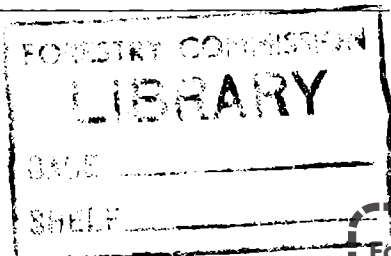


FORESTRY COMMISSION

Thirty-Seventh
Annual Report of the
Forestry Commissioners
for the year ended
30th September 1956

*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
30th May 1957*



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FORESTRY COMMISSION,
25, SAVILE ROW,
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20th March, 1957

To:

THE MINISTER OF AGRICULTURE, FISHERIES AND FOOD
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 37th Annual Report of the Forestry Commissioners covering the Forest Year ended 30th September 1956.

I am,

Gentlemen,

Your obedient Servant,
(Sd.) RADNOR,
Chairman.

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THIRTY-SEVENTH ANNUAL REPORT

OF THE

FORESTRY COMMISSIONERS

FOR THE YEAR ENDED

SEPTEMBER 30th 1956

GENERAL REVIEW

THE MILLIONTH ACRE

Her Majesty the Queen, accompanied by His Royal Highness the Duke of Edinburgh, visited Eggesford Forest on 8th May, 1956, to unveil a commemorative stone recording the planting by the Forestry Commission of the millionth acre of forest. Eggesford Forest, which lies halfway between Exeter and Barnstaple, was chosen for this ceremony for it was there that the Commission, soon after its formation in 1919, started its work of replanting and extending our forests.

Her Majesty was met at the forest by the Earl of Radnor, Chairman of the Forestry Commissioners, accompanied by the Commissioners; the Rt. Hon. D. Heathcoat Amory, Minister of Agriculture, Fisheries and Food; the Rt. Hon. James Stuart, Secretary of State for Scotland; Sir Arthur Gosling, Director General of the Forestry Commission and other senior officers.

A bronze plate on the stone records:

“This stone, unveiled by Her Majesty Queen Elizabeth II on 8th May, 1956, commemorates the planting by the Forestry Commission of one million acres in Great Britain.

The Commission's first trees were planted on 8th December, 1919, in Eggesford Forest.”

After the ceremony Her Majesty and His Royal Highness each planted an oak tree near the stone.

PLANTING AND ACQUISITION OF LAND

THE FIRST DECADE OF POST WAR FORESTRY

The Forest Year 1956 brings to an end the first decade of post war forestry. The White Paper (Cmd. 6447),* on which this country's forest policy and programme is based, was published in 1943, but it was not until Forest Year 1947 that a beginning could be made on the programme proposed in the White Paper. It is appropriate, then, to compare what has actually been achieved in acquisitions and planting with the desirable programme set out in the White Paper.

The total afforestation and replanting proposed for the Forestry Commission for the first ten years was 900,000 acres. What has been actually achieved is 548,000 acres, or 61 per cent. of the programme. For acquisitions the proposals were 1,850,000 acres; and there have actually been acquired 493,000 acres of plantable land or 27 per cent. The achievement therefore is in both cases very short of the desirable programme. Although there were certain labour and other shortages in the first years of the decade, the main reason for the shortfall in the planting achievement is the lack of land. It may seem surprising that

* Report on Post-War Forest Policy Cmd. 6447, H.M.S.O. 4s. 0d.

61 per cent. of the planting programme was achieved while acquisitions were only 27 per cent. of the target figures, but this was possible because of the comparatively large reserve of plantable ground that the Commissioners held in 1947. It might be argued with justification that the target set for acquisitions, at 1,850,000 acres in ten years, was far too high, but even so there is no doubt that the rate of acquisition in the last few years has been much too low to sustain anything like the desirable planting programme or even a planting programme which could increase at a modest rate. The net amounts of plantable land, excluding standing woods, acquired in the last three years are as follows:—

Forest Year 1954	...	...	73,500 acres
Forest Year 1955	...	...	56,700 acres
Forest Year 1956	...	...	54,200 acres

The areas planted for the same years were:—

Forest Year 1954	...	...	...	70,400 acres
Forest Year 1955	...	...	...	67,900 acres
Forest Year 1956	...	...	...	62,400 acres

For the last two years acquisitions have been substantially less than the area planted and thus must affect the planting programme until the rate of acquisitions rises.

The Commissioners have given much thought to the whole question of their programme and have reached the conclusion that it is not the total size of the programme that is at fault but that the rate of achieving this was originally set too high. Their very definite view is that there is adequate land of the right type and of relatively low agricultural productivity to make possible in the long term a forest estate in Great Britain of five million acres of properly managed woodlands under both private and Forestry Commission management. They are also of the view that from an economic and social standpoint, the original intention to provide from home sources approximately one-third of the country's pre-war consumption of wood in all its forms is a realistic objective. The great problem is to ensure a steady flow of acquisitions of suitable land so that the rate of planting may be substantially increased and so that the achievement of five million acres of fully productive woodland may not be too long delayed.

The main source of new acquisitions must be privately owned land. One means of securing land for planting might be by the use of compulsory powers. The Commissioners believe that the use of these powers in any but very exceptional circumstances would not, in fact, achieve the purpose they have before them. They rely instead on the methods used up to now; that is the purchase of suitable land that comes into the market in the ordinary way and the voluntary offering of land direct to them. There is a general recognition throughout the country, and in particular by the owners and occupiers of hill land, that in principle a substantial increase in forestry is desirable with the objective of raising the productivity of much of the hill land which is at present not being put to its best use. The Commissioners believe that with the co-operation of owners and occupiers of hill land, the flow of acquisitions can be substantially stepped up. They have already taken a number of steps to make the introduction of forestry into the hill areas more attractive or acceptable. For instance, they have recently agreed that in appropriate cases they would continue to maintain boundary fences so long as the grazing needs of their neighbours warrant this, even when their plantations are past the stage of being subject to damage by grazing animals. They have agreed where it is desirable and possible to carry out at their own expense, and, of

course, in agreement with their neighbours, the burning of fire belts on hill land which will enable normal hill burning to be carried out in greater safety than in the past. They have agreed to accept comparatively small areas for planting where access and other circumstances are favourable and this may often be of advantage to the farmer in providing shelter. They are continuing and intensifying their efforts to control foxes, where other methods are ineffective, and vermin. Finally, they are ready to discuss prices with anyone who offers them land with the object of reaching agreement on a fair price, taking account of all the circumstances of the proposed transaction. Purchase is not the only method by which land may be acquired and a common method is by lease or feu, the terms of which can be negotiated to meet, so far as possible, the wishes of the offerer. The Commissioners sincerely hope that when the steps that they have already taken are appreciated, and when the advantages of increased forestry in the hill lands are fully recognised, they can count on the co-operation of owners and occupiers of land to achieve a greatly increased rate of acquisitions.

The story of private planting makes more encouraging reading and, indeed, in the Forest Year 1956, for the first time, the area planted privately, 27,100 acres, actually exceeds the programme of 25,000 acres proposed in the White Paper. For the first decade private owners have planted 165,000 acres, representing 82 per cent. of the 200,000 acre programme. Furthermore, the rate of private planting is tending to rise steadily, as the following figures will show:—

Forest Year 1954	...	...	...	...	19,100 acres
Forest Year 1955	...	...	...	...	22,100 acres
Forest Year 1956	...	...	...	...	27,100 acres

(These figures include the best estimates that can be made of planting carried out without grants.) The Commissioners recognise the great effort that has been made on private estates to achieve this amount of planting and look forward to even greater private planting in the next decade.

SPECIAL PLANTING IN THE HIGHLANDS

Progress has been made in the acquisition of land for the special planting scheme in crofting districts to which reference was made in last year's Report. By the end of the year, close on 2,500 acres of plantable land had been acquired; 1,150 acres in the Isle of Mull, 435 acres in the Isle of Skye, 300 acres in Sutherland and 541 acres in Ross and Cromarty. In general, land suitable for forestry in crofting districts, is much intermixed with areas which are too exposed or otherwise unsuitable for planting; and to obtain this 2,500 acres of plantable land the Commission has been obliged to acquire a total area of some 10,000 acres of which about 7,500 acres, though unsuitable for planting, will in the main continue to be used for agriculture. Further areas which will give some 6,000 acres of plantable land have been approved for acquisition in Strathnaver (Sutherland), Glenforsa (Mull) and at Druidraig (Ross-shire). Here again the total area to be acquired includes some 12,000 acres of land which will not be planted. The greater part of this also will remain available for grazing.

Work in preparation for planting is proceeding and it is hoped that planting will begin in the 1957-58 season.

Close liaison is being maintained with the Department of Agriculture for Scotland and with the Crofters Commission, especially with regard to the possible acquisition of suitable areas near crofting townships.

THE MID-WALES INVESTIGATION REPORT

The *Mid-Wales Investigation Report* (Cmd. 9631)* issued in December, 1955, gave the results of an intensive survey by the Welsh Agricultural Land Sub-Commission of a selected area amounting to nearly 300,000 acres in Cardiganshire, Radnorshire and Montgomeryshire.

The survey clearly traced the trend of a declining and ageing population in a "region of inherently low agricultural potential", and though it was able to forecast certain normal changes leading to greater agricultural efficiency it indicated that these developments would employ still fewer people on the land. Many areas were going, and would continue to go, out of production, and would be available to be acquired by the Forestry Commission.

In addition to numerous agricultural recommendations the Sub-Commission stressed that a properly planned development of afforestation, closely integrated with agriculture, would strengthen the social and economic fabric of the countryside and would assist materially in the rehabilitation of the upland areas. Afforestation would benefit agriculture by assisting the provision of services and shelter and would generally invigorate the life of the countryside.

After receiving views upon the Report from many interested bodies, including the Council for Wales, the Government announced its recommendations in July, 1956, in its *Mid-Wales Investigation Report; Conclusions and Recommendations* (Cmd. 9809)*. The forestry recommendations and the broad classifications of land pre-eminently suitable for afforestation as defined by the Sub-Commission were accepted. The Government considered that developments along the lines suggested by the Sub-Commission would be primarily the concern of the Ministry of Agriculture, Fisheries and Food, the Forestry Commission and the Ministry of Housing and Local Government, and they proposed to set up a Standing Committee, consisting of the Heads of these Departments resident in Wales, which would be charged to push ahead "as fast as possible" with the development of agriculture and forestry and the provision of basic services and "to secure the development of each part of rural Wales in the manner which its special local circumstances require".

The Commissioners welcome this declaration of policy and believe that a steady expansion of forestry in areas of this type will not only re-vitalise the social fabric of the countryside but will bring to it an increasing wealth in a new type of crop.

PRODUCTION AND USE OF HOME GROWN TIMBER

The trend of production of both hardwood and softwood sawn timber was downwards; this was general for all categories of sawn timber (excluding mining timber) in Great Britain. The year under report was virtually clear of the effect of the 1953 windblow in Scotland, and this, to some extent, accounts for the lower production of sawn softwood. On the hardwood side the diminishing requirement of oak wagon bottoms and sheeting due to the gradual change-over to steel wagons and to the preference for softwood for the repair of wooden wagons, affected the production figures. Doubtless, too, credit problems contributed to the overall reduction. Mining timber production remained steady.

MINING TIMBER

During the year, the price agreement covering unpeeled round pitwood sold by weight to the National Coal Board's South-western Division was reviewed. The prices agreed were 102s. 6d. and 82s. 6d. per ton, free on transport, for pitwood and laggings respectively, and with a maximum limit on recoverable

* H.M.S.O.

freight of 35s. per ton. These prices run for one year from the 1st July, 1956, and compare with 96s. and 77s. 6d. per ton for softwood and laggings in the previous agreement when the recoverable freight was limited to 30s. per ton. In addition it was agreed that the maximum recoverable freight limit would be subject to adjustment upwards or downwards according to any authorised national changes in British Transport Commission railway carriage charges. The other agreements relating to round mining timber continued unchanged throughout the year.

In Britain, and also in western European coal-producing countries, there has been a downward trend in the rate of consumption of mining timber per ton of coal produced; this is accounted for, partly by the more economical use of timber, and partly by the increasing use of metal supports. The long-term effects of this on the requirements of mining timber are difficult to foresee, but there is still a large potential market in England and Wales for an increase in supplies of home-grown softwood mining timber, both round and sawn; in Scotland, home production meets over ninety per cent. of the Scottish mines' requirements. The slight overall increase during the year in home production amounting to about $1\frac{1}{2}$ per cent., attributable to sawn mining timber, is a step in the right direction.

UTILISATION

Short and long-term softwood thinning estimates and forecasts were made available to the landowner and timber trade organisations, and were published in the trade press. The short term estimates were limited to Forestry Commission areas and were based on the individual forest thinning plans. It is proposed to include hardwoods in the next revision. The long-term thinning forecasts cover both private and Forestry Commission production. These are necessarily less soundly based than the short-term estimates. The importance of these estimates and forecasts in planning development was emphasised in last year's report, and it is hoped that in due course private woodland thinning figures, built up from individual estate plans, will be forthcoming so as to provide a comprehensive and a reasonably accurate picture of thinning production.

The information provided in these production estimates is of value in assessing the quantity of material available to users of home timber, particularly to those industries which require and consume substantial quantities of small-sized roundwood, for example, coal mines and board pulp mills. Indeed, the expansion of existing markets for material from thinnings, and the establishment of new outlets, are largely dependent on the ability of growers and producers to give sound information on what is likely to be available both in quantity and in specification.

In the field of recent developments the Weyroc chipboard factory at Annan experienced difficulties over supply and specification during the earlier part of the year. Discussions were held between representatives of suppliers and the Company, and, as a result, fresh specifications and prices were drawn up. The Company's requirements at present amount to some 20,000 tons of softwood annually.

Work on the Sudbrook (the Wiggins Teape Group) hardwood pulp mill proceeded, but the mill is unlikely to be in full operation until towards the end of 1957. The mill's requirements, which amount to upwards of 36,000 tons annually of round small-sized hardwood, should provide an important outlet for hardwood of a size and a quality which is unsuitable for higher grade uses. The main species sought are oak, ash, beech and birch, but most other hardwood species are acceptable. While much of the pulpwood is expected to

come from thinnings of broadleaved woods and from the branchwood of older felled trees, coppice and scrub areas may well prove sources of substantial quantities of suitable timber.

Progress was also made with the groundwood pulp project (The Bowater Paper Corporation Limited) at Ellesmere Port. The annual requirement is a minimum of 50,000 tons of softwood pulpwood. The main species sought is spruce, though pines and Douglas fir—larches are excluded—can also be used. As the process is mechanical, the specification, in length, diameter and straightness, is stricter than is the case in pulpwood used in chemical processes.

It is unfortunate that the European Productivity Agency's project to investigate small-scale pulping developments, referred to in last year's Report, has been delayed, but it is hoped that the investigation will go ahead in 1957. The Commissioners attach considerable importance to this work and regard it as a necessary move in planning sound developments to provide for the utilisation of the growing production of small-sized thinnings.

The Cowal Ari-Sawmilling Company Limited, in which the Forestry Commission have an interest as debenture holders, continued to operate satisfactorily. The success of the Company's operations depends considerably on its ability to meet its customers' needs, not only in specification but also in regard to regularity of supply. This mill, it will be recalled, is concerned with the conversion and treatment of small-sized coniferous timber, largely Sitka spruce, coming from the thinning of young plantations, and it is noteworthy and encouraging that home grown Sitka spruce is being accepted and has found a satisfactory market as a commercial timber.

WORK STUDY IN FORESTRY OPERATIONS

The experimental programme of studies was taken a stage further by the decision, in the light of the preliminary survey undertaken by consultants in 1955, to commission a more exhaustive expert survey of thinning and ancillary operations in a group of forests in the South Scotland Conservancy. The number of Commission staff in training as a specialist nucleus was increased from two to four; by the end of the year they had all completed a short but intensive course in the theory of Work Study, and were being given practical instruction in the field by the consultants conducting the survey. The initial investigations on thinning emphasised the supreme importance of the scientifically correct maintenance of hand tools, and an early result has been the organisation of uniform short courses in the subject by specially trained instructors for forest workers in all Directorates. It is still much too early either to estimate the exact degree of improvement which Work Study can achieve in this comparatively new field, or to forecast the kind of organisation which would have to be set up to introduce it generally in the Commission; but the investigations carried out so far tend to suggest that in some form or another it may ultimately become a permanent feature in the direction of many of the Commission's operations.

FOREST FIRES

The protection of plantations from fire has been a matter of considerable concern during the past year. While the number of out-breaks was somewhat less, and the duration of the fire danger period shorter than last year, which had a summer as well as a spring danger period, the danger was unusually acute, and 4,078 acres of plantations were destroyed. In only two previous years has this loss been exceeded; once in 1929 when 4,575 acres were lost, and again in 1942 when, including war losses, 6,480 acres were destroyed.

In all there were 2,045 out-breaks in or so close to our plantations as to be a source of danger, and the Commissioners are pleased to note that 83 per cent. of these fires were brought under control before causing damage to the plantations. The Commissioners also wish to acknowledge the willing and effective assistance received from the Fire Services and other bodies.

STATISTICAL SUMMARY OF FORESTRY COMMISSION OPERATIONS

Table 1

FOREST YEAR 1955			FOREST YEAR 1956	
Great Britain...	61,100	Plantable land acquired (acres)	Great Britain	56,200
England	21,900		England	13,400
Scotland	20,500		Scotland	31,000
Wales	18,700		Wales	11,800
Great Britain... ..	67,900	Total area planted (acres)	Great Britain	62,400
England	21,200		England	20,800
Scotland	34,000		Scotland	29,800
Wales	12,700		Wales	11,800
Great Britain... ..	40,900	Afforested (acres)	Great Britain	38,600
England	9,900		England	10,400
Scotland	23,200		Scotland	21,200
Wales	7,800		Wales	7,000
Great Britain... ..	27,000	Replanted (acres)	Great Britain	23,800
England	11,300		England	10,400
Scotland	10,800		Scotland	8,600
Wales	4,900		Wales	4,800
Great Britain... ..	39,500	Area Thinned (acres)	Great Britain	43,100
England	22,500		England	22,100
Scotland	11,800		Scotland	15,100
Wales	5,200		Wales	5,900
Great Britain... ..	176	Houses built (number)	Great Britain	94
England	74		England	47
Scotland	79		Scotland	28
Wales	23		Wales	19
Great Britain... ..	338	Motorable Roads constructed (miles)	Great Britain	443
England	104		England	151
Scotland	181		Scotland	210
Wales	53		Wales	82

PRIVATE FORESTRY

DEDICATION OF WOODLANDS.

A revised booklet giving the amended form of the dedication deeds in full, along with explanatory notes, was published in June, 1956 (Forestry Commission Booklet No. 2. *The Dedication of Woodlands*. Fourth Edition, H.M.S.O.). The use of the revised form of deed began from the same date, but it should be noted that all owners of estates dedicated in the old form will be given the

opportunity, if they so wish, to enter into new agreements in the revised form, the whole of the legal charges being in that case payable by the Commission.

During the year the area dedicated increased by 35,000 acres to a total of 445,300 acres; this is a slowing down compared with previous years and resulted no doubt from some uncertainty about the form of the new deed.

APPROVED WOODLANDS

The number of areas registered as Approved Woodlands, i.e., areas outside the Dedication Scheme which are managed to an approved plan of operations, rose from 268 covering 82,900 acres, to 358 covering 117,200 acres.

GRANTS

In accordance with the obligation to review periodically the grants payable in respect of planting and maintenance of woodland areas included in Dedication Schemes, the Commissioners in consultation with the United Kingdom Forestry Committee agreed that, having regard to the general rise in wages and costs, an increase in the grants was warranted. The following changes were made as from 1st October, 1955.

(1) *Dedication Scheme*

Planting grant raised from £15 to £17 per acre.

Maintenance grant raised from 5s. to 5s. 6d. per acre, per annum.

(2) *Small Woods Scheme*

Planting grant raised from £15 to £17 per acre.

(3) *Poplar Planting Grants*

(a) *In blocks*; Dedicated areas raised from £15 to £17 per acre.

In blocks; Other areas raised from £8 to £8 10s. per acre.

(b) *In lines*; No change in the rate of 2s. per tree; but the minimum number of trees qualifying for grant was reduced from 200 to 100.

(4) *Scrub Clearance Grants*

The minimum cost of clearance in order to qualify for grant was raised from £15 net to £17 net per acre, and grants increased as follows:

(a) For areas estimated to cost more than £17 net per acre to clear, but less than £27 net: Grant £8 10s. per acre.

(b) For areas estimated to cost more than £27 net per acre to clear: Grant £13 10s. per acre.

(5) *Approved Woodlands Grants*

One half of the increased rate for planting payable in respect of Dedicated areas, i.e. £8 10s. per acre.

No change was made in the thinning grant, which remains at £3 15s. per acre.

CO-OPERATIVE FORESTRY SOCIETIES

A new Society in England—Chiltern Woodlands, Ltd.—has been formed to cover most of Buckinghamshire and parts of Oxfordshire, Berkshire and Hertfordshire. There is also activity in the Eastern Counties where a group of landowners in Norfolk and Suffolk are contemplating the formation of a Society to cover these counties and also parts of Cambridge and Essex. This is encouraging, but there are still large areas where co-operative forestry societies could do very useful work.

FELLING QUOTA

After consultation with the Home Grown Timber Advisory Committee, the Commissioners increased the conifer quota from 6.9 million cubic feet (Hoppus measure) to 7.1 million cubic feet, that is to the level at which it stood before the windblow in Scotland in the winter of 1951-52. No change was made in the quota for hardwoods.

The quotas as allocated between countries were as follows:

		<i>Thousands of cubic feet</i>			
	<i>1956</i>	<i>England</i>	<i>Scotland</i>	<i>Wales</i>	<i>Total</i>
Coniferous	...	2,085	4,675	340	7,100
Broadleaved	...	18,900	4,400	2,700	26,000

For comparison, the allocations for the previous year were:

		<i>England</i>	<i>Scotland</i>	<i>Wales</i>	<i>Total</i>
	<i>1955</i>				
Coniferous	...	2,210	4,225	465	6,900
Broadleaved	...	18,900	4,400	2,700	26,000

The allocations for 1955, it should be noted, take into account a reallocation made during that year of 250,000 cubic feet of conifers from Scotland, which was divided equally between England and Wales.

LICENSING

The increase shown last year, both in felling licence applications and in the number of licences issued, has continued. Only 83 per cent. of the quota for broadleaved timber was licensed, but the quota for coniferous timber was exceeded by 2 per cent. on account of storm damage in England and Wales.

Local planning authorities were consulted on 20 per cent. of the applications received, and 82 cases, the largest number to date, were referred to them to be dealt with under the relevant Tree Preservation Orders. One case was submitted to the Minister of Housing and Local Government for decision under Section 13 (2) of the Forestry Act, 1951.

Conditional licences requiring the restocking and maintenance of the areas felled were issued in respect of 13,589 acres. Unconditional licences given in respect of felling on dedicated estates amounted to 400, but the 2,995 acres involved will be replanted under approved Plans of Operations.

A Reference Committee was appointed in one case of complaint against the imposition of replanting conditions.

The Commission took legal proceedings in five cases of alleged offences under the 1951 Act, four in England and one in Scotland. All but one were successful, fines ranging from £2 to £100 being imposed.

SUPPLY OF PLANTS FOR PRIVATE ESTATES

It is a standing arrangement that surplus transplants and seedlings in Commission nurseries are made available for sale to private estates through the nursery trade and other channels. Such plants can never take the place of supplies from commercial forest tree nurseries and from private estate nurseries, which must be the normal source of plants for private forestry.

For several years however it has been apparent that supplies from Trade nurseries have not kept pace with the growing demand for plants required to meet the increasing amount of planting being carried out by woodland owners. The result has been a shortage of plants. An additional factor contributing materially to the shortage was two bad growing seasons in succession. As the shortage seemed likely to continue for another year at least, and as many owners are under an obligation to plant or re-plant under Dedication Schemes or conditional felling licences, the Commissioners decided to take certain special measures to alleviate the position.

Firstly, they reduced their 1956 planting programme and thus made additional plants available to private estates. In all, the number of plants supplied during the year from Commission nurseries for private planting or lining-out amounted to approximately 8½ million transplants and 7 million seedlings.

Secondly, arrangements were made to sow approximately 1,000 lb. of seed of the major conifer species to provide seedlings for lining-out in the next two years by the nursery trade and by private estates. This is the first occasion on which the Commissioners have raised plants specially for use in private forestry.

COMMITTEE ON MARKETING OF WOODLAND PRODUCE

The Report of this Committee⁽¹⁾ was submitted to the Forestry Commissioners in May, 1956, and was forwarded to the Minister of Agriculture and the Secretary of State for Scotland. The Ministers agreed that the Report should be published, and the printing was put in hand in August.

[Note:—The Report was published on 12th December, 1956.]

THE COMMITTEE ON HEDGEROW AND FARM TIMBER

The Report of this Committee⁽²⁾ was published on 8th March, 1956, and received wide publicity in the national and provincial press. The Government Departments concerned, and other interested organisations, have been invited to give their views on the recommendations. At the end of the year replies were still being received.

HOME GROWN TIMBER ADVISORY COMMITTEE

Meetings of the Home Grown Timber Advisory Committee were held in October, 1955, and January, April and July, 1956. Apart from matters arising out of the Forestry Act, 1951, the Committee discussed a variety of subjects including the supply of material to new pulping projects, the expansion of the use of home grown timber by British Railways for railway sleepers and by the Highway Authorities for fencing new motorways, etc.

The Committee also considered the desirability of prohibiting the import of unbarked round timber and poles to prevent the introduction into Great Britain of insects destructive to plantations which are prevalent in certain Continental countries, e.g. *Dendroctonus micans* and *Ips typographus*.

INTERNATIONAL UNION OF FOREST RESEARCH ORGANISATIONS

The Twelfth Congress of the International Union of Forest Research Organisations met in Oxford in July, 1956. The Union was founded in 1890 and this is the first occasion that the Congress, which meets at intervals of three to four years, has been held in Britain. The Congress, which was opened by the Rt. Hon. D. Heathcoat Amory, Minister of Agriculture, Fisheries and Food, was attended by 250 delegates from research organisations in forty-two different countries. Discussions were conducted under nine sections, each dealing with a different subject, and continuity is maintained as the Section Leaders continue in office between congresses and keep in touch with research workers in their respective fields and initiate action where this is necessary.

During the conference the delegates visited Rothamsted Experimental Station, the Forest Products Research Laboratory, and the Commission's Forest Research Station at Alice Holt Lodge, near Farnham, Surrey.

Mr. James Macdonald, the Commission's Director of Research and Education, was honoured by being elected president of the Union in succession to Professor Pavari of Italy.

(1) *Report of the Committee on Marketing of Woodland Produce*, 1956. H.M.S.O. 4s. 6d.

(2) *Report of the Committee on Hedgerow and Farm Timber*, 1955. H.M.S.O. 3s. 6d.

After the formal meetings, many of the delegates took part in one or other of the seven study tours arranged for them, during which they were shown as much as possible of the research going on in forestry and closely allied sciences. These tours included visits to many of the Commission's forests.

WESTONBIRT ARBORETUM, GLOUCESTERSHIRE

The Commission has been fortunate in being able to acquire the famous arboretum at Westonbirt in Gloucestershire. This arboretum of 116 acres, together with the adjoining Silk Wood of 370 acres which is partly developed as an arboretum, was started by Mr. R. S. Holford early in the 19th century. The work was continued by his son, Sir George Holford who succeeded him in 1892, and subsequently by Lord Morley, who succeeded Sir George in 1926. Each added to the collection, which now contains a wealth of material unequalled in any other arboretum in the country. Broadleaved and coniferous trees and a wide range of shrubs are represented, the collection of exotic maples being a noteworthy feature. The original arboretum is very crowded, but there is room for expansion in Silk Wood. The management of the arboretum will be in the hands of the Commission's Research Branch, under the guidance of an advisory committee under the chairmanship of the Hon. Lewis Palmer.

WAGES AND CONDITIONS OF INDUSTRIAL EMPLOYEES

As noted in the report for the previous year a claim for an increase in the minimum rates of pay for the Commission's forestry workers, on which the Forestry Commission Industrial and Trade Council was unable to reach agreement, had been referred to the Industrial Court. In November, 1955 this Court made an award which raised the minimum wage for adult male workers from 129s. to 134s. per week. Shortly afterwards an application was made by the Trade Union Side for a further increase and agreement was finally reached on a new minimum rate of 137s. per week with effect from the end of January, 1956. Later in the year the minimum wage was again discussed by the Council, and an increase of 7s. per week, bringing the minimum for adult male workers up to 144s., was negotiated, with effect from September, 1956. Proportionate increases in wages rates for women and juvenile forestry workers were settled on each occasion.

The wages and conditions of employment of forestry workers on private estates are the concern of the Agricultural Wages Boards who also awarded increases during the year under review. In England and Wales the minimum adult rate was raised from 127s. to 135s. per week in January 1956, and later, in September, by 6s. to 141s.; in Scotland an award was made which increased, from March 1956, the minimum adult wages from 124s. to 132s. per week.

FORESTRY APPRENTICESHIP SCHEME

With the development of the Commission's afforestation areas, forest workers are being called on to exercise greater skills in many directions. Where forestry has been long established these skills are traditionally passed on to the young men and boys. To enable boys in the Commission's employment to acquire these skills and to become skilled forest workers, a two-year forestry apprenticeship scheme was started in 1953 with a small number of boys in the Forest of Dean, Gloucestershire. This pilot scheme proved successful and further but limited extensions of this scheme have been made at a number of other forests in the Commission's charge.

GREY SQUIRRELS

The campaign against the grey squirrel has been continued. An examination of the records of the numbers known to have been destroyed throughout the country in the past three years shows that there has been a progressive decrease from 406,000 destroyed in 1954, to 236,000 in 1955 and to 173,000 in the present year. As the campaign has been carried on with no less vigour than in the past and as an additional incentive had been given for one year from the beginning of 1956 by increasing the reward for tails from 1s. to 2s., it might be inferred that fewer squirrels have been destroyed because of a diminution in their numbers.

The Committee on Grey Squirrels, under the chairmanship of Sir Richard Cotterell, however, is of the opinion that this is true only to a limited extent. In the autumn and early winter of 1955, owing to the numbers killed as a result of the campaign and a bad breeding season in 1955, the grey squirrel population was at its lowest ebb for several years. It was expected, however, that if there was a favourable breeding season in 1956, the population figures would rise again swiftly. That this has actually happened is borne out by the fact that the kills in the half year from April to September, 1956, are 4,000 more than in the previous half year, and 17,000 more than in the corresponding period in 1955. There is also the general opinion among foresters and others, that there were a few more squirrels about in the autumn of 1956 than in 1955.

Sir Richard Cotterell's Committee is of the opinion that if the campaign is prosecuted to the full during Forest Year 1957, the numbers of squirrels would certainly be reduced at least to the level of 1955.

The potential for damage to our limited broadleaved areas by grey squirrels leaves no doubt that it is essential that the campaign to control them should be continued.

RABBITS AND MYXOMATOSIS

By 1956 myxomatosis had spread into most parts of the country, and its effects on rabbit populations are now well known. In brief, these have varied between almost total extermination where rabbits were numerous, to sporadic clearances where they were few. Rabbits are now at a very low level, but are re-appearing in many districts in spite of the work done in Rabbit Clearance Areas, and the efforts of voluntary clearance schemes, some of which were active before the advent of myxomatosis.

Many private owners, and the Commission, have taken advantage of the absence of rabbits to plant without enclosing the area with small mesh netting. These areas require to be kept under close observation as some of them have already been re-invaded and have had to be cleared of rabbits and enclosed against them.

In 1954, the Commission's trappers accounted for 292,000 rabbits. In 1955 the number dropped to 154,000, while in the year under report, 41,000 only were killed. These decreases are due to the effects of myxomatosis and not to any lessening of effort by the Commission.

It would be most unfortunate if, now that the rabbit population throughout the country is at a very low ebb, every occupier of land is not induced to take effective action to exterminate this pest.

CONFERENCES AND VISITS

In May, 1956, the Commissioners had great pleasure in inviting a party of distinguished French foresters to tour forests in Great Britain in return for hospitality extended by the French Government in 1955. The party

visited the New Forest and forests in the South-East England Conservancy, and the West and South Conservancies, Scotland, as well as private woodlands on both sides of the Border. At the end of their tour the visitors were entertained to dinner in Edinburgh Castle by Mr. Niall Macpherson, Joint Under-Secretary of State for Scotland. In the following month the Commissioners entertained a party of forestry officials from the U.S.S.R. on a tour of Commission forests in England and Scotland. At the invitation of the U.S.S.R. a return visit was made to Russia at the end of August, when Mr. Lloyd Owen, Forestry Commissioner, led a party of five senior Commission officers, including the Deputy Director General and the Director of Research and Education, on a tour of forestry institutes in Moscow and Kiev and forests in the Ukraine and the Caucasus.

In October, 1955, Sir Henry Beresford-Peirse, Deputy Director General, Mr. J. A. B. Macdonald, Conservator for South Scotland, and Mr. C. A. J. Barrington, a Conservator in the English Directorate, attended the Eighth Session of the European Forestry Commission of the Food and Agriculture Organisation of the United Nations in Rome. Sir Henry, who is the present Chairman of the European Forestry Commission, was also a member of the United Kingdom delegation at the Eighth Session of the full Conference of the Food and Agriculture Organisation, held in Rome in November, 1955.

The United Kingdom was represented by officers of the Commission at other international meetings abroad as follows:—

Paris, December, 1955—First Session of the Joint F.A.O.–E.C.E. Committee on Forest Working Techniques and the Training of Forest Workers: Mr. E. G. Richards (Utilisation Research Officer), Mr. J. W. L. Zehetmayr (Divisional Officer, Research Branch) and Mr. E. C. Shanks (Senior Chief Executive Officer, Finance Branch).

Geneva, January, 1956—F.A.O.–E.C.E. Working Party on Forest and Forest Products Statistics: Dr. F. C. Hummel (Divisional Officer, Research Branch).

Geneva, May, 1956—F.A.O.–E.C.E. Working Party on the testing of forest tractors: Mr. E. G. Richards (Utilisation Research Officer) and Col. R. G. Shaw (Machinery Research Officer).

Nimes, June, 1956—Fifth Session of the European Forestry Commission's Working Party on Afforestation and Reforestation: Sir Henry Beresford-Peirse (Deputy Director General) and Mr. C. A. J. Barrington (Conservator in the English Directorate).

Brussels, July, 1956—Twelfth Session of the Standing Executive Committee of the International Poplar Commission: Mr. T. R. Peace (Divisional Officer, Research Branch).

The annual meeting of the British Association for the Advancement of Science was held at Sheffield during August and September, 1956. In addition to the address by Mr. M. V. Laurie, Chief Research Officer, as Chairman of the Forestry Sub-Section, contributions to the deliberations were made by Messrs. E. M. Conder and A. J. Grayson, officers of the Forestry Commission. Excursions made by the Sub-Section included visits to Sherwood and Laughton Forests.

OBITUARY

SIR JOHN STIRLING MAXWELL, K.T.

LORD RADNOR writes:

Sir John Stirling Maxwell, who died on 30th May, 1956, was one of the original members of the Forestry Commission under the late Lord Lovat as chairman, and was himself chairman from 1929–32.

Among his many and varied interests in life, forestry was one of the most prominent. It was he who made the first large-scale turf planting at Corrour from which has developed so much of our modern planting technique. Those plantations also demonstrated the hitherto unrealised possibilities of growing trees on high peat land. I can well remember his pleasure when he told me that it really was becoming a forest as woodland birds were beginning to come there.

Among his other interests and activities, mention should be made of his benefactions to Glasgow, his interest in and great knowledge of all artistic matters, and that he himself was an accomplished water colour artist.

He retained his active interest in forestry to the end. In spite of crippling disabilities, in the August before he died he went with me round the woods at Corrour. He discussed with me the progress of the plantations he had already made and also explained his plans for future planting—this in his ninetieth year. To the end of his life he was always glad to see anyone connected with the Forestry Commission and he took an active interest in our progress.

SUMMARY OF THE YEAR'S WORK

Weather conditions during the year tended to run to extremes. Over much of the country the closing months of 1955 were drier than usual and a good start was made with the winter's work. January and February followed the usual pattern of hard weather with snow which interrupted planting and nursery work. This hard spell was followed by a prolonged dry, cold period during which a number of very destructive forest fires occurred. The summer months were wet and cool and, while this helped nurseries and new plantations to recover from the effects of the earlier dry conditions, growth was in general somewhat below normal.

The Forestry Fund. Payments and receipts for the forest years ended 30th September, 1955 and 1956 were:

		1955	1956
Payments	... ..	£11,053,705	£11,235,170
Receipts	... ..	£2,658,827	£2,736,690

The amount paid into the Forestry Fund from Parliamentary Votes during the forest year ended 30th September, 1956 was £8,351,000, made up of £3,951,000 from the Vote for the financial year ended 31st March, 1956 and £4,400,000 from the Vote for the financial year ending 31st March, 1957 (page 27).

Land Acquired. The net area of plantable land acquired during the year was 56,242 acres, comprising 33,486 acres of bare land, 20,761 acres of felled or devastated woodlands and 1,995 acres of standing woods (Table 6, page 30).

The total area of land at 30th September, 1956, acquired through the Forestry Fund, under the Forestry (Transfer of Woods) Act, 1923, and by gifts was 2,176,600 acres. This comprised 1,377,000 acres classed as "Forest Land" which is already planted or will be planted in due course, and 799,600 acres of "Other Land" which includes nurseries, rough grazing and agricultural land, and also other land unsuitable for tree planting. The areas of these categories in England, Scotland and Wales are given in Table 3, page 28.

New Forests. Twelve new forests, three being formerly part of existing forests, were constituted during the year. Seven of these were in England and five in Scotland; there was no change in the number in Wales (Table 5, page 29).

Forest Nurseries. The area in use as forest nurseries was 2,112 acres. Seed sown during the year amounted to 119,171 lb. of broadleaved seed and 17,568 lb. of conifer seed. Stocks of forest trees in nurseries totalled 432·6 million, 176·4 million being transplants and 256·2 million being seedlings (pages 33 to 39).

Forestry Commission Planting. The area planted during the year was 62,400 acres, a reduction of 5,506 acres compared with last year's figure of 67,906 acres. The number of trees used for new planting and for replacing failures in recently planted areas was 118·8 million (pages 39 to 42).

Forest Protection. The number of fires in or threatening Commission plantations was 2,045, of which 83 per cent. were extinguished before causing damage to plantations. The area of plantations burned was 4,078 acres, the assessed damage including the cost of extinguishing being £175,000 (page 42).

As a result of the spread of myxomatosis the number of rabbits destroyed decreased to 41,000, as compared with 154,000 in the previous year; the number of hares taken has increased from 17,000 to 20,700 (page 43).

In Commission forests 20,600 grey squirrels were destroyed; last year 23,400 were destroyed. The number of foxes destroyed was 5,523; last year it was 5,900 (page 44).

Preparation and Sale of Produce

Thinning and Clear Felling. Thinnings were made in 43,110 acres of young plantations. The area clear felled was 7,503 acres, of which 4,686 acres were scrub woodlands and 955 acres were coppice or coppice with standards (page 44).

Production and Disposal of Forest Products. The total volume felled was 18·34 million cubic feet, of which 77 per cent. came from thinnings. Disposals included: Standing timber, including thinnings, 5·84 million cubic feet; round timber and saw-logs including telegraph and other selected poles, 3·36 million cubic feet; mining timber, 3·17 million cubic feet; posts, stakes and unselected poles, 2·02 million cubic feet; pulpwood and boardmill, 1·41 million cubic feet; firewood and cordwood, 1·91 million cubic feet. Gross income was £2,352,000; direct expenditure on felling, preparation and despatch of produce was £1,205,000 (page 46).

Roads and Bridges. Work was undertaken at 213 forests; 443 miles of motorable road were completed and 200 miles were in course of construction (page 47).

Housing. 94 houses for forest workmen and local supervisors were completed; a further 48 were being built at the close of the year (page 48).

The Dedication Scheme. Dedication was completed by the owners of 119 estates covering 35,249 acres of woodlands; in addition Plans of Operation for 168 estates in respect of 59,681 acres were agreed for Dedication (page 50).

Approved Woodlands. 95 estates with 36,000 acres of woodlands were accepted as Approved Woodlands (page 52).

Planting on Private Estates. The area planted during the year on private estates is estimated at 27,200 acres, of which 24,700 acres qualified for planting grants. In the previous year a total of 22,100 acres were planted (page 52).

Licensing of Timber Felling. 7,188 licences were issued to private estates authorising the felling of 41·8 million cubic feet of timber (page 55).

Research and Experiment. Research work on a wide variety of forestry problems has been continued at the Forest Research Station, Alice Holt Lodge, Farnham, Surrey, and in experimental areas in many of the Commission's forests and nurseries throughout the country (page 56).

Grants for forest research in specific fields have been made to Universities and other Institutions (page 59).

Education. The Commission maintains five Forester Training Schools at which 103 men completed the two-year course; 79 took employment with the Commission, one in the Colonial Forest Service, and 12 returned to posts under the Government of Northern Ireland: 11 took up other employment (page 60).

Publications. Ten new publications for sale, and two for free distribution, were issued (page 61).

Publicity and Public Relations. The public were kept informed of the work of the Commission through the usual channels. Press conferences and visits to forests were arranged; lectures to schools and other bodies were given by Commission officers, who also contributed articles to journals with forestry interests. Exhibits were arranged at the major agricultural shows. The scheme for School Forests was continued. Forestry featured in sound broadcasts and on television (page 62).

ORGANISATION

THE FORESTRY COMMISSIONERS

Her Majesty the Queen approved the re-appointment of Mr. Stanley C. Longhurst, J.P. as a Forestry Commissioner for a further period of one year.

Consequent upon his appointment as a Member of the Crofters Commission, Mr. John McNaughton, C.B.E. relinquished his appointment as a Forestry Commissioner.

The Chairman and the Commissioners at the close of the year were:

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

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

THE NATIONAL COMMITTEES

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

Changes during the year were as follows: Mr. John A. Cameron and Mr. W. McGinniss resigned from the Committee for Scotland; Mr. S. C. Longhurst and Major J. D. Gibson-Watt resigned from the Committee for Wales, to which Mr. P. R. D. Spurgin was appointed.

The membership of these Committees as constituted at the end of the year is given below, the Chairman of the Forestry Commission being *ex officio* a member of each Committee.

THE NATIONAL COMMITTEE FOR ENGLAND

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

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

THE NATIONAL COMMITTEE FOR SCOTLAND

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

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

THE NATIONAL COMMITTEE FOR WALES

Mr. Lloyd O. Owen (*Chairman*), Mr. A. P. F. Hamilton, Mr. J. E. Lewis,
Dr. R. Phillips, Mr. P. R. D. Spurgin, Mr. W. H. Vaughan.

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

THE REGIONAL ADVISORY COMMITTEES

Regional Advisory Committees for each Conservancy, appointed under the Forestry Act, 1951, Section 15, met at intervals during the year. The membership of these Committees is given below:

ENGLAND

North-West Conservancy.—Viscount Newport (*Chairman*), Alderman J. V. Allen, Mr. J. L. Benson, Mr. R. F. Dickinson, Mr. J. Edwards, Mr. G. R. Jacob, Mr. R. W. S. Thompson, Mr. C. J. Venables. *Secretary to the Committee:* Mr. J. Steele. The Committee met in November, 1955 and in March and July, 1956.

North-East Conservancy.—Lord Bolton (*Chairman*), Professor J. S. Allen, Mr. R. H. B. Hammersley, Mr. W. P. Hedley, Mr. A. Kirkup, Jr., Mr. A. M. Leitch, Mr. R. Minto, Jr., Mr. R. Stanley, Mr. H. Wardale. *Secretary to the Committee:* Mr. L. A. Chaplin. Meetings were held in December, 1955, and June, 1956.

East Conservancy.—Major Sir Richard G. Proby, Bt. (*Chairman*), Lt.-Col. M. E. St. J. Barne, Major R. L. Coke, Mr. A. V. Hilton, Mr. N. D. G. James, Mr. G. Oates, Mr. C. H. Thompson, Mr. R. B. Verney, The Earl of Yarborough. *Secretary to the Committee:* Mr. G. H. Clark. The Committee met in December, 1955, and September, 1956.

South-East Conservancy.—Mr. G. E. H. Palmer (*Chairman*), Mr. A. E. Aitkins, Lt.-Col. W. R. Burrell, Mr. G. E. H. Calvert, The Rt. Hon. Viscount Cowdray, Mr. A. L. F. Hills, Major J. M. Mills, Mr. W. H. Pearson, Major R. E. Whitaker. *Secretary to the Committee:* Mr. H. W. Gulliver. There were meetings in November, 1955, and in February and June, 1956.

South-West Conservancy.—Mr. W. E. Hiley (*Chairman*), The Earl Bathurst, Lord Hylton, Mr. J. R. Maeer, Major J. L. Pilling, Mr. M. Philips Price, M.P., Mr. L. C. Wheeler, Lt.-Commander R. J. B. White, Brig. C. H. Woodhouse. *Secretary to the Committee:* Mr. A. W. Matthews. The Committee met in March, 1956.

SCOTLAND

North Conservancy.—Major D. J. Brodie of Lethen (*Chairman*), Mr. J. Armstrong, Mr. G. Brown, Mr. R. Dean, Mr. J. Grant, Mr. A. N. S. Kinnear, Mr. A. R. Mackenzie, Mr. A. B. L. Munro-Ferguson. *Secretary to the Committee:* Mr. M. Nicolson. The Committee met in November, 1955, and May, 1956.

East Conservancy.—Professor H. M. Steven (*Chairman*), The Earl of Dundee, Lord Glentanar, Mr. J. B. Hendry, Sir Ian Forbes Leith, Bt., Mr. A. D. Miller, Lt.-Col. J. W. Nicol, Bailie R. A. Raffan, Mr. W. Riddoch. *Secretary to the Committee:* Mr. J. P. Lenman. Meetings were held in October, 1955 and in April, 1956.

South Conservancy.—Major S. F. Macdonald Lockhart (*Chairman*), Sir James Hunter Blair, Bt., Mr. A. Duncan, Mr. W. P. Earsman, Mr. T. E. Hubbard, Mr. D. M. McQueen, Commander D. Herries Maxwell, Mr. J. Roe, Mr. R. F. Wilson. *Secretary to the Committee:* Mr. T. H. McGeorge. There were meetings in October and December, 1955, and in March and April, 1956.

West Conservancy.—Sir George I. Campbell, Bt., of Succoth (*Chairman*), Mr. P. Campbell, Capt. J. Craig, Lt.-Col. W. D. H. C. Forbes, Mr. R. M. Hamilton, Professor J. Kirkwood, Mr. W. D. McGregor, Mr. P. S. Murray, Jr. *Secretary to the Committee:* Mr. B. Kinnaird. The Committee met in November, 1955, and April, 1956.

WALES

North Conservancy.—Col. P. R. Davies-Cooke (*Chairman*), Mr. P. S. Barnie, Capt. G. L. Bennett Evans, Mr. T. Jones, Capt. J. Hext Lewis, Professor E. C. Mobbs, Mr. D. Tudor, Lt.-Col. J. F. Williams-Wynne. *Secretary to the Committee:* Mr. K. Mayhew. Meetings took place in October, 1955, and March and June, 1956.

South Conservancy.—Major J. D. D. Evans (*Chairman*), Mr. D. G. Badham, Mr. H. H. Busher, Mr. I. G. Gordon, Mr. H. A. Hyde, Mr. A. J. Llewellyn, Mr. M. H. Maxwell, Mr. P. W. Murray Threipland. *Secretary to the Committee:* Mr. E. H. Bradford. This Committee met in October, 1955, and May, 1956.

HOME GROWN TIMBER ADVISORY COMMITTEE

This Committee met in October, 1955, and in January, April, and July, 1956. No changes in membership took place during the year; the Committee as constituted at the end of the year was:

The Earl of Radnor	...	Chairman, Forestry Commission (<i>Chairman of the Committee</i>)
Mr. A. P. F. Hamilton	...	Forestry Commission
Sir Arthur Gosling	...	
Mr. O. J. Sangar	...	
Mr. A. H. H. Ross	...	
Mr. G. B. Ryle	...	
Mr. J. Macdonald	...	
Mr. H. A. Turner	...	
Mr. J. Rea Price	...	Board of Trade
Lord Bolton	...	Country Landowners Association
Major Sir Richard G. Proby, Bt.	...	
Mr. W. E. Hiley	...	
Mr. C. M. Floyd	...	
The Duke of Buccleuch	...	Scottish Landowners Federation
The Earl Cawdor	...	
The Earl of Dundee	...	
Capt. J. Maxwell Macdonald	...	
Mr. G. R. Jacob	...	Federated Home Timber Associations
Mr. C. J. Venables	...	
Mr. H. N. Sadd	...	
Mr. F. G. Chalke	...	
Mr. T. Bruce Jones	...	Home Timber Merchants Association of Scotland
Mr. Bruce B. Kennedy	...	
Mr. J. C. McGregor	...	
Mr. Bryan Latham	...	Timber Trades Federation
<i>Secretary:</i> Mr. H. R. Flowers.		

THE COMMISSIONERS' STAFF

During the year the four former Forester and Foremen grades were reorganised into three grades of Head Forester, Forester and Assistant Forester. Men leaving the Forester Training Schools to join the Commission's service now enter directly into the non-industrial grade of Assistant Forester instead of serving in an industrial capacity for a period of years before entering the Forester grades.

Apart from this there was no major change in the Commission's Staff. The total number of non-industrial staff at 30th September, 1956, was 2,571; these included 425 professional, scientific and technical staff (mainly Forest Officer and Engineer grades) and 1,265 supervisory staff in the Forester grades.

LABOUR EMPLOYED

The number of men, women and juveniles employed at 30th September, 1956 was 13,112, as compared with 13,337 at the end of the previous year. Of these 5,311 were in England, 4,511 in Scotland and 3,290 in Wales.

THE YEAR'S WORK

THE FORESTRY FUND

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

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

FORESTRY FUND—SUMMARY

Table 2 Years ended 30th September £

		Balance from Preceding Year (1)	Receipts			Payments (5)
			Total (2)	From Parliamen- tary Votes (3)	Other (4)	
GRAND TOTAL.						
1920-1956	...	—	105,193,318	79,260,800	25,932,518	105,065,566
1920-29	...	—	4,421,484	3,570,000	851,484	4,502,018
1930-39	...	—	8,114,652	6,292,800	1,821,852	7,926,093
1940-49	...	—	26,370,778	18,945,000	7,425,778	26,238,789
1950 ...	...	240,014	7,030,748	5,495,000	1,535,748	7,025,414
1951 ...	...	245,348	8,161,846	6,350,000	1,811,846	8,012,098
1952 ...	...	395,096	9,258,033	6,893,000	2,365,033	9,277,642
1953 ...	...	375,487	9,258,319	7,041,000	2,217,319	9,421,426
1954 ...	...	212,380	10,357,941	7,850,000	2,507,941	10,373,211
1955 ...	...	197,110	11,131,827	8,473,000	2,658,827	11,053,705
1956 ...	...	275,232	11,087,690	8,351,000	2,736,690	11,235,170
1957 ...	...	127,752	—	—	—	—

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

The amount drawn from Parliamentary Votes into the Fund during the Forest Year 30th September, 1956 was £8,351,000, made up of £3,951,000 from the vote for the financial year ended 31st March, 1956 and £4,400,000 from the vote for the financial year ending 31st March, 1957. Other receipts, mainly from sales of forest produce, totalled £2,736,690; payments made amounted to £11,235,170.

FINANCIAL TABLES

In Appendix I a statement is given of the expenditure which has to be accounted for after taking into account all items proper to a statement of income and expenditure as distinct from cash receipts and cash payments; Appendix I also shows the allocation of the expenditure in a summary of activities. Each activity is shown in greater detail in the appropriate appendix following Appendix I, with comparative figures for the previous year. In Appendix 3 (Forestry Operations) it should be noted that the cost of raising the plants used

in the formation and maintenance of plantations is included under these heads and that the amount shown against each heading is direct expenditure comprising direct wages, charges for the use of departmentally owned vehicles and machines, materials and contract services. Overhead expenses consist of labour overheads (mainly paid holidays, wet time, sick pay and national insurance), local supervision (salaries and expenses of foresters), estate expenses (maintenance of buildings, rent and other charges) and administrative and control overheads (salaries and expenses of district officers and conservancy staffs and provision for pensions and gratuities); overhead expenses have been allocated as appropriate to the various activities reported in Appendices 2 to 8.

These Appendices appear on pages 65 to 67.

ACQUISITION AND UTILISATION OF LAND

The total area of land acquired through the Forestry Fund, under the Forestry (Transfer of Woods) Act, 1923, and by gifts from private persons, less disposals, was 2,176,600 acres at 30th September, 1956. In most acquisitions of land it is unavoidable that in addition to plantable land there is included some rough grazing and agricultural land which it is not intended to plant, and also land unsuitable for planting on account of soil conditions, exposure or other reasons; it may also be necessary to include areas of standing woods. Table 3 below gives the present or intended future use of the land so far acquired.

UTILISATION OF LAND

Table 3

At 30th September 1956

Thousand acres

	Great Britain	England	Scotland	Wales
Total Acquired	2,176·6	681·5	1,182·5	312·6
Forest Land: Total	1,377·0	519·9	610·7	246·4
Acquired Plantations	81·7	50·6	24·7	6·4
Planted by Forestry Commission	980·6	367·5	430·4	182·7
To be planted	314·7	101·8	155·6	57·3
Other Land: Total	799·6	161·6	571·8	66·2
Nurseries	2·1	0·8	0·8	0·5
Rough Grazing and Agricultural Land	513·6	69·0	394·0	50·6
Forest Workers Holdings	13·3	6·7	4·2	2·4
Unplantable and Miscellaneous	270·6	85·1	172·8	12·7

The above table shows that of the 2,176,600 acres acquired to date, 1,377,000 acres are classed as Forest Land, comprising 980,600 acres planted by the Commission, 81,700 acres of acquired plantations, and 314,700 acres of land to be planted in due course. The land to be planted, which is partly bare land and partly old woodland, is held in the three countries as follows: England, 101,800 acres; Scotland, 155,600 acres; Wales, 57,300 acres. It should be noted that all land shown as "to be planted" is not immediately available, and that as much as possible is let for grazing until it is actually required. Land which it is not intended to plant is shown under Other Land; this includes 526,900 acres of rough grazing and agricultural land, along with 270,600 acres of land unsuitable for planting.

Land not placed at the disposal of the Commissioners

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

LAND NOT PLACED AT THE DISPOSAL OF THE COMMISSIONERS

Table 4 At 30th September 1956 Acres

	Great Britain	England	Scotland	Wales
Total ...	374,177	66,149	272,628	35,400
Forest Land ...	36,741	7,241	28,116	1,384
Rough grazing, agricultural, unplatable and miscellaneous ...	337,436	58,908	244,512	34,016

The land in the charge of the Agricultural Departments at the end of the year was 374,177 acres of which 36,741 acres have been classified as plantable, most of which will be transferred to the Commissioners for planting in due course.

Number of Forests

The Commission now has 510 forests, a total which includes a small number of central nurseries which have little or no woodlands attached. The numbers of forests in each of the three countries are given in Table 5 below; the individual forests are listed by Conservancies in Appendices 12 to 14 on pages 71 to 81 and their approximate positions are shown in the outline maps on pages 82 to 93.

NUMBER OF FORESTS

Table 5 At 30th September 1956

	Great Britain	England	Scotland	Wales
Number of Forests:—				
At beginning of year ...	500	212	204	84
At end of year ...	510	218	208	84
Net increase during the year ...	10	6	4	—

Twelve new forests, of which three were formerly parts of older forests, were constituted during the year. The net increase in number, however, was ten, as Woolmer Forest, Hampshire, was sold to the War Department to which it had been leased for a number of years, and Struie Forest was amalgamated with Morangie Forest, Ross-shire. Details of the additional forests formed during the year are given below.

ENGLAND

Bampton, Devon.
 Chillingham, Northumberland (formerly part of Rothbury Forest).
 Eynsford, Norfolk (formed from parts of Swanton and Hevingham Forests).
 Fountains, Yorks.
 Hebden Royd, Yorks.
 Holt, Norfolk (formed from part of Swanton Forest).
 Honeywood, Essex.

SCOTLAND

Arcleoch, Ayrshire.
Cumbernauld, Dunbartonshire.
Glenprosen, Angus.
Kilmartin, Argyll.
Watermeetings, Lanarkshire.

A change was made in the name of Tilliefour Forest which is now called Benachie Forest, Aberdeenshire.

Land Acquired during the Year

The area of land acquired, including land to which entry was secured prior to the legal procedure being completed, amounted to 82,078 acres, of which 60,574 acres were classed as plantable. Disposals and adjustments totalled 7,756 acres, made up of 4,332 acres classed as plantable, 968 acres as unplantable, and 2,456 acres of grazing and agricultural land. The major disposals of plantable land were the sale of two areas to the War Department, namely Woolmer Forest, Hampshire (2,073 acres) and a portion of Crychan Forest in South Wales, extending to 1,318 acres. Woolmer Forest was transferred to the Commission in 1924 under the Forestry (Transfer of Woods) Act, 1923; it was then subject to a lease to the War Department for military training. The use latterly being made for training was so extensive that its management as a forest was no longer practicable, and the whole was sold to the War Department. At Crychan Forest, the portions disposed of were more recent acquisitions which had been in the occupation of the War Department since 1940, and on which no planting had been done.

The net addition of plantable land was thus 56,242 acres; compared with the previous year this is less by 4,834 acres, and it may be noted that it is 6,158 acres less than the area planted during the year. Acquisitions in relation to the planting programme are discussed earlier in this Report (page 7).

Table 6 below gives by countries an analysis of the types of plantable land acquired.

PLANTABLE LAND ACQUIRED DURING THE YEAR
[NET AREA]

Table 6			Year ended 30th September 1956			Acres
			Total	Bare Land	Land previously under a Tree Crop	Standing Woods
Great Britain	...	...	56,242	33,486	20,761	1,995
England	...	...	13,385	2,028	10,683	674
Scotland	...	...	31,057	22,442	7,471	1,144
Wales	...	...	11,800	9,016	2,607	177

From the above table it will be seen that the net addition of 56,242 acres is made up of 33,486 acres (59 per cent.) of bare land, 20,761 acres (37 per cent.) of felled or devastated woodland, and 1,995 acres (4 per cent.) of standing woods. Compared with last year these percentages show an increase of 10 per cent. in the amount of bare land and a reduction of 7 and 3 per cent. respectively in the amounts of land previously under a tree crop and of standing woods.

Progress of Acquisition of Plantable Land

The acreage of plantable land acquired from 1920 onwards by lease or feu and by purchase is given in Table 7 below.

ACQUISITION OF PLANTABLE LAND*

Table 7

Years ended 30th September

Acres

Period	Total	By Lease or Feu	By Purchase
Total 1920-1956	1,331,580	441,952	889,628
1920-29	310,230	156,759	153,471
1930-39	344,757	60,057	284,700
1940-49	255,725	81,536	174,189
1950	60,996	26,423	34,573
1951	56,113	24,624	31,489
1952	53,604	15,718	37,886
1953	53,635	20,742	32,893
1954	77,149	22,049	55,100
1955	61,076	20,456	40,620
1956	58,295	13,588	44,707

* Excluding Crown Woods transferred to the Commissioners under the Forestry (Transfer of Woods) Act, 1923.

Land Acquired to Date

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

SUMMARY STATEMENT OF LAND ACQUIRED*

Table 8

At 30th September 1956

Acres

	Total	By Lease or Feu			By Purchase		
		Total	Plant-able†	Other	Total	Plant-able†	Other
Total:							
Great Britain	2,058,551	600,915	441,952	158,963	1,457,636	889,628	568,008
England ...	581,362	232,839	208,038	24,801	348,523	280,350	68,173
Scotland ...	1,169,982	272,601	155,712	116,889	897,381	442,851	454,530
Wales ...	307,207	95,475	78,202	17,273	211,732	166,427	45,305
Acquisitions completed:							
Great Britain	2,046,623	593,840	435,476	158,364	1,452,783	884,983	567,800
England ...	571,310	227,461	203,229	24,232	343,849	275,828	68,021
Scotland ...	1,168,538	271,157	154,270	116,887	897,381	442,851	454,530
Wales ...	306,775	95,222	77,977	17,245	211,553	166,304	45,249
Entry Secured:							
Great Britain	11,928	7,075	6,476	599	4,853	4,645	208
England ...	10,052	5,378	4,809	569	4,674	4,522	152
Scotland ...	1,444	1,444	1,442	2	—	—	—
Wales ...	432	253	225	28	179	123	56

* Excluding Crown Woods amounting to 118,000 acres (of which some 60,000 acres are plantable) transferred to the Commissioners under the Forestry (Transfer of Woods) Act, 1923.

† Including planted land.

From the above table it will be noted that a total of 2,058,551 acres have been acquired by lease or feu and by purchase. Of this total, 1,331,580 acres were classified on acquisition as plantable land, and is held by the three countries as follows: England, 488,388 acres (37 per cent.); Scotland, 598,563 acres (45 per cent.); Wales, 244,629 acres (18 per cent.). The classification at the time of acquisition may be altered in the light of experience, local developments and other factors, and the present or intended use of land as at 30th September is given in Table 3 on page 28.

Expenditure during the year on the purchase and lease of land, including the salaries and expenses of the acquisition staff, legal expenses, outgoing valuations, and tithe and stipend redemptions, was £312,000. The value of land disposed of was £51,000, giving a net expenditure of £261,000 (Appendix 2, page 65). It should be noted that this amount cannot be directly related to the area acquired during the year since that area includes land to which entry was secured pending financial settlement.

The average price paid during the year for plantable land, excluding timber and buildings, was £3 4s. 2d. per acre; in the previous year it was £3 1s. 8d. Within this average there is a considerable range of prices related to the quality of the land and its value to the Commission. Excluding land purchased to improve access and boundaries, prices have ranged from 10s. per acre for some 300 acres of very poor land acquired for experimental planting, up to, in one instance, £9 7s. 6d. per acre in respect of 32 acres. The general run of prices lay between £2 and £4 per acre between which limits 63 per cent. of area purchased during the year was acquired.

The average rent paid for plantable land was 2s. 9d. per acre; the corresponding average for the previous year was 2s. 5d. The rents negotiated ranged from 1s. per acre for a 10-acre experimental area up to 5s. 6d. per acre for good quality land on a water catchment area, being an extension of an already extensive area leased from the same corporation. These are the extremes, and of the plantable land leased during the year 68 per cent. was at rents between 2s. 6d. and 3s. 6d. per acre.

FORESTRY OPERATIONS

During the autumn and early winter, the weather over much of the country was drier than usual and good progress was made with forest work till hard weather in January and February brought planting and nursery work to a standstill in many parts. In February, snow was general and heavy in the east. Spring was late and brought dry, cold weather which resulted in a long period of acute fire danger. Between February and May a number of destructive forest fires occurred. The months from June to September were wet and cold with heavy rainstorms. The combination of spring drought and cold summer was not favourable and growth in nurseries and plantations was generally below normal.

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

Expenditure on forestry operations amounted to £7,773,000, less £2,352,000 in respect of sales of timber and other forest produce and an increase in stocks of felled timber and other forest produce. For comparison, the figures for the previous year were: Expenditure, £7,803,000, less £2,425,000. Details are given in Appendix 3, page 65.

Forest Nurseries

Seed Supply

The Commissioners' policy is to collect from their own woods, and by arrangement with owners from private woodlands also, as much as possible of the seed required to provide the trees for their planting programme. The amount of seed produced by trees varies greatly from year to year, but it is usually possible to meet most of the requirements of the broadleaved species such as oak, ash, sycamore and beech; the beech crop, however, is intermittent and from time to time it has been necessary to seek supplies from the Continent and these have not always been available. For supplies of conifer seed, Scots pine is the only important home-grown species which can be relied on to provide all our requirements. For supplies of other species such as Douglas fir, Sitka spruce, Japanese larch, *Tsuga* and lodgepole pine, though considerable areas of these have been planted in this country, until more of them reach seed bearing age it is necessary to import seed from their countries of origin.

In order to make the most of these sources, a survey of plantations, and in some cases of individual trees of outstanding quality, from which seed or material for propagation should be collected, is being undertaken; a register of this information has been prepared for Scottish sources and the survey is in progress in England.

Home Collected Seed

With the exception of Scots pine, the main conifers throughout the country gave a poor yield of cones, and it was only in the north and east of Scotland and in the east and south-east of England that the Scots pine crop could be called good. The production of broadleaved tree seeds, with the exception of oak and Spanish chestnut, was also poor, and beech for the fifth year in succession failed to produce seed.

The conifer collection amounted to 12,051 bushels of cones, of which Scots pine accounted for 10,604 bushels; most of this was collected in Scotland, 3,396 bushels in North Conservancy and 4,300 in East Conservancy. As will be seen from Table 9, the quantities of other species were small and for the most part these too were collected from Scottish sources. The amount collected in the previous year was 10,877 bushels of cones, of which 6,723 bushels were of Scots pine.

The quantity of cones which passed through the Commission's seed extraction establishments was 11,263 bushels and produced 5,003 lb. of seed.

The quantity of broadleaved tree seeds collected totalled 128,942 lb. as compared with 21,969 lb. last year. Acorns and Spanish chestnut made up the bulk of the collection, and amounted to 119,127 lb. and 6,505 lb. respectively, most of which were collected in England. The acorn crop was generally good, except in North Scotland; Spanish chestnut was good only in the South of England.

Details by species of the amounts of conifer and broadleaved seeds collected are given in Tables 9 and 10 below.

HOME COLLECTION OF CONIFER SEED

Table 9

Year ended 30th September 1956

	Cones Collected					Cones kilned	Seed extracted
	Total	England	Scotland	Wales	Research		
	Bushels					Bushels	lb.
Total	12,051	2,514	9,454	68	15	11,263	5,003
Scots Pine	10,604	2,378	8,194	32	—	10,616	4,599
Corsican Pine ...	93	27	66	—	—	93	61
European Larch ...	183	—	183	—	—	187	79
Japanese Larch ...	14	—	9	5	—	10	6
Douglas Fir	9	—	9	—	—	—	—
Norway Spruce ...	27	3	24	—	—	27	3
Sitka Spruce	4	—	4	—	—	—	—
Other Conifers...	1,117	106	965	31	15	330	255

HOME COLLECTION OF BROADLEAVED SEED

Table 10

Year ended 30th September 1956

lb.

	Total	England	Scotland	Wales	Research
Total	128,942	83,219	43,675	1,756	292
Ash	135	55	77	—	3
Beech	24	—	23	—	1
Oak	119,127	74,605	42,903	1,384	235
Sycamore	428	96	293	10	29
Spanish Chestnut ...	6,505	6,322	8	175	—
Other broadleaved trees ...	2,723	2,141	371	187	24

Imports of Seed. The Commission has continued to make bulk imports of seed of Douglas fir, Sitka spruce, Japanese larch and Corsican pine to cover its own, and also private and trade needs. Last year the seed crop of the North American species, with the exception of Douglas fir, was moderate to poor; this year the crop, including Douglas fir, was again moderate to poor, and requirements of *Tsuga*, *Thuja* and some of the *Abies* species could not be met. As last year was a good year for Douglas fir, we had taken the precaution of purchasing 10,000 lb. which were held in storage in U.S.A., against future requirements; last year we drew on this to the extent of 2,500 lb. and this year to the extent of 2,000 lb. In Europe there was again a poor crop of larch of acceptable origin; sufficient Corsican pine seed was available but of a lower germination percentage than usual. It was a good year for Japanese larch seed, and sufficient was available to meet requirements and give a small carry over for next year.

We were unable to make up our deficiency of beech seed as the failure of the beech mast extended to the Continent; our main purchases of broadleaved tree seeds were of sessile and red oak.

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

IMPORTED SEED

Table 11

Year ended 30th September 1956

Species	Quantity (lb.)	Origin
All Species: Total...	26,392	—
Coniferous: Total	11,074	—
Corsican Pine	1,540	Corsica
Lodgepole Pine	933	Washington and Oregon, U.S.A.
Norway Spruce	500	Austria
Norway Spruce	447	Poland
Sitka Spruce	284	West Coast of Washington, U.S.A.
Sitka Spruce	193	Vancouver and Vancouver Island, Canada
European Larch	159	Poland
Japanese Larch	4,000	Japan
Tsuga heterophylla	34	British Columbia, Canada
Thuja plicata	34	British Columbia, Canada
Abies nobilis	600	Oregon, U.S.A.
Abies nobilis	314	Washington, U.S.A.
Abies grandis	1,425	British Columbia, Canada
Abies amabilis	100	Washington, U.S.A.
Abies alba	36	Austria
Abies concolor	100	Colorado, U.S.A.
Abies lasiocarpa	40	Oregon, U.S.A.
Abies sachalinensis	20	Japan
Cedrus deodara	40	France
Cedrus libani	20	France
Cryptomeria japonica	33	Japan
Pinus peuce	21	Macedonia
Pinus mugo erecta	21	Austria
Pinus ponderosa	20	Canada
Other Conifers	160	Various
Broadleaved: Total	15,318	—
Oak (sessile)	5,000	Austria
Oak (red)	10,080	Holland
Other hardwoods	238	Various

Sales of Seed. The amounts of coniferous seed sold to the nursery trade were in general greater than last year; exceptions to this were European larch and Sitka spruce. A consignment of Scots pine seed was again sent to the U.S.A. Woodland owners' requirements were small, and in total also showed an increase.

Sales of broadleaved tree seeds, almost entirely acorns, were considerably greater than last year when the crop was poor; of the 19,878 lb. sold, all went to the nursery trade.

Details by species of quantities sold to the nursery trade and to woodland owners are given in Table 12, page 36.

SALES OF SEED

Table 12

Years ended 30th September

lb.

Species	Total		Sold to			
			Nursery Trade		Woodland Owners	
	1955	1956	1955	1956	1955	1956
All species: Total ...	4,077	24,755	3,939	24,583	138	172
Conifers: Total ...	4,063	4,877	3,939	4,705	124	172
Scots Pine ...	781	1,052	769	1,043	12	9
Corsican Pine ...	306	485	289	426	17	59
European Larch ...	244	2	234	—	10	2
Japanese Larch ...	1,035	1,522	1,019	1,495	16	27
Douglas Fir ...	668	730	658	708	10	22
Norway Spruce ...	141	270	111	248	30	22
Sitka Spruce ...	554	516	542	499	12	17
Lodgepole Pine ...	70	86	66	84	4	2
Abies grandis ...	144	131	138	123	6	8
Other conifers ...	120	83	113	79	7	4
Broadleaved: Total ...	14	19,878	—	19,878	14	—
Oak ...	—	19,848	—	19,848	—	—
Beech ...	14	—	—	—	14	—
Ash ...	—	30	—	30	—	—

Nursery Work

Preparatory work progressed well in most districts till the onset of wintry weather in January and February. This caused some delay in lifting plants for despatch, and also in lining out and preparation of the new seed beds. Where this delayed sowings, the results were affected by the cold and dry spring, and in most parts of England and Wales germination was slow and irregular; conditions in Scotland were not so unfavourable, except in the east. The dry weather in the early summer, which in some parts continued into June, was unfavourable to growth, and after the dry spell ended, the succeeding cold wet sunless summer gave a shorter growing period than usual. The results have therefore been variable, with more than the usual amount of weed growth to contend with.

Nursery Area. The area under forest nurseries was reduced by 9 acres and at the end of the year amounted to 2,112 acres, of which 432 acres are classed as heathland nurseries. The corresponding figures for the previous year were: 2,131 acres, of which 393 acres were of the heathland type.

Use of Nursery Ground. A rotation of cropping is observed in the nurseries and of the total area of 2,112 acres, 314 acres (15 per cent.) were under seed beds, 693 acres (33 per cent.) under transplants, and 722 acres (34 per cent.) occupied by fallow or green crops; these proportions show little change from the previous year. Details by Conservancies are given in Table 13, page 37.

Seed Sown. The quantity of conifer seed sown was 17,568 lb., an increase of 1,218 lb. on last year's sowing; this increase includes close on 1,000 lb. of seed sown to provide seedlings for disposal to the nursery trade for private planting. This special extra sowing marks an important though temporary change in policy on the part of the Commission aimed at getting over the shortage of plants which has affected private planting for a number of years. The main increases compared with last year were in Corsican pine, Japanese larch, Norway and Sitka spruces and *Abies grandis*. There was also an increase in

the quantity of broadleaved tree seeds sown, 119,171 lb. as compared with 33,497 lb. in 1955. The bulk of the broadleaved sowings are usually of oak, and in 1956 considerable quantities of acorns were available, whereas in 1955 they had been scarce. Details by countries of the quantities of coniferous and broadleaved tree seed sown are given in Table 14, page 38, along with comparable figures for 1954 and 1955.

Stocks of Seedlings and Transplants. At the end of September the nurseries held 432·6 million plants of all species and categories; compared with last year this is less by some 6 million, which is made up of an increase in the number of transplants of close on 14 million, and a decrease in the number of seedlings of 20 million. Details of the stocks of coniferous and broadleaved transplants and seedlings held in each of the three countries, along with comparative figures for the two previous years, are given in Table 15, page 38.

Sales of Nursery Stock. Sales of seedlings and transplants to the nursery trade for lining-out or for resale to woodland owners, increased from 11½ million plants in 1955 to just over 15½ million in the year under report. As discussed earlier in this Report (page 15) additional plants were made available by a reduction in the Commission's own planting programme. The increases were spread over most of the usual coniferous species; while the number of broadleaved species sold showed a slight reduction. Details by species are given in Table 16, page 36.

Expenditure and Receipts. Expenditure on nurseries, including the purchase and collection of seed, was £584,000; sales of seed and surplus nursery stock brought in £73,000.

USE OF NURSERY GROUND
At 30th September 1956

Table 13

Acres

	Total	Seedbeds	Transplant Lines	Fallow and Green Crops	Other
GREAT BRITAIN	2,112	314	693	722	383
<i>Percentage of total area ...</i>	100	15	33	34	18
ENGLAND: Total	784	111	249	278	146
Conservancy:					
North West	175	17	52	65	41
North East	181	26	69	50	36
East	164	30	52	51	31
South East	91	12	25	40	14
South West	92	15	30	36	11
New Forest	53	7	15	26	5
Dean Forest	28	4	6	10	8
SCOTLAND: Total	833	123	270	301	139
Conservancy:					
North	217	41	67	82	27
East	162	26	57	43	36
South	247	35	88	75	49
West	207	21	58	101	27
WALES: Total	462	77	164	134	87
Conservancy:					
North	259	40	92	75	52
South	203	37	72	59	35
Research Nurseries	33	3	10	9	11

SEED SOWN IN NURSERIES

Table 14

Years ended 30th September

lb.

	1954	1955	1956
TOTAL SEED SOWN			
Great Britain	234,029	49,847	136,739
England	157,196	30,681	100,490
Scotland	24,080	10,543	25,446
Wales	51,829	8,006	10,225
Research Nurseries	924	617	578
CONIFEROUS SEED			
Great Britain	15,985	16,350	17,568
England	4,251	3,691	5,233
Scotland	7,672	7,232	6,719
Wales	3,917	5,192	5,447
Research Nurseries	145	235	169
BROADLEAVED SEED			
Great Britain	218,044	33,497	119,171
England	152,945	26,990	95,257
Scotland	16,408	3,311	18,727
Wales	47,912	2,814	4,778
Research Nurseries	779	382	409

STOCKS OF TRANSPLANTS AND SEEDLINGS

Table 15

At 30th September

Thousands of Plants

	1954	1955	1956
TOTAL TRANSPLANTS			
Great Britain	189,117	162,706	176,393
England	58,006	49,985	51,039
Scotland	91,052	81,013	83,716
Wales	39,527	31,105	41,120
Research Nurseries	532	603	518
CONIFEROUS			
Total, Great Britain	180,270	147,054	164,908
England	52,058	39,211	43,685
Scotland	89,701	78,949	82,227
Wales	38,059	28,476	38,575
Research Nurseries	452	418	421
BROADLEAVED			
Total, Great Britain	8,847	15,652	11,485
England	5,948	10,774	7,354
Scotland	1,351	2,064	1,489
Wales	1,468	2,629	2,545
Research Nurseries	80	185	97
TOTAL SEEDLINGS			
Great Britain	316,029	276,035	256,201
England	84,590	70,415	65,113
Scotland	156,316	129,200	129,001
Wales	71,639	73,795	60,780
Research Nurseries	3,484	2,625	1,307

Table 15—*continued*

	1954	1955	1956
CONIFEROUS			
Total, Great Britain ...	293,712	264,812	247,903
England	72,100	63,888	59,826
Scotland	153,117	126,938	126,686
Wales	65,416	71,431	60,155
Research Nurseries ...	3,079	2,555	1,236
BROADLEAVED			
Total, Great Britain ...	22,317	11,223	8,298
England	12,490	6,527	5,287
Scotland	3,199	2,262	2,315
Wales	6,223	2,364	625
Research Nurseries ...	405	70	71

SALES OF NURSERY PLANTS

Table 16

Year ended 30th September, 1956

Thousands

ALL SPECIES: TOTAL	15,653
Coniferous: Total	15,518
Scots pine	3,082
Corsican pine	280
European larch	71
Japanese larch	2,580
Douglas fir	1,370
Norway spruce	4,400
Sitka spruce	2,500
Other conifers	1,235
Broadleaved: Total	135
Ash	16
Oak	21
Beech	73
Other broadleaved species	25

Plantations

Conditions in the early part of the forest year permitted good progress to be made with fencing and preparatory work. Planting was commenced in good time and progressed well till stopped by the onset of hard weather in January and February. When it was possible to restart planting, dry conditions prevailed; and much of it was done in drier conditions than are desirable. In some districts, drought conditions extended into June and caused losses in some of the newly planted areas. The wet and cool summer which followed, while assisting the young trees to get over the effects of drought, brought on heavy weed growth, and generally it was a poor year for tree growth. It will be recalled that in the previous year drought conditions also prevailed, and much additional beating up of plantations, that is making good gaps caused by the death of young trees, had to be undertaken. The results of spring frosts were not severe.

During the year the planting of the millionth acre of forest was marked by a visit of Her Majesty the Queen to Eggesford Forest, Devonshire, as it was at this forest on 8th December, 1919, that the first trees were planted by the then newly-constituted Forestry Commission. This visit is recorded on page 7 of this Report, and a photograph of the Queen and H.R.H. the Duke of Edinburgh at the ceremony appears in the centre pages.

The rates of planting and acquisition of land in relation to the first decade of post-war forestry are discussed earlier in this Report (pages 7 to 9). Here it may be noted that there has been a progressive reduction in the area planted annually since the peak in the Forest Year of 1954, when 70,400 acres were planted; in 1955, 67,900 acres were planted, while in the year under review the area was reduced to 62,400 acres, and an even lower figure must be expected in 1957.

The contributions made by the three countries to the 62,400 acres planted during the year were as follows: England, 20,822 acres (33 per cent.); Scotland, 29,751 acres (48 per cent.); Wales, 11,827 acres (19 per cent.). Details of the amounts planted in each Conservancy are given in Table 17, while the planting done in individual forests is given in Appendices 12 to 14 on pages 71 to 81.

AREAS PLANTED AND UNDERPLANTED

Table 17 Year ended 30th September, 1956 Acres

Country or Conservancy	Planted	Under-planted	Country or Conservancy	Planted	Under-planted
GREAT BRITAIN	62,400	593	SCOTLAND: Total ...	29,751	129
ENGLAND: Total ...	20,822	376	Conservancy:		
Conservancy:			North ...	7,840	6
North West ...	3,938	61	East ...	6,656	61
North East ...	8,281	167	South ...	9,575	25
East ...	2,696	102	West ...	5,680	37
South East ...	2,410	9	WALES: Total ...	11,827	88
South West ...	2,671	23	Conservancy:		
New Forest ...	517	14	North ...	6,779	70
Dean Forest ...	309	—	South ...	5,048	18

Table 18 analyses the 62,400 acres planted during the year in respect of the area under conifers and broadleaved trees, and also as to the area afforested, that is planted on ground which has not within recent times carried a forest crop, and the area replanted, that is the planting up of a woodland area from which the old crop has been removed.

AFFORESTATION AND REPLANTING

Table 18 Year ended 30th September, 1956 Acres

	Great Britain	England	Scotland	Wales
TOTAL PLANTED:				
All species ...	62,400	20,822	29,751	11,827
Conifers ...	56,316	16,025	29,165	11,126
Broadleaved ...	6,084	4,797	586	701
AFFORESTED:				
All species ...	38,592	10,393	21,137	7,062
Conifers ...	37,650	9,714	20,951	6,985
Broadleaved ...	942	679	186	77
RE-PLANTED:				
All species ...	23,808	10,429	8,614	4,765
Conifers ...	18,666	6,311	8,214	4,141
Broadleaved ...	5,142	4,118	400	624

From the above analysis it will be noted that 56,316 acres were planted with conifers and 6,084 acres with broadleaved species. This represents proportions of 90 per cent. and 10 per cent. respectively; these proportions have varied little over the past few years. Broadleaved plantations require better soil and more favourable conditions than coniferous, and thus the bulk of the broadleaved plantations were made in England, where 4,797 acres were completed; Scotland and Wales planted 586 acres and 701 acres respectively. The main broadleaved species used were oak and beech.

Table 18 also shows that the year's planting was divided between 38,592 acres (62 per cent.) afforested and 23,808 acres (38 per cent.) of replanting old woodland; this latter figure includes 749 acres replanted after destruction by fire. These proportions show only small variations from those of previous years.

Plants used for Planting and Beating-up

A total of 118·8 million young trees were planted in the Commission's forests during the year; 95·8 million were used in the formation of new plantations and 23·0 million for beating-up, that is for replacing failures in the more recently formed plantations. For comparison, the numbers used last year were: in new plantations, 103·5 million; for beating-up, 14·9 million. It will be noted that a greater number of plants were used for beating-up in 1956; this is on account of the greater number of deaths in young plantations resulting from the prolonged drought in the spring and summer of 1955.

The proportions in which the main species were used for planting and beating-up are:

	<i>Per cent</i>		<i>Per cent</i>
Sitka spruce ...	24	Douglas fir ...	4
Scots pine ...	18	Beech ...	4
Lodgepole pine ...	13	Oak ...	4
Japanese larch ...	12	European larch ...	2
Norway spruce ...	8	Other conifers ...	5
Corsican pine ...	5	Other broadleaved species ...	1

Compared with the previous year changes have been slight; Sitka spruce and Scots pine retain their position, but greater use is being made of lodgepole pine on account of its value as a pioneer and nurse species on difficult sites.

The numbers of the main species used in each Conservancy are given in Appendix 9, page 68, and a summary by species is given in Appendix 10, page 70.

Progress of Planting to date

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

AREAS PLANTED TO DATE				Acres	
Table 19				Years ended 30th September	
				Total	Re-planted
Total, 1920-1956				1,026,886	320,398
1920-29	...	...	...	138,271	36,295
1930-39	...	...	...	230,607	56,179
1940-49	...	...	...	217,122	67,254
1950	...	...	...	53,737	16,382
1951	...	...	...	57,164	19,146
1952	...	...	...	61,632	21,976
1953	...	...	...	67,610	24,945
1954	...	...	...	70,437	27,409
1955	...	...	...	67,906	27,004
1956	...	...	...	62,400	23,808

The total area of plantations formed by the Commission up to the end of September, 1956 was 1,026,886 acres. Not all of this is still standing as there have been losses from fires and gales, as well as fellings and disposals. The actual area of plantations at the end of the year was 980,600 acres excluding acquired plantations, (*see* Table 3, page 28). Included in the 320,398 acres shown above as re-planted are 20,262 acres which were replanted after destruction by fires.

Expenditure. Direct expenditure on preparatory work and the formation of plantations was £1,866,000; this includes the cost of clearing the ground and ploughing if necessary, making drains, putting up fences and planting, along with charges for the provision of plants. Expenditure on the maintenance of plantations was £1,165,000; this likewise in addition to the cost of beating-up and underplanting, weeding and cleaning plantations, and the maintenance of ditches and fences, includes charges for the plants used.

For comparison, expenditure in the previous year was: Preparatory work and formation of plantations, £2,205,000; maintenance of plantations, £1,028,000. (Appendix 3, page 65.)

Forest Protection

Direct expenditure on forest protection was £471,000 (Appendix 3, page 65); of this, £298,000 was expended on fire protection, including making and maintaining fire lines, fire patrols and the actual work of fire fighting; and £173,000 was in respect of other protective works such as the destruction of rabbits, squirrels and vermin, and also measures taken against injurious insects and fungi.

Fire Protection

The year under review was one in which heavy losses from fire were sustained; 2,045 fires endangering plantations occurred, 4,078 acres of plantations were destroyed and the loss, including the cost of extinguishing, was £175,000. These are, however, exceptional amounts. The number of fires was above the average, and while it is some 800 less than in the previous year, that year also was exceptional; the average number of fires over the five previous years was 1,577 per annum. The period of greatest fire danger occurred as usual in the early part of the year; acute danger existed from February to May, during which 90 per cent. of the outbreaks occurred, and for the second year running the Commission's staff had a very trying and arduous time. Of the 2,045 outbreaks which occurred during the year, 83 per cent. were controlled before they damaged plantations; the figure for the previous year was 92 per cent.

In only two previous years have losses of this magnitude been sustained; in 1929 the area of plantations lost was 4,575 acres, and in 1942 losses, including those due to the war, amounted to 6,480 acres. An unfortunate feature of the year under review was the number of large fires; the eight largest together destroyed 2,648 acres of plantations and accounted for 65 per cent. of the loss; five of these fires destroyed areas of between 180 acres and 212 acres; two extended to 446 and 449 acres respectively, and the largest of all destroyed 740 acres of plantations. The financial loss, assessed at £175,000, was the heaviest recorded; the average for the five previous years was £15,600 per annum. Table 20 gives a summary of the fires which occurred in the previous five years.

NUMBER AND EXTENT OF FOREST FIRES, 1951-1956

Table 20

Years ended 30th September

					Number of Fires	Area Burned (acres)	Assessed Damage £
1951	...	...	...	...	1,327	348	12,000
1952	...	...	...	...	1,130	455	16,000
1953	...	...	...	...	1,253	532	15,000
1954	...	...	...	...	1,344	390	16,000
1955	...	...	...	...	2,834	276	19,000
1956	...	...	...	...	2,045	4,078	175,000

CAUSES OF FOREST FIRES

Table 21

Year ended 30th September, 1956

	Number of Fires	Area Burned (acres)
Total	2,045	4,078
Railways	980	1,330
Adjoining Land	543	1,579
General Public	155	237
Commission Employees	22	525
Incendiarism	—	—
Miscellaneous	42	44
Unknown	303	363

The classification given above of the causes of the 2,045 fires which occurred during the year shows that, as in previous years, railways have been the cause of the greatest number of fires; the 980 fires from this cause accounted for 48 per cent. of all fires and for 33 per cent. of the area of plantations burned. While the number of these fires and the percentage they bear to the whole decreased very considerably compared with the previous year, the area of plantations destroyed was much greater; one fire alone extended to 740 acres and the total loss from this cause was 1,330 acres, as against 63 acres in 1955. The number of fires coming in from adjoining land was more than double that for 1955, and the area of plantations destroyed jumped from 56 acres up to 1,579 acres. Twenty-two fires which destroyed 525 acres of plantations were caused by Commission employees; sixteen of these resulted from burning operations, one of which unfortunately involved the loss of 448 acres of plantations; six which between them burned 31 acres were due to men smoking or lighting meal-time fires.

The cost of protecting plantations from fire is heavy, and the Commission is constantly seeking to improve methods of preventing fires from reaching plantations and of limiting and suppressing them when they do. The new roads being built at many forests and the provision of radio equipment for emergency communications are adding greatly to the efficiency of the fire fighting arrangements.

Protection against Damage by Animals and Insects

Myxomatosis and persistent trapping have continued to reduce the rabbit population on Forestry Commission areas; but, as noted earlier in this Report (page 18) it is disturbing to learn that pockets of healthy rabbits are re-appearing

on areas previously cleared of them. In 1954 and 1955 the numbers killed were 292,000 and 154,000 respectively; in the year under review 41,000 were destroyed, made up of 14,000 in England, 24,000 in Scotland and 3,000 in Wales. Corresponding figures for the previous year were: England, 41,000; Scotland, 102,000; Wales, 11,000. The number of hares taken has continued to increase, 13,000 were killed in 1954, 17,000 last year and 20,700 this year; the East Conservancy of Scotland accounted for 13,000 of the year's total.

The general campaign against the grey squirrel, which is discussed earlier in this Report (page 18), has been continued with vigour. The numbers destroyed totalled 20,600, and as in previous years most of these were taken south of a line from Gloucester to London. The greatest numbers were again accounted for in the New and Dean Forests, and in the South-East Conservancy of England; these regions individually accounted for 5,800, 3,800 and 4,600 squirrels. The number taken by our trappers in Scotland was 700, most of them in the West Conservancy. In Wales 1,088 were destroyed; there was a small increase in the North Conservancy and a small decrease in the South Conservancy.

In the interests of our tenants and neighbours 5,523 foxes and cubs were destroyed; last year the total was 5,900.

Reports of increases in the vole population come from forests in central and south Scotland, and north Wales. In reporting on the increases observed at the Forest of Ae and at Castle O'er Forest in Dumfries-shire, the Conservator remarks that no great damage to the trees has yet occurred and concludes that foxes, aided by a greater number of owls and kestrels than usual, have taken care of the increase.

Deer, particularly the roe, are finding congenial conditions in the extensive areas of new forest now growing up in many parts of the country and are extending their distribution. Damage by browsing and fraying can be serious in plantations, and to keep this within bounds, the numbers of deer must be controlled. The Commission is studying how this can best be done and has appointed a Game Warden with experience in these matters. In Scotland during the past year deer were killed at 152 forests; in England at 36 forests; in Wales, deer are rare and are not a problem.

Defoliation of oak by tortrix caterpillars has been much in evidence, particularly so in the Forest of Dean and in Wyre Forest and also in the Tay Valley, Perthshire. Outbreaks of Pine Shoot Beetle and pine weevils occurred in some of the wind-damaged areas in Scotland, but not of epidemic proportions. A continuation of the survey of pine areas in relation to the Pine Looper Moth, which caused considerable damage in 1954, showed no dangerous concentration of the pupae.

PREPARATION AND SALE OF PRODUCE

Thinning

The area of plantations thinned was 43,110 acres, an increase of some 3,500 acres compared with the previous year; practically the whole of this increase occurred in Scotland, and most of it in East Conservancy. Table 22 provides details by Conservancies of the areas thinned in 1955 and 1956.

AREAS THINNED

Table 22

Year ended 30th September

Acres

	1955	1956		1955	1956
GREAT BRITAIN: Total	39,542	43,110	SCOTLAND: Total ...	11,813	15,054
ENGLAND: Total ...	22,526	22,133	Conservancy:		
Conservancy:			North ...	3,256	2,777
North West ...	4,199	5,398	East ...	3,480	6,374
North East ...	3,184	2,362	South ...	1,306	1,936
East ...	7,677	7,274	West ...	3,771	3,967
South East ...	1,650	1,263	WALES: Total ...	5,203	5,923
South West ...	2,511	2,479	Conservancy:		
New Forest ...	1,745	1,596	North ...	3,084	3,346
Dean Forest ...	1,560	1,761	South ...	2,119	2,577

Over the country as a whole, 94 per cent. of the area thinned was under conifers; this shows no change from the previous year. The area of young plantations in which thinnings were made for the first time was 14,456 acres; last year it was 14,592 acres.

Over the past few years there has been a progressive increase in the area of thinnings worked by merchants, that is where they have bought the thinnings standing; in 1955 the area was 6,878 acres (17 per cent. of the whole) and in the year under review it was 12,173 acres (28 per cent.). More of this work is done by merchants in Scotland than elsewhere; in 1956, of the total area thinned in each country, the proportions worked by merchants were, in Scotland 41 per cent., in Wales 27 per cent., in England 20 per cent.; the proportions by volume were approximately the same. It is also of interest to note that as regards first thinnings, where the poles are smaller than those from second or subsequent thinnings, merchants worked 26 per cent. of the area which was thinned for the first time in the year under report.

Clear Felling

An area of 7,503 acres was clear felled; of this 1,862 acres were high forest, 4,686 acres scrub woodlands, and 955 acres coppice and coppice-with-standards. In total, the area clear felled is 518 acres more than last year; most of this increase is shared between fellings in the high forest, and coppice and coppice-with-standards categories. Table 23 below gives by conservancies the areas felled in 1955 and 1956; from this it will be seen that the greatest individual difference from the previous year is in Wales where a considerably greater acreage of scrub woodland was cleared for planting.

AREAS FELLED

Table 23

Year ended 30th September

Acres

	1955	1956		1955	1956
GREAT BRITAIN: Total	6,985	7,503	SCOTLAND: Total...	1,085	880
ENGLAND: Total ...	4,394	4,398	Conservancy:		
Conservancy:			North ...	726	544
North West ...	234	416	East ...	247	224
North East ...	242	519	South ...	13	16
East ...	698	697	West ...	99	96
South East ...	1,716	1,598	WALES: Total ...	1,506	2,225
South West ...	901	578	Conservancy:		
New Forest ...	445	391	North ...	807	939
Dean Forest ...	158	199	South ...	699	1,286

Production and Disposal of Forest Products

The total volume of timber felled in Commission forests during the year was 18·34 million hoppus feet over bark, of which 14·20 million came from thinnings and 4·14 million from clear fellings; of these amounts, merchants cut 4·22 million feet of thinnings and 1·01 million feet from clear fellings.

The volume of timber and thinnings being sold standing to merchants is becoming progressively greater; the quantity so disposed of in 1954 was 1·99 million hoppus feet, in 1955 it was 3·92 million and in the year under review it had increased to 5·84 million feet. The total of 5·84 million feet was made up as follows: in Scotland 3·41 million, England 1·76 million, Wales 0·67 million.

A comparison of these figures with those for the previous year gives a total increase of 1·92 million Hoppus feet, made up as follows:—

		<i>Million Hoppus Feet</i>
England ...		0·28 (+19 per cent.)
Scotland ...	...	1·41 (+71 per cent.)
Wales ...	... ..	0·23 (+52 per cent.)

Other disposals, including material used by the Commission for forest and estate purposes, are given below, along with the previous year's figures for comparison:—

		<i>Million Hoppus Feet</i>	
		<i>1956</i>	<i>1955</i>
Round Timber and Saw Logs ...	... ..	3·29	3·60
Telegraph, Transmission and other selected Poles ...	... ..	0·07	0·13
Mining Timber ...	... ..	3·17	3·56
Posts, stakes, unselected poles ...		2·02	2·03
Pulpwood and boardmill		1·41	1·33
Firewood, etc.	...	1·91	1·80
Sawn timber	...	0·16	0·29

The decreases in some items, as compared with 1955, are largely accounted for by the reduction in the scale of direct operations in Scotland following on the windblow clearance. The demand for harvest poles fell away, but other categories of produce were readily saleable.

Prices for standing timber and thinnings were generally steady throughout the year.

In the Forest Year under report, income from sales of standing timber amounted to £482,000 (£280,000 in Forest Year 1955). £1,580,000 (£1,810,000) was realised from other sales of produce ranging in variety from tree lengths sold at stump to finished products, e.g. pitprops, delivered to customers; minor produce, etc., which includes Christmas trees and sundry receipts, realised £114,000 (£125,000); and material to the value of £109,000 (£162,000) was used within the Commission for fencing, estate work and other purposes. Stocks and work in progress increased during the year by £17,000 (£48,000). Recoveries in respect of damage to plantations amounted to £50,000. Gross income thus amounted to £2,352,000 (£2,425,000).

Direct expenditure on thinning and clear felling operations, including the felling, preparation and despatch of produce amounted to £1,205,000 (£1,444,000) (Appendix 3, page 65).

ROADS AND BRIDGES

Good progress was made with the construction of forest roads. Work was undertaken at 213 forests and 443 miles of motorable roads were completed with 200 miles under construction at the end of the year. This exceeds last year's progress by 105 miles of completed road and 85 miles of road under construction. The good progress made is attributed in the main to the gradual development and adoption of specifications and construction techniques specially fitted to forestry needs, to the gain by all concerned in experience of this particular kind of road work and to the build-up over the years of the requisite constructional equipment. The work carried out during the year in each of the three countries is given in Table 24 below.

FOREST ROADS

Table 24 Year ended 30th September, 1956

				Length of Road (Miles)		Number of Forests at which work was undertaken
				Completed	Under Construction	
GREAT BRITAIN: Total ...				443	200	213
England				151	143	88
Scotland				210	24	98
Wales				82	33	27

Bridging is a major item only in Scottish forests, where 49 bridges aggregating more than 1,000 feet in length were built in 1956. The majority of these were of the tram-rail-concrete composite type, in single spans up to 30 feet, or in multiple spans up to 60 feet.

Including new roads constructed since 1947, the network of forest roads for which the Commission is responsible now amounts to over 3,500 miles. Maintenance and repair work on these is done as required.

Capital expenditure on roads and bridges was £1,099,000 (Appendix 2, page 65). Maintenance cost £165,000, in addition £45,000 was spent on the formation and maintenance of forest tracks; this expenditure is charged mainly to forestry operations. Expenditure on these subjects last year was: capital expenditure, £785,000; maintenance of roads and bridges, £147,000; forest tracks, £38,000.

ESTATE MANAGEMENT

Properties in the charge of the Commission show the usual diversity associated with large estates. In addition to 1,064,400 acres of plantations and nurseries, other land in the charge of the Commission amounts to 738,100 acres; this includes 278,000 acres which will be planted up in due course, but the major part consists of farms, forest workers holdings and other land which will not be planted. The number of lettable subjects, including easements and permissions, at the end of the year was 12,537, made up of 5,555 in England, 4,990 in Scotland, and 1,992 in Wales; these are detailed in Table 25 overleaf.

TENANCIES

Table 25

At 30th September, 1956

Number

Description	Great Britain	England	Scotland	Wales
Houses for Supervisors and Forest Workers	4,569	1,785	2,135	649
Foresters and Foremens Houses	860	380	326	154
Forest Workers Holdings	1,160	507	448	205
Forest Workers Houses	2,549	898	1,361	290
Other properties	4,220	1,801	1,563	856
Agricultural, with house	518	133	152	233
Agricultural, land only	1,597	672	559	366
Houses and other premises	798	429	243	126
Sporting lettings	1,307	567	609	131
Miscellaneous: Easements, permissions, etc.	3,748	1,969	1,292	487

From the above it will be seen that 4,569 houses have been provided for the forest staff; of these, houses for Foresters and Foremen number 860, and houses and holdings for forest workers total 3,709.

Other properties, under which are included farms, agricultural land, houses and other premises, together total 2,913; lettings of sportings numbered 1,307. Miscellaneous easements, permissions and the like totalled 3,748.

Changes of tenants have not been significantly different from previous years; in general, it is still difficult to find tenants for older houses and for those with poor access or lacking amenities, particularly the absence of public transport. In Wales, however, changes of tenants have been fewer than in previous years and Forest Workers Holdings, even those with poor access and in remote situations, have been in demand.

Disposals of properties not required for forestry purposes have been continued; several farms and blocks of unequipped agricultural land were sold, as well as cottages unsuitable for modernisation.

Buildings

Progress with the construction of new houses has been hindered by financial considerations and by difficulties in getting acceptable tenders and in obtaining suitable sites. During the year 94 new houses, including those obtained by the conversion of larger properties, were completed, with at the end of the year a further 48 in course of erection. For comparison, at the end of the previous year 176 houses had been completed and 108 were under construction. Houses completed and under construction at the end of the year in each country were as follows:

	<i>Houses Completed</i>	<i>Houses in course of erection</i>
England	47	25
Scotland	28	12
Wales	19	11
	—	—
Total	94	48
	—	—



PLATE 1. Her Majesty the Queen at Eggesford Forest after unveiling the stone which commemorates the planting of one million acres by the Commission.

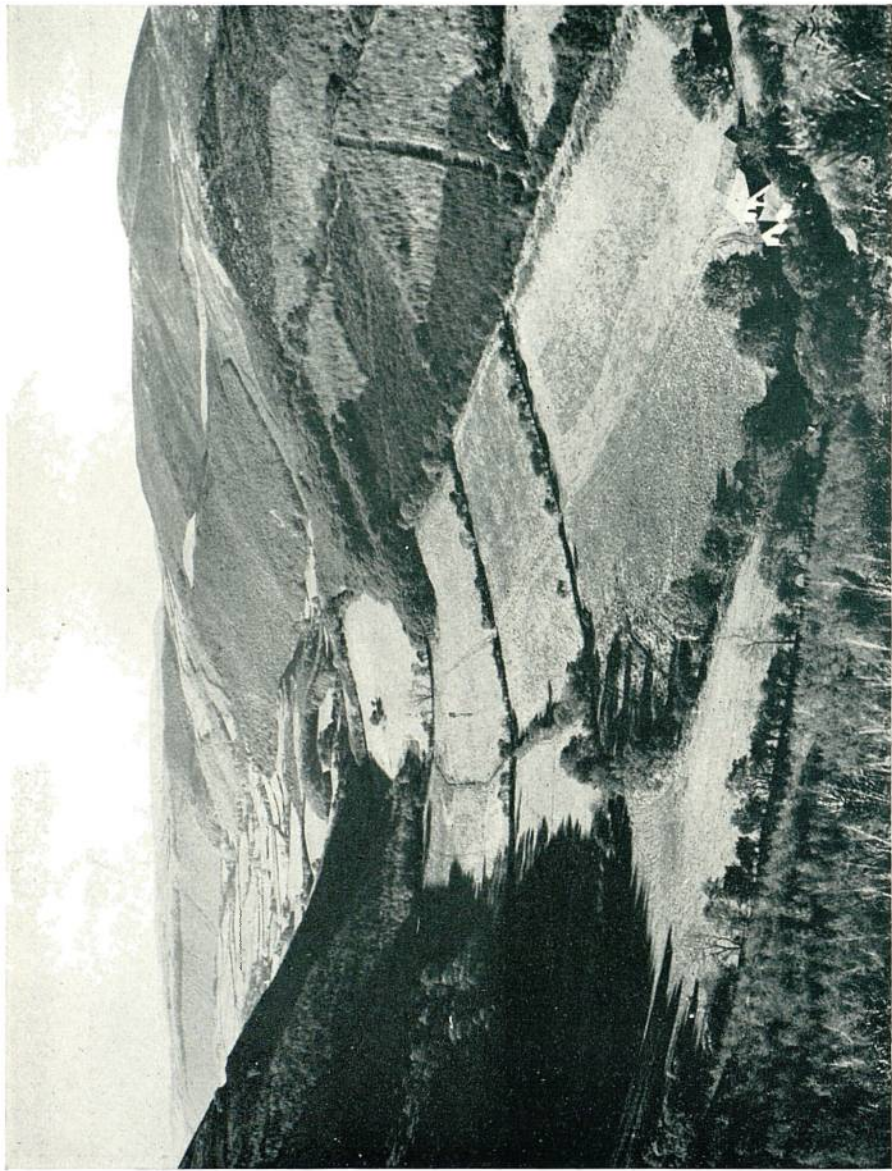


PLATE 2. The Nant yr Arian valley near Aberystwyth in Cardiganshire, showing the integration of agriculture and forestry.

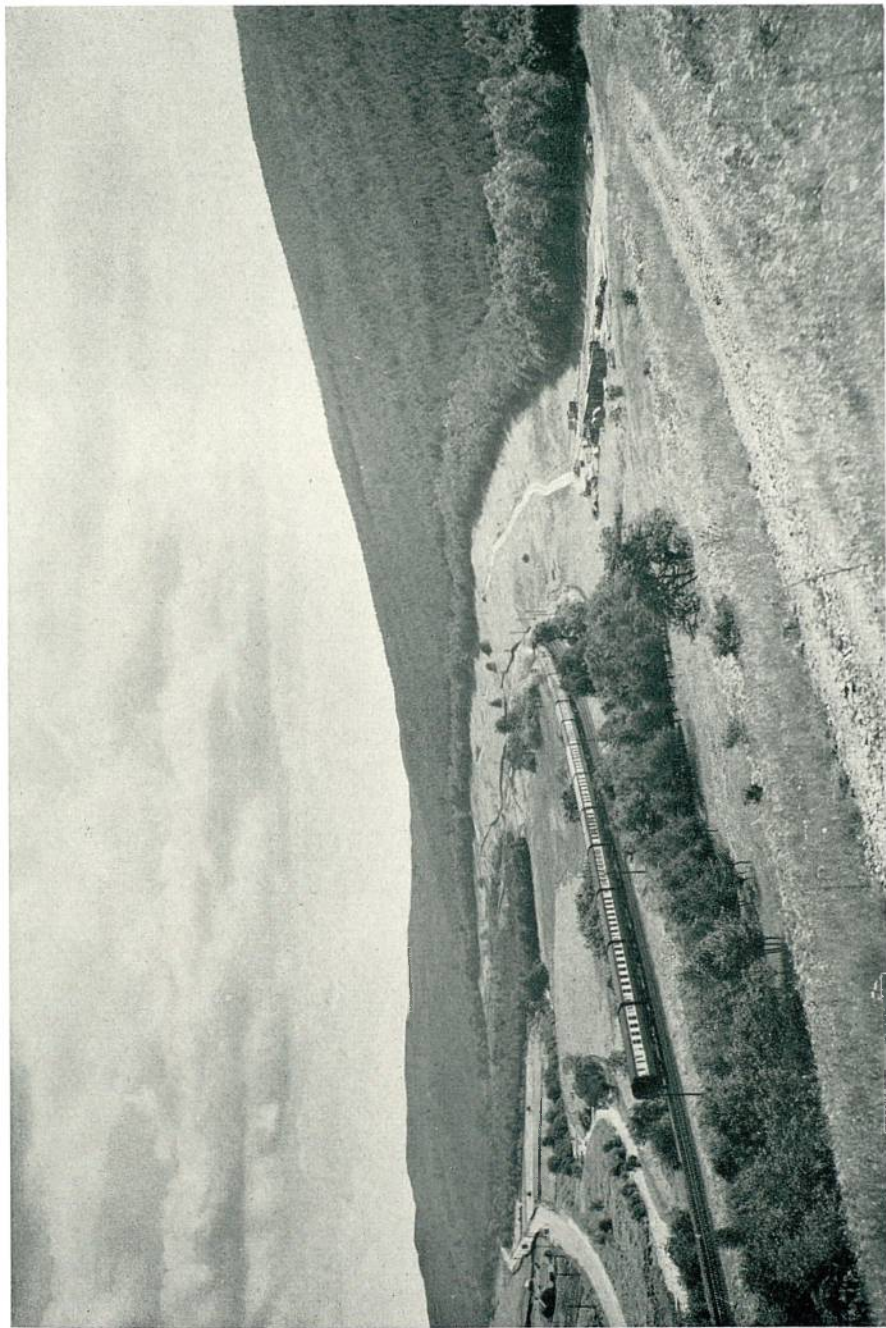


PLATE 3. A fire-break against the railway at Greskine Forest, Dumfries-shire. Note the road providing access for extraction of timber or fire fighting, and the belt of broadleaved trees. The grass has been improved and is grazed.



PLATE 4. Fine beech about 220 years old on the National Trust Property at Slindon Park, Sussex. These beech are the subject of genetic studies by the Commission's Research Branch, and are represented by grafted trees in two seed orchards.

Four of the houses completed during the year were timber houses; two of these, using timber from the Commission's forests, were built at Culloden Forest, Inverness-shire, while one pair of Swedish cottages, using imported prefabricated timber, were erected at Witley Forest, Surrey.

Forest villages continue to develop; in the North Tyne, at Byrness Village, a shop and a telephone kiosk were opened; at Kielder, a temporary church has been built by voluntary labour and subscriptions, and a telephone kiosk was also opened. The village hall at Stonehaugh, which was completed last year, was formally opened as the workman's social club by the Chairman of the Commission. In Scotland, the village of Ae, Dumfriesshire, was extended by eight new houses, a shop and post office, and three garages. At Glentrool, Kirkcudbrightshire, a school and school house were built by the County Council.

Repair and maintenance work in outlying places is still difficult; contractors can be found for major repairs but not so readily for small items of maintenance. A considerable programme of improvements was however undertaken; this included connecting houses to mains water and electricity supplies where practicable and provision of modern sanitation and hot water installations; improvements were also made to farm buildings.

Capital expenditure on buildings, including Forest Workers Holdings, was £420,000 as against £517,000 in the previous year (Appendix 2, page 65). Expenditure on repairs and maintenance was greater than last year, £165,000 as compared with £134,000. Income from rents and royalties was £215,000; a small increase of £2,000.

PRIVATE FORESTRY

Expenditure on services to woodland owners was £743,000. The greater part of this expenditure was in respect of payments under the Dedication Scheme, which totalled £383,000; payments made for planting done outside the Dedication Scheme amounted to £75,000, of which Small Woods Planting Grants accounted for £48,000. Other payments made included Thinning Grants, £47,000; Scrub Clearance Grants, £39,000; grants to forestry co-operative societies, £4,000; payments for the destruction of grey squirrels, £15,000. The expense of administration, including advisory services was £178,000. (Appendix 4, page 66).

The Dedication Scheme

A new edition of the booklet on the dedication scheme (Forestry Commission Booklet No. 2, *The Dedication of Woodlands*, Fourth Edition, H.M.S.O., 2s. 6d.) was published in June, 1956. This booklet gives the new forms of dedication covenant along with the changes made in the plan of operations. The following extracts from this booklet outline some of the changes which have been made:—

“The new forms of Covenant which have been agreed with the United Kingdom Forestry Committee now make it clear that although the Covenant is binding in its entirety on the original owner, that is the person who signs it, once the original owner has parted with all his interest in the land by sale, transfer, or death, the positive clauses—i.e. those requiring adherence to an approved plan of operations, the carrying out of approved works, the employment of skilled staff, etc.—are unenforceable against a person who succeeds to the property or purchases it. The only restriction on any successor is that contained in Clause 1 (Clause First in the Scottish version) which prohibits the use of the land otherwise than for the growing of timber in accordance with the rules or practice of good forestry. This restriction does not compel a successor in title to take any positive action, but it prevents him from using the land for any other purpose. He will be invited to enter into a new Dedication Covenant, or alternatively to sign an undertaking agreeing, in consideration of the continuation of the payment of the grants, to be bound by all the covenants and conditions contained in the Deed of Covenant entered into by his predecessor in title”.

“The following changes of substance as well as some drafting amendments have been made:

- (i) Under the old form of Covenant, any disputes about the rules or practice of good forestry would be referred to an Investigating Committee whose recommendations would not be however binding on the Commissioners. Under the revised Covenants these Investigating Committees will be replaced by Reference Committees modelled on those provided for by the Forestry Act, 1951. The Chairman will be appointed by the Minister of Agriculture or the Secretary of State for Scotland, and the members will be selected by the appropriate Minister from a panel appointed by him after consultation with the organisations representing landowners and timber merchants, the forestry societies, and the Regional Advisory Committee for the Conservancy. The decisions of such committees about the rules or practice of good forestry will be binding on both parties to the Covenant except in relation to (a) whether any work required has been carried out in a proper and workmanlike manner or (b) the amount of felling to be prescribed in a Plan of Operations. In such cases the Commissioners will make the final decision after

having given due consideration to the recommendations of the Reference Committee.

- (ii) The old form of Covenant (Basis II) provided that the grants should be reviewed in the light of the general trend of ascertained costs in 1951, and thereafter at such periods as the Commissioners might decide. The new form provides for review at least once every three years.
- (iii) The Commissioners are given power to determine the Covenant if the owner fails to perform his obligations under the Covenant.

All owners of estates dedicated in the old form will be given the opportunity, if they so wish, to enter into new Covenants in the revised form, the whole of the legal charges being in that case payable by the Commission.

Any owner who is considering the dedication of all or any of his woodland estate is recommended, as the first step, to invite the Conservator or one of his officers to discuss with him the area to be dedicated and the general outline of a Plan of Operations. (The addresses of the Conservators will be found on page 94 of this Report.)"

The publication of this booklet will have removed some uncertainties which may have been holding up decisions to dedicate, but it is too early for changes in the rate of dedication to become evident.

The rates of the grants payable under the Dedication Scheme were reviewed during the year; as a result the planting grant was increased from £15 per acre to £17 per acre, and the maintenance grant from 5s. per acre to 5s. 6d. per acre per annum; these increases took effect from 1st October, 1955.

During the year dedication was completed by 119 estates, which added 35,249 acres of woodland to the area already dedicated; on examining the dedications in individual countries given in Table 25 below it will be seen that compared with last year the area dedicated in England and Scotland has dropped considerably, while in Wales there has been an appreciable increase both in numbers of estates and in the area dedicated.

As an indication of future progress, plans of operations put forward by 168 estates in respect of 59,701 acres of woodland were agreed, and for most of these the dedication deeds were being prepared; compared with the previous year, when the corresponding figures were 159 estates with 48,111 acres of woodland, this shows some improvement both in the number of estates and in the area to be dedicated. In addition, 143 estates had the preparation of plans of operations in hand for some 56,000 acres; corresponding figures for last year were 129 estates and 58,000 acres.

The total area now dedicated amounts to 445,336 acres; the progress to date by countries is given in Table 26 below.

PROGRESS OF DEDICATION

Table 26 Years 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, 1948-56	992	445,336	614	210,030	306	218,631	72	16,675
1948-52 ...	252	149,144	118	51,656	116	93,223	18	4,265
1953 ...	227	76,810	143	42,963	61	28,255	23	5,592
1954 ...	253	116,667	180	60,611	61	54,393	12	1,663
1955 ...	143	67,650	103	38,350	34	27,669	6	1,631
1956 ...	119	35,249	70	16,496	36	15,229	13	3,524
Withdrawals and Adjustments	-2	-184	—	-46	-2	-138	—	—

Approved Woodlands

The term "Approved woodlands" signifies woodlands which are being managed according to a plan of operations approved by the Commission. For planting carried out under this scheme, a grant is available at half the rate fixed for planting in Dedicated Woodlands and Small Woods; in common with these, the planting grant under the Approved Woodlands Scheme was also increased from 1st October, 1955, and now stands at £8 10s. per acre.

At the end of the year, a total of 117,200 acres of woodland on 358 estates had been accepted as Approved Woodlands. This scheme has apparently proved more acceptable to owners in England than in Scotland, judging by the results to date; in England there are 279 estates with 80,800 acres of approved woodlands; in Scotland 61 estates with 32,800 acres; in Wales 18 estates with woodlands amounting to 3,600 acres. In the year under review the area accepted as approved woodlands has slightly exceeded the area dedicated, 36,264 acres of approved woodlands as against 35,249 acres of dedicated woodlands. The additions to Approved Woodlands during the year were: England, 73 estates with 25,356 acres; Scotland, 16 estates with 9,721 acres; Wales, 6 estates with 1,187 acres.

At the end of the year, 106 estates were known to be preparing plans of operations for 35,500 acres of woodlands for acceptance under this scheme.

Planting on Private Estates

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

A summary, by number and area, of planting grant schemes which were inspected and passed for payment during the year is given in Table 27 below. While most of the planting recorded in this table was done in the year under review, it also includes some planting done in earlier years but not inspected till now, while some of the present year's planting, not yet inspected, is not included.

PLANTING UNDER GRANT-AIDED SCHEMES

Table 27
Areas inspected and passed for payment
Year ended 30th September, 1956

	Planting under Dedication	Small Woods Planting	Approved Woods Planting	*Poplar Planting	Total
GREAT BRITAIN					
Number of Schemes	784	711	247	122	1,864
Total Area, acres ...	17,271	3,640	3,465	359	24,735
Conifers ...	13,203	2,134	2,002	—	17,339
Broadleaved ...	905	123	286	359	1,673
Mixed ...	3,163	1,383	1,177	—	5,723
				(8,504 trees)	

Table 27—cont.

	Planting under Dedication	Small Woods Planting	Approved Woods Planting	*Poplar Planting	Total
ENGLAND					
Number of Schemes	461	370	199	109	1,139
Total Area, acres ...	6,672	1,978	2,192	314	11,156
Conifers	3,321	762	842	—	4,925
Broadleaved	800	94	268	314	1,476
Mixed	2,551	1,122	1,082	—	4,755
				(7,631 trees)	
SCOTLAND					
Number of Schemes	243	144	33	4	424
Total Area, acres ...	9,582	896	1,111	4	11,593
Conifers	9,067	690	1,029	—	10,786
Broadleaved	56	16	8	4	84
Mixed	459	190	74	—	723
				(355 trees)	
WALES					
Number of Schemes	80	197	15	9	301
Total Area, acres ...	1,017	766	162	41	1,986
Conifers	815	682	131	—	1,628
Broadleaved	49	13	10	41	113
Mixed	153	71	21	—	245
				(518 trees)	

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

The above table shows that while most of the planting is done under the Dedication scheme, quite appreciable areas are planted in small woods and in Approved Woodlands. In total, the acreage inspected and passed for payment was 24,735 acres, as against 21,321 in the previous year; the increase of 3,414 acres includes 2,010 acres more in Dedicated Woods, and 671 acres and 730 acres respectively in Small Woods and in Approved Woods. The area planted with poplars was virtually the same as in the previous year, but the planting of poplars in lines showed an increase of 95 per cent.

ESTIMATED AREA OF PRIVATE PLANTING

Table 28

Year ended 30th September, 1956

Acres

	Grant-aided	Planted without the aid of Grants	Total
GREAT BRITAIN	24,600	2,500	27,100
England	10,900	1,300	12,200
Scotland	11,900	1,100	13,000
Wales	1,800	100	1,900

The total area planted on private estates in the year under review is estimated at some 27,200 acres; of this 24,700 acres are known to have been planted under grant schemes and 2,500 acres are estimated to have been planted without a

grant being applied for; this estimate is possibly a conservative one. Last year it was estimated that 22,100 acres were planted, of which 19,600 acres were under grant schemes and 2,500 acres without grants. The Commissioners are pleased to note the progress made in private planting, and, in order to remove some of the limitations which shortage of plants may have imposed, have made and are making additional plants available. The progress of private planting is discussed earlier in this Report (page 9).

Scrub Clearance Grants

The use being made of this scheme for assisting owners to clear unproductive scrub areas for planting continues to increase. This scheme applies to Dedicated Woodlands, Approved Woodlands and also to Small Woods. The grants available, which are related to the estimated cost of clearing, were increased during the year; the amounts now payable are given on page 14. It should be noted that the planting grant appropriate to each description of woodland is payable in addition to a scrub clearing grant.

During the year, 3,546 acres of scrub were cleared as compared with 1,830 acres last year. Details by countries of the numbers of schemes and the area cleared are given below.

SCRUB CLEARANCE GRANTS

Table 29 Schemes inspected and passed for First Payment
Year ended 30th September, 1956

	Number of Schemes	Area (acres)
GREAT BRITAIN	426	3,546
England	258	2,278
Scotland	68	740
Wales	100	528

An analysis of the areas cleared shows that 2,340 acres were in Dedicated Woodlands, 629 acres in Approved Woodlands and 577 acres in Small Woods.

Thinning Grants

No change was made during the year in the regulations governing this grant, under which a payment of £3 15s. 0d. per acre is made on the completion of first and second thinnings in stands coming within certain limits of height or, alternatively, of girth. Table 30 below gives details for each country of the schemes inspected and passed for payment.

THINNING GRANTS

Table 30 Schemes Inspected and Passed for Payment
Year ended 30th September, 1956

	Number of Schemes	Area (acres)	Estimated Volume (cubic feet)
GREAT BRITAIN	912	12,189	3,199,805
England	598	7,001	1,721,601
Scotland	241	4,415	1,216,860
Wales	73	773	261,344

A comparison with last year's figures shows that a greater number of woodland owners are availing themselves of this grant, and that a greater area is being thinned with a consequent increase in the out-turn of material. In the present year, 12,189 acres were thinned from which the out-turn was 3·2 million cubic feet, the corresponding figures for 1955 were, 10,831 acres with an out-turn of 2·9 million cubic feet. It should be noted that these figures refer only to woods for which a thinning grant was paid. There are no complete statistics for other areas thinned on private estates.

Loans to Woodland Owners

During the year, loans amounting to £25,000 were made to woodland owners. This amount is shown in Appendix 2 on page 65.

Licensing of Timber Felling

During the year 7,188 licences were issued; these authorised the felling of 41·792 million cubic feet of timber. The corresponding figures for the previous year were 6,643 licences covering the felling of 38·439 million cubic feet.

Details of the licences issued in the year under report are as follows:

	<i>Hoppus feet (millions)</i>
<i>Conifers</i>	
<i>Counting against Quota</i>	
Over 6 inches quarter-girth at breast height	7·263
<i>Not counting against Quota</i>	
Thinnings over 6 inches quarter-girth at breast height	3·436
6 inches quarter-girth and under at breast height...	8·312
	<hr/> 19·011
<i>Broadleaved species</i>	
<i>Counting against Quota</i>	
Over 6 inches quarter-girth at breast height	21·474
<i>Not counting against Quota</i>	
6 inches and under at breast height...	1·307
	<hr/> 22·781
Total	<hr/> 41·792 <hr/>

As noted earlier in this Report (page 15) the coniferous and broadleaved quotas for the year were fixed at 7·100 million and 26·000 million cubic feet respectively. It will thus be seen that the conifer quota was slightly exceeded, while the broadleaved quota was again not fully taken up, and there was a balance of 4·526 million cubic feet still available at the end of the year. The quantities of windblown timber included above were: Conifers, 1·272 million cubic feet; broadleaved, 0·215 million cubic feet.

The volume of timber not coming within the quota restrictions, for which licences were issued, amounted to 13·055 million cubic feet. This is 2·662 million cubic feet more than last year, and most of this increase was in respect of small conifers of six inches quarter girth and under.

Of the 7,188 licences issued, 2,297 authorised the clear felling of 20,572 acres; an analysis of these shows that 1,619 licences covering 13,589 acres were issued subject to replanting and maintenance conditions, that 400 licences covering 2,995 acres were issued to dedicated estates, and 278 licences in respect of 3,988 acres to which no replanting conditions were attached were issued to other estates. As 2,175 acres of the area covered by unconditional licences will be acquired by the Commission, and as licences for 208 acres were in respect of the removal of the overwood from an established crop, the restocking in due course is assured of 18,967 acres of the 20,572 acres authorised during the year for clear felling.

In addition, 259 replacement licences were issued in respect of time-expired licences; these cover the felling of 5,968 acres of which 3,757 acres carry restocking and maintenance conditions. Of the remainder, 1,382 acres will be replanted, as 220 acres are on Dedicated estates and 1,162 acres have been or will be acquired by the Commission.

The administrative cost of licensing during the year under report was £42,000 (Appendix 7, page 67).

RESEARCH AND EXPERIMENT

Research work and special investigations into forestry problems were continued at the Forest Research Station, Alice Holt Lodge, near Farnham, Surrey, and also in experimental areas in many forests in England, Scotland and Wales. Expenditure amounted to £265,000, as compared with £234,000 in the previous year, for details see Appendix 5, page 66.

Brief notes of work done during the year are given in the following paragraphs. Detailed accounts of research projects will be found in the Report on Forest Research for the year ending March, 1956*.

The growing interest in forest research and in the activities of the Research Station is shown in the increasing number of visitors. This year 544 persons visited the Station; these included students from home universities and other institutions, also forest officers and other visitors from 39 Commonwealth and other overseas countries.

Two noteworthy visits during the year were a party of Russian forestry officers in June, and 138 delegates of the International Union of Forest Research Organisations in July.

Silviculture

The work of the Seed Testing Laboratory of the Research Station covered a number of subjects, notably problems of seed storage, seed pre-treatment, protection of seed against damage by vermin and fungi, and studies of seed testing methods, including biochemical and X-ray techniques; these investigations were undertaken in addition to the testing of the purity and germinative quality of seed used by the Commission. Collaboration with the International Seed Testing Association was continued, and proposals have been made for revision of the International Seed Testing Rules for forest tree seeds.

Experimental work on chemical soil sterilisation has been concluded, satisfactory knowledge of the techniques having been attained. Nutritional experiments have also been reduced, though long term fertility studies will remain of importance. Experimental projects being continued included weed control, irrigation and the handling and storage of plants.

* H.M.S.O., 6s. 0d.

Attention has been given to the use of machinery in preparing derelict woodland sites for replanting. A device known as the "V Blade", mounted on a high-powered crawler tractor, is the latest under test. Further work has been done on chemical "arboricides" for the control of woody weed species.

Pilot plots on difficult and exposed sites continue to be observed; as a simple index of exposure, the tattering of flags of standard material has been used with some success. Smoke-polluted areas in the Pennines continue to receive special attention. Ecological work has included a study of Corsican pine with respect to its climatic and soil requirements.

In the newly-constituted soils laboratory, a large part of the work has been in the development of suitable techniques, but a considerable number of analyses have been made in connection with various silvicultural and ecological enquiries.

Forest Genetics

Two principal methods are being used to improve Scots pine, European and Japanese larch, Douglas fir, beech and certain other species. The first method involves the selection and direct use as seed sources of superior stands and of individual trees; the second makes use of hybrid vigour or heterosis obtained by cross-breeding both within species and between species.

A survey of seed sources in England is being undertaken on lines similar to that completed last year in Scotland. The selection of "Plus" trees for breeding was continued and 2,002 trees are now registered. Vegetative propagation was employed to raise clonal material for use in Tree Banks and Seed Orchards; during the year 9,495 grafts were attempted of which over 80 per cent. were successful.

The establishment of seed orchards was continued; work is in progress at fifteen sites totalling 148 acres. Twelve thousand cones from controlled pollination were produced in a four-acre hybrid larch seed orchard planted in 1951 at Newton Nursery, Elgin. One hundred and fifteen cross- and nineteen self-pollinations were made on the grafted seed trees; in addition controlled pollination was carried out on four "plus" trees of Douglas fir using climbing equipment developed in Scotland for seed collection.

Forest Pathology

Further observations on "group dying" of conifers confirmed that fires lit by workers in the forest were the main causes of the disease. Work was continued on "top dying" of Norway spruce and "resin bleeding" of Douglas fir; resin bleeding of *Pinus contorta*, apparently similar to the latter disease, has been reported from two forests and is being investigated. A large experimental programme on methods of protection against *Fomes* has been initiated; this involves extension of stump treatment to parts of the country other than East Anglia, and also methods of treatment of standing crops to protect second rotations.

Since the dry summer of 1955, several outbreaks of beech bark disease have been reported; these records, together with observations of previous seasons, suggest that drought is the main predisposing cause of this disease. Work is being continued on nursery diseases, such as *Keithia thujina*, *Meria laricis* and *Botrytis cinerea*, at Alice Holt and at various universities.

Studies of Growth and Yield

Twenty-one new permanent sample plots were established, two plots previously written off because of windblow were reclaimed and 177 plots were

remeasured; one plot was abandoned. Table 31 below shows the distribution between countries:—

PERMANENT SAMPLE PLOTS

Table 31

	Great Britain	England	Scotland	Wales
Number at 1st October, 1955 ...	694	343	225	126
New plots established during the year ...	23	21	2*	—
Plots abandoned (felled, blown, etc.) during the year ...	1	1	—	—
Number at 30th September, 1956 ...	716	363	227	126
Remeasured during the year ...	177	113	62	2

* Reclaimed plots.

The revision of the 1947-49 Census of Woodlands continues; the counties of Hertford, Montgomery, Argyll and Warwick were completed during the year and the re-survey of Devon and Essex is now in progress.

Changes were made in the work of the section previously dealing with mensuration; this section now comprises three sub-sections, one dealing with statistics, including Census of Woodlands, one with forest management and one with economics. Statistical work concerned with the design and analysis of experiments and interpretation of results now comes directly under the Chief Research Officer.

Forest Entomology

Forest and laboratory studies on the pine looper moth, *Bupalus piniarius*, have been continued. In the laboratory the fecundity of the female, details of larval development, and the biology of associated parasites have been investigated. In the field, research has centred on the development of sampling techniques for all life cycle stages in an effort to elucidate the critical factors influencing population movements of the species. The annual winter pupal survey covering the whole country did not reveal any localities with immediately threatening high population densities.

Field experiments on the insecticidal control of *Hylobius abietis* have been continued and give promising indications. A number of minor projects, such as the testing of machinery for the application of insecticides, the control of cutworms in the nursery, and preliminary studies on *Semasia diniana* attacking Sitka spruce, have been prosecuted.

Utilisation Research

The Advisory Committee on the Utilisation of Home Grown Timber met in London in January and at Benmore, Argyll, in May. The Committee has had under review problems affecting the utilisation of softwood and hardwood thinnings, coppice, scrub and waste arising both from forest and sawmilling operations.

After the meeting at Benmore, opportunity was taken to see work in progress on the preparation of produce in neighbouring Commission forests and also to visit the Cowal Ari-Sawmill at Strachur.

Mention was made in last year's Report of the erection at Santon Downham, Thetford Forest, of an experimental office building using small-sized conifer thinnings. This building is proving satisfactory in use, and to get further information on thermal transmission qualities of the materials used, a panel similar in design and type of material to that used in the external walls was

tested by the Building Research Station, whose report is satisfactory. The Committee recommend that the type of construction used in this experimental building should be tried in one or two dwelling houses.

The survey of the use of home-grown timber in the box, packing case and pallet making trades, begun last year, was completed. A survey of the use of home-grown timber for the manufacture of wood wool was also undertaken. Further work was carried out on possible uses for bark, on problems relating to the supply of hardwood pulpwood, and on the effect on the strength properties of timber cut from poles left lying in the forest for periods up to three years.

Machinery Research

The development of machinery for use in forest nurseries has continued and two seed sowing machines are under trial. Two more lining-out machines have been imported from U.S.A., and after modifications to suit local conditions have been in use at Bramshill and Ferndown (Hants.) and Longtown (Cumberland); the results of these trials are now being assessed. Progress has been made in the development of machines for multiple row weeding of seedling and transplant lines in forest nurseries.

Tests continue to be made of various makes of power saws and several makes are now being used by forest workers. Portable powered-winchies are in forest use and trials of new makes are being undertaken. Other developments of extraction equipment cover the modification of sledges, sulkies etc. to suit local conditions.

Deep drainage ploughing trials are in progress at the Forest of Ae, Dumfriesshire, and a Danish plough for preparing old woodland sites has been imported for trials in Eastern England.

User trials of new and modified machinery for forest operations covering drain cleaning, bark peeling, clearance of derelict woodland sites, planting and extraction of timber are in progress.

Grants to Universities and other Institutions

The Commissioners have continued to make grants for research work on forestry problems of a fundamental nature to be carried out by Universities and other institutions qualified to undertake such work. Grants for research work on forest soils were made to the Imperial Forestry Institute, the Macaulay Institute, Aberdeen, and the Rothamsted Experimental Station, also to Bedford College, London where Dr. I. Levisohn has continued her work on Soil Mycology. A grant for an investigation into the causes of *Fomes annosus* was made to the Botany School, Cambridge University. The University of Edinburgh received grants for bioclimatic studies on the Pine looper (*Bupalus piniarius*) and for shelterbelt research work. Grants were also made to the University of Southampton for studies of *Meria laricis*, the needle-cast disease of larch, and also of larch canker, and to the University of Nottingham for studies of *Keithia thujina*, a leaf disease of western red cedar.

Advisory Committee on Forest Research

A meeting of the above Committee to discuss current research work and future programmes was held at Pitlochry, Scotland, in September, 1956; the Committee also visited experimental areas at Rannoch and Dunkeld.

Tests of Home Grown Timbers

Comprehensive tests of timbers of the main species used for afforestation were continued by the Forest Products Research Laboratory on behalf of the Commission. During the year, tests were made of consignments of Scots pine and of *Abies grandis* from two sites each, and of one consignment each of Leyland cypress and of Western red cedar.

EDUCATION

Expenditure on Forester Training Schools, Short Courses for Forest Workers, the Forestry Apprenticeship Scheme and Northerwood House was £152,000. Income amounted to £40,000 of which £25,000 represents the value of work done in the Commission's forests by students at the Forester Training Schools. For details of expenditure and income see Appendix 6, page 66.

Forester Training Schools

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

The course of training extends over two years, and at the beginning of the year 239 men were under instruction; 134 in their first year and 105 in their second year. The two year course was completed by 103 men, all of whom were awarded a Forester's Certificate. Of these men, 79 took up employment with the Forestry Commission, 1 was appointed to the Colonial Forest Service, and 12 who had been nominated by the Government of Northern Ireland returned to posts in that country; 11 took up other employment.

Short Courses for Forest Workers

Two courses of six weeks duration were again held at Chatsworth Estate, Derbyshire, through the courtesy of His Grace the Duke of Devonshire. The object of these courses is to provide selected forest workers with training in the theory and practice of forestry to fit them for supervisory duties on private estates. A total of 30 men attended these courses and were awarded certificates of efficiency by the Forestry Commission; these men also took the examination for the Woodman's Certificate of the Royal Forestry Society of England and Wales, and all but one passed.

Forestry Apprenticeship Scheme

During the year 15 apprentices successfully completed their apprenticeship and were awarded certificates which qualify them for guaranteed employment as skilled forest workers. There are now 111 apprentices in training at various forests in England, Wales and Scotland. The Local Education Authorities co-operate by admitting apprentices to classes for further education on one day a week.

Northerwood House

The use of Northerwood House in the New Forest has been continued as a centre where special courses on forestry are given, and for accommodating university students studying working plans and silviculture in the Forest.

Eighteen courses of instruction, each lasting a week, were held for the Commission's staff: the subjects covered were Nursery Work (3), Silviculture (3), Forest Management (1), Utilisation (3), Fire Protection (2), Private Woodlands (1), Research Work (2) and introductory courses for new entrants (3); a short course on the techniques of lecturing in which the Treasury assisted was also given. As in previous years courses on forestry practice were arranged for others with forestry interests: these included three courses for landowners and agents, one for County Planning Officers, one for Schoolteachers, and one for nurserymen.

Students from the Universities of Oxford, Edinburgh, Aberdeen, Cambridge, and the University College of North Wales, Bangor, were in residence for a period of 19 weeks. Northerwood House was also used by the British Council for a forestry course.

Benmore House

Benmore House, Argyll, one of the Forester Training Schools, was the centre for two forestry courses each of a week's duration, one arranged for County Planning Officers and the other for schoolteachers.

PUBLICATIONS

Ten new publications for sale were issued through H.M. Stationery Office,* and two new pamphlets for direct circulation by the Commission, free of charge,† were printed. In addition, ten sale publications and eight free pamphlets were revised and re-issued.

The new sale publications were issued under the following titles:

- (1) Report of the Committee on Hedgerow and Farm Timber, 1955.
- (2) Report on Forest Research, 1954.
- (3) Report on Forest Research, 1955.

One bulletin, giving the results of intensive studies of an insect pest of conifers, carried out at the University of Aberdeen, was published, namely:

- (4) Bulletin 26. Adelges Insects of Silver Firs.

One booklet, with illustrations in colour, was published describing some fungi affecting forest trees, namely:

- (5) Booklet 4. Rusts of British Forest Trees.

The Leaflet and Forest Record Series were extended by the following items:

- (6) Leaflet 36. The Crossbill.
- (7) Leaflet 37. The Capercaillie.
- (8) Leaflet 38. Oak Mildew.
- (9) Forest Record 30. Growth and Yield of Sweet Chestnut Coppice.
- (10) Forest Record 31. Tariff Tables for Conifers in Great Britain.

Among the sale publications re-issued was the booklet giving the revised Dedication Agreements, and the new forms for the Plan of Operations; the title being:

- (11) Booklet 2. The Dedication of Woodlands: Principles and Procedure. Fourth Edition, 1956.

The new publications for free distribution were entitled:

Starting a School Forest.
Camping in the National Forest Parks.

The pamphlet entitled "Starting a School Forest" gives information on the scheme for interesting schoolchildren in the welfare of their local forests. The pamphlet "Camping in the National Forest Parks" provides information on camping grounds open to the public in five of the National Forests. Another free pamphlet, "Grants for Woodland Owners", was revised to give the new rates now in force.

The Commission's staff has continued to contribute articles to scientific and technical publications concerned with forestry, and to present papers to conferences, including that held at Sheffield by the British Association for the Advancement of Science.

* Published by H.M.S.O. at the following prices: (1) 3s. 6d.; (2) 6s. 0d.; (3) 5s. 6d.; (4) 8s. 6d.; (5) 2s. 6d.; (6) 9d.; (7) 9d.; (8) 6d.; (9) 2s. 6d.; (10) 1s. 0d.; (11) 2s. 6d.

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

PUBLICITY AND PUBLIC RELATIONS

The scheme for " School Forests " was continued; more schools were invited to adopt a small area of Commission woodlands in which pupils may undertake planting and other work. An explanatory pamphlet entitled " Starting a School Forest " is available on request. A further development has been to arrange for parties from training colleges for teachers to visit forests where the nature of various forest works was explained.

The co-operation of the Press and the B.B.C. in issuing appeals for special care on the part of visitors to forest districts during the prolonged period of high fire risk in the spring was much appreciated. A number of sound broadcast and television programmes of a general character included forestry features.

Statements were issued from time to time to the Press, and conferences were held. Conducted tours for Press representatives were arranged; these included visits to various Commission forests and also to privately owned woodlands.

There was a substantial increase in the number of lectures given by forest officers to schools and other bodies, and during the year 300 talks were arranged. There was also an increase in the number of visits to forests arranged for individuals and organised parties. A number of articles were contributed to journals by Commission officers.

Exhibits were again arranged at major agricultural shows, including the Royal Show at Newcastle, Bath and West at Cardiff, Three Counties at Hereford, Royal Counties at Poole, Great Yorkshire at Harrogate, Royal Highland at Inverness and Royal Welsh at Rhyl. Exhibits were provided for, among others, the Kent County Show, where the forestry section is a recent addition. Displays were also included in a number of exhibitions whose purpose was to illustrate employment opportunities for young people.

NATIONAL FOREST PARKS

The eight National Forest Parks designated by the Commission provide 428,000 acres of woodland and mountain to which the public are given the freest possible access consistent with the protection of the plantations from fire and other kinds of damage. These Forest Parks continue to attract visitors in considerable numbers; the poor summer of 1956 did not make a great deal of difference to their numbers, and at most of the official sites where facilities are provided the number of campers was greater than last year. At the main camp site in the Forest of Dean National Park, campers and caravanners made 5,500 over-night stays; last year it was 4,300. In this Forest Park improvements were made to the road approaches to Symonds Yat Rock, one of the beauty spots, where a Canadian-type log cabin is being erected for the sale of refreshments, to be in keeping with the woodland setting. At the Beddgelert camping site in Snowdonia National Forest Park, 17,000 camper-nights were recorded; as many as 465 persons were staying over night on one occasion.

The National Forest Parks in Scotland were also very popular; the camping sites in Argyll and Glentworth Forest Parks both recorded increased use; at the former, which is close to Glasgow, campers made 31,000 over-night stays; at the latter, there were 6,200. At Glen More, the various types of accommodation provided by the Commission and the Scottish Council for Physical Recreation were occupied for 31,000 over-night stays.

The New Forest, Hampshire, while not a designated forest park, is visited by the public more than any of the other forest areas. It is a very popular camping place and, notwithstanding the wet summer, campers in tents or caravans made 83,000 over-night stays. Litter is always a problem but some improvement was noticeable last year.

RADNOR, *Chairman.*

J. M. BANNERMAN.

R. C. G. COTTERELL.

LLOYD O. OWEN.

JOHN STIRLING.

W. H. VAUGHAN.

STANLEY LONGHURST.

A. P. F. HAMILTON.

D. C. BOWSER.

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

APPENDICES

Year Ended 30th September, 1956

FINANCIAL STATEMENT

Appendix 1

1955 £000's		1956 £000's
	TO BE ACCOUNTED FOR	
8,473	Forestry Fund	8,351
	Other Expenditure:	
793	Provision for Pensions and Gratuities	823
117	Net Variation in work-in-progress, stocks, debtors, sundry balances and cash add	7
<u>676</u>		<u>830</u>
<u>9,149</u>		<u>9,181</u>

SUMMARY OF EXPENDITURE

2,071	Capital Expenditure (Appendix 2) ...	2,166
5,378	Forestry Operations (Appendix 3) ...	5,421
610	Private Forestry (Appendix 4)	743
234	Research (Appendix 5)	265
109	Education (Appendix 6)	112
418	General Administration (Appendix 7) ...	472
329	Special Expenditure (Appendix 8) ...	2
<u>9,149</u>		<u>9,181</u>

CAPITAL EXPENDITURE

Appendix 2

1955 £000's		1956 £000's
267	Land... ..	261
125	Standing Timber	87
517	Buildings	420
785	Roads and Bridges... ..	1,099
350	Vehicles, Machines and Equipment	274
5	Loans to Private Woodland Owners	25
22	Miscellaneous	—
<u>2,071</u>		<u>2,166</u>

FORESTRY OPERATIONS: EXPENDITURE

Appendix 3

1955 £000's		1956 £000's
2,205	Preparatory work and formation of plantations	1,866
1,028	Maintenance of Plantations	1,165
420	Forest Protection	471
1,444	Preparation of Produce	1,205
2,706	Overhead Expenses	3,066
<u>7,803</u>		<u>7,773</u>
	Deduct:	
2,377	Sales of Timber and Other Forest Produce	2,335
48	Increase in Stocks of Felled Timber and other Forest Produce	17
<u>2,425</u>		<u>2,352</u>
<u>5,378</u>		<u>5,421</u>

PRIVATE FORESTRY: EXPENDITURE

Appendix 4

<i>1955</i> <i>£000's</i>		<i>1956</i> <i>£000's</i>
315	Grants under Dedication Schemes ...	383
35	Small Woods Planting Grants ...	48
17	Approved Woodlands Planting Grants ...	25
2	Poplar Planting Grants	2
5	Other Planting Grants	—
<hr/>		<hr/>
374		458
39	Thinning Grants	47
17	Scrub Clearance Grants	39
3	Grants to Co-operative Societies...	4
7	Grey Squirrel Bonus	15
3	Miscellaneous	2
<hr/>		<hr/>
443		565
167	Administration, including Advisory Services	178
<hr/>		<hr/>
610		743
<hr/>		<hr/>

RESEARCH: EXPENDITURE

Appendix 5

<i>1955</i> <i>£000's</i>		<i>1956</i> <i>£000's</i>
121	Silviculture, including nursery work	141
16	Genetics	20
31	Mensuration, Census, etc....	33
26	Pathology and Entomology ...	28
5	Machinery	5
10	Utilisation	9
13	Grants to Institutions	16
12	Miscellaneous	13
<hr/>		<hr/>
234		265
<hr/>		<hr/>

EDUCATION: EXPENDITURE

Appendix 6

<i>1955</i> <i>£000's</i>		<i>1956</i> <i>£000's</i>
124	Forester Training Schools...	130
5	Short Courses	6
1	Forestry Apprenticeship Scheme ...	4
9	Northerwood House	9
3	Miscellaneous	3
<hr/>		<hr/>
142		152
	Deduct :	
23	Value of Student Labour	25
10	Other	15
<hr/>		<hr/>
33		40
<hr/>		<hr/>
109		112
<hr/>		<hr/>

GENERAL ADMINISTRATION

Appendix 7

<i>1955 £000's</i>		<i>1956 £000's</i>
208	Directorate Offices	220
173	Headquarters	200
39	Administration of Felling Licensing	42
8	Information and Shows	10
<hr/>		<hr/>
428		472
	Deduct:	
10	Miscellaneous Income ...	—
<hr/>		<hr/>
418		472
<hr/>		<hr/>

SPECIAL EXPENDITURE

Appendix 8

<i>1955 £000's</i>		<i>1956 £000's</i>
329	Assistance towards cost of transporting Scottish wind-blown trees	2
<hr/>		<hr/>
329		2
<hr/>		<hr/>

PLANTATIONS MADE DURING THE YEAR ENDED

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 ...	62,400	56,316	6,084	37,650	942	18,666	5,142
ENGLAND: ...	20,822	16,025	4,797	9,714	679	6,311	4,118
Conservancy:							
North West ...	3,938	3,212	726	1,677	56	1,535	670
North East ...	8,281	7,456	825	6,579	106	877	719
East ...	2,696	1,586	1,110	416	276	1,170	834
South East ...	2,410	1,393	1,017	175	110	1,218	907
South West ...	2,671	1,966	705	726	119	1,240	586
New Forest ...	517	255	262	137	7	118	255
Dean Forest...	309	157	152	4	5	153	147
SCOTLAND: ...	29,751	29,165	586	20,951	186	8,214	400
Conservancy:							
North ...	7,840	7,818	22	4,278	5	3,540	17
East ...	6,656	6,367	289	3,745	116	2,622	173
South ...	9,575	9,482	93	8,378	7	1,104	86
West ...	5,680	5,498	182	4,550	58	948	124
WALES: ...	11,827	11,126	701	6,985	77	4,141	624
Conservancy:							
North ...	6,779	6,353	426	4,535	69	1,818	357
South ...	5,048	4,773	275	2,450	8	2,323	267

30TH SEPTEMBER, 1956—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
118,840	21,399	5,388	2,711	14,484	4,342	9,598	28,871	4,022	4,899	21,598	1,528
37,725	5,611	3,839	656	2,965	1,937	3,469	6,259	3,255	3,297	5,585	852
6,930	2,016	748	51	640	305	236	985	640	283	770	256
14,406	2,286	169	156	1,585	278	528	5,048	340	492	3,260	264
6,073	761	1,346	306	45	359	1,139	—	1,025	566	454	72
3,623	168	311	61	156	719	723	—	374	702	239	170
5,052	295	985	52	485	177	764	226	608	744	674	42
977	35	259	—	13	54	1	—	104	385	113	13
664	50	21	30	41	45	78	—	164	125	75	35
58,283	15,027	623	1,952	8,242	1,103	4,199	13,925	249	590	11,813	560
16,970	7,723	156	555	1,889	433	590	2,602	8	21	2,958	35
15,462	5,374	206	802	1,785	278	1,115	1,014	118	250	4,169	351
15,574	699	136	225	3,583	307	1,377	6,303	58	91	2,737	58
10,277	1,231	125	370	985	85	1,117	4,006	65	228	1,949	116
22,832	761	926	103	3,277	1,302	1,930	8,687	518	1,012	4,200	116
12,541	508	449	102	891	607	963	5,340	320	538	2,740	83
10,291	253	477	1	2,386	695	967	3,347	198	474	1,460	33

SUMMARY OF SPECIES USED FOR PLANTING AND BEATING UP

Appendix 10

Thousands of plants

Year ended 30th September 1956

SPECIES	GREAT BRITAIN			ENGLAND			SCOTLAND			WALES		
	Total	Planting	Beating up	Total	Planting	Beating up	Total	Planting	Beating up	Total	Planting	Beating up
All Species	118,840	95,824	23,016	37,725	30,578	7,147	58,283	47,942	10,341	22,832	17,304	5,528
Scots Pine...	21,399	16,115	5,284	5,611	3,888	1,723	15,027	11,959	3,068	761	268	493
Corsican Pine	5,388	3,700	1,688	3,839	2,904	935	623	379	244	926	417	509
European Larch	2,711	2,284	427	656	584	72	1,952	1,618	334	103	82	21
Japanese Larch	14,484	11,285	3,199	2,965	2,258	707	8,242	6,491	1,751	3,277	2,536	741
Douglas Fir	4,342	3,339	1,003	1,937	1,507	430	1,103	758	345	1,302	1,074	228
Norway Spruce	9,598	8,063	1,535	3,469	3,036	433	4,199	3,509	690	1,930	1,518	412
Sitka Spruce	28,871	24,937	3,934	6,259	5,637	622	13,925	12,428	1,497	8,687	6,872	1,815
Tsuga heterophylla	2,469	2,067	402	1,169	910	259	510	434	76	790	723	67
Thuja plicata	637	433	204	186	137	49	218	157	61	233	139	94
Lodgepole pine	15,458	12,700	2,758	3,356	2,990	366	9,965	8,070	1,895	2,137	1,640	497
Hybrid Larch	552	490	62	—	—	—	551	489	62	1	1	—
Lawson Cypress	506	283	223	378	222	156	46	36	10	82	25	57
Picea omorika	258	229	29	163	142	21	9	6	3	86	81	5
Abies grandis	303	216	87	73	36	37	91	79	12	139	101	38
Spanish Chestnut	98	61	37	88	52	36	—	—	—	10	9	1
Birch	360	287	73	125	99	26	230	188	42	5	—	5
Beech	4,899	4,002	897	3,297	2,725	572	590	470	120	1,012	807	205
Oak	4,022	3,465	557	3,255	2,823	432	249	216	33	518	426	92
Sycamore	506	327	179	310	156	154	191	167	24	5	4	1
Other Conifers	1,415	1,078	337	260	216	44	423	370	53	732	492	240
Other Broadleaved	564	463	101	329	256	73	139	118	21	96	89	7

SUMMARY AREA STATEMENT OF LAND USE: BY CONSERVANCIES

Appendix 11

At 30th September, 1956

Acres

Country or Conservancy	Total	Planted during year ended 30th September, 1956		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
GREAT BRITAIN	2,176,599	38,592	23,808	1,062,336	314,676	799,587
ENGLAND:	681,537	10,393	10,429	418,162	101,760	161,615
North West Conservancy	110,949	1,733	2,205	67,641	18,036	25,272
North East Conservancy	218,328	6,685	1,596	121,928	32,349	64,051
East Conservancy	115,768	692	2,004	82,801	14,501	18,466
South East Conservancy	57,588	285	2,125	39,462	15,811	2,315
South West Conservancy	74,834	845	1,826	52,331	17,258	5,245
New Forest	77,008	144	373	32,369	2,205	42,434
Dean Forest	27,062	9	300	21,630	1,600	3,832
SCOTLAND:	1,182,511	21,137	8,614	455,058	155,661	571,792
North Conservancy	442,371	4,283	3,557	115,778	46,027	280,566
East Conservancy	216,551	3,861	2,795	128,520	33,444	54,587
South Conservancy	250,739	8,385	1,190	102,626	55,966	92,147
West Conservancy	272,850	4,608	1,072	108,134	20,224	144,492
WALES:	312,551	7,062	4,765	189,116	57,255	66,180
North Conservancy	171,300	4,604	2,175	100,708	25,687	44,905
South Conservancy	141,251	2,458	2,590	88,408	31,568	21,275

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

AREA STATEMENT OF LAND USE: BY FORESTS—ENGLAND

Appendix 12

At 30th September, 1956

Acres

Forest	Total	Planted during year ended 30th September, 1956		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH WEST CONSERVANCY:						
TOTAL	110,949	1,733	2,205	67,641	18,036	25,272
Arden, Warwick	698	—	122	156	542	—
Bagot, Staffs	1,342	—	79	582	759	1
Bawtry, Notts	586	—	93	485	50	51
Blengdale, Cumberland	1,138	2	—	939	135	64
Bowland, Lancs & Yorks	936	—	37	231	664	41
Cannock, Staffs	6,125	5	33	5,841	231	53
Cartmel, Lancs	883	49	—	91	748	44
Causeway Wood, Salop	278	55	13	126	152	—
Charnwood, Leicester	275	—	31	231	44	—
Corvedale, Salop	350	65	18	216	112	22
Cotgrave, Notts	529	—	—	367	161	1
Dalton, Westmorland	833	—	138	708	39	86
Delamere, Cheshire*	2,092	—	35	1,980	90	22
Ennerdale, Cumberland	7,579	47	—	2,615	3	4,961
Foremark Woods, Derby...	390	—	—	6	384	—
Foulshaw Wood, Westmorland	600	45	—	163	437	—
Gisburn, Yorks	3,040	404	24	2,625	290	125
Greystoke, Cumberland	2,047	19	73	1,785	20	242
Grizedale, Lancs	7,024	153	45	4,834	1,261	929
Habberley, Salop	837	99	97	485	332	20

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1956		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Hardknott, Cumberland & Lancs	8,055	50	—	1,602	365	6,088
Hope, Derby	2,987	—	13	682	333	1,972
Inglewood, Cumberland	1,514	—	107	471	994	49
Irton, Cumberland	660	157	—	326	288	46
Kershope, Cumberland	12,522	107	—	9,382	115	3,025
Kinver, Staffs	1,026	5	—	591	405	30
Long Mynd, Salop	926	—	13	718	162	46
Longtown, Cumberland	281	—	45	159	56	66
Lyth, Westmorland	629	—	—	—	253	376
Matlock, Derby	1,184	43	—	241	941	2
Mortimer, Hereford & Salop	8,584	—	87	8,189	59	336
Oakamoor, Staffs	1,030	—	77	342	686	2
Packington, Warwick	402	—	21	173	229	—
Sherwood, Derby, Notts & Yorks	14,944	92	579	11,851	2,724	369
Spadeadam, Cumberland	8,909	335	—	1,184	2,715	5,010
Swynnerton, Staffs	2,160	—	215	1,550	589	21
Thornthwaite, Cumberland	5,592	1	138	4,121	316	1,155
Walcot, Salop	1,656	—	49	1,570	69	17
Walton Woods, Cumberland	306	—	23	23	283	—
NORTH EAST CONSERVANCY:						
TOTAL	218,328	6,685	1,596	121,928	32,349	64,051
Allendale, Northumberland	63	—	—	—	62	1
Allerston, Yorks	10,864	—	49	9,325	680	859
Ampleforth, Yorks	4,778	3	151	2,896	1,624	258
Arkengarthdale, Yorks	1,599	—	—	1,121	342	136
Cawthorne, Yorks	443	—	3	66	377	—
Chillingham, Northumberland	816	—	75	464	326	26
Chopwell, Durham*	2,044	—	145	1,204	742	98
Cleveland, Yorks	4,068	250	93	1,226	2,790	52
Doncaster, Yorks	1,014	—	109	586	421	7
Fountains, Yorks	161	—	—	—	161	—
Hambleton, Yorks	3,062	93	108	852	2,020	190
Hamsterley, Durham	6,038	—	106	5,458	252	328
Harwood, Northumberland	6,920	380	4	3,229	2,589	1,102
Hebden Royd, Yorks	739	—	—	—	718	21
Holmfirth, Yorks	566	1	—	80	455	31
Jervaulx, Yorks	1,470	108	4	463	1,003	4
Kidland, Northumberland	1,787	335	47	1,007	737	43
Kielder, Northumberland	70,874	1,913	—	42,250	2,514	26,110
Knaresborough, Yorks	533	75	—	486	47	—
Langdale, Yorks	14,613	109	56	5,636	1,005	7,972
Londesborough, Yorks	669	—	21	290	364	15
Ray, Northumberland	1,996	391	—	1,462	521	13
Redesdale, Northumberland	17,627	446	—	11,342	284	6,001
Rievaulx, Yorks	574	31	—	55	510	9
Rosedale, Yorks	10,798	649	7	6,000	1,218	3,580
Rothbury, Northumberland	4,012	112	107	2,263	1,378	371
Scardale, Yorks	1,059	—	21	670	97	292
Selby, Yorks	1,102	—	24	899	201	2
Slaley, Northumberland	2,452	—	—	1,304	919	229
Tong Woods, Yorks	195	—	10	159	36	—
Wark, Northumberland	36,353	1,789	—	18,954	4,330	13,069
Weardale, Durham	4,386	—	—	—	1,317	3,069
Wharnccliffe, Yorks	1,105	—	90	500	547	58
Widehaugh, Northumberland	70	—	—	—	—	70
Wynyard, Durham	1,604	—	263	652	947	5
York, Yorks	1,874	—	103	1,029	815	30

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1956		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
EAST CONSERVANCY:						
TOTAL	115,768	692	2,004	82,801	14,501	18,466
Amphill, Beds	1,394	34	57	557	756	81
Bardney, Lincoln	3,980	39	127	3,356	488	136
Bernwood, Oxford	1,483	—	122	523	960	—
Bramfield, Herts	830	—	20	507	302	21
Brooke Woods, Norfolk	157	1	29	38	119	—
Burwell, Lincoln	650	—	46	485	163	2
Chilterns, Bucks & Oxford	3,830	3	206	1,833	1,955	42
Ditton, Cambridge	319	—	33	135	184	—
Dunwich, Suffolk	1,639	77	31	1,263	345	31
Eynsford, Norfolk	571	—	47	534	20	17
Gaywood, Norfolk	876	4	29	465	388	23
Hazelborough, Bucks & Northants*	2,518	—	48	2,117	50	351
Hevingham, Norfolk	1,241	12	71	698	528	15
Holt, Norfolk	852	89	41	647	130	75
Honeywood, Essex	685	—	—	9	666	10
Kesteven, Lincoln & Rutland	4,687	—	182	2,829	1,444	414
The King's Forest, Suffolk	5,953	6	19	5,198	488	267
Laughton, Lincoln	2,144	—	28	2,027	65	52
Lavenham, Suffolk	486	—	16	29	457	—
Nassburgh, Northants	332	—	53	145	74	113
Pytchley, Northants	346	—	83	170	176	—
Rendlesham, Suffolk	4,754	12	34	3,694	87	973
Rockingham, Northants	6,110	21	85	4,849	763	498
Salcey, Bucks & Northants*	1,279	—	26	1,227	21	31
Shouldham, Norfolk	1,290	65	30	1,053	152	85
Swaffham, Norfolk	3,813	2	21	3,286	5	522
Swanton, Norfolk	843	—	—	655	17	171
Thetford Chase, Norfolk & Suffolk	49,725	318	160	35,677	1,309	12,739
Tunstall, Suffolk	3,421	4	3	2,840	54	527
Walden, Essex	719	—	54	213	480	26
Walsham, Norfolk	811	1	85	489	317	5
Waveney, Suffolk	284	4	2	237	8	39
Whaddon Chase, Bucks	362	—	14	18	344	—
Wigsley, Lincoln & Notts	2,184	—	50	1,528	259	397
Willingham, Lincoln	2,503	—	107	1,982	414	107
Yardley Chase, Beds & Northants	2,366	—	45	1,488	182	696
Not yet allocated	331	—	—	—	331	—
SOUTH EAST CONSERVANCY:						
TOTAL	57,588	285	2,125	39,462	15,811	2,315
Abinger, Surrey	1,156	—	76	460	535	161
Alice Holt, Hants*	2,329	—	25	1,994	54	281
Alton, Hants	1,080	7	14	811	156	113
Andover, Hants	1,255	—	21	885	223	147
Arundel, Sussex	2,555	—	64	2,168	357	30
Ashley Hill, Berks	301	—	46	200	98	3
Badbury, Berks	578	—	25	171	407	—
Basing, Hants	211	—	—	204	7	—
Bedgebury, Kent & Sussex*	2,375	—	67	2,028	132	215
Bere, Hants*	1,755	123	19	1,496	233	26
Bishopstoke, Hants	299	—	51	285	14	—

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1956		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re- planted		Plantable	Agricultural, Unplant- able, &c.
Bramshill, Berks & Hants...	4,533	—	3	4,032	409	92
Brightling, Sussex ...	1,764	4	115	581	1,166	17
Bucklebury, Berks ...	285	—	25	201	84	—
Challock, Kent ...	1,795	31	60	1,606	183	6
Charlton, Sussex ...	2,534	12	97	1,701	833	—
Chiddingfold, Surrey & Sussex ...	2,224	—	230	1,991	226	7
Chilworth, Hants ...	1,123	—	—	56	1,066	1
Corhampton, Hants ...	525	—	25	91	434	—
Crawley, Hants ...	315	—	—	315	—	—
Effingham, Surrey ...	497	—	35	192	304	1
Friston, Sussex ...	1,986	—	—	1,723	238	25
Gravetye, Sussex ...	910	3	9	362	55	493
Groombridge, Sussex ...	154	—	4	110	35	9
Havant, Hants ...	1,343	—	54	374	967	2
Hemsted, Kent ...	1,024	—	31	984	6	34
Hursley, Hants ...	2,360	—	120	1,206	1,154	—
Joydens Wood, Kent ...	333	—	—	3	330	—
Lyminge, Kent ...	2,495	—	66	2,361	76	58
Marden, Sussex ...	1,338	11	15	870	367	101
Maresfield, Sussex ...	738	—	67	317	419	2
Micheldever, Hants ...	2,933	—	152	2,234	640	59
Mildmay, Kent ...	272	—	16	177	95	—
Orlestone, Kent ...	893	—	37	814	77	2
Pen, Hants ...	221	—	43	119	101	1
Queen Elizabeth Forest, Hants & Sussex ...	2,593	66	—	1,498	821	274
Rochester, Kent ...	536	—	—	—	513	23
Rogate, Sussex ...	600	—	51	378	190	32
St. Leonards, Sussex ...	1,503	—	70	508	967	28
Shipbourne, Kent ...	458	—	26	302	154	2
Slindon, Sussex ...	1,358	—	43	1,047	311	—
Southwater, Sussex ...	489	28	25	401	85	3
Vinehall, Sussex ...	974	—	61	871	86	17
Westbury, Hants ...	490	—	56	477	3	10
Westerham, Kent ...	283	—	—	35	248	—
Wilmington, Sussex ...	881	—	69	385	458	38
Winterfold, Surrey ...	321	—	31	170	151	—
Witley Park, Surrey ...	611	—	81	268	343	—
Woking Office Grounds ...	2	—	—	—	—	2
SOUTH WEST CONSERVANCY:						
TOTAL ...	74,834	845	1,826	52,331	17,258	5,245
Aconbury, Hereford ...	613	—	56	88	525	—
Bampton, Devon ...	212	—	—	96	116	—
Bentley, Hants & Wilts ...	3,105	—	282	846	2,249	10
Blandford, Dorset ...	2,826	89	50	1,242	1,371	213
Bodmin, Cornwall ...	1,491	—	15	1,240	84	167
Bradon, Wilts ...	1,828	26	65	1,178	532	118
Brendon, Somerset ...	2,735	53	40	2,215	221	299
Bruton, Somerset & Wilts...	1,035	—	3	968	61	6
Charmouth, Devon & Dorset ...	989	—	40	683	261	45
Collingbourne, Wilts ...	1,239	—	—	1,221	7	11
Cowley Woods, Gloucester ...	221	—	22	97	123	1
Croft Pascoe, Cornwall ...	112	3	—	15	97	—
Dartmoor, Devon ...	2,287	—	—	1,689	—	598
Dunster, Somerset ...	2,023	56	9	1,264	342	417

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1956		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re- planted		Plantable	Agricultural, Unplant- able, &c.
Dymock, Gloucester & Hereford*	1,721	20	—	1,532	117	72
Eggesford, Devon	1,041	19	30	902	121	18
Erme, Devon	642	—	31	155	485	2
Fernworthy, Devon	1,505	—	—	1,501	—	4
Gardiner, Dorset & Wilts... ..	1,751	7	115	994	748	9
Glynn, Cornwall	2,518	41	86	1,969	417	132
Haldon, Devon	3,793	—	68	3,357	384	52
Halwill, Devon	4,590	16	30	3,779	63	748
Hartland, Devon	2,128	3	9	1,688	260	180
Haugh, Hereford	1,008	—	34	802	186	20
Herodsfoot, Cornwall	817	—	68	655	136	26
Honiton, Devon	1,075	22	58	352	694	29
Lydford, Devon	597	—	—	546	9	42
Mendip, Somerset	1,223	—	—	942	197	84
Middlemarsh Woods, Dorset	291	—	—	—	291	—
Moccas, Hereford	794	70	14	187	607	—
Molton Woods, Devon	395	—	20	197	198	—
Neroche, Somerset	2,235	62	18	851	1,330	54
Okehampton, Devon	519	—	—	476	4	39
Pershore, Worcs	361	—	28	114	246	1
Plym, Devon	1,392	—	108	1,220	168	4
Poorstock, Dorset	686	—	22	375	311	—
Purbeck, Dorset	1,595	63	—	1,307	187	101
Quantock, Somerset	2,766	3	68	2,206	205	355
St. Clement, Cornwall	282	—	46	256	21	5
Savernake, Wilts	4,443	—	139	2,667	1,497	279
Sedgemoor, Somerset	431	20	12	280	151	—
Shepton, Somerset... ..	160	—	—	155	3	2
Stanway, Gloucester	1,150	3	38	396	110	644
Stokeleigh, Somerset	639	—	31	444	188	7
Wareham, Dorset	5,815	269	40	4,036	1,673	106
West Woods, Wilts	1,071	—	25	900	9	162
Wilesey Down, Cornwall	1,346	—	—	1,138	144	64
Wyre, Worcester	3,338	—	106	3,110	109	119
NEW FOREST:						
TOTAL	77,008	144	373	32,369	2,205	42,434
Brightstone, Isle of Wight...	1,529	6	10	1,290	62	177
Combley, Isle of Wight	559	—	—	548	—	11
Ferndown, Dorset	1,633	1	—	992	126	515
Hurn, Hants	1,870	111	3	672	505	693
New Forest, Hants*	65,448	—	283	23,744	1,299	40,405
Osborne, Isle of Wight	188	—	39	159	29	—
Parkhurst, Isle of Wight*...	1,312	—	28	980	27	305
Ringwood, Dorset & Hants	3,962	—	—	3,719	6	237
Shalfleet, Isle of Wight	507	26	10	265	151	91
DEAN FOREST:						
TOTAL	27,062	9	300	21,630	1,600	3,832
Dean Forest, Gloucester, Hereford & Monmouth*	25,486	9	229	20,370	1,340	3,776
Tidenham Chase, Gloucester	1,576	—	71	1,260	260	56

AREA STATEMENT OF LAND USE: BY FORESTS—SCOTLAND

Appendix 13

At 30th September, 1956

Acres

Forest	Total	Planted during year ended 30th September, 1956		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH CONSERVANCY:						
TOTAL	442,371	4,283	3,557	115,778	46,027	280,566
Achnasheen, Ross	754	26	51	147	467	140
Achnashellach, Ross	19,674	—	—	934	20	18,720
Aigas, Inverness	1,593	50	100	480	454	659
Ardross, Ross	5,997	260	40	4,049	801	1,147
Assich, Nairn	1,021	2	4	800	1	220
Balblair, Sutherland & Ross	6,234	—	85	1,560	68	4,606
Battan, Inverness	2,167	75	75	1,253	568	346
Boblainy, Inverness	2,690	—	320	2,254	336	100
Borgie, Sutherland	2,706	—	59	1,230	83	1,393
Ceannacroc, Inverness	19,881	298	—	1,415	2,743	15,723
Clach Liath, Ross	2,277	65	96	907	1,059	311
Clunes, Inverness	7,261	44	41	1,620	1,060	4,581
Craig Phadrig, Inverness ...	211	—	—	203	—	8
Craigs, Ross	2,022	225	20	1,158	751	113
Creag nan Eun, Inverness ...	1,922	—	—	1,370	—	552
Culloden, Inverness	2,447	5	43	2,346	50	51
Dornoch, Sutherland	2,966	—	100	780	635	1,551
Dunnet, Caithness	879	100	—	176	632	71
Eilanreach, Inverness	922	—	—	829	—	93
Farigaig, Inverness	7,018	207	33	1,770	1,682	3,566
Ferness, Nairn	1,538	—	—	1,018	6	514
Findon, Ross	2,367	—	1	2,244	11	112
Fiunary, Argyll	18,339	177	25	4,289	2,026	12,024
Glen Affric, Inverness	54,156	121	436	3,607	5,234	45,315
Glen Brittle, Skye, Inverness	8,858	16	—	1,573	2	7,283
Glen Cripesdale, Argyll ...	6,650	66	60	260	1,908	4,482
Glen Garry, Inverness	23,029	98	69	4,711	1,128	17,190
Glen Hurich, Argyll	15,180	31	19	3,058	743	11,379
Glen Loy, Inverness	2,546	—	—	1,938	101	507
Glen Righ, Inverness	5,883	97	—	2,499	31	3,353
Glen Shiel, Ross	3,653	—	—	763	—	2,890
Glen Urquhart, Inverness ...	16,276	66	137	3,387	1,739	11,150
Glen Varragill, Skye, Inverness	8,530	105	—	185	104	8,241
Guisachan, Inverness	5,645	137	77	1,784	1,218	2,643
Healaval, Skye, Inverness ...	1,265	85	—	111	816	338
Inchnacardoch, Inverness ...	9,351	62	—	2,348	465	6,538
Inshriach, Inverness	16,598	75	236	2,578	2,581	11,439
Inverinate, Ross	1,234	—	—	1,038	—	196
Kessock, Ross	1,666	—	—	1,080	281	305
Kilcoy, Ross	3,424	4	13	2,943	14	467
Lael, Ross	3,504	94	—	2,039	542	923
Laiken, Nairn	838	—	—	821	4	13
Leanachan, Inverness	7,546	329	10	2,863	1,987	2,696
Loch Ericht, Inverness	933	—	—	183	506	244
Longart, Ross	1,522	42	—	1,221	225	76
Millbuie, Ross	7,337	—	—	6,731	8	598
Morangie, Ross	7,138	40	298	4,490	952	1,696
Nevis, Inverness	7,659	—	—	980	—	6,679
North Strome, Ross	1,969	7	—	882	30	1,057
Oykell, Ross & Sutherland	4,587	152	102	986	2,863	738
Portclair, Inverness	5,500	—	—	2,353	—	3,147
The Queen's Forest, Inverness	12,500	—	25	3,197	45	9,258
Raasay, Isle of Raasay, Inverness	723	—	8	519	16	188

Appendix 13—continued

Forest	Total	Planted during year ended 30th September, 1956		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Ratagan, Inverness & Ross	5,472	—	—	1,590	527	3,355
Rumster, Caithness ...	2,362	30	—	834	66	1,462
Salen, Mull, Argyll ...	23,992	395	37	4,465	2,379	17,148
Shin, Sutherland ...	13,888	321	83	2,652	685	10,551
Slattadale, Ross ...	1,395	76	—	837	30	528
South Laggan, Inverness ...	4,195	—	—	1,110	—	3,085
South Strome, Ross ...	3,556	29	4	1,214	20	2,322
Strath Conon, Ross	6,664	156	—	1,875	810	3,979
Strath Dearn, Inverness ...	4,148	10	166	2,158	296	1,694
Strath Mashie, Inverness ...	3,609	—	155	804	1,880	925
Strath Nairn, Inverness ...	2,530	31	102	1,100	153	1,277
Strathy, Sutherland	804	52	—	162	419	223
Sunart, Argyll ...	2,569	22	130	991	1,038	540
Torrachilly, Ross ...	7,554	—	257	1,124	694	5,736
Urray, Ross ...	999	—	40	856	34	109
Hoy Experiments, Orkney	32	—	—	32	—	—
Lewis Experiments, Isle of Lewis, Ross ...	16	—	—	14	—	2
EAST CONSERVANCY:						
TOTAL ...	216,551	3,861	2,795	128,520	33,444	54,587
Allean, Perth ...	3,062	212	2	1,809	933	320
Alltcaillach, Aberdeen ...	3,806	—	—	3,487	230	89
Benachie, Aberdeen ...	4,892	—	164	2,773	268	1,851
Bin, Aberdeen ...	7,745	62	144	5,740	1,011	994
Blackcraig, Perth ...	2,451	70	—	1,566	392	493
Blackhall, Kincardine ...	4,687	—	—	2,760	1,791	136
Blairadam, Fife & Kinross	2,105	65	22	1,787	80	238
Carden, Fife ...	547	2	11	537	1	9
Clashindarroch, Aberdeen	18,284	493	—	10,256	233	7,795
Corrennie, Aberdeen ...	2,049	267	—	1,582	225	242
Countesswells, Aberdeen ...	765	—	35	641	91	33
Craigvinean, Perth ...	4,461	56	58	3,342	63	1,056
Culbin, Moray & Nairn ...	7,738	58	158	6,996	130	612
Dallas, Moray ...	2,073	9	4	964	340	769
Forest of Deer, Aberdeen...	2,250	—	13	2,094	5	151
Delgaty, Aberdeen ...	1,373	—	197	1,087	282	4
Drummond Hill, Perth ...	6,361	—	23	4,137	422	1,802
Drumtochty, Kincardine ...	9,685	284	15	3,750	4,018	1,917
Durris, Kincardine ...	4,443	—	175	4,042	120	281
Edensmuir, Fife ...	1,701	4	5	1,557	7	137
Elchies, Moray ...	4,215	—	232	610	2,334	1,271
Faskally, Perth ...	1,045	—	6	228	699	118
Fetteresso, Kincardine ...	8,773	217	92	4,626	1,481	2,666
Fonab, Perth ...	2,237	165	—	974	766	497
Glendevon, Perth & Kinross	915	—	—	876	—	39
Glendoll, Angus ...	3,713	104	6	639	839	2,235
Glenarrochty, Perth ...	2,509	21	55	628	1,073	808
Glenisla, Angus ...	11,492	332	—	2,513	3,026	5,953
Glenlivet, Banff ...	6,459	517	—	5,164	119	1,176
Glenprosen, Angus ...	8,326	—	—	25	1,475	6,826
Hallyburton, Angus & Perth	1,997	5	243	1,865	115	17
Inglismaldie, Kincardine ...	1,414	—	57	1,207	200	7
Keillour, Perth ...	2,156	—	56	1,691	401	64
Kemnay, Aberdeen ...	1,328	—	11	1,250	61	17
Kinfauns, Perth ...	826	—	—	774	51	1
Kirkhill, Aberdeen ...	2,062	—	74	1,876	49	137
Ledmore, Perth ...	117	—	—	—	—	117
Lossie, Moray ...	1,904	—	2	1,672	—	232
Midmar, Aberdeen ...	2,110	—	71	1,056	723	331

Appendix 13—continued

Forest	Total	Planted during year ended 30th September, 1956		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Monaughty, Moray ...	4,345	—	18	3,820	167	358
Montreathmont, Angus ...	2,783	—	70	2,409	329	45
Newton, Moray ...	175	—	—	—	—	175
Newtyle, Moray ...	1,928	120	—	1,718	—	210
Pittfichie, Aberdeen ...	5,067	—	44	2,890	1,131	1,046
Pitmedden, Fife ...	2,118	—	79	1,875	126	117
Rannoch, Perth ...	4,458	39	111	2,165	1,617	676
Rosarie, Banff ...	6,585	—	302	4,188	1,084	1,313
Roseisle, Moray ...	2,053	—	—	1,779	—	274
Scootmore, Banff & Moray	820	—	5	809	6	5
Speymouth, Moray ...	12,543	575	81	8,514	2,548	1,481
Strathord, Perth ...	1,608	—	—	1,166	438	4
Teindland, Moray ...	3,155	11	129	2,041	351	763
Tentsmuir, Fife ...	4,025	—	20	3,356	19	650
Tornashean, Aberdeen ...	9,278	173	—	1,999	1,574	5,705
Whitehaugh, Aberdeen ...	1,534	—	5	1,210	—	324
SOUTH CONSERVANCY:						
TOTAL ...	250,739	8,385	1,190	102,626	55,966	92,147
Forest of Ae, Dumfries ...	12,639	571	15	10,554	1,513	572
Arcleoch, Ayrshire ...	3,105	—	—	—	2,713	392
Auchenroddan, Dumfries...	777	—	—	751	—	26
Bareagle, Wigtown ...	2,327	34	75	403	1,433	491
Brownmoor, Dumfries ...	464	—	12	445	11	8
Cairn Edward, Kirkcudbright	28,482	1,549	—	10,615	8,094	9,773
Cardrona, Peebles ...	1,860	—	—	1,413	—	447
Carrick, Ayr ...	32,605	909	119	5,733	3,371	23,501
Castle O'er, Dumfries ...	3,497	—	—	2,411	621	465
Changue, Ayr ...	2,389	28	23	1,658	83	648
Clauchrie, Dumfries ...	639	—	—	567	67	5
Clydesdale, Lanark ...	768	90	4	280	481	7
Corriedoo, Kirkcudbright	1,022	—	—	955	21	46
Craigieburn, Dumfries ...	585	6	—	536	—	49
Craik, Roxburgh ...	4,246	427	3	3,679	—	567
Dalbeattie, Kirkcudbright	6,299	94	69	4,381	1,271	647
Dalmacallan, Dumfries ...	1,795	189	93	1,261	433	101
Dreva, Peebles ...	1,205	—	140	563	615	27
Dundeugh, Kirkcudbright	5,964	521	—	3,044	1,461	1,459
Duns, Berwick ...	1,078	45	57	424	628	26
Edgarhope, Berwick ...	1,776	—	5	1,160	106	510
Elibank & Traquair, Selkirk & Peebles ...	5,594	334	—	2,814	1,046	1,734
Fleet, Kirkcudbright ...	1,481	1	48	1,163	89	229
Garcrogo, Kirkcudbright...	1,914	—	—	1,506	192	216
The Garraries, Kirkcudbright	7,712	256	—	562	4,596	2,554
Glengap, Kirkcudbright ...	2,266	129	29	1,771	305	190
Glentress, Peebles ...	2,349	—	8	1,973	2	374
Glen Trool, Kirkcudbright	55,641	971	40	10,284	9,255	36,102
Greskine, Dumfries ...	2,459	50	158	1,499	744	216
Kilgrammie, Ayr ...	570	—	15	557	13	—
Kilsture, Wigtown...	511	—	3	503	4	4
Kirroughtree, Kirkcudbright	10,528	348	18	4,631	3,059	2,838
Laurieston, Kirkcudbright	4,533	299	9	2,556	948	1,029
Leithore, Roxburgh ...	1,165	222	—	1,165	—	—
Mabie, Kirkcudbright ...	3,015	139	31	2,469	328	218
Newcastleton, Roxburgh & Dumfries...	7,588	62	—	4,651	2,547	390

Appendix 13—continued

Forest	Total	Planted during year ended 30th September, 1956		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re- planted		Plantable	Agricultural, Unplant- able, &c.
Penninghame, Wigtown ...	5,430	340	31	1,877	1,996	1,557
Saltoun, East Lothian ...	834	—	81	207	585	42
Selm Muir, Midlothian ...	517	66	2	229	279	9
Stenton, East Lothian ...	557	—	78	433	105	19
Twiglees, Dumfries ...	5,137	—	2	4,710	1	426
Watermeetings, Lanark ...	3,140	—	—	—	1,687	1,453
Wauchope, Roxburgh ...	12,080	505	—	4,971	4,360	2,749
Yair Hill, Selkirk ...	2,157	200	22	1,250	903	4
Bush Nursery, Midlothian	9	—	—	—	—	9
Whittingehame Seed Orchard, East Lothian	30	—	—	12	—	18
WEST CONSERVANCY:						
TOTAL ...	272,850	4,608	1,072	108,134	20,224	144,492
Achaglachgach, Argyll ...	2,508	17	54	1,707	478	323
Ardfin, Jura, Argyll ...	1,179	47	—	103	853	223
Ardgartan, Argyll ...	18,394	140	—	4,617	830	12,947
Asknish, Argyll ...	5,900	—	—	3,745	—	2,155
Barcaldine, Argyll ...	6,024	82	—	3,974	282	1,768
Benmore, Argyll ...	9,584	65	—	2,970	373	6,241
Carradale, Argyll ...	10,853	149	58	4,649	172	6,032
Carron Valley, Stirling ...	6,640	—	—	4,488	36	2,116
Corlarach, Argyll ...	5,503	228	1	2,080	248	3,175
Creran, Argyll ...	2,031	—	45	124	619	1,288
Cumbernauld, Dunbarton	905	—	—	13	714	178
Dalmally, Argyll ...	2,664	428	—	803	1,631	230
Devilla, Fife & Clackmannan	3,034	—	267	1,977	963	94
Fearnoch, Argyll ...	1,342	—	—	1,133	—	209
Garadhbhan, Stirling ...	1,297	—	31	1,179	67	51
Garelochhead, Dunbarton	1,003	52	40	532	335	136
Garshelloch, Stirling ...	424	89	24	338	86	—
Glenbranter, Argyll ...	8,712	26	—	3,437	319	4,956
Glencoe, Argyll ...	380	34	11	292	74	14
Glendaruel, Argyll ...	7,045	193	10	1,839	1,156	4,050
Glenduror, Argyll ...	8,318	51	—	2,673	5	5,640
Glenfinart, Argyll ...	8,712	39	65	3,019	142	5,551
Glenrickard, Arran, Bute- shire ...	2,687	151	—	601	482	1,604
Inverinan, Argyll ...	12,796	189	72	4,933	1,176	6,687
Inverliever, Argyll*	29,519	163	—	6,061	964	22,494
Kilmartin, Argyll ...	1,563	—	100	105	1,402	56
Kilmichael, Argyll ...	10,374	410	—	5,098	138	5,138
Kilmory, Argyll ...	3,169	276	—	2,106	358	705
Knapdale, Argyll ...	19,701	2	22	6,714	29	12,958
Lennox, Stirling ...	778	41	2	616	106	56
Loch Ard, Perth & Stirling	32,284	1,060	39	16,828	2,220	13,236
Loch Eck, Argyll ...	5,502	—	—	2,412	30	3,060
Minard, Argyll ...	5,328	293	10	3,481	208	1,639
Rowardennan, Stirling ...	9,464	153	20	1,517	1,844	6,103
Saddell, Argyll ...	4,917	15	—	1,496	17	3,404
St. Fillans, Perth ...	1,644	31	120	667	853	124
Strathlachlan, Argyll ...	7,616	48	—	2,702	266	4,648
Strathyre, Perth ...	10,613	10	69	5,780	7	4,826
Tighnabruaich, Argyll ...	1,174	126	—	353	676	145
Torrie, Perth ...	1,157	—	12	972	65	120
Tulliallan, Fife ...	112	—	—	—	—	112

AREA STATEMENT OF LAND USE: BY FORESTS—WALES

Appendix 14

At 30th September, 1956

Acres

Forest	Total	Planted during year ended 30th September, 1956		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH CONSERVANCY:						
TOTAL	171,300	4,604	2,175	100,708	25,687	44,905
Aberhirnant, Merioneth ...	6,663	287	3	2,532	897	3,234
Aeron, Cardigan ...	1,520	176	54	575	844	101
Bechan, Montgomery ...	586	2	38	415	170	1
Beddgelert, Caernarvon ...	3,130	—	28	1,835	244	1,051
Brynmawr, Cardigan ...	3,924	406	101	2,489	1,058	377
Carno, Montgomery ...	924	36	45	803	64	57
Ceiriog, Denbigh ...	1,533	25	15	608	677	248
Clocaenog, Denbigh & Merioneth	15,395	511	46	11,214	820	3,361
Coed Clwyd, Denbigh ...	1,860	4	122	1,327	166	367
Coed Sarnau, Radnor ...	5,585	125	70	3,748	711	1,126
Coed y Brenin, Merioneth	18,877	123	310	10,379	1,356	7,142
Coed y Goror, Denbigh & Salop ...	995	9	22	926	46	23
Commins Coch, Montgomery	1,366	47	27	975	148	243
Cynwyd, Merioneth ...	1,876	—	—	1,640	109	127
Derry Ormond, Cardigan	1,677	—	23	927	550	200
Dovey, Merioneth & Montgomery	16,907	160	184	12,517	1,585	2,805
Dyfnant, Montgomery ...	7,791	331	4	2,804	1,913	3,074
Elwy, Denbigh ...	1,347	124	27	1,083	245	19
Glanllyn, Merioneth ...	968	41	—	641	284	43
Gwydyr, Caernarvon & Denbigh	19,921	220	158	11,911	655	7,355
Hafod Fawr, Merioneth*...	2,268	37	36	825	585	858
Hafren, Montgomery ...	10,963	305	58	7,280	1,078	2,605
Kerry, Montgomery & Salop	2,615	—	52	2,447	41	127
Llangollen, Denbigh ...	844	13	33	778	55	11
Lleyn, Caernarvon ...	1,597	44	110	466	969	162
Maelor, Flint ...	191	—	20	20	146	25
Mathrafal, Montgomery ...	3,198	110	138	1,708	1,400	90
Myherin, Cardigan ...	9,704	73	—	2,943	2,388	4,373
Newborough, Anglesey ...	2,547	81	11	1,245	642	660
Pencerrig, Radnor ...	151	—	19	21	130	—
Penllyn, Merioneth ...	932	157	35	682	91	159
Pentraeth, Anglesey ...	844	7	57	458	351	35
Radnor, Radnor ...	6,294	149	114	4,563	606	1,125
St. Asaph, Denbigh & Flint	961	—	78	569	314	78
Taliesin, Cardigan ...	6,664	374	57	1,426	3,516	1,722
Tanat, Denbigh ...	667	186	—	419	165	83
Tarenig, Cardigan & Montgomery	3,000	160	5	1,850	23	1,127
Ystwyth, Cardigan ...	5,011	281	75	3,659	645	707
Chirk Depot, Denbigh ...	4	—	—	—	—	4
SOUTH CONSERVANCY:						
TOTAL	141,251	2,458	2,590	88,408	31,568	21,275
Abergavenny, Monmouth	294	19	12	36	257	1
Brechfa, Carmarthen ...	16,310	28	252	12,124	549	3,637
Brecon, Brecon ...	1,870	—	2	1,577	—	293
Caio, Carmarthen ...	4,418	—	213	3,072	260	1,086

Appendix 14—continued

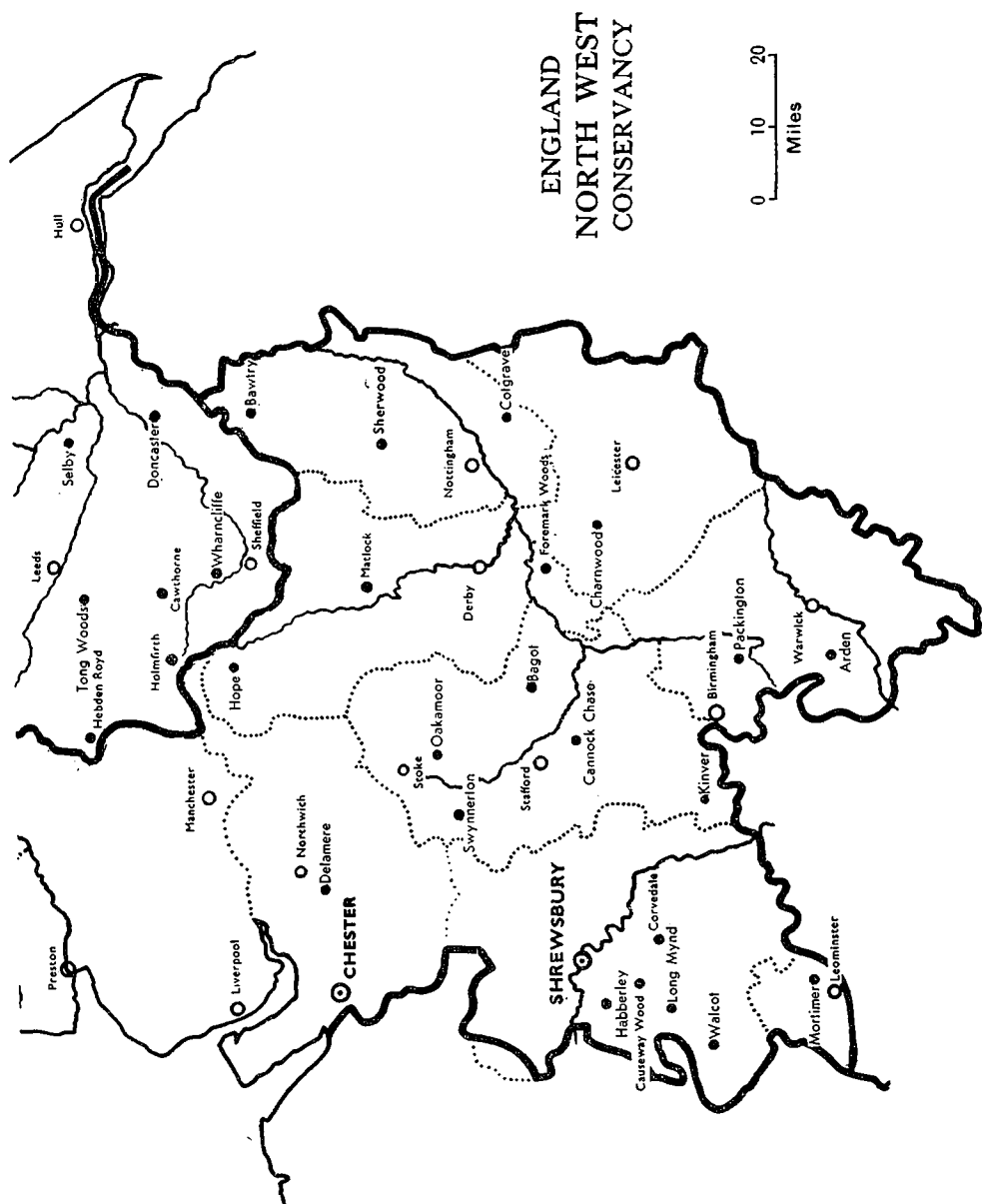
Forest	Total	Planted during year ended 30th September, 1956		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Chepstow, Monmouth ...	2,157	—	96	1,680	472	5
Cilgwyn, Carmarthen ...	1,212	—	137	801	409	2
Cilsant, Carmarthen ...	220	31	55	146	72	2
Coed Caerdydd, Glamorgan	948	—	69	362	566	20
Coed Morgannwg, Glamorgan	36,726	596	404	23,824	6,173	6,729
Coed Taf Fawr, Brecon ...	2,345	216	—	1,191	521	633
Coed y Brithdir, Glamorgan	311	—	37	37	272	2
Coed y Rhaiadr, Brecon ...	2,341	241	—	1,277	812	252
Conwil Elvet, Carmarthen	186	—	—	3	182	1
Crychan, Brecon & Carmarthen	9,515	68	136	7,689	395	1,431
Daugleddau, Pembroke ...	1,509	214	22	395	969	145
Draethen, Glamorgan ...	1,319	—	46	494	806	19
Ebbw, Monmouth ...	671	48	2	452	169	50
Gamrhiw, Brecon ...	822	—	60	559	226	37
Giedd, Brecon ...	746	—	—	589	16	141
Glasfynydd, Brecon ...	3,454	211	—	3,172	178	104
Glyn Tarell, Brecon ...	290	8	22	280	10	—
Gower, Glamorgan ...	429	—	14	327	96	6
Goytre, Monmouth ...	611	—	89	394	212	5
Hay, Brecon & Hereford	1,593	7	43	1,026	493	74
Hensol, Glamorgan ...	729	—	36	545	89	95
Irfon, Brecon ...	3,925	301	—	904	2,431	590
Llandowror, Carmarthen	530	19	1	378	106	46
Llandeilo, Carmarthen ...	1,069	62	19	705	91	273
Llanover, Monmouth ...	4,459	20	94	2,952	1,215	292
Llantrisant, Glamorgan ...	801	—	13	734	64	3
Machen, Monmouth ...	1,132	101	—	316	731	85
Monmouth, Monmouth ...	1,304	—	64	659	557	88
Mynydd Ddu, Brecon & Monmouth ...	3,119	22	46	2,168	223	728
Nethergwent, Monmouth...	536	—	55	134	388	14
Pembrey, Carmarthen ...	4,680	—	47	1,951	587	2,142
Penllergaer, Glamorgan ...	601	6	19	469	104	28
St. Gwynno, Glamorgan ...	4,045	—	86	2,979	305	761
Sirhowy, Monmouth ...	638	94	35	326	273	39
Slebech, Pembroke ...	1,837	—	152	1,240	549	48
Taf Fechan, Brecon ...	1,131	1	—	1,088	18	25
Tair Onen, Glamorgan ...	189	—	—	52	—	137
Talybont, Brecon ...	3,558	145	22	1,991	1,437	130
Teifi, Carmarthen ...	776	—	108	577	199	—
Tintern, Monmouth* ...	5,167	—	11	4,511	162	494
Towy, Cardigan & Brecon	8,730	—	—	819	7,357	554
Wentwood, Monmouth ...	1,998	—	71	1,403	567	28

MAPS

Maps showing the distribution of the Commission forests, and the boundaries of the Conservancies, as at September 1956, follow overleaf.

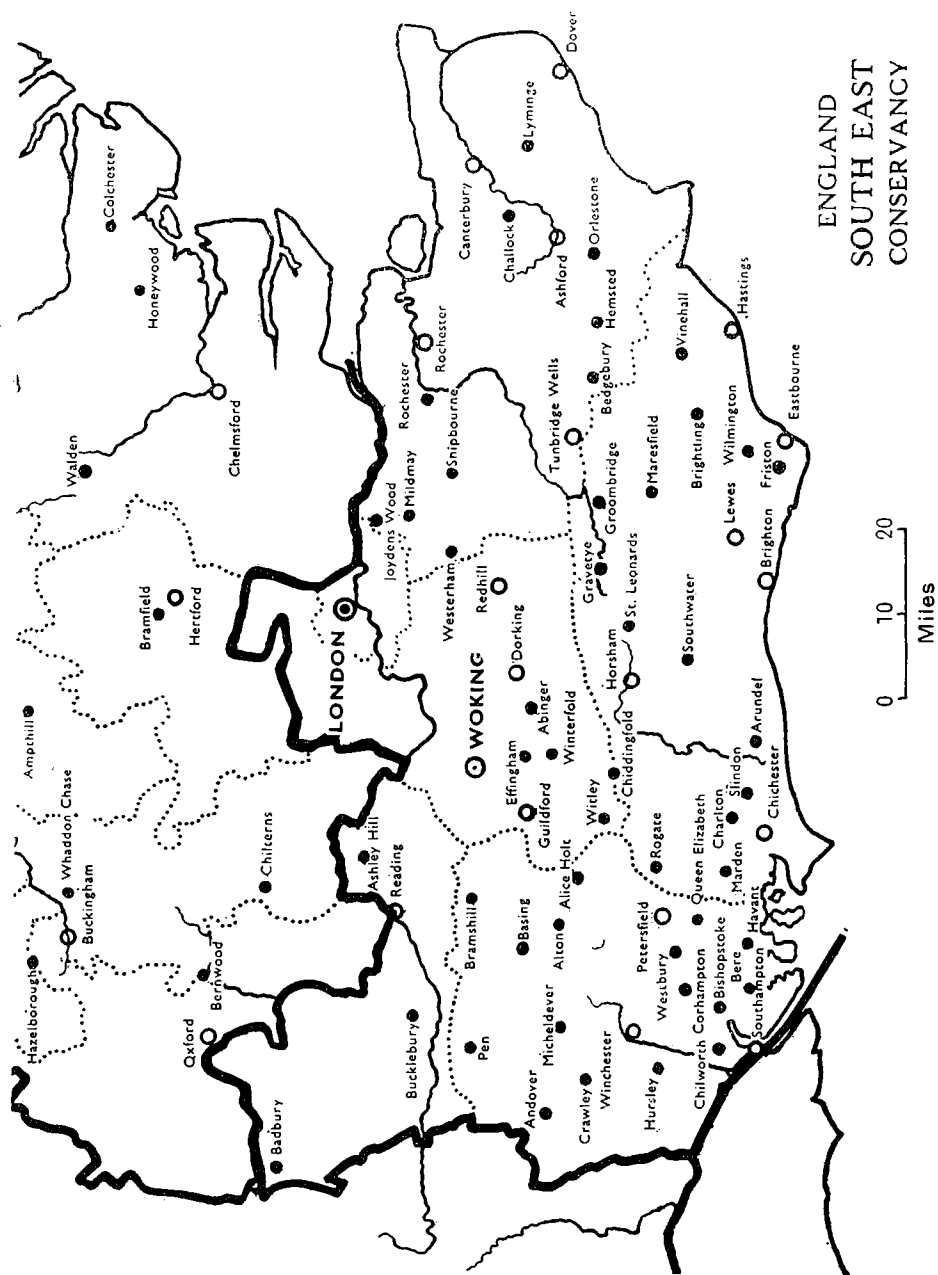
ENGLAND NORTH EAST CONSERVANCY





Forests: ●
Towns: ○

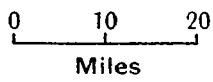
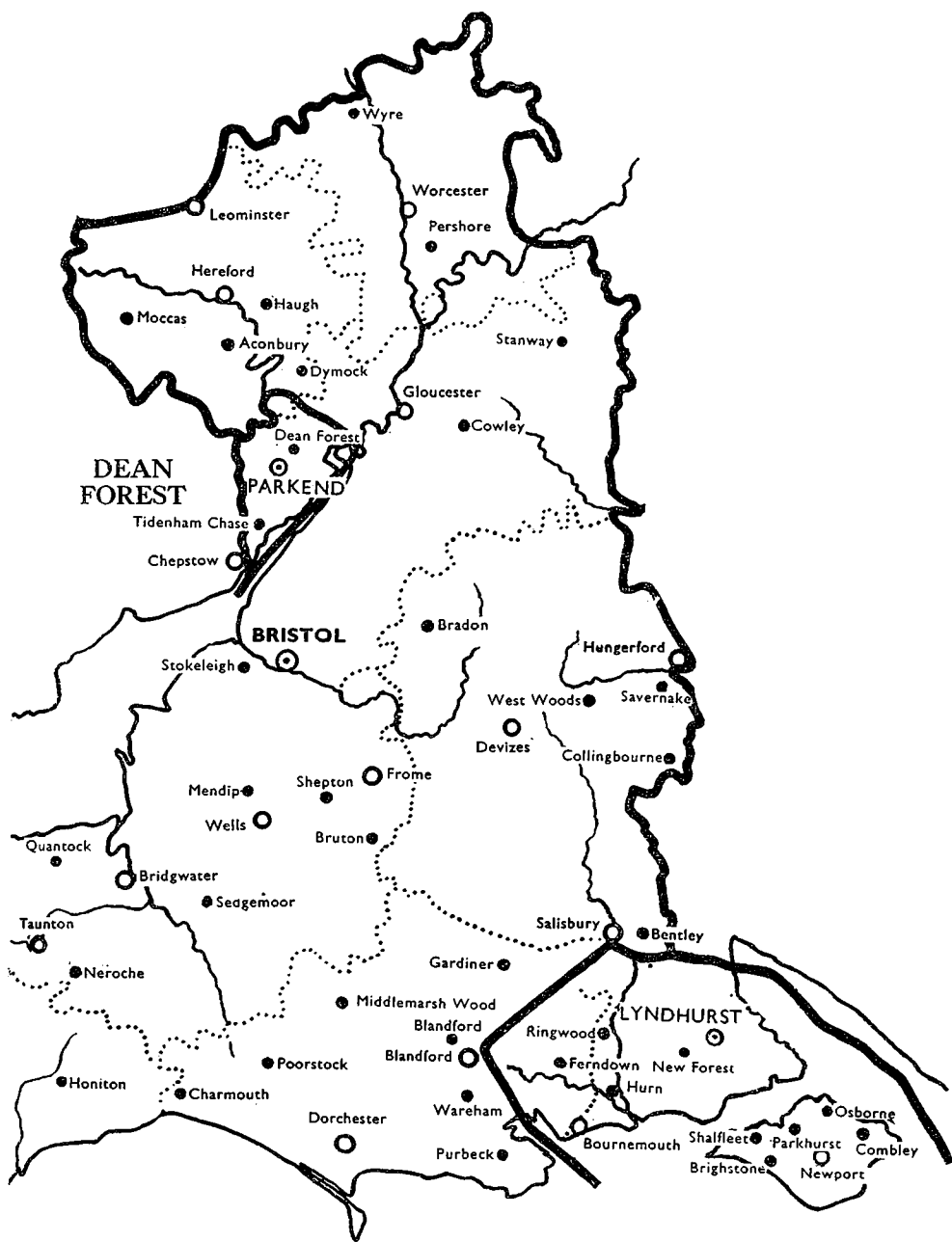




Forests: ●
Towns: ○

ENGLAND SOUTH WEST CONSERVANCY



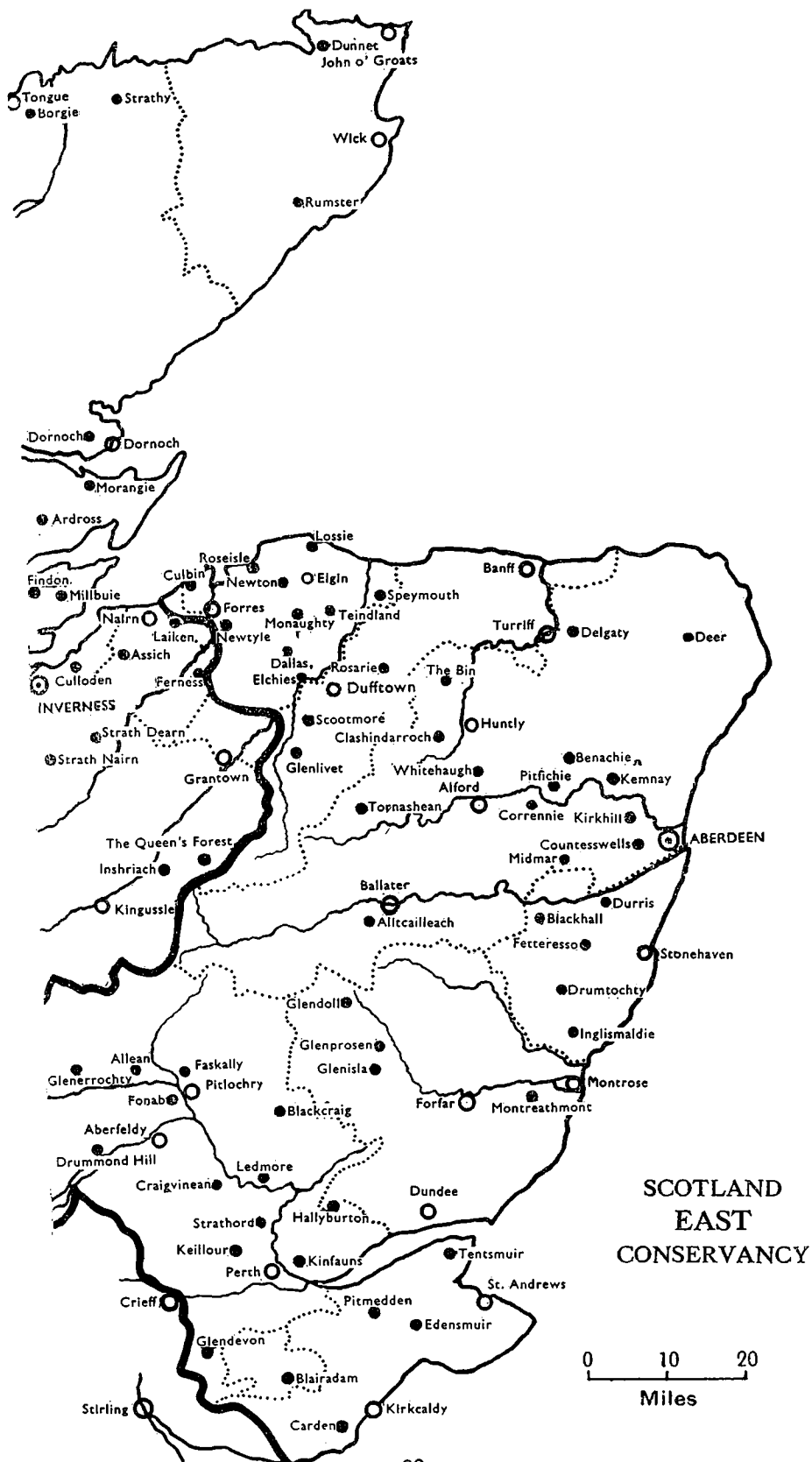


SCOTLAND NORTH CONSERVANCY

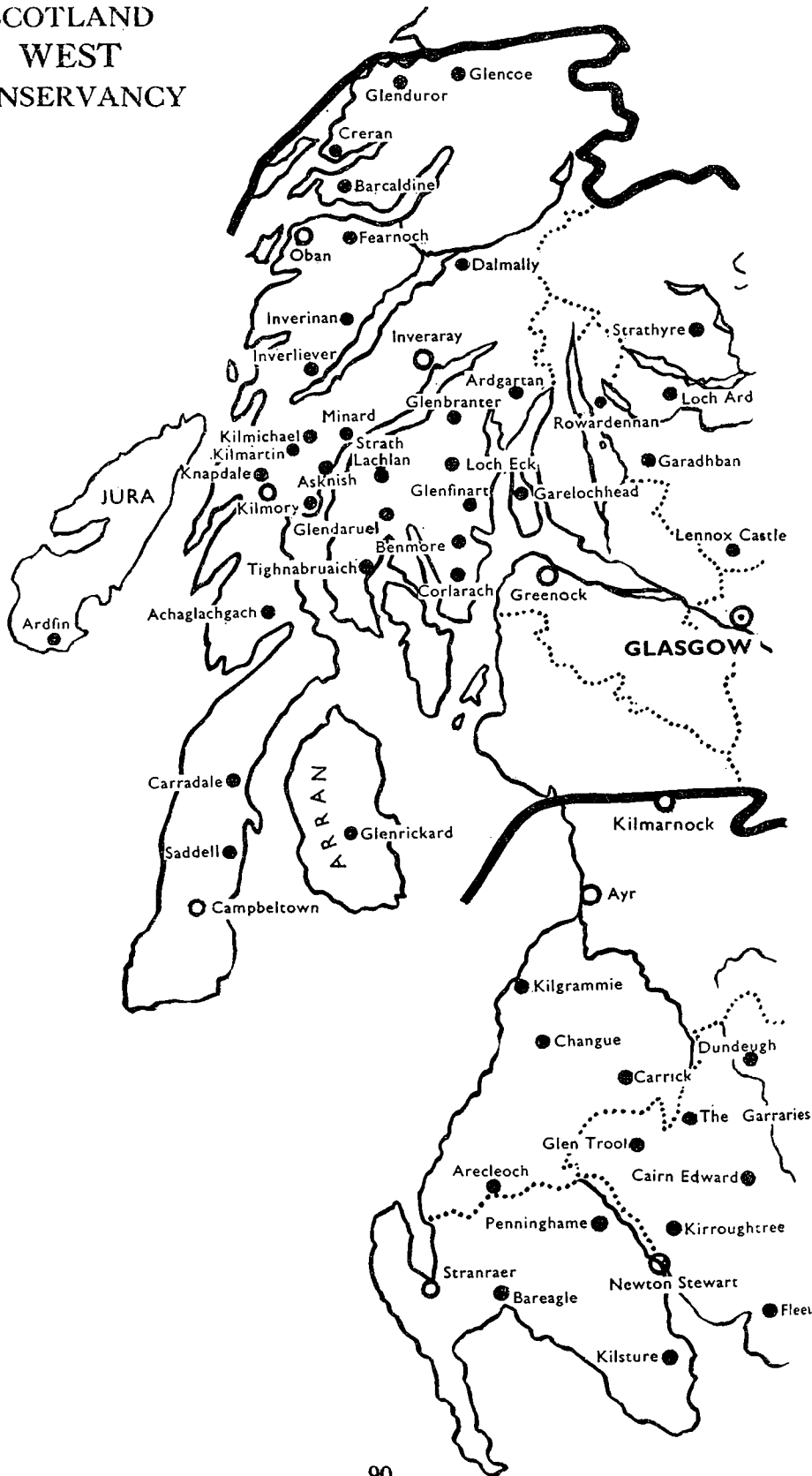
Forests: ●

Towns: ○



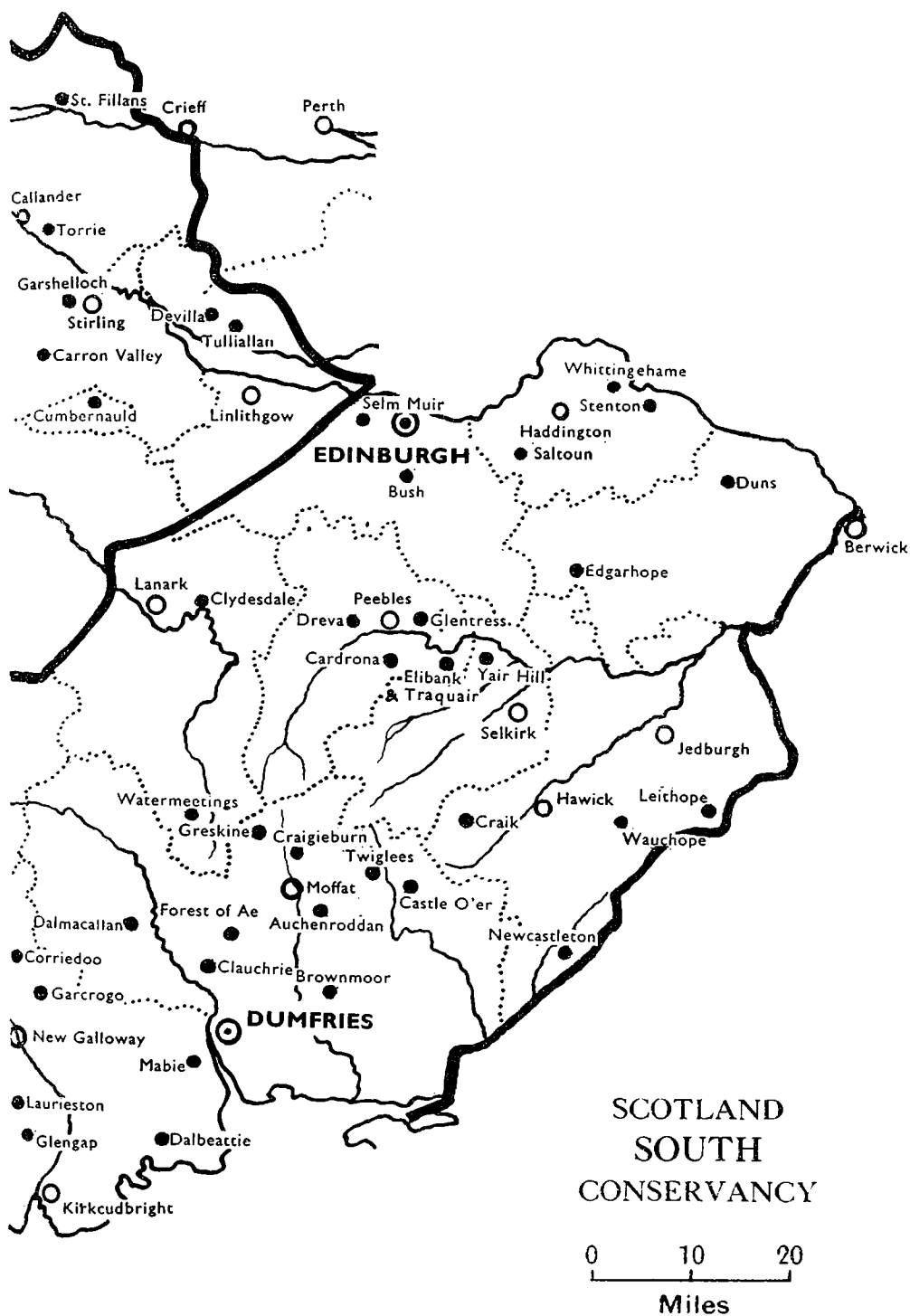


SCOTLAND WEST CONSERVANCY



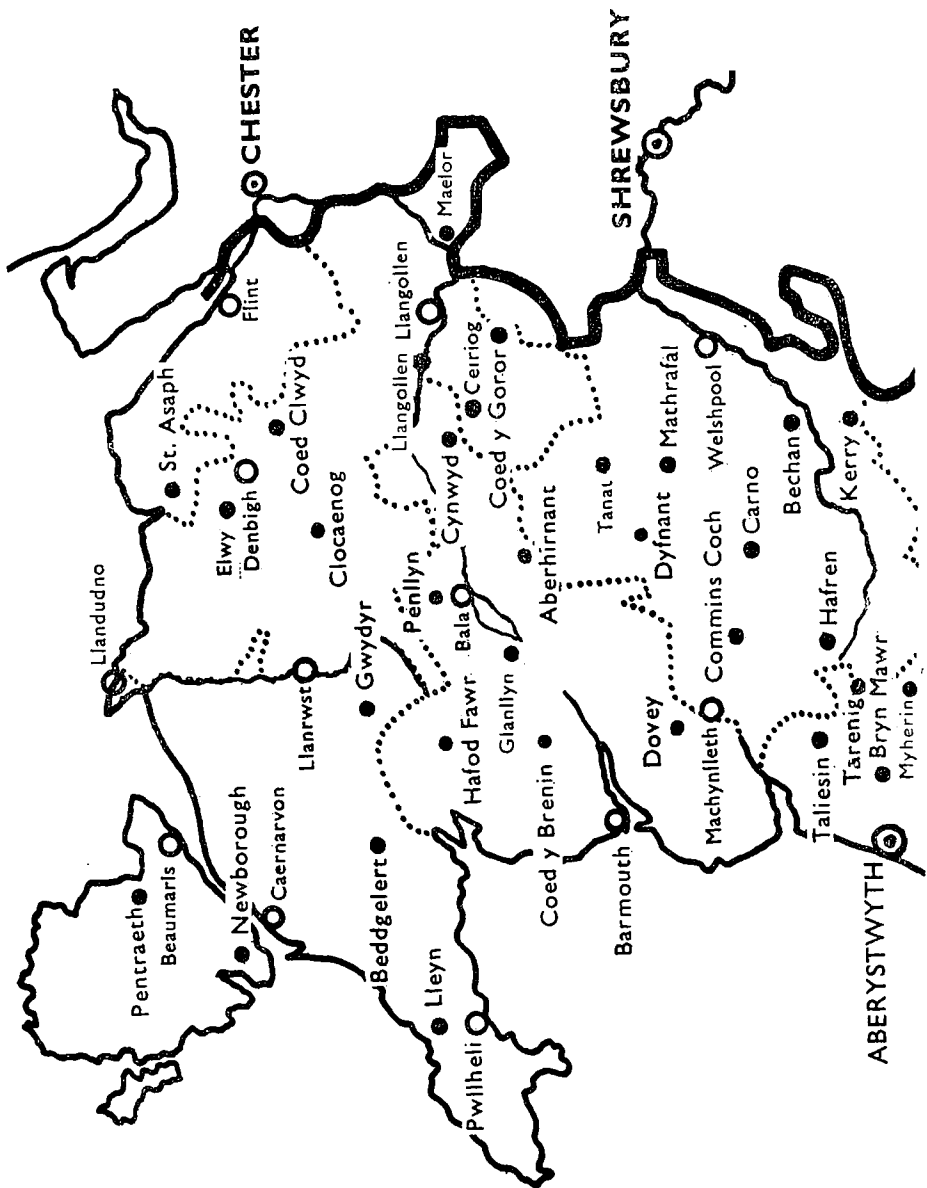
Forests : ●

Towns : ○

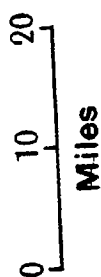


WALES NORTH CONSERVANCY

- Forests:
- Towns:



A vertical scale bar labeled "Miles" with markings at 0, 10, and 20.



Addresses of the Main Offices of the Forestry Commission

Headquarters of the Forestry Commission :

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

Director of Forestry for England :

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

Director of Forestry for Scotland :

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

Director of Forestry for Wales :

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

Director of Research and Education :

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

Conservancy Offices

England :

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

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

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

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

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

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

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

Scotland :

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

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

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

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

Wales :

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

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

Research Station

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

