the owners, from private woodlands, as much as possible of the seed required for sowing in the forest nurseries. The amount of seed available from these sources varies greatly with the season, but it is usually possible to meet our own requirements for most of the broadleaved species, notably of oak, ash, sycamore and beech, though the crop of the latter in some years may be a complete failure ; among the conifers, Scots pine is the only species which can be relied on to provide our requirements. There are still insufficient stands of seed-bearing age of most of the other important conifers, so that it is necessary to import our main requirements from the countries of origin.

Home Collection of Seed—(Tables 9 and 10, pages 37 and 38).—There were good crops of Scots pine and sufficient for our purposes was available. Corsican pine and European larch were more abundant than last year, while Japanese larch, Norway spruce and Sitka spruce were scarce ; no Douglas fir seed was available. *Pinus contorta* coned well, and over 500 bushels were harvested, most of it in Scotland. The broadleaved trees furnishing good crops were oak, ash and birch ; sycamore and sweet chestnut were not so abundant as last year ; the beech mast, in contrast to the abundance of the autumn of 1950, failed, and none was collected.

Progress is being made in the selection and recording of stands and of individual trees of special merit for seed collection.

HOME COLLECTION OF CONIFER SEED
Year ended 30th September, 1952

Table 9

	Cones Collected				Cones kilned	Seed extracted
	Total	England	Scotland	Wales		
	Bushels				Bushels	lb.
Total	12,215	2,828	9,217	170	11,940	6,754
Scots Pine	10,603	2,663	7,935	5	10,559	5,859
Corsican Pine	173	48	90	35	160	133
European Larch	414	5	392	17	386	173
Japanese Larch	82	—	79	3	74	59
Douglas Fir	—	—	—	—	—	—
Norway Spruce	61	14	29	18	59	44
Other Conifers	882	98	692	92	702	486

HOME COLLECTION OF BROADLEAVED SEED
Year ended 30th September, 1952

Table 10

	Total	England	Scotland	Wales
Total	126,474	123,669	592	2,213
Ash	630	160	349	121
Beech	—	—	—	—
Oak	123,849	122,009	80	1,760
Sycamore	142	—	80	62
Sweet Chestnut	419	419	—	—
Other broadleaved trees	1,434	1,081	83	270

Imports of Seed.—The Commissioners have continued to make bulk imports of seed of Douglas fir, Sitka spruce, Japanese larch and Corsican pine, to cover private and trade needs as well as the Commissioners' own requirements; purchases of seed of *Abies grandis* and *Tsuga heterophylla* for the trade were also undertaken; with the exception of *Tsuga*, which was very scarce, sufficient supplies of seed of the above species were obtained. The principal imports of broadleaved tree seeds were 28,256 lb. of red oak from Holland, and 2,627 lb. of beech seed, half of which came from Austria and half from Bavaria. Details of imports of coniferous and broadleaved tree seeds are given in Table 11.

IMPORTED SEED

Table 11

Year ended 30th September, 1952

Species	Quantity	Origin
	lb.	
<i>All species: Total</i>	39,812	—
<i>Coniferous:</i>		
Total	8,726	—
<i>Major species:</i>		
Corsican pine	1,103	Corsica
European larch	6	Austria
European larch	54	Germany
Japanese larch	750	Japan
Douglas fir	570	British Columbia
Douglas fir	396	Washington, U.S.A.
Sitka spruce	3,200	British Columbia
Pinus contorta	250	British Columbia
Pinus contorta	83	Washington, U.S.A.
<i>Minor species:</i>		
Abies grandis	1,242	Washington, U.S.A.
Abies grandis	190	British Columbia
Abies nordmanniana	25	Germany
Abies nobilis	100	Denmark
Abies veitchii	8	Japan
Araucaria imbricata	77	Italy
Cryptomeria japonica	15	Japan
Larix polonica	45	Poland
Larix sudetica	43	Czechoslovakia
Pinus montana	27	France
Pinus montana	25	Denmark
Pinus monticola	11	British Columbia
Sequoia sempervirens	111	California, U.S.A.
Thuja plicata	170	British Columbia
Tsuga heterophylla	66	Washington, U.S.A.
Tsuga heterophylla	15	British Columbia
Other conifers	144	Various
<i>Broadleaved:</i>		
Total	31,086	—
Beech	1,424	Austria
Beech	1,203	Bavaria
Oak (Red)	28,256	Holland
Other broadleaved species	203	Various.

Sales of Seed.—The quantity of seed sold to the nursery trade was considerably less than in the two previous years; the drop was most marked in the broadleaved tree species, less so for the conifers. Private owners took a slightly larger quantity of coniferous seed than in the previous year. Comparative figures by species are given for 1951 and 1952 in Table 12.

SALES OF SEED
Year ended 30th September

lb.

Species	Total		Sold to			
			Nursery Trade		Woodland Owners	
	1951	1952	1951	1952	1951	1952
<i>All species: Total</i>	10,925	3,404	10,670	3,211	255	193
<i>Coniferous: Total</i>	4,584	2,968	4,420	2,775	164	193
Scots pine	938	65	912	52	26	13
Corsican pine	337	339	314	304	23	35
European larch	—	60	—	60	—	—
Japanese larch	1,543	915	1,489	872	54	43
Douglas fir	613	693	597	665	16	28
Norway spruce	236	94	226	63	10	31
Sitka spruce	752	502	725	489	27	13
Pinus contorta	78	21	70	21	8	—
Abies grandis	—	239	—	209	—	30
Other conifers	87	40	87	40	—	—
<i>Broadleaved: Total</i>	6,341	436	6,250	436	91	—
Oak	5,902	162	5,826	162	76	—
Beech	21	224	6	224	15	—
Other broadleaved species	418	50	418	50	—	—

Provision of Plants from Nurseries

Nursery work in most parts of the country was carried out under reasonably favourable conditions; some districts, however, in England and in South Wales had wet weather in the early part of the year which delayed seed sowing, and the later sowings were affected by the dry conditions which followed. Changeable weather fortunately then set in and permitted most species to develop normally. There were exceptions to this, however, particularly in south-east England where the drought was prolonged and resulted in the germination and growth of Scots pine, Japanese larch and Sitka spruce, being below normal; growth in nurseries in east England was also below average from the same cause.

Chemical control of weeds in seed-beds was tried on a practical scale at several nurseries where the use of mineral-oil as a spray before the tree seedlings have appeared has given satisfactory results. This may prove to be an important advance in nursery technique.

Expenditure.—Expenditure on nurseries was £486,461 which is substantially the same as in the previous year.

Nursery Area.—The total area under nurseries was 2,112 acres, 59 acres less than in the previous year.

Use of Nursery Ground.—(Table 13 below.) Of the 2,112 acres of nursery, 336 acres (16 per cent.) were under seedbeds, 680 acres (32 per cent.) under transplant lines and 680 acres (32 per cent.) under fallow or green crops. Apart from a reduction of 3 per cent. in the area of seedbeds the proportions are practically the same as in the previous year.

USE OF NURSERY GROUND

Table 13

At 30th September, 1952

Acres

	Total	Seedbeds	Transplant Lines	Fallow and Green Crops	Other
GREAT BRITAIN	2,112	336	680	680	416
<i>Percentage of total area</i> ...	100	16	32	32	20
ENGLAND: Total	795	132	255	272	136
Conservancy:					
North West	171	23	50	58	40
North East	153	23	56	51	23
East	170	34	52	58	26
South East	99	17	34	32	16
South West	112	24	35	36	17
New Forest	60	7	20	26	7
Dean Forest	30	4	8	11	7
SCOTLAND: Total	881	132	280	260	209
Conservancy:					
North	222	48	58	76	40
East	192	15	64	62	51
South	242	38	94	63	47
West	225	31	64	59	71
WALES: Total	436	72	145	148	71
Conservancy:					
North	229	36	71	86	36
South	207	36	74	62	35

Amount of Seed Sown.—(Table 14 below.) The total amount of seed sown was 154,086 lb., of which 138,970 lb. were of broadleaved species and 15,116 lb. of conifers. Sowings of both categories of seed were less than in the previous year.

SEED SOWN IN NURSERIES

Table 14

Year ended 30th September

lb.

	1950	1951	1952
TOTAL SEED SOWN			
Great Britain	193,283	227,720	154,086
England	142,294	155,021	98,009
Scotland	13,255	12,333	12,739
Wales	37,734	60,366	43,338
CONIFEROUS SEED			
Great Britain	15,400	17,848	15,116
England	4,479	4,742	4,870
Scotland	7,604	6,501	6,712
Wales	3,317	6,605	3,534
BROADLEAVED SEED			
Great Britain	177,883	209,872	138,970
England	137,815	150,279	93,139
Scotland	5,651	5,832	6,027
Wales	34,417	53,761	39,804

Stocks of Seedlings and Transplants.—The stocks of young forest trees standing in the nurseries comprised 184 million transplants and 315 million seedlings. Comparative figures for the two previous years, separating coniferous and broadleaved species are given in Table 15.

STOCKS OF TRANSPLANTS AND SEEDLINGS

Table 15	At 30th September		Thousands of Plants
	1950	1951	1952
TOTAL TRANSPLANTS			
Great Britain	195,191	176,393	183,781
England	64,603	51,286	58,144
Scotland	84,546	85,759	87,096
Wales	46,042	39,348	38,541
CONIFEROUS			
Total, Great Britain ...	175,572	163,849	166,441
England	50,035	42,481	45,914
Scotland	82,858	84,323	85,596
Wales	42,679	37,045	34,931
BROADLEAVED			
Total, Great Britain ...	19,619	12,544	17,340
England	14,568	8,805	12,230
Scotland	1,688	1,436	1,500
Wales	3,363	2,303	3,610
TOTAL SEEDLINGS			
Great Britain	306,975	334,929	314,609
England	72,568	93,239	93,517
Scotland	174,109	152,551	150,510
Wales	60,298	89,139	70,582
CONIFEROUS			
Total, Great Britain ...	294,426	308,679	302,528
England	62,951	75,045	85,874
Scotland	173,224	151,267	149,691
Wales	58,251	82,367	66,963
BROADLEAVED			
Total, Great Britain ...	12,549	26,250	12,081
England	9,617	18,194	7,643
Scotland	885	1,284	819
Wales	2,047	6,772	3,619

Sales of Nursery Plants.—The nursery trade purchased $7\frac{1}{4}$ million seedlings and transplants for lining out or for direct resale to woodland owners—an increase of over $1\frac{1}{2}$ million plants compared with the previous year. (Table 16, page 42.)

SALES OF NURSERY PLANTS

Table 16

Year ended 30th September, 1952

Thousands

All species: TOTAL	...	7,277
Coniferous: Total ...	...	6,954
Scots pine ...	...	822
Corsican pine	...	261
European larch	...	—
Japanese larch	...	999
Douglas fir	...	817
Norway spruce	...	3,119
Sitka spruce	...	855
Other conifers	...	81
Broadleaved: Total	...	323
Ash ... ..	...	83
Oak ... ..	...	148
Beech ... ..	...	42
Other broadleaved species	...	50

Plantations

The weather during the planting season was much more favourable generally than in the forest year 1950-51. Snow storms in the North and South Conservancies in Scotland and in the North East Conservancy in England caused some interruption to the progress of planting, but the position was retrieved during the good weather of the early spring and planting was completed in good time.

The early spring was followed by a dry spell with late night frosts in parts of east and south Scotland and in the north of England, where some damage resulted to the leaders of Sitka spruce; in the south, however, a welcome absence of these frosts, particularly in south-west England and in Wales, allowed plantations in frosty localities to put on good growth.

The plantations formed during the year amounted to 61,632 acres; this exceeds last year's planting by almost 4,500 acres, and is the largest achieved to date. In addition to the area planted, 808 acres were underplanted. It should be noted however that the area of plantable land acquired during the year, amounting to 53,604 acres, including 4,553 acres of standing woods, was less by 8,028 acres than the acreage planted.

Table 17 shows the contributions made by each country and each conservancy to the acreage planted during the year. The areas planted at individual forests are given in Appendices 12 to 14 on pages 67 to 75.

AREAS PLANTED AND UNDERPLANTED

Table 17

Year ended 30th September, 1952

Acres

Country or Conservancy	Planted	Under-planted	Country or Conservancy	Planted	Under-planted
GREAT BRITAIN	61,632	808	SCOTLAND: Total ...	30,978	71
ENGLAND: Total ...	18,055	633	Conservancy:		
Conservancy:			North	7,371	15
North West ...	3,071	37	East	8,492	46
North East ...	7,384	300	South	8,068	5
East	2,284	173	West	7,047	5
South East ...	1,729	—	WALES: Total ...	12,599	104
South West ...	2,361	33	Conservancy:		
New Forest ...	857	10	North	7,339	89
Dean Forest ...	369	80	South	5,260	15

Of the 61,632 acres planted by the Commissioners, 18,055 acres were planted in England, 30,978 acres in Scotland and 12,599 acres in Wales. These figures show an increase compared with last year of 500 acres in England, 4,000 acres in Scotland, while Wales is just slightly below last year's figure of 12,713 acres.

Table 18 analyses the planting carried out during the year, showing the amounts afforested and replanted, sub-divided also under conifers and broad-leaved species.

AFFORESTATION AND REPLANTING

Table 18

Year ended 30th September, 1952

Acres

	Great Britain	England	Scotland	Wales
TOTAL PLANTED:				
All species	61,632	18,055	30,978	12,599
Conifers	56,132	13,898	30,628	11,606
Broadleaved	5,500	4,157	350	993
AFFORESTED:				
All species	39,656	9,508	20,704	9,444
Conifers	38,878	9,012	20,582	9,284
Broadleaved	778	496	122	160
RE-PLANTED:				
All species	21,976	8,547	10,274	3,155
Conifers	17,254	4,886	10,046	2,322
Broadleaved	4,722	3,661	228	833

Of the 61,632 acres planted during the year, 39,656 acres (64 per cent.) were afforested and 21,976 acres (36 per cent.) were replanted, including the replacement of 533 acres destroyed by fire. The area planted with broad-leaved trees was 5,500 acres, most of this being in the East, South East and South West Conservancies of England.

Plants used for Planting and Beating-up

Over 120 million young trees were planted in the Commission's forests. One hundred and two million of these were used in the making of new plantations and 18 million used in beating-up, that is, were put in to replace failures in the more recently formed plantations.

The proportions in which the main species were used are:—

- Spruces (Norway and Sitka) 39 per cent.
- Pines (Scots and Corsican) 27 per cent.
- Larches (European and Japanese) 13 per cent.
- Douglas fir and other conifers 11 per cent.
- Broadleaved species (chiefly beech and oak) 10 per cent.

The trend over the last few years towards a reduction in the proportion of spruces has continued though to a lesser extent. Of the minor species, *Pinus contorta* is now prominent; over six million plants of this species were used during the year under review. The proportion of broadleaved species has remained constant at about 10 per cent.

Appendix 9, page 64, gives the numbers of the individual species used in each Conservancy. Appendix 10, page 66, gives a summary of the species used for planting and beating-up in each of the three countries.

Planting Progress to Date

Table 19 sets out the gross area planted to date, with details for the past six years.

				Acres		
				Total	Afforested	Re-planted
Total, 1920-1952	...	...	...	758,533	541,301	217,232
1920-29	...	...	...	138,271	101,976	36,295
1930-39	...	...	...	230,607	174,428	56,179
1940-46	...	...	...	110,476	77,616	32,860
1947	...	...	...	26,356	17,456	8,900
1948	...	...	...	36,404	23,932	12,472
1949	...	...	...	43,886	30,864	13,022
1950	...	...	...	53,737	37,355	16,382
1951	...	...	...	57,164	38,018	19,146
1952	...	...	...	61,632	39,656	21,976

The total of 758,533 acres shown in the above table is the gross acreage planted by the Commissioners without taking account of losses from fire, or wind or as a result of fellings, disposals, etc. The area of plantations existing at the end of the year was 720,200 acres (see Table 3, page 33). Included in the 217,232 acres, shown above as replanted, are 18,244 acres replanted after fires.

Forest Protection

The cost of forest protection during the year was £300,627 (Appendix 4, page 62). Of this sum £151,405 was spent on fire protection, including making and maintaining fire lines, fire patrols and actual fire fighting; and £149,222 on other protection which includes the destruction of rabbits, squirrels, and measures taken in plantations and nurseries against injurious insects and fungi, etc. Other protection cost £22,146 more than in the previous year, an increase which may be largely attributed to the extension of the campaign against rabbits and grey squirrels.

Fire Protection

Over most of the country the periods of acute fire danger in plantations were of short duration. The most dangerous months were March, April and May when more than 75 per cent. of the outbreaks occurred. The danger period was shortened by the early spring which brought on the new vegetation; a period of prolonged fire danger was, however, experienced in east and south-east England.

Table 20 below gives the number of fires dealt with during the year, the area of plantations burned and the loss sustained; for comparison the corresponding figures for the previous four years are also given.

NUMBER AND EXTENT OF FOREST FIRES, 1948-1952

				Number of Fires	Area Burned (acres)	Assessed Damage £
1948	...	...	...	1,189	1,837	45,000
1949	...	...	...	1,094	489	22,000
1950	...	...	...	874	158	7,000
1951	...	...	...	1,327	348	12,000
1952	...	...	...	1,130	455	16,000

The number of fires in or threatening Commission plantations during the year was 1,130, of which the high proportion of 90 per cent. was extinguished before causing damage to plantations; in the previous year the proportion was 95 per cent.

The extent of plantations burned was 455 acres; while this is 107 acres more than last year it is still much below the average of the preceding five years. It is of interest to note that the three largest fires of the year caused the loss of 300 acres, and thus accounted for 65 per cent. of the total area of plantations burned. The loss during the year is assessed at £16,000.

CAUSES OF FOREST FIRES
Year ended 30th September, 1952

Table 21

	Number of Fires	Area Burned (acres)
Total	1,130	455
Railways	751	24
Adjoining Land	185	189
General Public	71	18
Commission Employees	16	10
Incendiarism	24	29
Miscellaneous	13	38
Unknown	70	147

This analysis shows that railways were responsible for 751 fires or 66 per cent. of the total number of outbreaks; the corresponding figures for 1951 were 1,043 fires and 79 per cent. of the outbreaks. As railways are known danger zones they are kept well patrolled by the forest staff during dry periods, and most fires from this cause are controlled before they get to large proportions, thus fires originating from railways caused the loss of only 24 acres out of the total of 455 acres burned. Fires spreading from other land, often arising from burning off the dead vegetation on grazing or moorland, caused the second greatest number of fires and the loss of 189 acres. Fires caused by the Commissioners' employees numbered 16 of which 13 resulted from the burning of fire lines, etc., which got out of control.

One of the largest fires, that at Rosedale Forest, Yorkshire, calls for special comment as it was caused by lightning. A flash was seen by two separate fire patrols to strike into the centre of a fourteen-year-old plantation of Scots pine and Sitka spruce, starting a fire which destroyed 35 acres of plantation before being brought under control.

Protection against Damage by Animals

Rabbits continue to be a major source of worry and expense to foresters throughout most of the country. In many parts the mild winter led to an increase in their numbers, but it is encouraging to record that, by the concerted action of the Commissioners, and owners and tenants of adjoining properties, the rabbit population has been virtually exterminated over an area extending to some 20 to 30 thousand acres in the Fochabers district, Elgin. As a result of these control measures new plantations may now be made without enclosure by rabbit proof fences and the netting round older plantations can be dispensed with. A scheme on similar lines has been started in the Tweed Valley. Over a quarter of a million rabbits and hares were destroyed during the year by the Commissioners' trappers and warreners, who wage an all year round war against these destructive animals.

The control measures taken against the grey squirrel in the Commissioners' forests have resulted in 27,000 being destroyed during the year under report. Of this number 26,000 were killed in England, some 900 in South Wales, and less than 100 in Scotland where they have not yet reached many of the Commission forests. In England, except for a few hundred, most of the squirrels destroyed were in the southern half of the country, the New Forest and the Forest of Dean accounting for 7,000 and 8,500 respectively.

An account of the damage by gales to plantations in Scotland is given on page 21; other effects of the weather on plantations are mentioned on page 42.

PREPARATION AND SALE OF PRODUCE

Thinning and Clear Felling

Table 22 details by Conservancies the areas thinned and clear felled during the year under review.

	Thinned	Felled		Thinned	Felled
GREAT BRITAIN: Total	37,250	5,045	SCOTLAND: Total ...	12,192	1,611
ENGLAND: Total ...	20,562	2,710	Conservancy:		
Conservancy:			North	3,083	925
North West ...	3,158	171	East	5,892	678
North East ...	2,922	384	South	1,619	3
East	7,386	792	West	1,598	5
South East ...	1,256	743	WALES: Total ...	4,496	724
South West ...	2,696	382	Conservancy:		
New Forest ...	1,701	113	North	2,186	386
Dean Forest ...	1,443	125	South	2,310	338

The area of young plantations thinned during the year amounted to 37,250 acres. Those thinned for the first time accounted for 15,830 acres, some 800 acres more than in the previous year; the remainder, 21,420 acres, which had in previous years been thinned one or more times, shows an increase of over 3,000 acres compared with last year. While most of the felling and extraction of the thinnings to ride-side is done by the forest staff, merchants have, in the past few years, been taking an increasing share in this work, and in the year under review, 7,700 acres of thinnings were sold "standing".

Clear fellings total 5,045 acres, over 1,000 acres more than last year. An analysis of these fellings shows that 1,251 acres were classified as high forest, 823 acres as simple coppice or coppice-with-standards, and the remaining 2,971 acres as scrub or devastated woodlands.

Sales of Forest Produce

The produce from Commission forests sold or used for forest purposes amounted to 12½ million cubic feet, approximately 85 per cent. coming from the thinning of plantations.

Sales of pitwood and of pitprops amounted to 2¾ million cubic feet, of which approximately 1 million went to the South Wales pits; production of pitprops at Brandon Central Depot in Norfolk alone exceeded half a million cubic feet. These figures showing the pitwood and pitprop production

do not reflect the full contribution that the Commission forests are making to the mining timber needs of the country; the thinnings sold, standing and felled, to the trade were mainly of pitwood size, and there is no doubt that a fair proportion of the produce from these sales found its way to the pits. More than $1\frac{1}{4}$ million cubic feet were sold for the manufacture of woodpulp and boardmill; this quantity would have been larger but for a sudden reduction in the requirements of the home boardmill industry.

Other produce offering a reasonably steady market included harvest poles, fencing material, and firewood, the last of which absorbed just under $1\frac{1}{2}$ million feet. Small quantities of oak bark for tanning were harvested and several thousand fascines were supplied for coast protection works.

The gross income from all classes of forest produce was £2,128,553—an increase of £550,845 over the previous year; included in the above is £30,988 from sales of plants from forest nurseries. Expenditure on preparation of produce was £883,388 as compared with £754,626 in the previous year (Appendix 3, page 62).

LICENSING OF TIMBER FELLING

The licences issued during the year ended 30 September, 1952, were 9,591 in number, and authorised the felling of 45,622,000 cubic feet of timber. This volume was apportioned between coniferous and broadleaved species as follows:—

	<i>Cubic feet quarter-girth over-bark, millions</i>
<i>Conifers</i>	
Over 6 inches quarter-girth at breast-height ...	8·354
Thinnings over 6 inches quarter-girth at breast-height	2·710
6 inches quarter-girth and under at breast-height	7·260
	18·324
<i>Broadleaved Species</i>	
Over 6 inches quarter-girth at breast-height ...	25·360
6 inches quarter-girth and under at breast-height	1·938
	27·298
Total	45·622

The quota, as fixed for the year ended 30 September 1952, was 7.1 million cubic feet of coniferous timber and 26 million cubic feet of broadleaved timber; in both cases this refers to timber over 6 inches quarter-girth at breast-height; conifer thinnings over 6 inches quarter-girth, and coniferous and broadleaved trees of 6 inches quarter-girth and under are not counted against the quota. As a result of considerable windblow in plantations in Scotland it became necessary to issue licences for 1.254 million cubic feet in excess of the conifer quota, while there was an unused balance of 640,000 cubic feet in the broadleaved quota.

The 9,591 licences issued included 1,989 licences authorising the clear felling of 19,260 acres; 1,559 of these licences, covering the clear felling of 15,300 acres, were subject to restocking and maintenance conditions, and 84 licences for the clear felling of 684 acres were issued to dedicated estates. Licences to which no replanting conditions were attached amounted to 346 and covered the clear felling of 3,276 acres.

Expenditure on private forestry during the year was £345,580. Included in this amount are payments under dedication schemes, £133,014; planting grants, £43,795; thinning grants, £82,809; grants to co-operative societies, £1,475; payments in connection with the Liverpool Corporation proceeds-sharing scheme at Lake Vyrnwy, £4,221; and salaries and expenses of the staff administering these schemes and employed on agency and advisory work amounting to £79,096.

Income was £55,833, largely made up of two abnormal items, namely, refunds totalling £23,170 in respect of interim planting grants by owners who have decided not to dedicate, and a contribution of £29,530 made by the National Coal Board towards the cost of thinning grants paid from the commencement of the scheme until the ending of maximum price control over standing trees.

Details of expenditure and income for 1951 and 1952 are given in Appendix 5, page 62.

The Dedication Scheme

PROGRESS OF DEDICATION

Table 25

Year ended 30th September

	Great Britain		England		Scotland		Wales	
	Number of Dedications	Area (acres)	Number of Dedications	Area (acres)	Number of Dedications	Area (acres)	Number of Dedications	Area (acres)
Total, 1948-52	252	149,144	118	51,656	116	93,223	18	4,265
1948 ...	1	1,006	1	1,006	—	—	—	—
1949 ...	17	12,267	8	4,214	9	8,053	—	—
1950 ...	35	23,448	11	9,062	22	14,165	2	221
1951 ...	79	37,010	31	12,489	41	22,779	7	1,742
1952 ...	120	75,413	67	24,885	44	48,226	9	2,302

The total area now dedicated is 149,144 acres spread over 252 estates. While this is a very small proportion of the private woodlands of the country, it is encouraging to note that for the third consecutive year the total area dedicated has virtually doubled during the year. Progress is shown diagrammatically on page 10.

Dedications completed during the year numbered 120 and covered 75,413 acres of woodland. Further deeds of dedication relating to 191 estates with 69,000 acres were in the process of completion at the end of the year; in addition, plans of operations were being prepared by 520 estates covering 271,000 acres.

Approved Estates

The term "Approved Estates" signifies estates whose owners have decided not to dedicate but to manage their woodlands in accordance with a working plan approved by the Commissioners. By the end of the year approval had been given to the working plans for 10 estates with woodlands covering 1,399 acres, 9 estates with 1,267 acres being in England, and one of 132 acres in Wales.

Planting on Private Estates

Table 26 below summarises by number and area the planting grant schemes which were inspected and passed for payment during the year. They include: (1) Outstanding Interim Planting Grant Schemes of the type which were introduced to tide over the interval until the Dedication Scheme came into operation; (2) Planting under the Dedication Scheme, including planting by owners who intend to dedicate by 30th June, 1953, and whose Plans of Operation have been approved by the Conservator; (3) Small Woods Planting Grants for planting carried out in woods considered to be in that category; and (4) The special grants for poplar planting.

PLANTING UNDER STATE-AIDED SCHEMES

Areas inspected and passed for payment

Table 26

Year ended 30th September 1952

	Interim Planting Grants	Planting under Dedication	Small Woods Planting	*Poplar Planting	Total
GREAT BRITAIN					
No. of Schemes ...	13	400	363	51	827
Total Area, acres ...	188	7,837	2,062	162	10,249
Conifers ...	170	5,794	1,231	—	7,195
Broadleaved ...	3	343	143	162	651
Mixed ...	15	1,700	688	—	2,403
				(3,088 trees)	
ENGLAND					
No. of Schemes ...	6	205	206	42	459
Total Area, acres ...	33	2,670	1,116	141	3,960
Conifers ...	18	1,037	463	—	1,518
Broadleaved ...	3	316	124	141	584
Mixed ...	12	1,317	529	—	1,858
				(2,754 trees)	
SCOTLAND					
No. of Schemes ...	7	143	120	7	277
Total Area, acres ...	155	4,655	760	16	5,586
Conifers ...	152	4,443	621	—	5,216
Broadleaved ...	—	13	16	16	45
Mixed ...	3	199	123	—	325
				(84 trees)	
WALES					
No. of Schemes ...	—	52	37	2	91
Total Area, acres ...	—	512	186	5	703
Conifers ...	—	314	147	—	461
Broadleaved ...	—	14	3	5	22
Mixed ...	—	184	36	—	220
				(250 trees)	

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

This table does not give a complete picture of grant-aided planting carried out during the year, because it includes a number of schemes planted in earlier years and not inspected until the year under review. On the other hand some schemes which were planted in the current year have not yet been inspected.

The following table, compiled from information supplied by the Conservators, provides an estimate of the planting actually carried out during the year on private estates, including planting without the aid of grants. The heading "State-aided" includes all types of planting grants.

ESTIMATED TOTAL AREA OF PRIVATE PLANTING

Table 27

Year ended 30th September 1952

Acres

	State-aided	Planted without the aid of Grants	Total
GREAT BRITAIN	11,300	3,800	15,100
England	4,100	2,100	6,200
Scotland	6,200	1,500	7,700
Wales	1,000	200	1,200

The total of 15,100 acres estimated to have been planted in the season 1950-51 shows an increase of 2,800 acres over the area planted last year.

Thinning Grants

The changes in the regulations restricting the payment of grants to thinning made in the younger plantations are given on page 11. Table 28 below gives details for each country of the schemes passed for payment during the year.

THINNING GRANTS

Schemes Inspected and Passed for Payment

Table 28

Year ended 30th September, 1952

	Number of Schemes	Area (acres)	Estimated Volume (cubic feet)
GREAT BRITAIN	887	14,295	4,746,576
England	568	7,557	2,130,505
Scotland	261	5,750	2,263,419
Wales	58	988	352,652

The number of schemes, the acreage thinned, and also the estimated out-turn, were less than in the previous year by 162 schemes, 5,900 acres and approximately 3 million cubic feet. The drop was most marked in Scotland where it amounted to 182 schemes, 6,250 acres and over 2½ million cubic feet; the number of schemes and the area thinned actually increased in England but the estimated out-turn was less by almost 400,000 cubic feet; in Wales little change took place in the number and acreage of schemes while the estimated out-turn was greater by some 16,000 cubic feet.

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. Forest Research is also undertaken for the Commission at Universities and other Institutions. Expenditure amounted to £179,408, as compared with £164,211 in the previous year (for details see Appendix 6, page 63).

A brief outline of some of the more important work undertaken during the year is given in the following paragraphs. Fuller accounts of research projects will be found in the *Report on Forest Research for the Year ending March 1952*.*

During the year the Research Station at Alice Holt was visited by 242 forest officers and students. These included students from Edinburgh University, London University, the Imperial Forestry Institute, the Guildford Technical College, a party of Overseas students organised by the British Council, and also members of the Workers Educational Association. Visitors came from the following Commonwealth and foreign countries: Algeria, Argentine, Australia, Austria, Canada, Cyprus, Denmark, Egypt, France, Germany, Holland, India, New Zealand, Norway, S. Rhodesia, Spain, Sudan, Sweden, Uganda and United States of America.

A study of the forest trees of the Pacific Coast of Canada is being made by a research officer of the Commission, who has been awarded a Nuffield Foundation Fellowship. This region is the native habitat of several conifers extensively used in afforestation in Britain.

Silviculture

In November 1951, the Forest Research Station was licensed as a Private Seed Testing Station under the Seeds Act, 1920, and now undertakes the testing of tree seeds used by the Forestry Commission. About 1,154 seed purity and germination tests were made between November 1951, and the end of September 1952. The examination of samples of cones, before general collection is undertaken, to ascertain the quantity and quality of their seed was continued. Studies in the control of conditions in seed extraction kilns and in seed sampling methods have been commenced. Further confirmatory work on the use of tetrazolium bromide for testing seed viability was carried out. Seed storage tests were continued.

In the nurseries, the restoration of soil fertility by partial sterilisation was further investigated. Fertiliser experiments in old-established nurseries, including placement of phosphate and potash fertilisers below seed drills, gave results confirming previous years' trials, namely that placement gives a slight improvement in seedling growth. Tests were also made of several forms of nitrogen, of which "flash" (plastic waste) and formalised casein gave the best results. Trials of composts have been continued; on heathland and woodland soils all composts gave improved growth of seedlings, whilst responses on older established nursery soils were unimportant. The fertility trials started at Teindland heathland nursery last year to provide a long-term comparison between organic and inorganic methods of manuring were continued; a small demonstration with the same object has also been started at Newton Nursery near Elgin. Experiments were carried out on green

* To be published shortly by H.M.S.O.

cropping, seed bed covering, nursery irrigation by overhead spray lines, the chemical control of weeds in conifer seed beds, and the intensive culture of Sitka spruce seedlings in frames with soil heating.

Trial plantations have been laid down in Caithness, Northumberland and Yorkshire on poor land previously classed as unplatable ; in Caithness also, an experimental shelter belt on a very exposed ridge has been planted. A large scale experiment on methods of ploughing heathlands preparatory to planting was established in Morayshire.

Derelict woodland investigations continue to be a major silvicultural project ; the initial experimental treatment of the derelict woodland area at Weston Common, Alton Forest, Hants, is now complete. Various methods of raising beech in hazel coppice are being compared experimentally at Gardiner Forest in Dorset. An experiment is in hand at Haldon Forest, Devon, in crops containing a fair quantity of natural regeneration of useful species, to ascertain what tending work is necessary to ensure their survival and growth. Attention is also being given to problems connected with the establishment of hardwoods in Scotland. Tests have been made on the chemical control of woody weed growth and the chemical killing of standing trees to facilitate bark removal.

Forest Genetics

The principal work during the year was a continuation of the survey of seed stands, the selection of "plus" trees for breeding purposes, and the establishment in Alice Holt Forest of a central collection of grafts and cuttings from selected parents. A method for the mass production of grafts in the open nursery is being tested. The propagation of forest trees by grafting, budding, and the rooting of cuttings is also being undertaken at Grizedale Forest, Lancashire. The study of flowering and fruit production, and cross-pollination of forest trees has been continued.

Studies of Growth and Yield

The establishment of 55 new sample plots brings the total number of permanent sample plots up to 518. Table 29 shows their distribution between countries.

Table 29
PERMANENT SAMPLE PLOTS
Year ended 30th September, 1952

	Great Britain	England	Scotland	Wales
In being on 1st October 1951	470	204	192	74
New plots established during the year ...	55	25	23	7
Plots abandoned (felled, blown etc.) during the year	7	—	7	—
In being on 30th September 1952	518	229	208	81
Remeasured during the year	153	78	53	22

In addition to the work done in Permanent Sample Plots, over 340 temporary broadleaved plots were measured to provide data for provisional yield tables for oak, beech, ash and sycamore.

In conjunction with the Forest Products Research Laboratory an investigation is being made into the effects of site and silvicultural treatment on the quality of Japanese larch and Sitka spruce timber. This investigation will be extended to other species in due course.

Forest Pathology

During the year investigations have been continued into a number of diseases, including the dying out of groups of Sitka spruce, the dying bark from the top of Norway spruce, bark die-back and canker of beech, *Phaeocryptopus gäumannii* on Douglas fir needles, and *Botrytis cinerea* on conifers in forest nurseries.

A large number of inquiries, many necessitating visits, have been dealt with relating to both private and Commission plantations. The commonest diseases on which advice was sought were Honey fungus (*Armillaria mellea*), Grey Mould (*Botrytis cinerea*) on conifers, and leaf cast, caused mainly by *Lophodermium pinastri*, on pines.

Forest Entomology

A survey of the status of larch sawflies was continued and preliminary studies have been commenced on the biology of a number of species of both larch and spruce sawflies. A survey of *Neomyzaphis abietina* on Sitka spruce has yielded valuable data on its distribution and status under a wide range of conditions. The next step is the selection of sample areas in which population fluctuations and effects on rate of growth of Sitka spruce will be studied over a number of years.

Machinery Research

Investigations during the year have been related mainly to the suitability of new tractors for forest work and to devices for improving extraction methods.

Trials, under forest conditions, of a number of British tracked-tractors have now been completed or are well advanced. In the smaller class (under 30 horse power) and the medium class (30 to 40 horse power) there are several suitable makes some of which are already in use in our forests. A tractor designed primarily for negotiating soft peat areas has reached the later stages of field trials and a small number are being taken into use. Ploughs mounted on tracked-tractors are still the subject of investigation.

Experiments with trailers for use on soft and uneven ground have shown that rolling resistance and also damage to rides can be greatly reduced by increasing wheel diameters. Under comparable conditions it has been found that a saving of over 30 per cent. in rolling resistance (and, therefore, tractor horse power) can be made by changing from standard sized wheels of an overall diameter of about 39 inches to wheels with an overall diameter of 58 inches ; a number of trailers are being converted to take the larger wheels.

Further tests of machines for the clearance of derelict woodlands have been made, but costs are still uneconomically high. Development of machines for use in nurseries for spraying weed killers and for root pruning has continued. A new machine for cutting grass on rides and fire breaks is showing good results.

Utilisation Research

The Advisory Committee on the Utilisation of Home Grown Timber met twice during the year, when consideration was given to problems related to the utilisation of small-sized conifer and hardwood thinnings, coppice and scrub, and also sawmill waste. A study was also made of problems affecting the marketing of small-sized conifers on private estates. The requirements of the home wood flour industry for sawmill waste and small-sized conifers were ascertained, and, as part of the hardwood problem, a detailed study was made of the home charcoal manufacturing industry.

In co-operation with the Rural Industries Bureau a census is being taken of underwood craftsmen dependent on coppice for their raw material, and the field work for the estimation of the yield of hazel coppice was completed during the year.

Advisory Committee on Forest Research

Owing to the Commonwealth Forestry Conference being held in Canada during the summer of 1952, no field meeting of this committee took place; a meeting was however held at the Commission Headquarters in London in March, 1952, at which current work and future programmes of research work were discussed.

Grants to Universities and other Institutions

The Commissioners have continued to make grants for research work on special forestry problems of a fundamental scientific nature to be carried out by Universities and other Institutions qualified to undertake such work. Grants made during the year included £2,600 to Rothamsted Experimental Station for work on the nutrition of trees in forest nurseries, and £1,352 to Dr. Levisohn of Bedford College, University of London, for research in soil mycology as affecting tree growth. For the furtherance of research on forest soils, grants totalling £5,793 were made to the Macaulay Institute for Soil Research, Aberdeen, the Rothamsted Experimental Station and the Imperial Forestry Institute, Oxford. Grants totalling £1,734 for botanical and other research were made to Aberdeen University. Small grants were also made to permit investigations into the Wanstead Sycamore Disease, the nesting of insectivorous birds in bird boxes in forests, and the *Megastigmus* seedfly.

EDUCATION

Expenditure on Forester Training Schools, Short Courses for foresters and woodmen, the Forest Workers Training Scheme, and grants to educational institutions was £148,343. Details are given in Appendix 7, page 63. Income amounted to £40,028, of which £26,935 represents the value of work done in Commission forests by students at the Forester Training Schools.

Forester Training Schools and Short Courses

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. The normal course extends over two years. At the commencement of the year 265 men were under instruction; 137 in their first year and 128 in their second year. Wastage during the year amounted to 13 first year and 4 second year men.

The two year course was completed by 124 men of whom 119 were awarded Forester certificates, while five, who did not reach that standard, qualified for Foreman certificates. All took up posts in forestry, 97 with the Forestry Commission, 17 in private forestry, and 3 with the Colonial Forestry Service; seven nominees—four from Northern Ireland, two from Cyprus and one from the West Indies—returned to their respective countries.

Three Short Courses were held for the training of foresters and woodmen on private estates. These courses, which were previously of three months duration, were reduced to six weeks because employers found it difficult to give men leave of absence for the longer period. Two courses were held at Raby Castle in Durham and one at Darnaway in Morayshire. The forty-five men attending these courses were granted certificates of efficiency by the Forestry Commission; at the conclusion of the course forty-four men

entered for and were successful in passing the examination of the Royal Forestry Societies for the Woodman's Certificate (England and Wales) or the Junior Forester's Certificate (Scotland). The thanks of the Commissioners are due to Lord Barnard and to the Earl of Moray for the facilities they provided for these courses.

Expenditure during the year on Forester Training Schools, Short Courses and Notherwood House was £103,135, made up as follows: Salaries and expenses of Instructors £24,914; allowances to men under training £32,898; rents, stores, fuel, etc., £45,323.

Forest Workers Training Scheme

The Forest Workers Training Scheme which started in 1946 as part of the national scheme for giving training for civilian employment to men released from the armed forces and other forms of national service, was brought to a close in July, 1952. This scheme provided men with a basic training in practical forestry extending over twelve months in the Commission's forests or on a private estate. Since its inception, 1,630 men have completed their training and with few exceptions have taken up forestry employment. In addition to providing a substantial number of trained forest workmen, 400 trainees were selected for further training in the Commissioners' Forester Training Schools; most of these men have now completed their training and are in supervisory posts.

Notherwood House

Notherwood House in the New Forest has continued to be a useful centre for conducting refresher and other special courses.

Twenty-three courses of instruction, each lasting a week, were given during the year. Twenty of these were for the Commission's staff; the subjects covered were: Nursery work (3), Forest Management (3), Utilisation (2), Fire Protection Methods (3), Silviculture (2), Research (2), Organisation and Accounting (4). Two special courses on forestry practice were given for landowners and land agents, and one on general forestry for school teachers.

In addition to these courses, forestry students from the Universities of Oxford and Edinburgh, while studying working plan methods and silviculture in the New Forest, were in residence for six and seven weeks respectively; students from the Universities of Aberdeen and Cambridge, and the University College of North Wales, similarly spent one to two weeks at Notherwood House.

Grants to Educational Institutions

During the year grants amounting to £14,104 were made to Universities for the purpose of forestry education. The responsibility for the payment of future grants was taken over by the University Grants Committee from 1st August, 1952.

Grants made to individual Universities were as follows:—

	£
University of Aberdeen	4,392
Imperial Forestry Institute, Oxford ...	4,812
University College of North Wales, Bangor	3,150
University of Cambridge	500
University of Edinburgh	1,250
	14,104

PUBLICATIONS

Sixteen new publications for sale were issued through the medium of H.M. Stationery Office* ; and nine papers were produced for presentation to the British Commonwealth Forestry Conference held in Canada.

Details of the priced publications are :—

- (1) Annual Report, 1951 (H.C. 181).
- (2) Guide to the New Forest.
- (3) Britain's Forests, Loch Ard.
- (4) Britain's Forests, Strathyre.
- (5) Britain's Forests, Thetford Chase.
- (6) Britain's Forests, Thornthwaite.
- (7) Forest Record 11. General Volume Tables for Corsican Pine in Great Britain.
- (8) Forest Record 12. Girdling or Banding as a Means of Increasing Cone Production in Pine Plantations.
- (9) Forest Record 13. Chemical Control of Weeds in Forest Nursery Seedbeds.
- (10) Forest Record 14. General Volume Tables for Japanese Larch in Great Britain.
- (11) Forest Record 15. General Volume Tables for Douglas Fir in Great Britain.
- (12) Forest Record 17. Adelges attacking Japanese and Hybrid Larches.
- (13) Leaflet 1. The Large Pine Weevil.
- (14) Leaflet 21. Leaf Cast of Larch.
- (15) Leaflet 28. Collection and Storage of Acorns and Beech Mast.
- (16) Leaflet 29. Pissodes Weevils.

† Publications prepared by officers of the Forestry Commission and other Institutions for presentation to the Commonwealth Forestry Conference, 1952 comprised a *Statement Presented by the Forestry Commission of Great Britain to the Sixth Commonwealth Forestry Conference, Canada, 1952* ; the *Report of the Committee on Aerial Survey of Forests* ; and seven technical papers, with the following titles and authors :

- (1) The Role of State, Communities, and Private Enterprise, in the National Forest Policy of Great Britain, by W. H. Guillebaud, Forestry Commission.
- (2) The Place of North-Western American Conifers in British Forestry, by James Macdonald, Forestry Commission.
- (3) Utilisation of Young Plantation Timbers in Great Britain, by F. G. O. Pearson and E. G. Richards, Forestry Commission.
- (4) The Use of Statistical Methods in Forest Research, by J. N. R. Jeffers, Forestry Commission.
- (5) Organisation of Sustained Yield in Previously Unmanaged Forest, by N. V. Brasnett, Imperial Forestry Institute, Oxford.

* Published by H.M.S.O. at the following prices: No. 1, 3s. 0d.; No. 2, 3s. 6d.; Nos. 3 to 6, 1s. 0d. each; No. 7, 1s. 6d.; No. 8, 6d.; No. 9, 2s. 0d.; No. 10, 9d.; No. 11, 1s. 6d.; No. 12, 1s. 3d.; No. 13, 6d.; No. 14, 3d.; No. 15, 4d.; No. 16, 6d.

† Copies obtainable on request from the Secretary, Forestry Commission, 25, Savile Row, London, W.1.

- (6) The Work of the Commonwealth Forestry Bureau, Oxford, 1947-1951, by F. C. Ford Robertson, Commonwealth Forestry Bureau.
- (7) Forest Products and Utilisation Abstracting, by F. C. Ford Robertson, Commonwealth Forestry Bureau.

In addition, seventeen publications issued in previous years were revised or reprinted.

Members of the technical staff have contributed papers to the principal journals concerned with forestry and land management; other papers were presented to the Forestry Section of the meeting of the British Association held in September, 1952.

PUBLICITY AND PUBLIC RELATIONS

The work of the Commissioners has been brought to the notice of the public through the Press, the B.B.C., displays at agricultural shows and lectures.

The Press continue to show considerable interest in forestry; the help of newspapers was especially valuable in drawing attention to opportunities for entry to Forester Training Schools, the arrangement of short training courses for woodmen from private estates, and to other instructional facilities provided by the Commissioners. Welcome support was given to the Commissioners' appeals to the public to guard against starting forest fires.

Press conferences were held and facilities were provided for Press representatives to visit the new forest villages of Llwynygog, Montgomeryshire, and Kielder in Northumberland. Visits to Thetford Chase in East Anglia, and to Strome and adjacent forests in North Scotland were also made. A number of articles on the technical aspects of the Commissioners' work were supplied to forestry and allied journals.

The Commissioners are grateful to the B.B.C. for their co-operation in drawing the attention of the public to the danger of forest fires at holiday times, and for making other announcements.

For reasons of economy, fewer agricultural shows were supported than in the previous year. Exhibits were, however, staged at nine shows, including the Royal Show at Newton Abbot, the Royal Highland Show at Kelso, the Royal Welsh Show at Caernarvon, and the Bath and West Show at Nottingham.

An exhibit was staged at the Schoolboys' Exhibition, London; help was also given to organisers of a number of displays at schools and other places, and facilities were provided to schools for educational visits to forests.

In March, the Central Office of Information lecture service on forestry came to an end, but Forest Officers continued to give lectures in response to requests from voluntary organisations and educational sources.

A film record of the Commissioners' work in afforesting sand dunes at Culbin Forest, on the Moray Firth, was undertaken by the photographic section of the Research Branch.

NATIONAL FOREST PARKS

The seven National Forest Parks, established by the Commissioners, amounting to over 289,000 acres of forest and moorland, continue to attract a large number of visitors. The number of overnight stays at the camping grounds provided at most of the parks exceeded 50,000.

Although the New Forest in Hampshire is not included in the National Forest Park Scheme, it being administered under special Acts of Parliament, it also provides a substantial area of some 65,000 acres for the enjoyment of the public. Over 2,000 permits to camp in the New Forest were issued during the year.

ACKNOWLEDGMENT TO STAFF

The Commissioners gratefully acknowledge the loyal service they have received from their staff at all levels.

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

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

APPENDICES

PAYMENTS BY HEADS OF ACCOUNT, AND RECEIPTS

Appendix 1	£000s	
1951	<i>Year ended</i> 30th September 1952	<i>Total</i> 1920-1952
PAYMENTS		
667	795	5,154
30	42	270
32	31	312
108	128	890
6,743	7,785	52,097
205	270	1,337
103	112	650
113	109	1,449
11	6	823
8,012	9,278	62,982
1,812 RECEIPTS	2,365	15,812
6,200 NET PAYMENTS ...	6,913	47,170

Note.—This table shows amounts paid and received in cash during the year. (*See also* Note to Appendix 2.)

EXPENDITURE AND INCOME

Appendix 2	-£000s	
1951	<i>Year ended</i> 30th September 1952	<i>Total</i> 1920-1952
EXPENDITURE		
7,535	8,665	58,393
263	346	1,762
164	179	1,098
130	148	1,736
61	90	1,189
8,153	9,428	64,178
INCOME		
1,947	2,479	16,533
40	40	454
7	58	92
1,994	2,577	17,079
6,159 NET EXPENDITURE	6,851	47,099

Note.—This table shows the cash transactions in Appendix 1 adjusted for amounts due to or by the Commissioners at the end of the year and for non-cash transactions such as the value of produce used for forest purposes. Salaries and office charges, shown separately in Appendix 1, are here distributed over the heads of account to which they are appropriate.

In Appendices 3 to 8, pages 62 to 63, the expenditure and income shown above are given in greater detail.

FORESTRY OPERATIONS : EXPENDITURE AND INCOME

Appendix 3

1951		<i>Year ended</i> 30th September 1952	<i>£000s</i> Total 1920-1952
	EXPENDITURE (Appendix 2)		
245	Overhead Charges	262	2,137
387	Superior Supervision	469	2,915
427	Local Supervision	570	3,779
527	Acquisition of Land, etc.	518	5,167
2,184	Cultural Operations (Appendix 4)	2,615	20,862
755	Preparation and Sale of Produce	883	5,133
464	Roads	601	2,948
1,101	Buildings	1,218	5,978
730	Stores	717	4,034
715	Miscellaneous	812	5,440
7,535		8,665	58,393
	INCOME (Appendix 2)		
80	Sales of Land and Buildings	14	407
150	Rents and Royalties	177	2,908
1,578	Forest Produce	2,128	11,780
139	Other	160	1,438
1,947		2,479	16,533
5,588	NET EXPENDITURE	6,186	41,860

CULTURAL OPERATIONS : EXPENDITURE

Appendix 4

1951		<i>Year ended</i> 30th September 1952	<i>£000s</i> Total 1920-1952
485	NURSERIES	486	5,197
	PLANTATIONS:		
783	Preparatory Work and Planting	1,045	6,669
646	Establishment and Maintenance	783	6,316
270	Forest Protection	301	2,680
2,184	TOTAL (Appendix 3) ...	2,129	20,862
		2,615	20,862

PRIVATE FORESTRY : EXPENDITURE AND INCOME

Appendix 5

1951		<i>Year ended</i> 30th September 1952	<i>£000s</i> Total 1920-1952
	EXPENDITURE (Appendix 2)		
62	Administration, including Advisory Services	78	453
27	Planting Grants (other than under Dedication, Small Woods and Poplar planting)	25	748
31	Grants under Dedication Schemes	133	166
12	Small Woods Planting Grants	19	31
1	Poplar Planting Grants	—	1
103	Thinning Grants	83	201
2	Grants to Co-operative Forestry Societies	2	4
—	Loans	1	1
24	Proceeds-sharing schemes	4	81
1	Agency Services	1	76
263		346	1,762
	INCOME		
2	Refund of Planting Grants	23	
—	Contribution in respect of Thinning Grants	30	
3	Agency and Advisory Services	3	
5		56	78
258	NET EXPENDITURE	290	1,684

RESEARCH AND EXPERIMENT : EXPENDITURE AND INCOME

Appendix 6

		<i>Year ended</i>	<i>Total</i>
		<i>30th September 1952</i>	<i>1920-1952</i>
1951	EXPENDITURE (Appendix 2)		£000's
10	Overhead Charges and Superior Supervision ...	9	83
66	Salaries and Expenses	81	487
78	Labour, Stores, etc.	76	429
10	Grants to Institutions	13	99
<u>164</u>		<u>179</u>	<u>1,098</u>
2	INCOME	2	13
<u>162</u>	NET EXPENDITURE	<u>177</u>	<u>1,085</u>

EDUCATION : EXPENDITURE AND INCOME

Appendix 7

		<i>Year ended</i>	<i>Total</i>
		<i>30th September 1952</i>	<i>1920-1952</i>
1951	EXPENDITURE (Appendix 2)		£000's
7	Overhead Charges and Superior Supervision ...	9	104
13	Salaries and Expenses	18	75
	Forester Schools and Short Courses:		
21	Instructors Salaries and Expenses	25	146
31	Allowances to Apprentices ...	33	234
26	Rent, Stores, Fuel, Light, etc. ...	45	314
	Forest Workers Training Scheme:		
10	Allowances to Trainees ...	1	403
7	Upkeep of Training Centres	3	291
15	Grants to Institutions	14	169
<u>130</u>		<u>148</u>	<u>1,736</u>
40	INCOME (Appendix 2)	40	454
<u>90</u>	NET EXPENDITURE	<u>108</u>	<u>1,282</u>

SPECIAL SERVICES : EXPENDITURE AND INCOME

Appendix 8

		<i>Year ended</i>	<i>Total</i>
		<i>30th September 1952</i>	<i>1920-1952</i>
1951	EXPENDITURE (Appendix 2)		£000's
50	Overhead Charges and Superior Supervision ...	85	258
—	Consultative Committee Expenses	—	1
1	Publications	1	14
10	Special Enquiries	4	135
—	Relief of Unemployment	—	781
<u>61</u>		<u>90</u>	<u>1,189</u>
—	INCOME ...	—	1
<u>61</u>	NET EXPENDITURE	<u>90</u>	<u>1,188</u>

PLANTATIONS MADE DURING THE YEAR

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 ...	61,632	56,132	5,500	38,878	778	17,254	4,722
ENGLAND ...	18,055	13,898	4,157	9,012	496	4,886	3,661
Conservancy:							
North West ...	3,071	2,810	261	1,505	63	1,305	198
North East ...	7,384	7,119	265	6,203	66	916	199
East ...	2,284	1,165	1,119	478	121	687	998
South East ...	1,729	697	1,032	11	41	686	991
South West ...	2,361	1,328	1,033	807	142	521	891
New Forest ...	857	697	160	8	63	689	97
Dean Forest...	369	82	287	—	—	82	287
SCOTLAND: ...	30,978	30,628	350	20,582	122	10,046	228
Conservancy:							
North ...	7,371	7,341	30	3,099	2	4,242	28
East ...	8,492	8,391	101	4,042	31	4,349	70
South ...	8,068	7,903	165	7,182	40	721	125
West ...	7,047	6,993	54	6,259	49	734	5
WALES: ...	12,599	11,606	993	9,284	160	2,322	833
Conservancy:							
North ...	7,339	6,771	568	5,479	127	1,292	441
South ...	5,260	4,835	425	3,805	33	1,030	392

ENDED 30TH SEPTEMBER, 1952—SUMMARY BY CONSERVANCIES

Total plants used	Species Planted, including Beating Up (Thousands of plants)										
	Scots Pine	Corsi-can Pine	Euro-pean Larch	Japan-ese Larch	Douglas Fir	Norway Spruce	Sitka Spruce	Oak	Beech	Other Species	
										Conifers	Broad leaved
120,027	23,809	8,957	382	15,730	3,264	14 628	32,450	4,173	6,753	9,262	619
34,991	5,191	6,429	11	2,996	1,262	3,395	5,396	2,212	5,425	2,377	297
5,685	932	954	2	938	208	507	1,488	54	347	209	46
12,604	2,569	643	—	1,268	246	1,894	3,656	88	488	1,722	30
5,312	361	2,444	—	21	206	481	—	862	666	118	153
4,098	715	275	3	178	466	187	—	178	2,062	3	31
4,699	341	1,565	—	435	2	191	249	426	1,244	235	11
1,477	257	497	—	22	98	49	3	13	460	74	4
1,116	16	51	6	134	36	86	—	591	158	16	22
58,587	15,543	1,373	357	7,386	1,446	7,543	19,108	305	387	4,940	199
14,894	7,515	74	46	1,374	387	1,170	3,245	30	53	994	6
17,400	5,566	1,018	261	2,914	682	2,094	2,132	47	51	2,559	76
14,775	1,255	195	8	2,013	276	2,841	7,160	225	206	517	79
11,518	1,207	86	42	1,085	101	1,438	6,571	3	77	870	38
26,449	3,075	1,155	14	5,348	556	3,690	7,946	1,656	941	1,945	123
15,299	937	758	14	2,139	529	2,344	5,384	1,120	385	1,631	58
11,150	2,138	397	—	3,209	27	1,346	2,562	536	556	314	65

SUMMARY OF SPECIES USED FOR PLANTING AND BEATING UP

Appendix 10

Thousands of plants

Year ended 30th September 1952

SPECIES	GREAT BRITAIN			ENGLAND			SCOTLAND			WALES		
	Total	Planting	Beating up	Total	Planting	Beating up	Total	Planting	Beating up	Total	Planting	Beating up
	All Species	120,027	102,133	17,894	34,991	27,976	7,015	58,587	52,034	6,553	26,449	22,123	4,326
Scots Pine	23,809	19,605	4,204	5,191	3,700	1,491	15,543	13,796	1,747	3,075	2,109	966
Corsican Pine	8,957	6,456	2,501	6,429	4,616	1,813	1,373	1,153	220	1,155	687	468
European Larch	382	356	26	11	—	11	357	346	11	14	10	4
Japanese Larch	15,730	13,149	2,581	2,996	2,333	663	7,386	6,389	997	5,348	4,427	921
Douglas Fir	3,264	2,673	591	1,262	884	378	1,446	1,294	152	556	495	61
Norway Spruce	14,628	13,138	1,490	3,395	3,021	374	7,543	6,708	835	3,690	3,409	281
Sitka Spruce	32,450	29,405	3,045	5,396	5,200	196	19,108	17,160	1,948	7,946	7,045	901
Tsuga heterophylla	567	462	105	105	79	26	212	192	20	250	191	59
Thuja plicata	378	304	74	135	106	29	54	50	4	189	148	41
Pinus contorta	6,501	5,687	814	1,960	1,803	157	3,697	3,241	456	844	643	201
Hybrid Larch	746	716	30	—	—	—	744	714	30	2	2	—
Lawson Cypress	362	259	103	65	27	38	39	39	19	258	212	46
Picea omorika	56	46	10	1	1	—	41	39	2	14	6	8
Abies grandis	225	206	19	91	80	11	2	1	1	132	125	7
Ash	138	124	14	37	35	2	45	34	11	56	55	1
Birch	200	83	117	187	75	112	—	—	—	13	8	5
Beech	6,753	5,194	1,559	5,425	4,096	1,329	387	345	42	941	753	188
Oak	4,173	3,689	484	2,212	1,860	352	305	285	20	1,656	1,544	112
Sycamore	157	136	21	23	19	4	109	94	15	25	23	2
Other Conifers	427	356	71	20	17	3	151	130	21	256	209	47
Other Broadleaved	124	89	35	50	24	26	45	43	2	29	22	7

SUMMARY AREA STATEMENT OF LAND USE: BY CONSERVANCIES

Appendix 11

At 30th September, 1952

Acres

Country or Conservancy	Total	Planted during year ended 30th September, 1952		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
GREAT BRITAIN	1,855,753	39,656	21,976	799,673	323,281	732,799
ENGLAND:	593,314	9,508	8,547	337,893	111,949	143,472
North West Conservancy	95,070	1,568	1,503	52,311	22,532	20,227
North East Conservancy	187,038	6,269	1,115	86,055	46,348	54,635
East Conservancy	101,170	599	1,685	71,248	10,950	18,972
South East Conservancy	46,925	52	1,677	31,242	13,728	1,955
South West Conservancy	60,989	949	1,412	40,708	14,665	5,616
New Forest	76,425	71	786	35,605	2,526	38,294
Dean Forest	25,697	—	369	20,724	1,200	3,773
SCOTLAND:	1,019,652	20,704	10,274	321,948	170,767	526,937
North Conservancy	364,836	3,101	4,270	83,150	44,889	236,797
East Conservancy	189,734	4,073	4,419	96,712	36,899	56,123
South Conservancy	206,204	7,222	846	64,142	54,565	87,497
West Conservancy	258,878	6,308	739	77,944	34,414	146,520
WALES:	242,787	9,444	3,155	139,832	40,565	62,390
North Conservancy	134,172	5,606	1,733	73,082	22,720	38,370
South Conservancy	108,615	3,838	1,422	66,750	17,845	24,020

NOTE. In the following appendices, former Crown Woods are indicated by asterisks.

AREA STATEMENT OF LAND USE: BY FORESTS—ENGLAND

Appendix 12

At 30th September, 1952

Acres

Forest	Total	Planted during year ended 30th September, 1952		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH WEST CONSERVANCY: TOTAL	95,070	1,568	1,503	52,311	22,532	20,227
Arden, Warwick	491	—	—	—	491	—
Bagot, Staffs	1,221	—	91	282	939	—
Bawtry, Notts	586	3	—	396	142	48
Cannock, Staffs	6,144	—	166	5,560	535	49
Charnwood, Leicester	275	—	—	—	275	—
Clipstone, Derby, Notts, & Yorks	9,740	122	222	6,900	2,563	277
Cotgrave, Notts	370	18	—	200	170	—
Dalton, Westmorland	833	—	70	312	432	89
Delamere, Cheshire*	1,937	—	—	1,898	1	38
Ennerdale, Cumberland	8,405	97	—	3,220	162	5,023
Gisburn, Yorks	2,674	322	—	1,149	1,456	69
Greystoke, Cumberland	1,937	78	22	1,526	168	243
Grizedale, Lancs	5,807	187	235	3,830	1,001	976
Haberley, Salop	412	—	—	—	412	—
Hardknott, Cumberland & Lancs	8,012	141	—	1,286	1,082	5,644
Hope, Derby	2,987	11	—	669	1,010	1,308
Inglewood, Cumberland	299	—	—	—	299	—
Irton, Cumberland	188	—	—	—	165	23
Kershope, Cumberland	12,504	310	—	8,866	1,080	2,558
Kinver, Staffs	900	—	146	530	340	30
Long Mynd, Salop	679	111	—	316	101	262
Longtown, Cumberland	178	—	29	29	84	65

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1952		Under Plantations	Provisional Allocation of Other Land	
		Alforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Mortimer, Hereford & Salop	7,670	15	281	6,695	645	330
Oakamoor, Staffs	595	—	—	3	590	2
Packington, Warwick	288	—	36	36	252	—
Sherwood, Notts	2,829	—	66	2,447	315	67
Spadeadam, Cumberland	8,909	100	—	124	6,731	2,054
Swynnerton, Staffs	986	—	139	690	276	20
Thornthwaite, Cumberland	4,997	53	—	3,533	431	1,033
Walcot, Salop	2,217	—	—	1,814	384	19
NORTH EAST CONSERVANCY:						
TOTAL	187,038	6,269	1,115	86,055	46,348	54,635
Allerston, Yorks	13,941	272	160	10,694	1,825	1,422
Ampleforth, Yorks	4,654	—	112	1,936	2,057	661
Arkengarthdale, Yorks	1,340	—	—	1,121	—	219
Chopwell, Durham*	816	—	3	778	19	19
Cleveland, Yorks	1,095	5	109	190	896	9
Doncaster, Yorks	415	—	—	29	381	5
Hamsterley, Durham	5,810	63	—	4,926	320	564
Harwood, Northumberland	5,766	58	5	1,512	3,398	856
Kidland, Northumberland	274	—	—	—	274	—
Kielder, Northumberland	70,875	3,580	23	32,178	12,994	25,703
Knarsborough, Yorks	485	—	—	—	485	—
Langdale, Yorks	10,839	52	164	2,298	999	7,542
Londesborough, Yorks	429	60	52	125	304	—
Ray, Northumberland	243	—	—	142	101	—
Redesdale, Northumberland	17,627	587	—	8,898	5,165	3,564
Rosedale, Yorks	10,807	416	78	3,581	4,077	3,149
Rothbury, Northumberland	2,463	—	144	1,612	661	190
Scardale, Yorks	972	5	81	476	202	294
Selby, Yorks	796	—	—	794	—	2
Slaley, Northumberland	1,480	—	—	1,252	—	228
Tong Woods, Yorks	183	—	—	—	183	—
Wark, Northumberland	33,206	1,171	—	12,826	10,295	10,085
Wharnciffe, Yorks	1,076	—	90	90	934	52
Widehaugh, Northumberland	70	—	—	—	—	70
York, Yorks	1,376	—	94	597	778	1
EAST CONSERVANCY:						
TOTAL	101,170	599	1,685	71,248	10,950	18,972
Ampthill, Beds	452	—	—	366	3	83
Bardney, Lincoln	3,232	31	128	2,520	576	136
Bernwood, Oxford	1,022	—	—	59	963	—
Bramfield, Herts	541	—	74	234	287	20
Burwell, Lincs	581	—	84	211	370	—
Dunwich, Suffolk	1,355	95	10	834	495	26
Gaywood, Norfolk	435	—	15	132	291	12
Hazelborough, Bucks & Northants*	2,454	—	52	1,907	175	372
Hevingham, Norfolk	611	5	50	249	343	19
Kesteven, Lincoln & Rutland	3,294	3	173	1,934	930	430
The King's Forest, Suffolk	5,932	21	415	4,647	929	356
Laughton, Lincoln	2,144	—	—	2,023	63	58
Rendlesham, Suffolk	4,660	7	17	3,635	31	994
Rockingham, Northants	5,463	20	123	4,341	540	582
Salcey, Bucks & Northants*	1,279	—	—	1,195	54	30
Shouldham, Norfolk	956	13	99	683	185	88

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1952		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
<i>EAST—continued</i>						
Swaffham, Norfolk ...	3,810	—	10	3,181	40	589
Swanton, Norfolk ...	1,651	34	11	1,358	57	236
Theford Chase, Norfolk & Suffolk ...	49,090	163	247	33,845	2,250	12,995
Tunstall, Suffolk ...	3,374	—	1	2,636	11	727
Walden, Essex ...	456	—	16	25	426	5
Walsham, Norfolk ...	533	—	—	157	376	—
Watlington, Oxford ...	598	6	9	288	304	6
Waveney, Norfolk ...	125	—	—	18	97	10
Wendover, Bucks ...	1,164	—	35	734	374	56
Wigsley, Lincoln & Notts ...	1,938	—	106	1,031	553	354
Willingham, Lincoln ...	1,904	201	5	1,585	227	92
Yardley Chase, Beds & Northants ...	2,116	—	5	1,420	—	696
SOUTH EAST CONSERVANCY:						
TOTAL ...	46,925	52	1,677	31,242	13,728	1,955
Abinger, Surrey ...	1,330	—	60	216	953	161
Alice Holt, Hants*	2,342	—	6	1,946	179	217
Alton, Hants ...	948	—	124	507	440	1
Andover, Hants ...	1,000	—	99	821	156	23
Arundel, Sussex ...	2,778	—	55	2,121	590	67
Ashley Hill, Berks ...	300	—	—	7	291	2
Basing, Hants ...	211	—	—	179	32	—
Bedgebury, Kent & Sussex*	2,341	—	63	2,003	120	218
Bere, Hants*	1,443	—	—	1,407	7	29
Bishopstoke, Hants ...	299	—	—	200	99	—
Bramshill, Berks & Hants...	4,275	—	54	3,680	489	106
Brightling, Sussex ...	162	—	—	—	159	3
Bucklebury, Berks ...	207	—	—	—	207	—
Buriton, Hants & Sussex ...	1,733	—	—	1,410	49	274
Challock, Kent ...	1,502	—	53	1,380	117	5
Charlton, Sussex ...	2,534	—	150	1,205	1,329	—
Chiddingfold, Surrey & Sussex ...	2,195	—	2	1,780	410	5
Crawley, Hants ...	315	—	—	315	—	—
Effingham, Surrey ...	417	—	—	—	417	—
Friston, Sussex ...	2,141	—	200	1,485	641	15
Gravetye, Sussex ...	910	—	—	380	23	507
Groombridge, Sussex ...	112	—	—	—	102	10
Hemsted, Kent ...	1,024	—	10	972	18	34
Hursley, Hants ...	2,194	—	196	489	1,705	—
Lyminge, Kent ...	2,495	—	101	2,366	65	64
Marden, Sussex ...	1,193	52	11	727	466	—
Maresfield, Sussex ...	434	—	—	16	417	1
Micheldever, Hants ...	2,197	—	161	1,682	386	129
Mildmay, Kent ...	275	—	—	27	248	—
Orestone, Kent ...	750	—	55	713	35	2
Rogate, Sussex ...	113	—	32	44	69	—
St. Leonards, Sussex ...	743	—	58	186	529	28
Shipbourne, Kent ...	238	—	48	104	132	2
Slindon, Sussex ...	1,358	—	51	749	609	—
Southwater, Sussex ...	350	—	49	279	70	1
Vinehall, Sussex ...	850	—	39	751	82	17
Walderslade, Kent... ..	200	—	—	13	187	—
Westbury, Hants ...	359	—	—	349	—	10
Witley Park, Surrey ...	580	—	—	106	474	—
Woolmer, Hants* ...	2,073	—	—	627	1,426	20
Woking Office Grounds ...	4	—	—	—	—	4

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1952		Under Plantations	Provisional Allocation of Other Land	
		Aforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
SOUTH WEST CONSERVANCY:						
TOTAL	60,989	949	1,412	40,708	14,665	5,616
Bentley, Hants & Wilts ...	1,623	—	—	6	1,614	3
Blandford, Dorset ...	2,526	74	45	483	1,839	204
Bodmin, Cornwall... ..	1,492	—	64	1,076	246	170
Braydon, Wilts	843	—	19	324	517	2
Brendon, Somerset ...	2,190	—	2	1,886	—	304
Bruton, Somerset & Wilts	975	—	34	829	138	8
Charmouth, Devon & Dorset	675	30	4	418	217	40
Collingbourne, Wilts ...	1,239	—	67	1,148	81	10
Cowley Woods, Gloucester	179	—	—	12	166	1
Culmhead, Somerset ...	40	—	—	—	—	40
Dartmoor, Devon	2,287	6	—	1,676	—	611
Dunster, Somerset... ..	1,050	41	70	829	221	—
Dymock, Gloucester & Hereford*	1,600	—	42	1,431	101	68
Eggesford, Devon	880	—	—	841	20	19
Erme, Devon	334	—	32	32	302	—
Fernworthy, Devon	1,480	—	—	1,472	5	3
Gardiner, Dorset & Wilts	1,492	49	35	707	779	6
Glynn, Cornwall	2,246	—	94	1,354	754	138
Haldon, Devon	3,312	—	41	3,000	263	49
Halwill, Devon	4,459	110	23	3,529	256	674
Hartland, Devon	2,143	27	—	1,429	107	607
Haugh, Hereford	606	—	—	551	35	20
Herodsfoot, Cornwall ...	667	—	53	356	286	25
Honiton, Devon	394	63	—	63	305	26
Lydford, Devon	597	—	—	542	13	42
Mendip, Somerset	1,224	26	3	1,128	8	88
Neroche, Somerset	2,130	—	29	642	1,456	32
Okehampton, Devon	519	—	8	332	147	40
Plym, Devon	1,215	—	168	510	702	3
Poorstock, Dorset	502	—	80	150	352	—
Purbeck, Dorset	1,470	392	—	1,115	246	109
Quantock, Somerset	2,283	4	—	1,917	7	359
St. Clement, Cornwall ...	159	—	16	16	143	—
Savernake, Wilts	4,470	—	198	1,827	2,189	454
Sedgemoor, Somerset	212	—	—	—	212	—
Shepton, Somerset... ..	160	—	78	90	70	—
Stanway, Gloucester	1,017	28	12	331	42	644
Stokeleigh, Somerset	640	—	5	297	335	8
Wareham, Dorset	4,092	—	58	3,385	323	384
West Woods, Wilts	1,192	—	33	790	110	292
Wilsey Down, Cornwall ...	1,183	99	—	1,076	33	74
Wyre, Worcester	3,192	—	99	3,108	25	59
NEW FOREST:						
TOTAL	76,425	71	786	35,605	2,526	38,294
Brightstone, Isle of Wight... ..	1,530	65	1	1,066	241	223
Combley, Isle of Wight	559	—	—	548	—	11
Ferndown, Dorset	1,534	—	52	938	69	527
New Forest, Hants*	65,155	1	492	28,532	65	36,558
Osborne, Isle of Wight	134	—	9	50	84	—
Parkhurst, Isle of Wight*... ..	1,270	—	7	960	5	305
Ringwood, Dorset & Hants	5,919	—	189	3,385	1,935	599
Shalfleet, Isle of Wight	324	5	36	126	127	71

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1952		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural Unplantable, &c.
DEAN FOREST: TOTAL	25,697	—	369	20,724	1,200	3,773
Dean Forest, Gloucester, Hereford & Monmouth*	24,440	—	343	19,512	1,200	3,728
Tidenham Chase, Gloucester	1,257	—	26	1,212	—	45

AREA STATEMENT OF LAND USE: BY FORESTS—SCOTLAND

Appendix 13 At 30th September, 1952 Acres

Forest	Total	Planted during year ended 30th September, 1952		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural Unplantable, &c.
NORTH CONSERVANCY: TOTAL	364,836	3,101	4,270	83,150	44,889	236,797
Achnashellach, Ross ...	19,674	—	—	903	3	18,768
Aigas, Inverness ...	1,593	—	12	25	901	667
Ardross, Ross ...	4,149	15	296	3,354	310	485
Assich, Nairn ...	1,043	41	40	678	2	363
Balblair, Sutherland & Ross	1,374	28	17	1,152	—	222
Battan, Inverness ...	1,036	—	188	317	638	81
Boblainy, Inverness ...	2,895	80	201	583	2,177	135
Borgie, Sutherland...	2,705	—	154	911	402	1,392
Ceannacroc, Inverness ...	16,955	158	—	275	1,324	15,356
Clach Liath, Ross ...	547	74	140	424	110	13
Clunes, Inverness ...	5,852	—	81	1,331	165	4,356
Craig nan Eun, Inverness...	1,922	—	—	1,370	—	552
Craig Phadrig, Inverness ...	573	—	52	500	—	73
Craigs, Ross ...	1,208	—	120	120	1,066	22
Cullochen, Inverness ...	2,421	—	252	1,522	753	146
Dornoch, Sutherland ...	727	—	—	670	4	53
Eilanreach, Inverness ...	922	—	—	835	—	87
Farigaig, Inverness ...	7,525	1	131	1,026	1,600	4,899
Ferness, Nairn ...	1,538	—	146	697	278	563
Findon, Ross ...	2,366	—	273	2,244	10	112
Fiunary, Argyll ...	18,341	270	—	3,467	1,924	12,950
Glen Affric, Inverness ...	53,393	—	—	2,062	6,161	45,170
Glen Brittle, Skye, Inverness	8,858	1	—	1,391	140	7,327
Glen Garry, Inverness ...	21,978	—	222	3,981	296	17,701
Glen Hurich, Argyll ...	15,180	5	28	2,839	962	11,379
Glen Loy, Inverness ...	2,547	100	—	1,928	101	518
Glen Righ, Inverness ...	5,883	175	—	2,011	180	3,692
Glen Shiel, Ross ...	3,653	—	—	765	—	2,888
Glen Urquhart, Inverness	16,047	102	69	2,418	2,542	11,087
Guisachan, Inverness ...	5,549	109	—	1,429	1,369	2,751
Inchnacardoch, Inverness...	9,145	62	—	2,206	198	6,741
Inshriach, Inverness ...	2,297	—	116	1,448	328	521
Inverinate, Ross ...	1,234	—	—	1,034	—	200
Kessock, Ross ...	1,205	64	—	1,060	60	85
Kilcoy, Ross ...	3,423	—	174	2,319	561	543
Lael, Ross ...	2,344	—	61	1,902	15	427
Laiken, Nairn ...	845	—	124	300	527	18
Leanachan, Inverness ...	7,546	316	—	2,350	3,510	1,686
Loch Erich, Inverness ...	933	—	—	183	506	244

Appendix 13—continued

Forest	Total	Planted during year ended 30th September, 1952		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
<i>NORTH—continued</i>						
Longart, Ross	1,264	—	22	1,145	—	119
Millbuie, Ross	6,939	—	430	6,081	252	606
Morangie, Ross	6,161	288	224	1,988	2,597	1,576
Nevis, Inverness	7,659	12	—	980	—	6,679
North Strome, Ross	1,969	—	—	873	—	1,096
Oykell, Ross & Sutherland	352	—	—	—	352	—
Portclair, Inverness	5,500	1	—	2,353	—	3,147
The Queen's Forest, Inverness	12,500	126	40	2,642	658	9,200
Raasay, Isle of Raasay, Inverness	715	46	50	335	192	188
Ratagan, Inverness & Ross	2,481	—	—	1,558	—	923
Rumster, Caithness	2,362	140	—	389	725	1,248
Salen, Mull, Argyll	8,718	109	—	2,672	1,152	4,894
Shin, Sutherland	15,683	222	96	906	2,665	12,112
Slattadale, Ross	1,154	—	9	703	—	451
South Laggan, Inverness	4,110	—	—	1,127	—	2,983
South Strome, Ross	3,556	—	—	1,163	—	2,393
Strath Conon, Ross	9,799	202	—	993	1,407	7,399
Strath Dearn, Inverness	2,357	—	179	747	727	883
Strath Mashie, Inverness	2,420	—	—	258	1,600	562
Strath Nairn, Inverness	4,314	169	6	1,009	1,049	2,256
Strathy, Sutherland	504	—	—	—	281	223
Struie, Ross	758	110	—	230	380	148
Sunart, Argyll	1,475	75	—	80	1,135	260
Torrachilty, Ross	3,620	—	155	292	221	3,107
Urray, Ross	1,040	—	162	596	373	71
EAST CONSERVANCY:						
TOTAL	189,734	4,073	4,419	96,712	36,899	56,123
Allean, Perth	2,940	110	—	1,008	1,069	863
Alltcaillach, Aberdeen	3,833	34	188	3,687	30	116
Bin, Aberdeen	5,987	134	—	5,191	40	756
Blackcraig, Perth	2,048	—	—	1,526	31	491
Blackhall, Kincardine	3,174	—	291	1,958	1,132	84
Blairadam, Fife & Kinross	1,911	—	—	1,616	75	220
Carden, Fife	547	—	26	518	6	23
Clashindarroch, Aberdeen	21,148	600	—	8,682	964	11,502
Corrennie, Aberdeen	1,913	—	241	646	1,069	198
Countesswells, Aberdeen	664	37	—	566	66	32
Craigvinean, Perth	4,463	340	12	2,910	630	923
Culbin, Moray & Nairn	7,546	195	135	5,545	1,369	632
Dallas, Moray	2,073	104	68	814	491	768
Forest of Deer, Aberdeen	2,251	2	—	2,061	47	143
Delgaty, Aberdeen	953	—	163	335	616	2
Drummond Hill, Perth	5,577	76	5	3,716	173	1,688
Drumtochty, Kincardine	9,998	—	—	2,509	2,995	4,494
Durris, Kincardine	4,002	—	44	3,560	169	273
Edensmuir, Fife	1,701	30	54	1,301	257	143
Fetteresso, Kincardine	8,765	506	12	3,002	3,098	2,665
Fonab, Perth	1,558	43	7	50	1,080	428
Glen Devon, Perth & Kinross	915	30	—	880	5	30
Glendoll, Angus	8,163	105	—	226	1,252	6,685
Glenarrochy, Perth	2,440	—	111	129	1,521	790
Glenisla, Angus	10,467	280	124	962	2,728	6,777
Glenlivet, Banff	5,306	398	—	2,925	1,008	1,373
Hallyburton, Angus & Perth	1,583	—	163	536	1,033	14

Appendix 13—continued

Forest	Total	Planted during year ended 30th September, 1952		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
<i>EAST—continued</i>						
Inglismaldie, Kincardine ...	1,144	—	14	1,137	—	7
Keillour, Perth ...	1,726	174	12	1,449	214	63
Kemnay, Aberdeen ...	1,227	—	4	1,209	—	18
Kinfauns, Perth ...	827	—	—	665	159	3
Kirkhill, Aberdeen ...	1,633	—	109	1,400	92	141
Ledmore, Perth ...	137	—	—	—	—	137
Lossie, Moray ...	1,904	100	—	1,466	231	207
Midmar, Aberdeen ...	1,340	—	64	736	306	298
Monaghty, Moray ...	4,344	—	245	3,458	521	365
Montreatmont, Angus ...	2,405	—	123	2,250	111	44
Newton, Moray ...	175	—	—	—	—	175
Newtyle, Moray ...	1,928	—	—	887	654	387
Pitfichie, Aberdeen ...	5,247	—	373	2,155	1,884	1,208
Pitmedden, Fife ...	1,825	—	102	1,429	304	92
Rannoch, Perth ...	3,786	141	131	1,336	2,053	397
Rosarie, Banff ...	3,576	254	208	2,270	255	1,051
Roseisle, Moray ...	2,322	52	3	2,042	—	280
Scotmore, Banff & Moray	820	—	—	815	—	5
Speymouth, Moray ...	9,142	—	842	4,833	3,419	890
Strathord, Perth ...	1,112	85	—	1,068	42	2
Teindland, Moray ...	2,372	—	174	1,288	684	400
Tentsmuir, Fife ...	4,331	121	4	3,510	114	707
Tilliefoure, Aberdeen ...	3,632	—	273	2,132	419	1,081
Tornashean, Aberdeen ...	9,277	122	94	1,115	2,483	5,679
Whitehaugh, Aberdeen ...	1,576	—	—	1,203	—	373
SOUTH CONSERVANCY:						
TOTAL ...	206,204	7,222	846	64,142	54,565	87,497
Forest of Ae, Dumfries ...						
Auchenroddan, Dumfries...	10,708	904	3	6,483	1,797	2,428
Bareagle, Wigtown ...	730	—	—	704	—	26
Brownmoor, Dumfries ...	202	3	48	99	46	57
Cairn Edward, Kirkcudbright	457	—	56	166	291	—
Cardrona, Peebles ...	15,032	977	45	6,278	4,945	3,809
Carrick, Ayr ...	1,860	—	—	1,384	—	476
Castle O'er, Dumfries ...	46,789	1,036	—	3,298	6,885	36,606
Change, Ayr ...	2,866	—	47	2,201	303	362
Clachrie, Dumfries ...	2,193	—	—	1,532	—	661
Corriedoo, Kirkcudbright	639	41	8	428	206	5
Craigieburn, Dumfries ...	1,022	22	—	954	22	46
Craik, Roxburgh ...	586	64	13	462	73	51
Dalbeattie, Kirkcudbright	3,368	465	—	1,809	370	1,189
Dalmacallan, Dumfries ...	4,366	89	—	3,839	6	521
Dreva, Peebles ...	1,455	—	108	245	1,110	100
Dundeugh, Kirkcudbright	1,004	—	51	153	831	20
Duns, Berwick ...	5,965	320	3	1,457	3,049	1,459
Edgarhope, Berwick ...	432	28	24	52	378	2
Elibank, Peebles & Selkirk	1,711	—	26	1,071	146	494
Fleet, Kirkcudbright ...	3,003	245	5	1,558	490	955
Garcrogo, Kirkcudbright...	1,357	—	27	1,015	136	206
Glengap, Kirkcudbright ...	1,914	162	—	1,142	556	216
Glentess, Peebles ...	2,176	138	—	844	863	469
Glen Trool, Kirkcudbright	2,349	—	110	1,794	95	460
Greskine, Dumfries ...	41,550	1,010	30	3,839	11,961	25,750
Kilgrammie, Ayr ...	1,215	18	8	868	163	184
Kilsture, Wigtown ...	568	30	34	246	322	—
	511	—	3	494	13	4

Appendix 13—continued

Forest	Total	Planted during year ended 30th September, 1952		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
SOUTH—continued						
Kirroughtree, Kirkcudbright	11,109	249	13	3,348	4,553	3,208
Laurieston, Kirkcudbright	4,405	199	—	1,298	2,082	1,025
Leithope, Roxburgh ...	1,165	100	—	373	792	—
Mabie, Kirkcudbright ...	2,726	62	94	1,780	476	470
Newcastleton, Roxburgh ...	3,553	—	5	3,284	101	168
Penninghame, Wigtown ...	5,341	249	15	435	3,306	1,600
Selm Muir, Midlothian ...	230	—	—	46	184	—
Shielswood, Selkirk ...	1,013	—	—	—	—	1,013
Stenton, East Lothian ...	540	—	56	89	437	14
Tinnisburn, Dumfries & Roxburgh ...	1,404	13	14	1,274	—	130
Twiglees, Dumfries ...	5,137	91	—	4,656	124	357
Wauchope, Roxburgh ...	11,574	543	—	2,748	6,116	2,710
Yair Hill, Selkirk ...	1,979	164	—	396	1,337	246
WEST CONSERVANCY:						
TOTAL	258,878	6,308	739	77,944	34,414	146,520
Achaglachgach, Argyll ...	1,969	37	—	1,646	—	323
Ardgartan, Argyll ...	18,126	—	—	4,259	953	12,914
Asknish, Argyll ...	5,901	425	6	2,789	817	2,295
Barcaldine, Argyll ...	4,005	140	—	3,408	486	111
Benmore, Argyll ...	9,687	26	231	2,556	1,116	6,015
Carradale, Argyll ...	11,313	372	135	2,878	1,227	7,208
Carron Valley, Stirling ...	6,640	348	45	4,007	599	2,034
Corlarach, Argyll ...	5,510	201	—	1,063	1,226	3,221
Devilla, Fife & Clackmannan	2,507	—	—	1,015	1,414	78
Fearnoch, Argyll ...	1,342	—	—	1,121	—	221
Garadhban, Stirling ...	1,297	6	—	1,074	172	51
Garelochhead, Dunbarton	827	115	—	266	435	126
Glenbranter, Argyll ...	8,726	—	—	3,364	274	5,088
Glencoe, Argyll ...	331	20	—	56	209	66
Glendaruel, Argyll ...	6,996	173	—	970	1,622	4,404
Glenduror, Argyll ...	8,319	143	2	2,384	112	5,823
Glenfinart, Argyll ...	8,712	—	33	2,633	528	5,551
Glenrickard, Arran, Bute-shire ...	1,660	62	—	71	468	1,121
Inverinan, Argyll ...	12,796	427	—	3,447	2,335	7,014
Inverliever, Argyll*	29,522	37	23	4,769	2,067	22,686
Kilmichael, Argyll ...	12,689	599	—	2,442	2,359	7,888
Kilmory, Argyll ...	3,169	276	2	354	1,748	1,067
Knapdale, Argyll ...	19,702	509	—	5,464	1,078	13,160
Lennox, Stirling ...	580	—	—	533	—	47
Loch Ard, Perth & Stirling	31,907	931	80	11,222	6,981	13,704
Loch Eck, Argyll ...	5,502	—	—	2,412	30	3,060
Minard, Argyll ...	5,168	306	27	1,914	1,438	1,816
Rowardennan, Stirling	9,464	36	133	631	2,730	6,103
Saddell, Argyll ...	4,917	312	8	1,389	79	3,449
St. Fillans, Perth ...	426	—	—	—	361	65
Strathlachlan, Argyll	7,616	445	—	1,592	1,272	4,752
Strathyre, Perth ...	10,464	153	14	5,475	172	4,817
Torrie, Perth ...	976	209	—	740	106	130
Tulliallan, Fife ...	112	—	—	—	—	112

AREA STATEMENT OF LAND USE: BY FORESTS—WALES

Appendix 14

At 30th September, 1952

Acres

Forest	Total	Planted during year ended 30th September, 1952		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH CONSERVANCY:						
TOTAL	134,172	5,606	1,733	73,082	22,720	38,370
Aberhirnant, Merioneth ...	6,399	316	37	1,385	1,771	3,243
Bechan, Montgomery ...	328	3	39	153	175	—
Beddgelert, Caernarvon ...	2,771	2	—	1,677	33	1,061
Brynmawr, Cardigan ...	1,913	138	32	1,287	391	235
Carno, Montgomery ...	784	33	62	336	390	58
Clocaenog, Denbigh & Merioneth ...	14,940	654	—	8,855	3,000	3,085
Coed Clwyd, Denbigh ...	1,627	199	48	711	620	296
Coed Penlyn, Merioneth ...	1,807	255	46	532	1,091	184
Coed Sarnau, Radnor ...	4,527	468	22	2,814	520	1,193
Coed Taliesin, Cardigan ...	68	—	—	—	68	—
Coed y Brenin, Merioneth	16,916	557	33	8,603	1,341	6,972
Coed y Goror, Denbigh & Salop	988	—	134	697	266	25
Commins Coch, Montgomery	1,073	166	40	654	162	257
Cwmeinion, Cardigan ...	938	—	—	605	—	333
Cynwyd, Merioneth ...	1,829	—	57	1,580	134	115
Dovey, Merioneth & Montgomery	14,597	677	77	10,312	1,843	2,442
Dyfnant, Montgomery ...	4,544	441	24	1,817	1,589	1,138
Glyn y Groes, Denbigh ...	769	—	131	221	534	14
Gwydyr, Caernarvon & Denbigh	19,414	486	123	10,096	1,714	7,604
Hafod Fawr, Merioneth*	1,367	23	—	623	11	733
Hafren, Montgomery ...	10,614	717	42	5,631	2,368	2,615
Kery, Montgomery & Salop	2,403	—	22	2,202	73	128
Lleyn, Caernarvon ...	210	—	59	59	151	—
Mathrafal, Montgomery ...	1,090	12	115	646	422	22
Myherin, Cardigan ...	10,068	89	227	5,176	1,422	3,470
Newborough, Anglesey ...	2,374	165	—	698	1,021	655
Pentraeth, Anglesey ...	390	65	—	187	171	32
Radnor, Radnor ...	5,439	69	206	3,181	963	1,295
St. Asaph, Denbigh & Flint	1,367	30	157	834	436	97
Tarenig, Cardigan & Montgomery	2,614	41	—	1,510	40	1,064
Chirk Depot, Denbigh ...	4	—	—	—	—	4
SOUTH CONSERVANCY:						
TOTAL	108,615	3,838	1,422	66,750	17,845	24,020
Brechfa, Carmarthen ...	15,229	51	33	11,276	369	3,584
Brecon, Brecon ...	1,870	—	15	1,575	—	295
Caio, Carmarthen ...	3,799	—	—	2,552	198	1,049
Chepstow, Monmouth ...	1,513	—	12	1,368	144	1
Cilgwyn, Carmarthen ...	335	2	28	219	114	2
Coed Caerdydd, Glamorgan	600	—	—	69	517	14
Coed Taf Fawr, Brecon ...	2,342	132	—	529	605	1,208
Coed y Brithdir, Glamorgan,	92	—	—	—	87	5
Coed y Rhaiadr, Brecon ...	952	98	—	687	245	20
Crychan, Brecon & Carmarthen	9,728	588	119	6,404	968	2,356
Cwmogwr, Glamorgan ...	3,966	392	89	2,018	306	1,642
Derry Ormond, Cardigan...	923	—	52	644	94	185

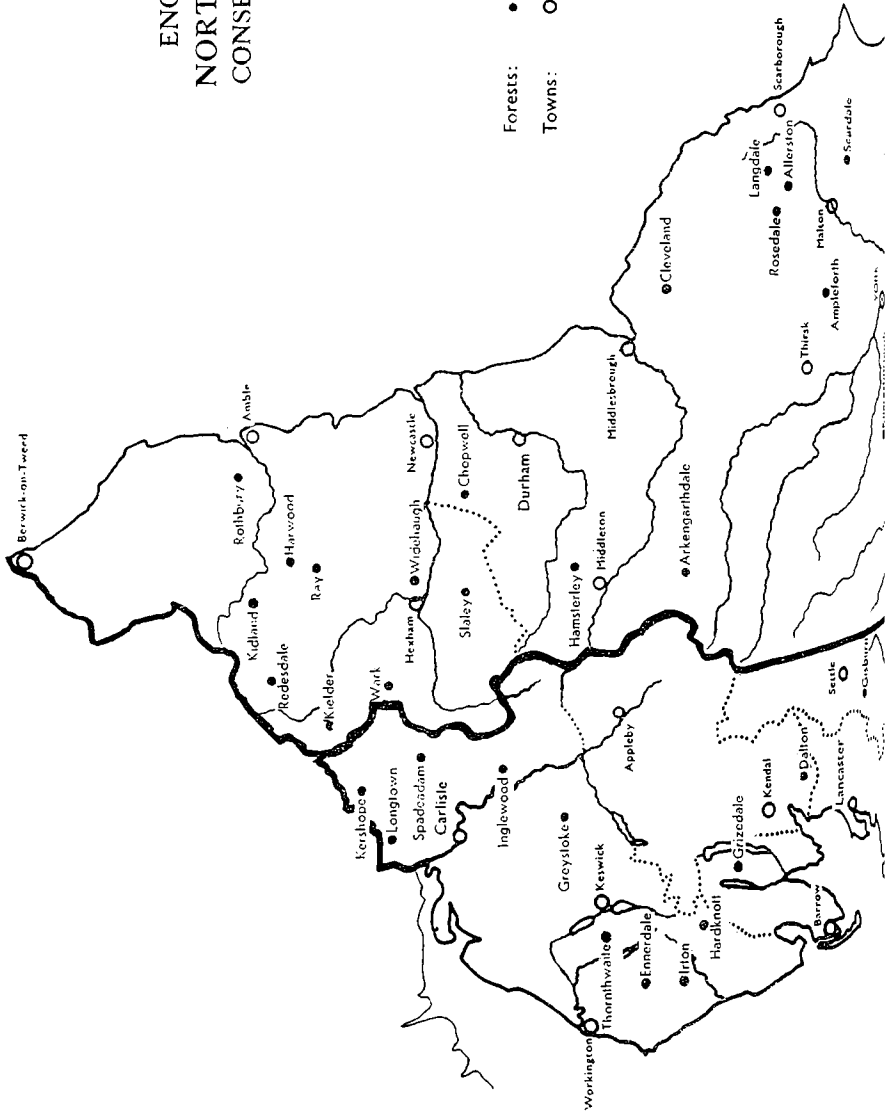
Appendix 14—*continued*

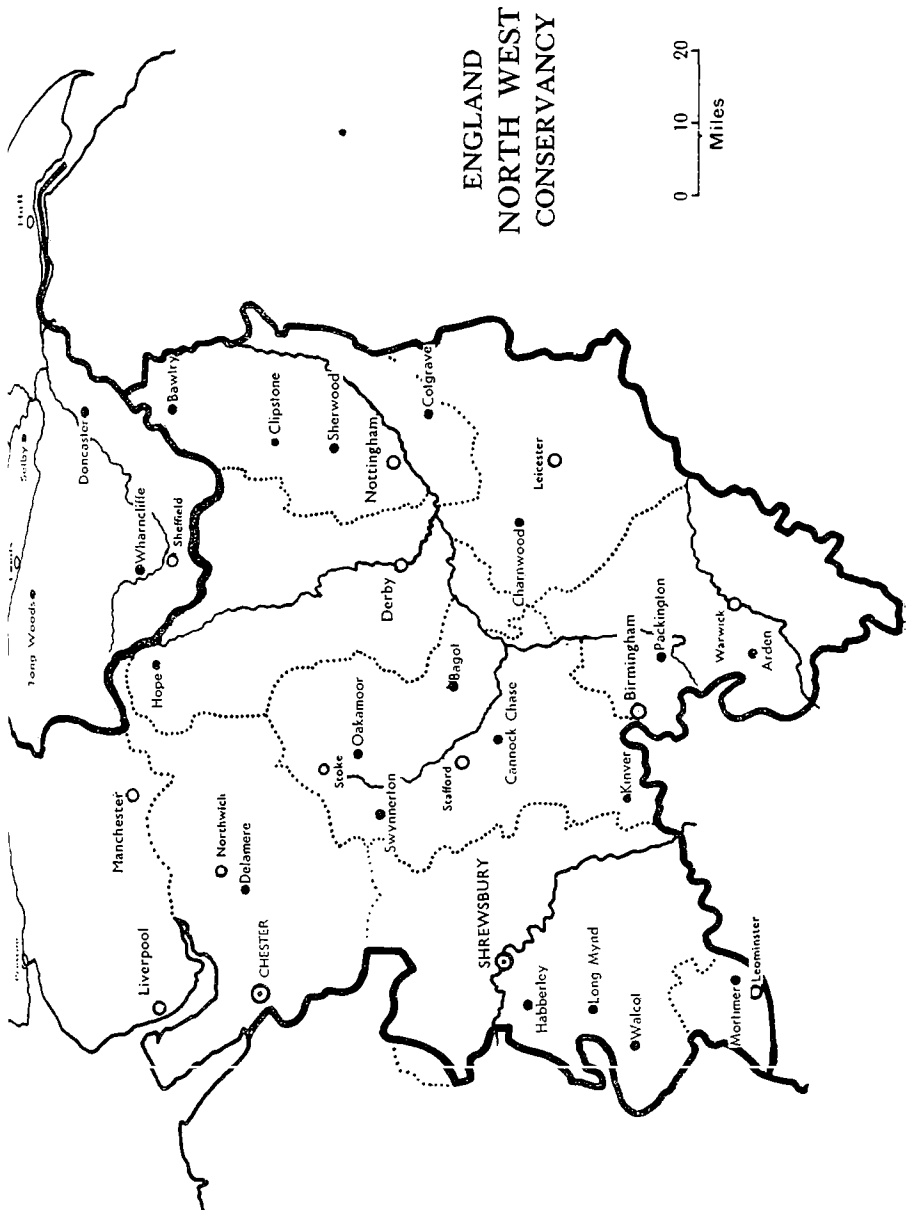
Forest	Total	Planted during year ended 30th September, 1952		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural Unplantable, &c.
<i>SOUTH—continued</i>						
Draethen, Glamorgan ...	342	—	129	187	142	13
Dunraven, Glamorgan ...	4,815	315	—	718	623	3,474
Ebbw, Monmouth ...	465	—	108	190	97	178
Gamrhiw, Brecon ...	493	42	20	62	311	120
Giedd, Brecon ...	746	—	—	584	18	144
Glasfynydd, Brecon ...	2,951	148	—	2,712	113	126
Goytre, Monmouth ...	326	—	25	233	89	4
Hay, Brecon & Hereford ...	925	69	—	821	98	6
Irfon, Brecon ...	340	119	—	247	93	—
Llandowror, Carmarthen ...	204	—	—	—	161	43
Llandeilo, Carmarthen ...	471	5	1	124	212	135
Llanover, Monmouth ...	2,837	28	121	2,550	22	265
Llantrisant, Glamorgan ...	1,356	—	57	1,107	143	106
Margam, Glamorgan ...	5,652	237	177	2,769	930	1,953
Michaelston, Glamorgan ...	6,179	396	3	3,033	1,572	1,574
Monmouth, Monmouth ...	1,212	—	44	360	761	91
Mynydd Ddu, Brecon & Monmouth ...	2,719	—	—	1,571	400	748
Pembrey, Carmarthen ...	4,501	2	—	1,620	740	2,141
Rheola, Glamorgan ...	13,752	951	24	9,884	2,787	1,081
St. Gwynno, Glamorgan ...	3,597	—	51	2,648	307	642
Sirhowy, Monmouth ...	326	—	—	—	312	14
Slebech, Pembroke ...	1,545	—	93	398	1,105	42
Taf Fechan, Brecon ...	1,131	120	—	1,019	5	107
Tair Onen, Glamorgan ...	189	1	2	52	—	137
Talybont, Brecon ...	2,765	136	—	1,171	1,504	90
Teifi, Carmarthen ...	464	6	50	56	408	—
Tintern, Monmouth*	4,969	—	72	4,344	216	409
Towy, Cardigan & Brecon	832	—	—	—	832	—
Wentwood, Monmouth ...	1,162	—	97	949	197	16

MAPS

Outline maps showing the distribution of the Commission forests, and the boundaries of the Conservancies, as at 30th September 1952, follow on pages 78 to 89.

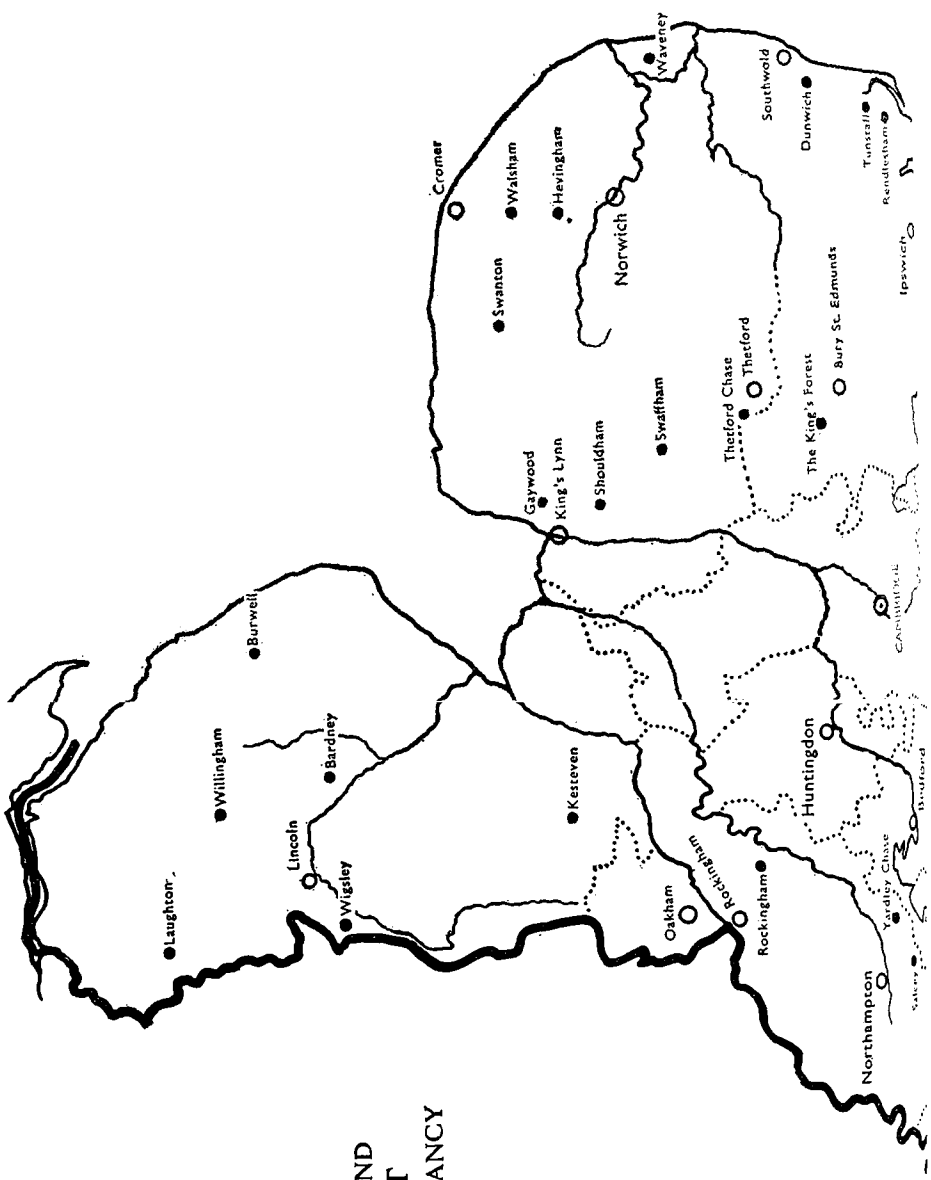
ENGLAND NORTH EAST CONSERVANCY

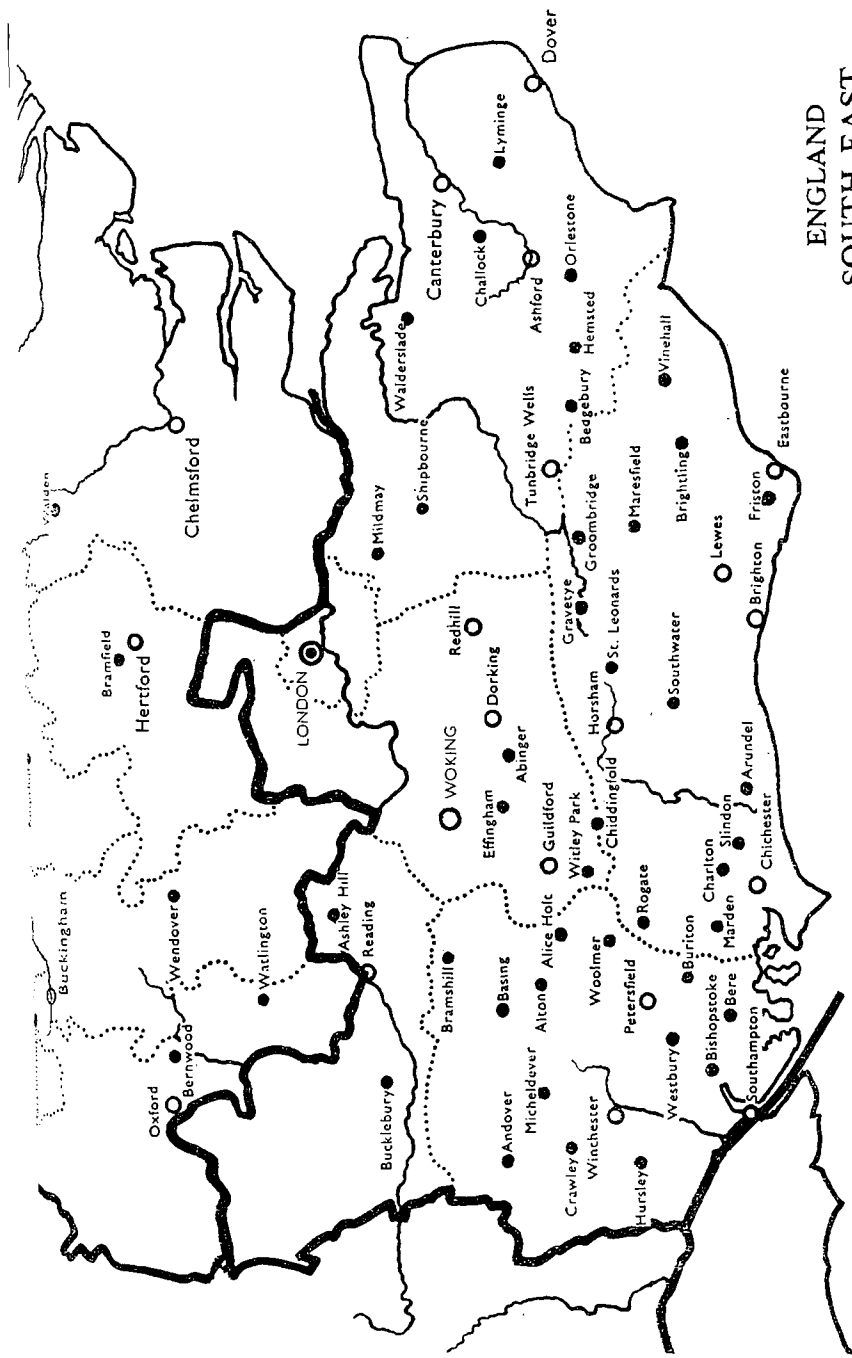




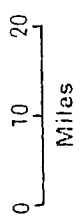
ENGLAND EAST CONSERVANCY

Forests: ●
Towns: ○

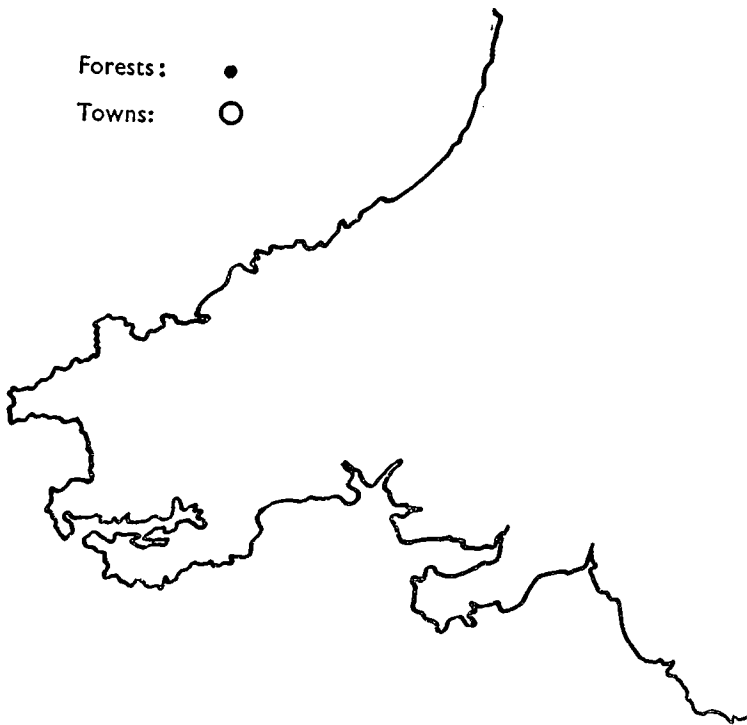




ENGLAND
SOUTH EAST
CONSERVANCY

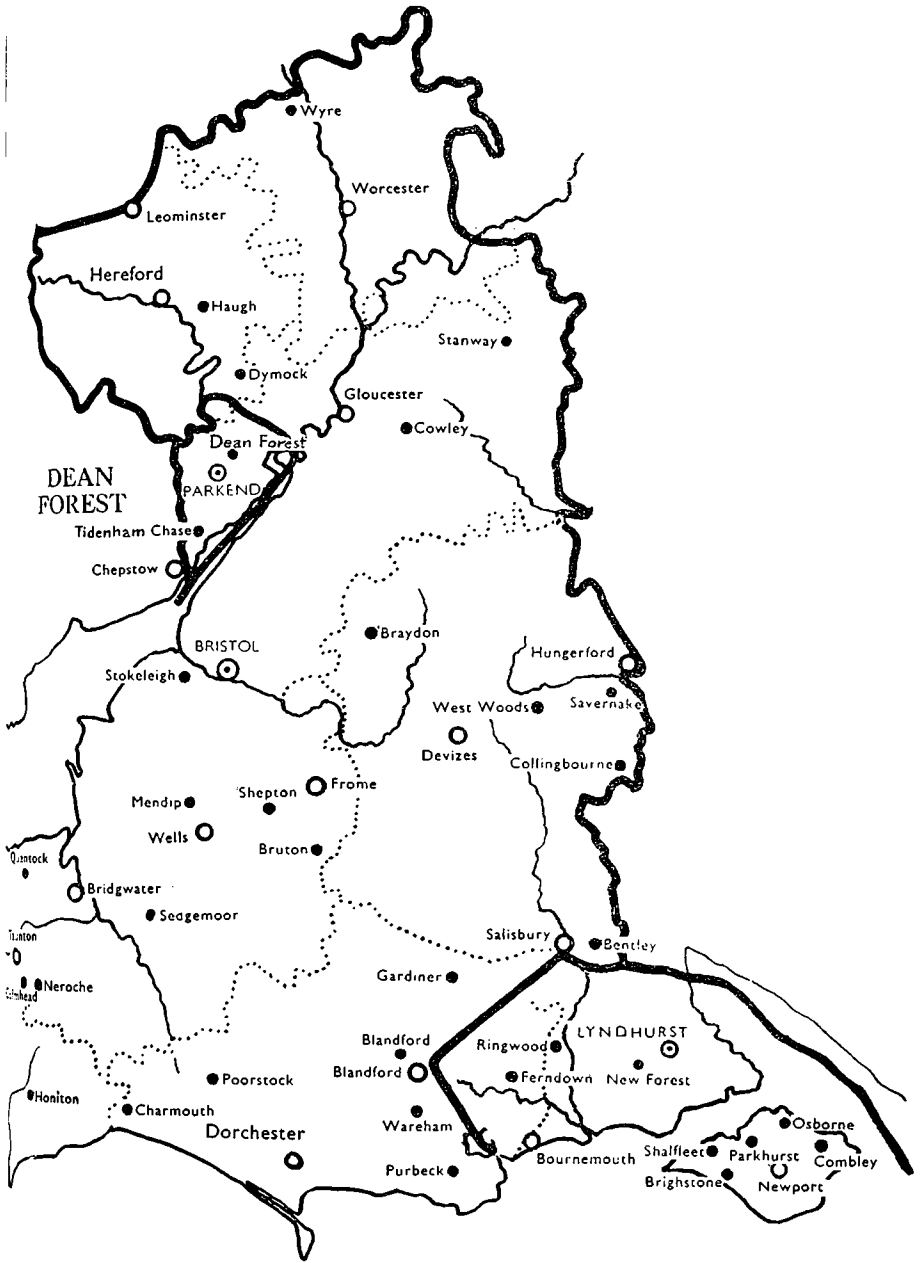


Forests: ●
 Towns: ○

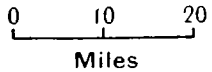


ENGLAND
 SOUTH WEST
 CONSERVANCY





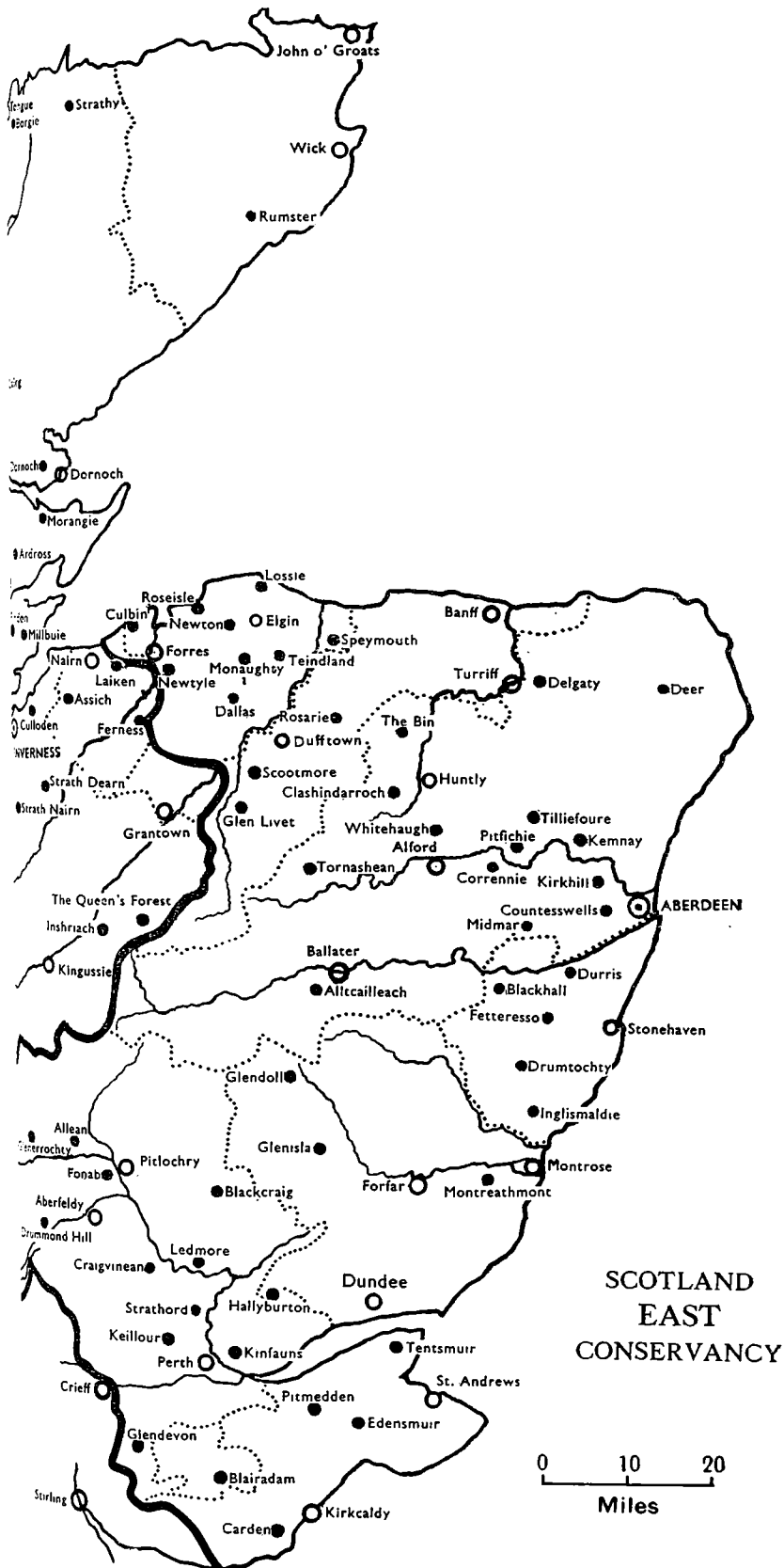
NEW FOREST



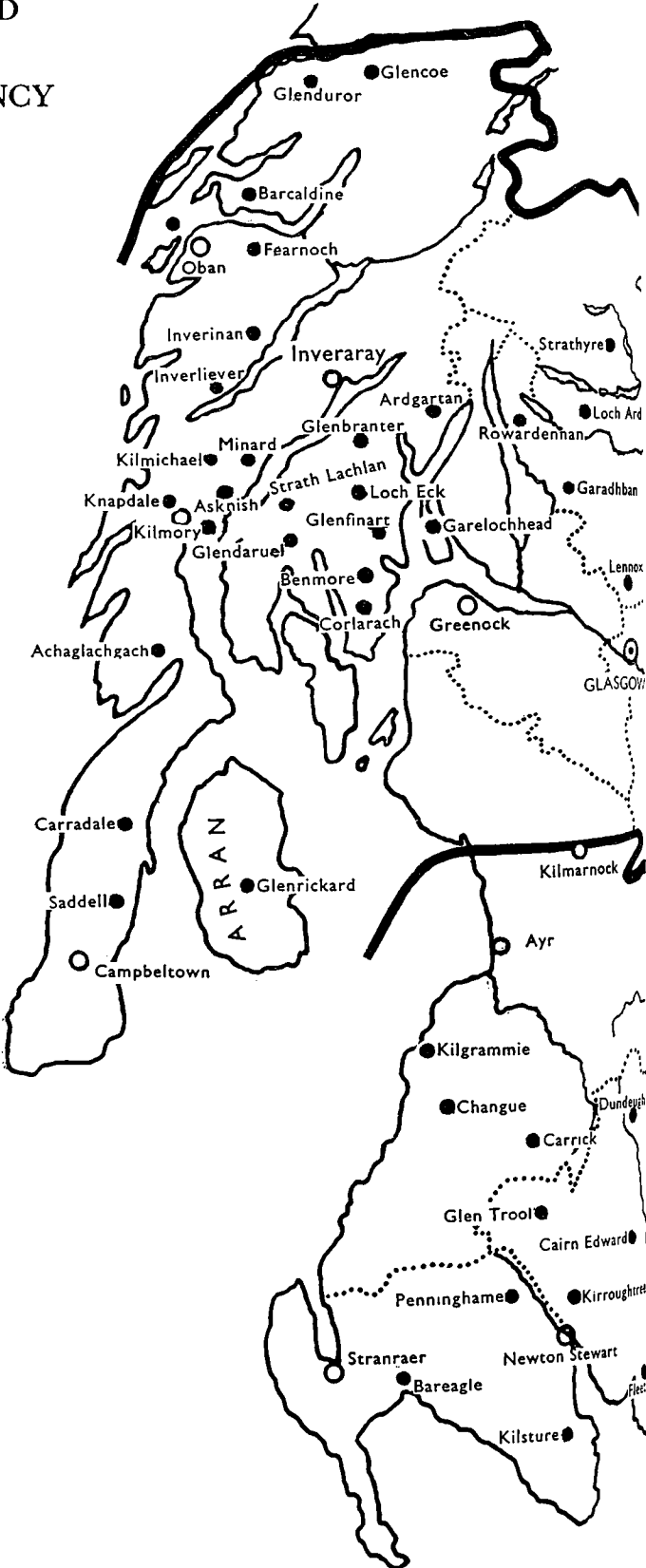
SCOTLAND NORTH CONSERVANCY

- Forests: ●
Towns: ○

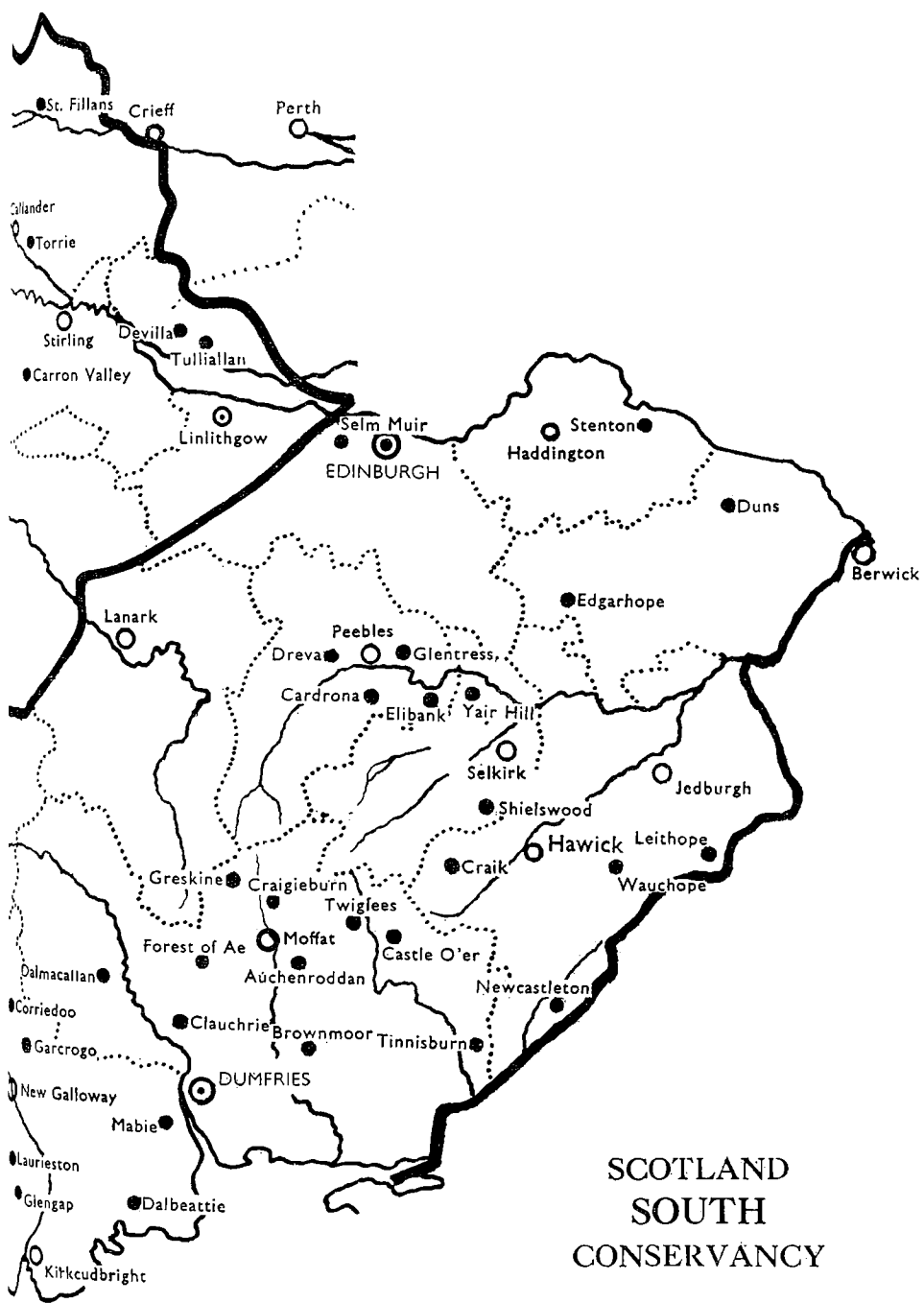




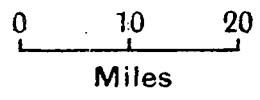
SCOTLAND
WEST
CONSERVANCY



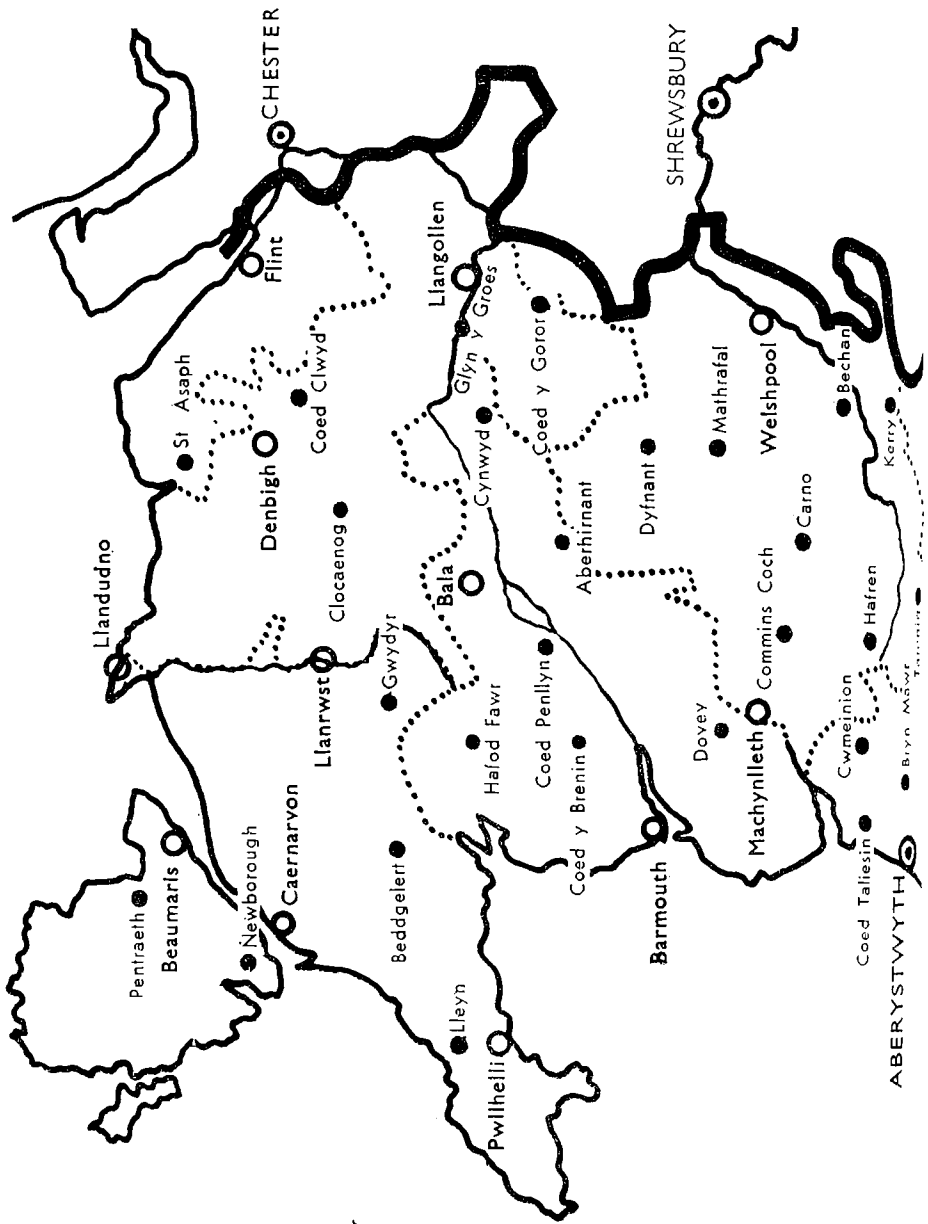
Forests: ●
 Towns: ○



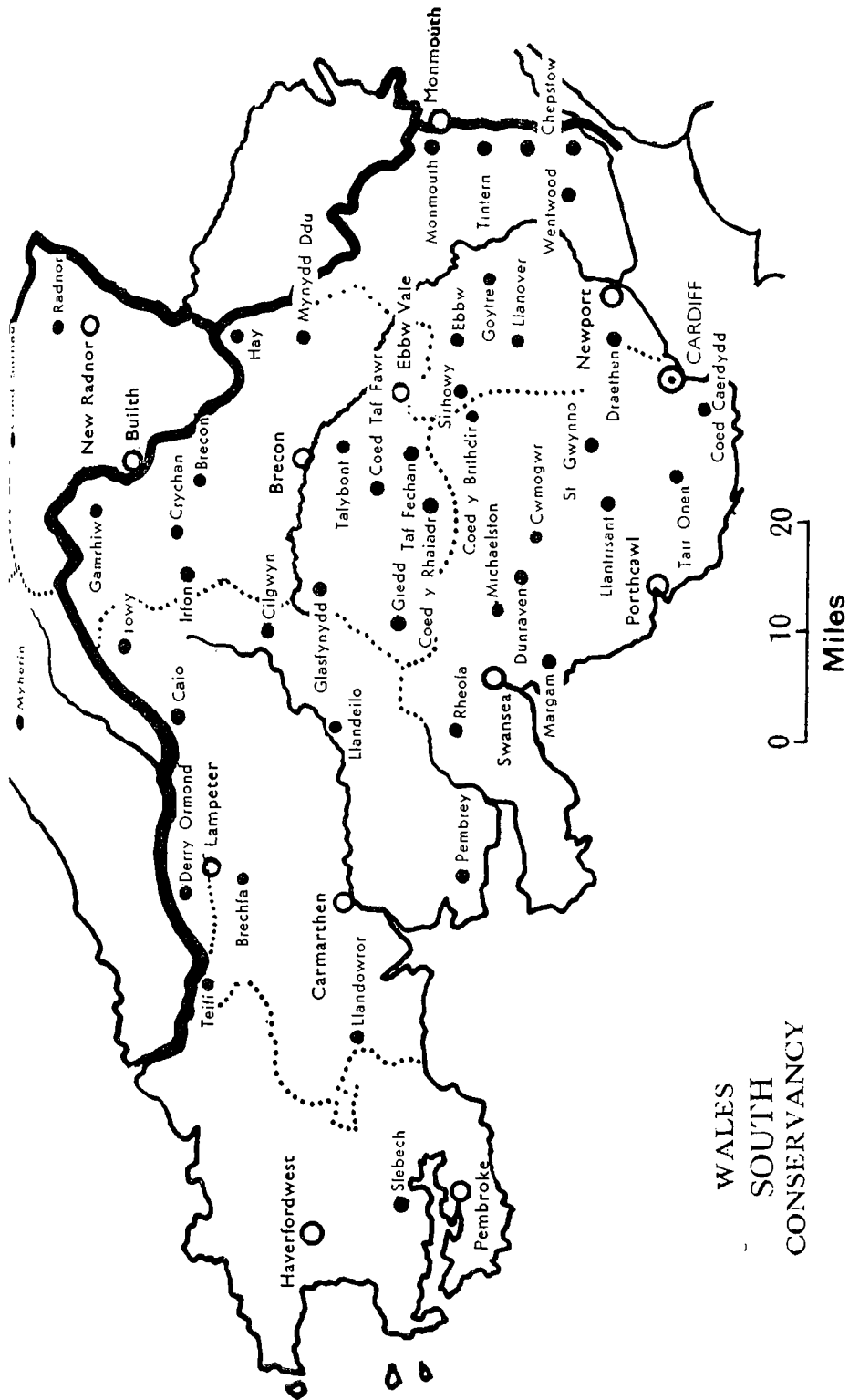
**SCOTLAND
 SOUTH
 CONSERVANCY**



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. Telephone: Regent 0221.

Director of Forestry for England:

1, Princes Gate, London, S.W.7. Telephone: Kensington 9691.

Director of Forestry for Scotland:

25, Drumsheugh Gardens, Edinburgh 3.

Telephone: Edinburgh Central 4782.

Director of Forestry for Wales:

Victoria House, Aberystwyth. Telephone: Aberystwyth 367.

Director of Research and Education:

25, Savile Row, London, W.1. Telephone: Regent 0221.

Conservancy Offices

England:

North-West: Upton Grange, Upton-by-Chester, Cheshire
(Chester 24006-7).

North-East: Briar House, Fulford Rd., York (York 4684).

East: Brooklands Avenue, Cambridge (Cambridge 54495).

South-East: Danesfield, Grange Rd., Woking (Woking 2270-1).

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

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

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

Scotland:

North: 60, Church St., Inverness (Inverness 223, 608-9).

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

South: Greystone Park, Moffat Rd., Dumfries (Dumfries 1156).

West: 112, West George St., Glasgow, C.2. (Douglas 7261-2-3).

Wales:

North: 15, Belmont, Shrewsbury (Shrewsbury 4071-2).

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