

FORESTRY COMMISSION

Thirty-Ninth  
Annual Report of the  
Forestry Commissioners  
*for the year ended*  
30th September 1958

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

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*Ordered by The House of Commons to be Printed  
28th July 1959*

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LONDON

HER MAJESTY'S STATIONERY OFFICE

FIVE SHILLINGS NET

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#### *ACKNOWLEDGMENTS*

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## STATISTICAL SUMMARY

Table 1

FOREST YEAR 1957			Forestry Commission	FOREST YEAR 1958		
Great Britain	...	56,100	Plantable Land Acquired, including Standing Woods (acres)  Page 18	Great Britain	...	51,200
England	...	18,700		England	...	11,800
Scotland	...	22,500		Scotland	...	30,500
Wales	...	14,900		Wales	...	8,900
Great Britain	...	57,900	Area Planted (acres)  Page 24	Great Britain	...	52,400
England	...	19,300		England	...	17,200
Scotland	...	26,700		Scotland	...	24,900
Wales	...	11,900		Wales	...	10,300
Great Britain	...	46,900	Area Thinned (acres)  Page 28	Great Britain	...	43,600
England	...	25,200		England	...	23,900
Scotland	...	13,900		Scotland	...	12,800
Wales	...	7,800		Wales	...	6,900
Great Britain	...	19,998,300	Volume of Timber Felled (Hoppus feet)  Page 29	Great Britain	...	18,231,900
England	...	9,689,100		England	...	9,688,500
Scotland	...	6,707,800		Scotland	...	5,286,000
Wales	...	3,601,400		Wales	...	3,257,400
Great Britain	...	400	Motorable Roads Constructed (miles)  Page 31	Great Britain	...	415
England	...	91		England	...	99
Scotland	...	175		Scotland	...	179
Wales	...	134		Wales	...	137
<b>Private Forestry</b>						
Great Britain	...	31,600	Area Planted (acres)  Page 49	Great Britain	...	32,100
England	...	14,000		England	...	16,700
Scotland	...	15,200		Scotland	...	12,800
Wales	...	2,400		Wales	...	2,600
Great Britain	...	40,100	Area Dedicated (acres)  Page 47	Great Britain	...	55,000
England	...	21,500		England	...	37,300
Scotland	...	16,000		Scotland	...	15,900
Wales	...	2,600		Wales	...	1,800
Great Britain	...	485,400	Total area to date under Dedication Scheme (acres)  Page 47	Great Britain	...	540,400
England	...	231,500		England	...	268,900
Scotland	...	234,600		Scotland	...	250,500
Wales	...	19,300		Wales	...	21,000
Great Britain	...	24,800	Area Accepted as Approved Woodlands (acres)  Page 48	Great Britain	...	12,700
England	...	18,600		England	...	12,300
Scotland	...	5,700		Scotland	...	400
Wales	...	500		Wales	...	—
Great Britain	...	139,800	Total Area to date under Approved Woodlands Scheme (acres)  Page 48	Great Britain	...	149,800
England	...	97,600		England	...	108,400
Scotland	...	38,200		Scotland	...	37,400
Wales	...	4,000		Wales	...	4,000
Great Britain	...	41,744,200	Volume Licensed for Felling (Hoppus feet)  Page 50	Great Britain	...	38,229,800
England	...	25,592,400		England	...	23,913,900
Scotland	...	13,239,900		Scotland	...	11,407,700
Wales	...	2,911,900		Wales	...	2,908,200

**THIRTY-NINTH ANNUAL REPORT**  
**OF THE**  
**FORESTRY COMMISSIONERS**  
**FOR THE YEAR ENDED**  
**30th SEPTEMBER 1958**

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

*7th March, 1959*

*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 39th Annual Report of the Forestry Commissioners covering the Forest Year ended 30th September, 1958.

I am,

Gentlemen,

Your obedient Servant,

(Sd.) RADNOR,

*Chairman.*

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**GENERAL REVIEW**

**GOVERNMENT STATEMENT ON FORESTRY POLICY**

1. The most important event in British forestry in 1958 was the statement of Government policy made in Parliament following a review of forestry policy undertaken in the light of developments since the beginning of the post-war programme in 1946. Speaking in the House of Commons on 24th July, the Minister of Agriculture said :—

“ In the light of current conditions—strategic, economic, agricultural and social—the Government have reached the following conclusions.

The planting programmes of the Forestry Commission should be fixed for periods of ten years at a time. For the five-year period 1959 to 1963, the programme will be about 300,000 acres, which allows for some increase over the present annual rate of planting. For the period 1964 to 1968, the planting programme will be reduced to about 235,000 acres, when the Forestry Commission's existing plantations will begin to come into full production.

The size of the subsequent programmes should be reviewed in five years' time in the light of the national needs. In deciding where planting shall take place, special attention will be paid to the upland areas, particularly in Scotland and Wales, where expansion of forestry would provide needed diversification of employment and important social benefits.

The Government propose to continue their support to private woodland owners, particularly through the dedication scheme. The present maintenance grant of 5s. 6d. per acre will be replaced by a management grant of 18s. per acre on the first 100 acres, 12s. per acre on the next 100 acres and 7s. per acre on the remainder. This will substantially increase the value of the grants, particularly on the smaller woodlands.

Secondly, the planting grant will be continued, but for approved woodlands it will be raised from one-half to the full rate per acre. These increased grants are contingent on the formation of an effective woodland owners' association, as recommended by the Watson Committee\*.

Thirdly, the grants for thinning and poplar planting will be terminated. The new structure of grants will be reviewed in five years' time. In reviewing, in future years, the level of grants, consideration will be given not only to trends in costs, but also to trends in receipts for private woodlands as a whole. As production from private woods taken as a whole—and thus the income of private owners as a body—rises, the level of assistance needed by way of planting and management grants will fall. Eventually—in say, twenty to thirty years' time—it should become nominal.

The system of felling licences will be continued. In present circumstances, it does not seem necessary to continue to fix a quota for the total annual felling, but the licensing system will be continued though with some relaxations. A Statutory Instrument will be made so that fellings in dedicated woodlands will no longer require a licence.

In addition, licences will, in general, be freely granted for other fellings subject to the existing arrangements for consultation with planning authorities. In order, however, to provide against the undesirable exploitation of woodland areas, the licences will normally have a condition attached requiring restocking. And licences for thinning or selective felling will not be granted where they would, in effect, permit exploitation without restocking.

The Government recognise the importance to the forestry industry of an efficient home-grown timber trade. They believe that the measures just announced will be welcomed by the trade as well as by woodland owners, and will help both to plan ahead with confidence."

2. One significant change outlined in the Minister's statement is the abolition of the felling quota. The immediate practical effect of this is that—subject to the power of local planning authorities to make Tree Preservation Orders—a private owner can now manage his woodlands with a view to the most economic management of the estate as a whole.

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

3. The planting programme now fixed for the Forestry Commission is 535,000 acres for the next ten years 1959–68, and is to be undertaken in two five-year phases. The following table shows these programmes in relation to achievement in the last ten years 1949–58:

<i>Achievement, 1949–58</i>						
<i>Acreage planted</i>						
1949	...	...	...	...	...	44,000
1950	...	...	...	...	...	53,000
1951	...	...	...	...	...	57,000
1952	...	...	...	...	...	62,000
1953	...	...	...	...	...	68,000
Five years	1949–53	...	...	...	...	284,000
(Annual average: 56,800)						
1954	...	...	...	...	...	70,000
1955	...	...	...	...	...	68,000
1956	...	...	...	...	...	62,000
1957	...	...	...	...	...	58,000
1958	...	...	...	...	...	52,000
Five years	1954–58	...	...	...	...	310,000
(Annual average: 62,000)						
Ten years	1949–58	...	...	...	...	594,000
(Annual average: 59,400)						

<i>Programme, 1959–68</i>						
<i>Acreage to be planted</i>						
Five years	1959–63	...	...	...	...	300,000
(Annual average: 60,000)						
Five years	1964–68	...	...	...	...	235,000
(Annual average: 47,000)						
Ten years	1959–68	...	...	...	...	535,000
(Annual average: 53,500)						

4. Annual rates of planting have not been laid down for each of the next ten years, but it will be seen that the immediate effect of the new programme is that the 1958 rate of 52,000 acres will have to be increased considerably to reach the annual average of 60,000 acres required to plant 300,000 acres in the next five years. As a beginning the Forestry Commission hope to plant 55,000 acres in 1959; and in the four following years annual planting will have to rise to a peak somewhere above 60,000 acres before running down to conform with the lower programme in the second phase. In accordance with the decision of the Government, special attention will be paid to the upland areas, particularly in Scotland and Wales, when the detailed planting programmes are being fixed.

5. The fresh impetus given to forestry in Great Britain by the Government's statement makes it urgent to acquire sufficient land, in the right areas, to support the planting programme announced by Ministers. The Commission have always recognised that, to acquire the land they need, the price,

rent or feu-duty they are prepared to pay must be sufficiently attractive to encourage landowners to negotiate with them. They would emphasise that the amount they will pay is not subject to arbitrary or unrealistic limits, and that they are always ready to negotiate on the basis of current land values with anyone who has suitable land to offer.

6. For private forestry, no planting programme has been suggested but it is expected that at least the present level of planting will be maintained.

7. The announcement of changes in grants to private woodland owners clears the way for discussions to be continued between the United Kingdom Forestry Committee and the Forestry Commission about the formation of a woodland owners' association, and the Forestry Commission look forward confidently to the setting up of an effective organisation in the near future. This will be the body with which the Commission can discuss and plan, with the timber trade and other users of wood, the effective disposal at satisfactory prices of the steadily growing output of the country's forests. Marketing—which is a major problem for both private owners and the Commission—needs to be considered regionally as well as nationally: at present there are areas where reasonable prices can be obtained while elsewhere, notably in the north of Scotland, marketing is difficult. There are however two encouraging features: first, the potential market is enormous—Great Britain is the largest importer of timber in the world, at an annual cost in 1957 of some £170 million (excluding timber products such as pulp, paper, veneers)—and secondly, there is a growing interest by new industries in enterprises using wood as a raw material. The need is for growers and merchants to co-ordinate their activities so that there is a steady flow of raw material to meet the demands of consumers. For their part, the merchants should ensure that the raw material is efficiently processed and, perhaps above all, that the product is sold with energy and enterprise. In all this the woodland owners' association has an essential part to play if there is to be an orderly development of a market for the increasing quantities of home-grown timber which will be coming forward in the future.

## FORESTRY COMMISSION OPERATIONS

8. Forest work in the year which ended on 30th September, 1958, was dominated by the monotonously wet summer endured by the whole country except north and west Scotland. On balance, the abnormal weather gave the forester more cause for congratulation than complaint. The almost incessant rain, following a reasonably mild winter and a spring free of late frosts, made the year memorable for tree growth both in the plantations and nurseries. Germination in the nursery seed-beds was exceptionally high; new plantations got away to a good start, and fire danger, although acute for a time in the spring, was negligible during most of the usually critical period. On the other side of the picture, the phenomenal growth of weeds was a problem in the nurseries and in the younger plantations.

9. In the acquisition of land the downward trend reported in the three previous years continued, and for this reason the Commission were able to plant no more than 52,400 acres, which was 5,500 acres less than they planted in 1957. Although one or two Conservancies reported a slight



improvement in acquisitions, the net plantable area acquired, including standing woods, was 51,200 acres, nearly 5,000 acres less than in the previous year, and less than the area planted. The plantable area approved for acquisition and awaiting completion of legal conveyance at 30th September, 1958, was about 108,500 acres; this was a little lower than the corresponding total a year earlier, so that the immediate outlook did not promise any appreciable improvement. The following tabular statement, which speaks for itself, compares acquisitions with planting for the last five years:

<i>Year</i>	<i>Plantable Acreage</i>	
	<i>Acquired*</i>	<i>Acreage Planted</i>
1954 ...	73,500	70,400
1955 ...	56,700	67,900
1956 ...	54,200	62,400
1957 ...	53,500	57,900
1958 ...	48,700	52,400
Total ...	... 286,600	311,000

\* Net area excluding standing woods.

10. At the end of the year the Commission's estate had reached a total of 2,361,000 acres. Of this, 1,172,000 acres were under plantations; 326,000 acres were awaiting future planting; forest nurseries covered 2,000 acres and the balance of 861,000 (of which about 370,000 acres were under the management of the Agricultural Departments) was classified as unsuitable for forestry.

11. The thinning programme was adjusted in some places to a weaker demand for small-sized timber, with the result that the area thinned—43,649 acres—failed to reach the record of 1957 by some 3,000 acres. Nevertheless, two Conservancies—North-West England and South Scotland—were able to increase their thinning programmes, partly owing to their proximity to the alternative markets offered for chipboard (see Plate 5) and pulp: a practical illustration of the flexibility of production which can be achieved in co-operation with industrial enterprise.

12. The road-building programme made good progress, and despite the unfavourable weather a record total of 415 miles of motorable road was completed during the year. Over 5,000 miles of roadways for which the Commission are entirely responsible were maintained.

13. By 30th September, 1958, the labour force had fallen to 12,384 as compared with 13,040 at the same date in 1957. The reduction of 656 was due partly to the temporary fall in the planting programme and partly to a more efficient use of manpower, and was made by allowing normal wastage to take its course. A major change in the conditions of the Commission's forest workers was the introduction of a 46-hour week, to be worked as a five-day week during nine months of the year. The minimum adult wage was increased from 144s. to 153s. per week.

14. The Commission's expenses during the forest year totalled £12,459,450. These were defrayed from a Parliamentary Vote of £8,993,000 and receipts, mainly from sales of timber, of £3,119,533. Balances in hand at the beginning and end of the year were respectively £419,203 and £72,286.

## PRIVATE FORESTRY

15. Despite the uncertainty inevitably engendered by the knowledge that the premises of forestry policy were under searching review, planting on private estates reached the highest figure since the war—32,100 acres against 31,600 acres in 1957. This was an excellent achievement; and it was also encouraging to note that the standard of management was improving steadily and that an increasing interest was being taken in applying the more advanced techniques developed by research and experience in recent years. The entry of financial syndicates into forestry—although so far on a relatively small scale—was another interesting development.

16. The Commission again increased their supply of plants to the nursery trade—over 23 million against 21 million in 1957. The exceptionally good germination and growth of the 1958 season has produced large nursery stocks of one-year and two-year-old conifers, so that the plant shortage of recent years has been at least temporarily overcome.

17. The changes in the various forms of financial aid which will be available to woodland owners in the future are specified in the Government statement reproduced in paragraph 1 above. While these proposals have not met with unqualified approval in detail, it cannot be overlooked that their overall effect will be a very substantial increase in the total Government aid to private forestry. Meanwhile, with effect from 1st October, 1958, the planting grants per acre under the Dedication and Approved Woodland Schemes were increased from £17 to £20 and from £8 10s. 0d. to £10 respectively. These increases were the result of a normal review and were not contingent upon the formation of the Woodland Owners' Association.

18. The area under the Dedication Scheme increased by 55,000 acres to 540,400 acres, while the area under the Approved Woodland Scheme increased by 10,000 acres to 149,800 acres. The total area of private woodlands under acceptable plans of management at the end of the year was therefore approaching 700,000 acres. To this may be added the woodlands, estimated to cover 180,000 acres, which were well managed outside the Commission's grant schemes, and the area of 129,000 acres which was in process of admission to the schemes—making a grand total of over a million acres of privately-owned land under active forestry management.

19. The number of applications (6,870) for felling licences, the number of licences issued (6,015) and the total volume of timber licensed for felling (38.2 million hoppus feet) all fell by about 10 per cent. in comparison with the previous year.

20. There was a lull in the formation of co-operative forestry societies, possibly owing to a feeling that new enterprises should be delayed until after the result of the Government's review was known. The Commission continued to help the more recently founded societies with grants and loans.

## PRODUCTION AND USE OF HOME-GROWN TIMBER

21. The year under report was not a favourable one for the home timber trade. In common with other industries it suffered the effects of the general trade recession and credit restrictions, but most severely felt were the contraction in the market for railway timbers and the lower intake of pitwood into the mines. The decline in the consumption of wagon timbers gave rise to difficulties in the marketing of hardwoods, particularly oak.

22. The downward trend in the production of sawn timber, other than sawn mining timber, continued, and the total output was about 9 per cent. less than in the previous year. The diminishing requirement for wagon timbers due to the change over to steel was reflected by a fall of 28 per cent. in total production (hardwoods 31 per cent., softwoods 24 per cent.). A slight reduction in the production of softwood sleepers and crossings was offset by the production of hardwood sleepers for trials by British Railways, so that total production was about the same as in the previous year.

23. For the first six months of the forest year, purchases of home-grown mining timber by the National Coal Board slightly exceeded the level of the same period in the previous year. Thereafter the Board's policy of reducing stocks at collieries and in national stock yards, plus a fall in consumption in the pits, led to a reduced intake of home-grown timber, with the result that the Board's total acquisitions for the year were about 5 per cent. less than in 1957. During the period from January to September, 1958, imports of pit-props were about 25 per cent. lower than during the same period of 1957.

24. The effects of the National Coal Board's policy were felt most seriously in Scotland (where home production covers about 90 per cent. of the requirements of the Scottish coalfield) and difficulties in obtaining orders during the second half of the year caused inconvenience and some hardship to producers.

25. A number of price agreements for round mining timber were reviewed during the year, and they now all have a common expiry date—30th June, 1959. For round unpeeled pitwood and laggings sold by weight to the South-Western Division of the National Coal Board, the revised price agreement showed a reduction of 5s. per ton for pitwood, with no change in the price for laggings or in the amount of the maximum recoverable freight charge. In Scotland a new agreement for supplies to the Scottish Division showed reductions equivalent to 3d. per cubic foot on props of 2½ inch and 3 inch top diameter, and 4½d. per cubic foot on 4½ inch and larger diameters. There was no change in the price for 3½ inch and 4 inch diameter props.

26. In England and Wales a new agreement for hardwood sawn mining timber for the period from 1st April to 31st December, 1958, showed reductions of 3d. per cubic foot on the previous free-on-transport prices, and 3d. per cubic foot on the recoverable carriage allowance. In Scotland the prices for most specifications of sawn mining timber were reduced by amounts varying from 3d. to 7½d. per cubic foot for softwoods, and 4d. to 9d. per cubic foot for hardwoods.

27. The new hardwood pulp mill at Sudbrook in Monmouthshire (The Sudbrook Pulpmill Co., Ltd.) started production during the year. Deliveries of roundwood were maintained at a satisfactory level. Interest expressed by the paper and board industry in the use of hardwoods for pulpwood led the Commission's Utilisation Development Committee to set up a Sub-Committee to investigate the problems associated, in England and Wales, with the growing of hardwoods for this purpose.

28. The new groundwood pulp mill at Ellesmere Port (Messrs. Bowaters) started to accept deliveries of roundwood on a limited scale in preparation for the opening of production early in 1959.

29. The Weyroc chipboard factory at Annan (The Airscrew Company & Jicwood, Ltd.) continued to work at full capacity. During the year direct deliveries of timber by the Commission were reduced as increased supplies became available from merchants and private estates.

30. The Canadian consultant appointed by the European Productivity Agency of O.E.E.C. to investigate small-scale pulping in Western Europe visited Britain in March, 1958, and at the invitation of the Forestry Commission extended his survey in this country to include the economics of small building board plants. The reports on both these projects were awaited with interest at the end of the year, in the hope that they might indicate the possibility of attractive local outlets for home-produced timber.

### FOREST TREE SEED ASSOCIATION OF ENGLAND AND WALES

31. In recent years there has been an awakening of interest in the improvement of forest trees by the selection of seed from the best types and the Commission's Research Branch has done a great deal to survey, register and test the best seed sources in Great Britain. The formation in 1956 of the Scottish Forest Tree Seed Association was a welcome indication of a wider interest, and the Commission are now glad to report that a parallel association is to be set up for England and Wales.

32. The new Association will include the nursery trade, the Country Landowners' Association, the Royal Forestry Society of England and Wales and the Forestry Commission. It will not be a trading body but will help members to produce and market seed and plants of known good parentage. Its main object will be the operation of a certification scheme which will enable purchasers to discriminate in favour of seed and plants of superior and reliable origin and later, to obtain supplies from any approved origin which has been found particularly suitable. At the same time collectors will be encouraged to obtain seed from the approved sources, in the knowledge that they can provide a generally accepted guarantee and thus be able to recoup any extra cost of collection.

### NEW FOREST ENCLOSURES

33. Under the provisions of the New Forest Act 1949 the Verderers of the New Forest accepted, subject to agreements on terms and conditions, a proposal by the Forestry Commission to enclose 2,000 acres for the growing of timber. Apart from their value as an extension of the area of productive woodland, these enclosures—lying along the south-eastern boundary of the New Forest—will form a cordon against the increasing industrialisation of the land between the Forest and Southampton Water.

### FOREST MACHINERY EXHIBITION

34. Inspired by the success of an exhibition of forest machinery organised by the Gascoyne Cecil Estates at Hatfield in 1956, the Commission organised a similar exhibition on a larger scale at Bramshill, Hants, on 28th–29th May, 1958. Over 70 exhibitors displayed their products and many took advantage

of the facilities provided for practical demonstration on adjacent forest land. It was generally agreed that the exhibition was of great help to private woodland owners and others who wanted to bring their knowledge of mechanical and other developments up-to-date. Despite poor weather on the second day, the attendance for the two days totalled more than 4,000. The success of the exhibition suggested a repetition in a year or two, and the Commission hope to arrange this, probably on a northern site.

### FOREST OF DEAN COMMITTEE

35. The Committee appointed by the Forestry Commission in June, 1955, to review the situation in the Forest of Dean in the light of modern requirements reported in July, 1958. At the end of the year the report was being considered by the Commission and was being prepared for publication as a White Paper.\*

### F.A.O. WORKING PARTY ON AFFORESTATION AND REFORESTATION

36. The Working Party on Afforestation and Reforestation of F.A.O.'s European Forestry Commission met in this country at the end of May for its Seventh Session, which was attended by about thirty delegates of sixteen nations. The United Kingdom delegation was led by Sir Henry Beresford-Peirse, Deputy Director General of the Forestry Commission, who was subsequently elected the Working Party's next Chairman. The main theme of the conference was the role of the forest in sound land use. A study tour of a number of Commission forests was arranged to illustrate the integration of forestry and farming, the technique of afforestation on hill land, and the replanting of old woodland. Business meetings were held in London during 28th-31st May, and visits were made to Alton and Micheldever Forests in Hampshire and the Forest Machinery Exhibition at Bramshill. The delegates then visited Allerston Forest in Yorkshire, Grizedale and Thornthwaite Forests in the Lake District, and Kershope and Newcastleton Forests in the Border country. In Scotland, Benmore and Glenbranter Forests in Argyll, and Loch Ard Forest in Perthshire were visited, and the tour concluded in Edinburgh with a reception by the Minister of State for Scotland and a final business meeting on 6th June. A number of delegates stayed on for a two-day tour in East Anglia, where the themes were the afforestation of deteriorated agricultural land and the production of pitwood and pulpwood.

37. The conference and tour provided a valuable opportunity for an international exchange of technical experience and views against the background of forestry in Great Britain. It is fair to say that the experts from abroad were much impressed by the techniques and progress they saw while they were here.

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\* Since issued as Cmnd. 686. *Report of the Forest of Dean Committee, 1958.* H.M.S.O. 8s. 0d.

# THE YEAR'S WORK

## FINANCE

38. The Forestry Commission's activities are financed by the Forestry Fund, which was established by the Forestry Act, 1919. The fund is replenished by amounts drawn against a grant-in-aid voted annually by Parliament, and by the Commission's receipts from the sale of timber, rents and sundry sources. The Commission are allowed to carry forward a small working balance in the Fund, but they cannot draw on any part of the annual grant-in-aid which may be unspent at the end of the Financial Year for which it is voted. Table 2 below summarises the main transactions on the Fund since its inception, and shows the broad trend of the Commission's finances since 1920 in terms of cash received and spent. The accounts for 1958 are summarised in Appendices 1-7 (pages 53 to 55). Total net expenditure (Appendix 1) rose in 1958 by £557,000 to a total of £10,780,000, largely owing to the increase in the industrial wage rate and a decline in income from the sale of timber.

### FORESTRY FUND—SUMMARY

Table 2 Years ended 30th September £

	Balance from Preceding Year	Receipts			Payments
		Total	From Parliamentary Votes	Other	
	(1)	(2)	(3)	(4)	(5)
<b>GRAND TOTAL.</b> 1920-1958 ...	—	129,806,773	97,613,800	32,192,973	129,734,487
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	12,500,922	9,360,000	3,140,922	12,209,471
1958 ... ..	419,203	12,112,533	8,993,000	3,119,533	12,459,450
1959 ... ..	72,286	—	—	—	—

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

39. Comments on expenditure and income under the main heads appear in the relevant sections of the Report; it should be noted that owing to accounting changes, which are mentioned in their context, direct comparisons between the figures for 1957 and 1958 are not valid for certain heads.\*

\* More detailed information about the Commission's finances is available in the following publications issued by and obtainable from H.M. Stationery Office:—

1. *Trading Accounts and Balance Sheets, 1957-58: Accounts and Balance Sheets of Trading or Commercial Services conducted by Government Departments in the Year 1957-58; together with the Report of the Comptroller and Auditor General thereon.*
2. *Civil Appropriation Accounts (Classes VI-X) 1957-58.*
3. *Civil Estimates for the year ending 31st March, 1958: Class VIII, Agriculture and Food.*

## LAND USE AND ACQUISITION

40. The Forestry Commission's estate had reached a total of 2,361,400 acres at 30th September, 1958, classified by type of use as shown in Table 3.

### UTILISATION OF LAND

Table 3

At 30th September, 1958

Thousand acres

	Great Britain	England	Scotland	Wales
Total Acquired ... ..	2,361·4	702·5	1,322·3	336·6
Forest Land: Total ... ..	1,498·4	550·2	675·9	272·3
Acquired Plantations ... ..	82·5	51·2	25·2	6·1
Planted by Forestry Commission ... ..	1,089·7	402·9	481·7	205·1
To be planted ... ..	326·2	96·1	169·0	61·1
Other Land: Total ... ..	863·0	152·3	646·4	64·3
Nurseries ... ..	2·0	0·8	0·8	0·4
Rough Grazing and Agricultural Land ... ..	531·9	64·5	416·4	51·0
Forest Workers Holdings ... ..	13·3	6·2	4·7	2·4
Unplatable and Miscellaneous ... ..	315·8	80·8	224·5	10·5

41. A relatively large area of land, currently 863,000 acres, not used for forestry is included because the Commission cannot always in practice limit the acquisition of a property to the area they need for planting. Land which is more suitable for agriculture than forestry, or is unplatable for other reasons such as extreme altitude, is unavoidably acquired and in the long run builds up to a considerable aggregate, much of which is managed by the Agricultural Departments—see Table 4.

42. From the point of view of future development the most significant figure in Table 3 is the reserve of land to be planted, which now amounts to 326,000 acres. At first sight this area may seem adequate in comparison with the planting programmes for the next few years; but about one-third of it is tenanted pending planting, and is therefore not immediately available, while much of the remainder is badly distributed in relation to local requirements and resources.

### Land not placed at the disposal of the Commission

43. Table 4 below shows the land included in Table 3 which is managed by the Ministry of Agriculture and the Department of Agriculture for Scotland. Most of the forest land in the charge of the Agricultural Departments will ultimately be transferred to the Commission.

### LAND NOT PLACED AT THE DISPOSAL OF THE COMMISSIONERS

Table 4

At 30th September, 1958

Acres

	Great Britain	England	Scotland	Wales
Total ... ..	403,985	55,888	315,220	32,877
Forest Land ... ..	33,768	2,538	30,082	1,148
Rough grazing, agricultural, unplatable and miscellaneous ... ..	370,217	53,350	285,138	31,729

### Land acquired during the year

44. The gross area acquired in 1958, including land to which entry was allowed in advance of legal completion, was 123,002 acres, of which 54,596 acres were plantable. Disposals and area adjustments totalled 15,415 acres, of which 3,417 acres were plantable and the remainder unplatable or grazing and agricultural land ; it should be noted that the sale of surplus agricultural land often entails the loss of some plantable land which is essential to make up a farm as an economic unit. The net addition to the Commission's estate was thus 107,587 acres, of which 51,179 acres were plantable ; as pointed out in paragraph 9 this continued the downward trend of recent years. As compared with 1957 the proportion of bare land increased from 62 per cent. to 68 per cent. of the net area of plantable land acquired, while the corresponding proportion of land previously under a tree crop fell from 34 per cent. to 27 per cent. ; the proportion of standing woods acquired was unchanged at about 5 per cent. Details by countries are given in Table 5 below.

#### PLANTABLE LAND ACQUIRED DURING THE YEAR [NET AREA]

	Total	Bare Land	Land previously under a Tree Crop	Standing Woods
Great Britain ... ..	51,179	35,037	13,693	2,449
England ... ..	11,764	4,023	6,365	1,376
Scotland ... ..	30,537	25,348	4,271	918
Wales ... ..	8,878	5,666	3,057	155

### Progress of acquisition of plantable land

45. The acreage of plantable land acquired from 1920 onwards by lease or feu and by purchase is given in Table 6 below :

#### ACQUISITION OF PLANTABLE LAND\*

Period	Total	By Lease or Feu	By Purchase
Total 1920-1958 ... ..	1,438,874	467,899	970,975
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
1957 ... ..	56,115	16,646	39,469
1958 ... ..	51,179	9,301	41,878

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



## Land acquired to date

46. Table 7 below gives a summary statement of land acquired to date, as classified at the time of acquisition into plantable land (including land already planted when acquired) and other land. This classification is subject to revision in the light of experience; the present or intended use of the land is given in Table 3 on page 17.

### SUMMARY STATEMENT OF LAND ACQUIRED\*

	Total	By Lease or Feu			By Purchase		
		Total	Plantable	Other	Total	Plantable	Other
Total:							
Great Britain	2,243,339	628,121	467,899	160,222	1,615,218	970,975	644,243
England ...	602,383	247,522	222,891	24,631	354,861	295,941	58,920
Scotland ...	1,309,725	278,916	161,979	116,937	1,030,809	489,614	541,195
Wales ...	331,231	101,683	83,029	18,654	229,548	185,420	44,128

\* 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; but including 7,500 acres to which entry was secured prior to the legal procedure being completed.

## Number of forests

47. Owing to the re-organisation of certain forests the number of forest units was reduced by five to 508 (222 in England, 210 in Scotland and 76 in Wales). Details of all forests and nurseries are given in Appendices 11 to 13 (pages 59 to 70): their location is shown on the maps of Conservancies (pages 71 to 83).

48. New forests were named during the year as follows:

### ENGLAND

Launde, Leicester and Rutland.  
Lytchett, Dorset.  
Skipton, Yorks.

The following forests were merged :—Nassburgh with Rockingham, and Eynsford partly with Hevingham and partly with Swanton. Irton was renamed Miterdale.

### SCOTLAND

Cushnie, Aberdeen.  
Eddleston, Peebles.  
Glendochart, Perth.  
Loch Etive, Argyll.

### WALES

Bannau, Brecon (formed by amalgamating Coed Taf Fawr, Glyn Tarell and Taf Fechan).  
Gwendraeth, Carmarthen.  
Môn, Anglesey (formed by amalgamating Newborough and Pentraeth).  
Preseli, Pembroke and Carmarthen (formed from Daugleddau).  
Tyddewi, Pembroke.

The following forests were merged :—Abergavenny with Mynydd Ddu; Coed y Brithdir with St. Gwynno; Cilsant with Llanddowror; Hensol with

Tair Onen ; Nethergwent with Wentwood ; Llanover, Machen, Sirhowy, with Ebbw ; and Commins Coch with Dovey. Five forests were renamed, as noted in Appendix 13 (page 69).

### **Expenditure**

49. The average price paid for plantable land was £3 4s. 0d. per acre, against £3 12s. 6d. in 1957. Prices ranged from £1 per acre for three acres of rough pasture to £10 per acre for 14 acres adjoining a Commission forest in a semi-developed district where there was little prospect of obtaining more land. The range of £3 to £5 covered 65 per cent. of the prices paid.

50. The average rent paid for plantable land was 3s. per acre (against 2s. 7d. in 1957) ; rents ranged from 1s. 4d. per acre for 15 acres leased from a local authority to 7s. 3d. per acre for about 50 acres with exceptionally good access. About half the leases during the year were within the range of 2s. 6d. to 3s. 6d. per acre.

51. Expenditure on the acquisition of land during the year was £293,000 ; this included the salaries and expenses of the acquisition staff, legal expenses, outgoing valuations, and tithe and stipend redemption, but was not directly related to the area acquired in the same period. Net expenditure, after deducting £106,000 received from the sale of surplus land, was £187,000 (Appendix 2, page 53).

## **FORESTRY OPERATIONS**

52. The main categories of forest work are reported below under the headings of Forest Nurseries, Plantations, Protection and Preparation of Produce. Under Forest Nurseries are included the collection and supply of seed as well as the work of seed sowing and raising young trees for plantations. Plantation work includes the preparatory work of clearing the land, ploughing, draining and fencing ; planting ; and maintenance— weeding, beating up and repairs to fences and drains.

53. Gross expenditure on Forestry Operations during the year amounted to £8,641,000, an increase of £233,000 in comparison with the previous year. Details are given in Appendix 3, page 54.

### **Forest Nurseries**

#### **Seed Supply**

54. As far as possible the tree seed required by the Commission for sowing in their nurseries is collected from their own forests and from private woodlands by arrangement with landowners. Deficiencies—which may be due either to poor crops of home-grown seed or the lack of seed-bearing trees of the more recently introduced species—are made up by importing from abroad.

#### **Home Collected Seed**

55. With one exception yields of all species were only poor to moderate. In England reports were particularly disappointing, for both conifers and broadleaved trees ; in Wales yields were a little better, but in Scotland they were very poor except for Scots pine, which produced a heavy crop. The total conifer collection amounted to 10,040 bushels of cones, of which 9,140 were collected in Scotland. The Commission's seed extraction plant dealt with 9,770 bushels of cones which yielded 4,960 lb. of seed.

56. The collection of broadleaved seed amounted to only 4,210 lb. as compared with 219,910 lb. in the previous year. The beech crop failed completely and the best yields were from oak (1,960 lb.) and Spanish chestnut (1,760 lb.).

### Imports of Seed

57. As usual the Commission imported seed in bulk to meet their own needs and to supply the nursery trade and private woodland owners. The main imports were of Douglas fir, Sitka spruce, Japanese larch, Corsican pine, *Abies grandis*, and *Abies nobilis*, among conifers; and of sessile oak, red oak and Spanish chestnut, among broadleaved species. The crop of Douglas fir was again poor and all imports were from cold store. There were good crops of Sitka spruce, *Abies grandis* and *Abies nobilis*; Corsican pine was in adequate supply and although the Japanese larch crop was poor it met the demand. Among the minor species of conifer, supplies of western hemlock and lodgepole pine fell short of requirements. No western red cedar seed was imported, stocks in hand being sufficient.

58. In the broadleaved species, the supply of sessile oak was adequate despite a poor crop and red oak, unobtainable last year, was again available. The supply of sweet chestnut met the demand.

59. Details of imports are given in Table 8 below:

Table 8  
Year ended 30th September, 1958

			IMPORTED SEED	
Species		Quantity (lb.)	Origin	
All Species: Total	...	49,857	—	
Coniferous: Total	... ..	15,359	—	
Corsican pine	... ..	2,000	Corsica	
Lodgepole pine	... ..	879	British Columbia	
Lodgepole pine	... ..	36	Washington, U.S.A.	
Pinus peuce	... ..	46	Austria	
Pinus pinaster	... ..	30	Portugal	
Japanese larch	... ..	2,000	Japan	
European larch	... ..	55	Poland	
European larch	... ..	9	Czechoslovakia	
Douglas fir	... ..	2,000	Washington, U.S.A.	
Norway spruce	... ..	900	Austria	
Sitka spruce	... ..	3,000	Queen Charlotte Islands, British Columbia	
Picea omorika	... ..	18	Irish Republic	
Abies grandis	... ..	1,600	Oregon, U.S.A.	
Abies nobilis	... ..	1,500	Oregon, U.S.A.	
Abies concolor var. lowiana	... ..	153	North California, U.S.A.	
Abies concolor	... ..	114	Colorado, U.S.A.	
Abies nordmanniana	... ..	25	Italy	
Western hemlock	... ..	699	British Columbia	
Western hemlock	... ..	76	Oregon, U.S.A.	
Western hemlock	... ..	105	Washington, U.S.A.	
Sequoia sempervirens	... ..	32	California, U.S.A.	
Sequoiadendron giganteum	... ..	22	California, U.S.A.	
Other conifers	... ..	60	Various	
Broadleaved: Total	... ..	34,498	—	
Oak (sessile)	... ..	20,000	Austria	
Oak (red)	... ..	8,960	Holland	
Spanish chestnut	... ..	5,280	France	
Acer platanoides	... ..	223	West Germany	
Other broadleaved	... ..	35	Various	

## Sales of Seed

60. Sales of conifer seed to the nursery trade and private owners amounted to 5,336 lb., a little less than in 1957. Japanese larch and Douglas fir were the species in most demand by the trade, while Corsican pine headed the list of sales to private owners. Sales of broadleaved tree seed were negligible, amounting to only 80 lb. as compared with 7,700 lb. in 1957. The grand total of all species of seed sold to the trade fell slightly, but sales to private owners, although still accounting for only a small fraction of the total, more than doubled.

## Nursery Work

61. The wet and generally mild weather was exceptionally favourable for germination and for growth in both the seedbeds and transplant lines. Weeds also flourished in these conditions, and the nurseries had to be heavily weeded by hand and, where possible, mechanically and by the use of chemicals (which in the conifer seedbeds were particularly effective in the form of pre-emergent and post-emergent weed-killing sprays). The weather also encouraged the development of fungal diseases, which were more widespread than usual; although they did relatively little damage during the forest year, their after-effects may be noticeable in some species in 1959. Mechanisation continued to make good progress, and in general nursery operations during the year gave good cause for satisfaction.

## Nursery Area

62. The closure of some of the smaller and least productive nurseries resulted in the total nursery area being reduced by 86 acres net to 2,065 acres, of which 461 acres were of the heathland type. As compared with 1957 the proportion of seedbeds fell from 22 per cent. to 16 per cent., owing mainly to the reduction of the area of beech seedbeds in England, which had been specially enlarged to take advantage of the heavy seed crop of 1957 and now returned to more normal proportions. Table 9 shows the allocation of the nursery area at 30th September, 1958.

### USE OF NURSERY GROUND

Table 9

At 30th September, 1958

Acres

	Total	Seedbeds	Transplant Lines	Fallow and Green Crops	Other
Great Britain ... ..	2,065	331	632	690	412
<i>Percentage of total area...</i>	<i>100</i>	<i>16</i>	<i>31</i>	<i>33</i>	<i>20</i>
England ... ..	785	128	227	287	143
Scotland ... ..	780	141	229	268	142
Wales ... ..	468	59	166	126	117
Research Nurseries ... ..	32	3	10	9	10

## Seed Sown

63. The quantity of conifer seed sown was 14,455 lb.—1,794 lb. less than in the previous year. Broadleaved sowing fell to 35,278 lb., a decrease of nearly 176,000 lb., owing to the small supplies of oak and beech seed and

the large sowings of the latter species in the previous year. Despite smaller sowings, the total production of seedlings of all species was in England slightly higher than in the previous years; and the following remarkable yields were reported from the South Scotland Conservancy:

<i>Species</i>	<i>Yield of usable seedlings per lb. of seed</i>
Scots pine ...	... 36,000
Lodgepole pine	... 69,000
Japanese larch	... 29,000
Sitka spruce	... 56,000

### Stocks of Seedlings and Transplants

64. The total stock of young trees in the nurseries at the end of the year exceeded 500 million. Details are shown in Table 10.

#### STOCKS OF TRANSPLANTS AND SEEDLINGS

Table 10 At 30th September, 1958 Thousands of Plants

	Total	Transplants	Seedlings
Great Britain ... ..	508,471	154,268	354,203
England ... ..	161,685	43,385	118,300
Scotland ... ..	246,204	72,217	173,987
Wales... ..	97,740	38,004	59,736
Research Nurseries ... ..	2,842	662	2,180

### Sales of Nursery Stock

65. Over 23 million trees were sold to the nursery trade; of this number (which exceeded sales in 1957 by over two million) 16 million were seedlings and seven million were transplants. In conifers there was little change in the total number sold, with Sitka spruce easily displacing Scots pine as the species in most demand. Sales of broadleaved species, however, multiplied over thirteen times, from 134,000 in 1957 to 1,813,000 in 1958. Details are given in Table 11 below:

#### SALES OF NURSERY PLANTS

Table 11 Year ended 30th September, 1958 Thousands

ALL SPECIES: TOTAL ... ..	23,338
Coniferous: Total ... ..	21,525
Scots pine ... ..	4,148
Corsican pine ... ..	137
European larch ... ..	758
Japanese larch ... ..	4,790
Douglas fir ... ..	3,346
Norway spruce ... ..	1,386
Sitka spruce ... ..	6,134
Other conifers ... ..	826
Broadleaved: Total ... ..	1,813
Ash ... ..	9
Oak ... ..	1,119
Beech ... ..	666
Other broadleaved species ... ..	19

## Expenditure and Income

66. Expenditure, including the purchase and collection of seed, totalled £659,000 (against £632,000 in 1957); the sale of seed and plants brought in £104,000 (against £113,000 in 1957).

### Plantations

67. The weather at the beginning of the winter was generally open and mild, and favourable for the preparation of ground and early planting, but more severe weather later on held up the completion of planting until fairly late in the season. Cold drying winds in the early spring checked growth, and for a short time threatened to cause heavy losses in the newly planted areas; thereafter the absence of severe late frosts, and the heavy rainfall in the rest of the year, more than restored the situation, with the final result that the "take" of the year's planting was unusually good, while plantations of all ages made exceptional growth. Strong weed growth entailed extra weeding, even in plantations which had previously been considered to be established.

68. A gale on 4th November, 1957, damaged plantations in Thetford Chase and Swaffham Forests. The windfall in these forests was estimated to amount to about 450,000 hoppus feet but was nowhere so great as to necessitate replanting.

69. The area planted was 52,398 acres, against 57,881 acres in 1957. The proportions planted in each country were: England, with 17,175 acres, 33 per cent.; Scotland, with 24,863 acres, 47 per cent.; and Wales, with 10,360 acres, 20 per cent. The reduction in the area planted was distributed as follows: England 11.1 per cent.; Scotland 6.9 per cent.; Wales 12.6 per cent. Details of planting by Conservancies are given in Table 12 below, while planting in individual forests is given in Appendices 11 to 13 on pages 59 to 70.

#### AREAS PLANTED

Table 12				Year ended 30th September, 1958			Acres
				Total	Afforested	Re-planted	
<b>GREAT BRITAIN</b> ... ..				52,398	30,456	21,942	
<b>ENGLAND: Total</b> ... ..				17,175	6,607	10,568	
Conservancy:							
North-West ... ..				3,637	1,743	1,894	
North-East ... ..				5,051	3,652	1,399	
East ... ..				2,838	584	2,254	
South-East ... ..				2,370	192	2,178	
South-West ... ..				2,425	292	2,133	
New Forest ... ..				502	128	374	
Dean Forest ... ..				352	16	336	
<b>SCOTLAND: Total</b> ... ..				24,863	16,649	8,214	
Conservancy:							
North ... ..				7,344	3,876	3,468	
East ... ..				5,087	2,851	2,236	
South ... ..				8,129	7,191	938	
West ... ..				4,303	2,731	1,572	
<b>WALES: Total</b> ... ..				10,360	7,200	3,160	
Conservancy:							
North ... ..				5,713	3,952	1,761	
South ... ..				4,647	3,248	1,399	

70. Table 12 also shows the sub-division between afforestation (the planting of bare land) and replanting (the re-stocking of woodland from which the previous crop has been removed). The respective proportions (58 per cent. and 42 per cent.) of these two types of planting during the year were identical with those in the previous year.

71. The area planted with conifers was 48,544 acres (93 per cent.) and with broadleaved trees 3,854 acres (7 per cent.)—practically the same proportions as in 1957.

72. The plantations made during the year in each Conservancy are analysed in more detail, including species used, in Appendix 8 on page 56.

### Plants used for Planting and Beating Up

73. A total of over 101 million young trees were planted in the Commission's forests during the year, in the following proportions of the main species:

	<i>Per cent.</i>		<i>Per cent.</i>
Sitka spruce ...	24	Corsican pine ...	5
Scots pine ...	19	Beech ... ..	4
Japanese larch	12	Oak ... ..	2
Lodgepole pine	12	European larch	1
Norway spruce	9	Other conifers	5
Douglas fir ...	6	Other broadleaved species ... ..	1

74. The only significant variations from 1957 were a small increase in the planting of Sitka spruce and a reduction in the use of lodgepole pine. A summary by species is given in Appendix 9 on page 58.

### Progress of Planting to date

AREAS PLANTED TO DATE  
Years ended 30th September

Table 13				Acres
	Total	Afforested	Re-planted	
Total, 1920-1958 ... ..	1,137,165	770,561	366,604	
1920-29 ... ..	138,271	101,976	36,295	
1930-39 ... ..	230,607	174,428	56,179	
1940-49 ... ..	217,122	149,868	67,254	
1950 ... ..	53,737	37,355	16,382	
1951 ... ..	57,164	38,018	19,146	
1952 ... ..	61,632	39,656	21,976	
1953 ... ..	67,610	42,665	24,945	
1954 ... ..	70,437	43,028	27,409	
1955 ... ..	67,906	40,902	27,004	
1956 ... ..	62,400	38,592	23,808	
1957 ... ..	57,881	33,617	24,264	
1958 ... ..	52,398	30,456	21,942	

75. The total acreage planted by the Commission up to 30th September, 1958, was 1,137,165 acres, as shown in Table 13 above; but not all of this was still standing, owing to losses from fires and natural causes, as well as fellings and disposals. The actual area of plantations, at the end of the year, excluding acquired plantations totalling 82,500 acres, was 1,089,700 acres (see Table 3, page 17). The 366,604 acres shown above as replanting include 22,793 acres replanted after destruction by fire.

## Expenditure

76. Direct expenditure on preparatory work and the formation of plantations was £1,948,000. This included the cost of clearing the ground and ploughing where necessary, making new drains and fences, planting and a charge for the plants used. Expenditure on the maintenance of plantations was £1,726,000; this covered the cost of beating-up, weeding, cleaning, maintaining ditches and fences and a charge for the plants used.

## Forest Protection

77. Direct expenditure on forest protection was £439,000; of this £217,000 was spent on fire protection, including fire patrols, the making and maintaining of fire lines and fire fighting; the remainder (£222,000) was for other protection such as the destruction of rabbits, squirrels and vermin, and for measures against injurious insects and fungi.

## Fire Protection

78. After an exceptionally bad year in 1956, and a very good year in 1957, the number of fires and the damage caused by them returned to normal in 1958. There were 1,030 outbreaks causing a loss of 400 acres; 78 per cent. of the fires occurred in March and April, before the beginning of the heavy rainfall which reduced the fire danger to well below the average for the rest of the year; and about 88 per cent. of the fires were extinguished before they damaged plantations, a slight improvement on the previous year's figure of 86 per cent. No particularly large fires occurred, but four caused damage assessed at over £1,000, or burnt more than 20 acres. Table 14 summarises the statistics for the last five years and Table 15 analyses the causes of the fires in 1958.

### NUMBER AND EXTENT OF FOREST FIRES, 1954-1958

Table 14 Years ended 30th September

	Number of Fires	Area Burned (acres)	Assessed Damage £
1954	1,344	390	16,000
1955	2,834	276	19,000
1956	2,045	4,078	175,000
1957	925	122	9,000
1958	1,030	400	19,000

### CAUSES OF FOREST FIRES

Table 15 Year ended 30th September 1958

	Number of Fires	Area Burned (acres)
Total	1,030	400
Railways	609	47
Adjoining Land	230	164
General Public	118	89
Commission Employees	8	64
Incendiarism	2	13
Miscellaneous	16	13
Unknown	47	10



79. The railways caused 59 per cent. of the fires—as usual, the highest proportion—but were responsible for only 12 per cent. of the area burned. Fires spreading from adjoining land, numerically 22 per cent. of the total, caused most damage and accounted for 41 per cent. of the area burned (against 16 per cent. in 1957). The general public were responsible for 11 per cent. of the fires and 22 per cent. of the plantations destroyed.

### **Protection against Damage by Animals, Birds, Insects and Fungi**

80. It was evident that rabbits were still increasing despite the continued prevalence of myxomatosis, but the rate of increase seemed to be much slower than in 1957. This was reflected in the number killed by the Commission, which although rising to 69,900 from 60,600 in 1957, represented an increase of only 15 per cent. as against the corresponding increase of nearly 50 per cent. between 1956 and 1957. The number killed in each country (with the percentage increase on 1957) was: England 29,600 (25 per cent.); Scotland 35,100 (7 per cent.); Wales 5,200 (24 per cent.). The Commission continued all the normal protective measures in young plantations, and co-operated with the Rabbit Clearance Societies sponsored by the Agricultural Departments wherever they were set up.

81. Hares continued to increase and 31,100 were taken against 24,100 in 1957. The situation is most troublesome in the East Scotland Conservancy; this Conservancy alone accounted for 17,600, well over half the number killed in the Commission as a whole.

82. The grey squirrel population seemed to be more or less stable; the number killed on Commission areas fell to 20,400 from 42,900 in 1957, and on the whole the damage caused by this pest was for once not very serious.

83. The plague of voles which was troublesome in 1957 receded in 1958. An isolated but interesting instance of damage by rodents was reported from forests in Hampshire, where brown rats destroyed trees in four-year-old plantations of beech and Douglas fir.

84. Electric fencing was tried out in a few Scottish forests to exclude deer from plantations and met with a fair measure of success.

85. In central and western Perthshire injury to the leading shoots of pine and larch by blackgame was particularly severe; and young conifers at Oykel Forest (Ross and Sutherland) and Ceannacroc Forest (Inverness-shire) were badly damaged by both blackgame and capercaillie. On the other side of the picture, the Commission were glad to co-operate with the Nature Conservancy in protecting the breeding grounds of the kite in Wales.

86. In the interests of the Commission's tenants and neighbours, 4,754 foxes and fox-cubs were killed; in 1957 the total was 5,094.

87. Insect pests again gave relatively little trouble. The good growing season helped to clear up any possible ill-effects from the previous year's widespread infestations of *Neomyzaphis* (the green spruce aphid), which were not repeated in 1958.

88. The lack of sunshine and the continual rain favoured widespread fungal disorders, especially in the nurseries, where *Botrytis* and *Meria laricis* were particularly prevalent. The control of *Fomes annosus* in plantations, by stump treatment with creosote, was widely extended as standard practice during the year.

## Preparation and Sale of Produce

### Thinning

89. The area of plantations thinned was 43,649 acres (conifers 40,864, hardwoods 2,785), a total decrease of about 3,200 acres compared with the previous year. The area of conifers thinned fell by about 2,100 acres, owing largely to the recession in the mining timber market, which was most keenly felt in Scotland, and resulted in curtailment of operations by merchants. The area of hardwoods thinned fell by 1,100 acres. Table 16 below gives details by Conservancies.

	1957	1958		1957	1958
<b>GREAT BRITAIN: Total</b>	46,878	43,649	<b>SCOTLAND: Total ...</b>	13,902	12,784
<b>ENGLAND: Total ...</b>	25,192	23,896	<b>Conservancy:</b>		
Conservancy:			North ... ..	2,141	1,976
North-West ...	5,786	6,267	East ... ..	6,939	5,637
North-East ...	4,023	3,894	South ... ..	1,421	2,572
East ... ..	7,649	6,318	West ... ..	3,401	2,599
South-East ...	1,348	1,280	<b>WALES: Total ...</b>	7,784	6,969
South-West ...	2,283	2,420	<b>Conservancy:</b>		
New Forest ...	1,760	1,861	North ... ..	4,819	4,270
Dean Forest ...	2,343	1,856	South ... ..	2,965	2,699

90. The area of young plantations thinned for the first time was 12,710 acres, a decrease of 2,300 acres. The total area thinned by merchants increased by 500 acres to 18,309 acres, and represented 42 per cent. of the total area thinned. The percentages thinned by merchants in each country, with the corresponding figures for 1957 in brackets, were : England 29 per cent. (26 per cent.), Scotland 58 per cent. (52 per cent.), Wales 59 per cent. (54 per cent.).

### Clear Felling

91. The area clear felled was 6,368 acres, 136 acres less than in the previous year. This total comprised 2,211 acres (conifers 1,237, hardwoods 974) of high forest ; 1,003 acres of coppice and coppice with standards ; and 3,154 acres of scrub and devastated woodland. The clear fellings in high forest included 542 acres of plantations established by the Commission, and felled either in accordance with Working Plan prescriptions or to provide new forest road alignments. Clear fellings by merchants represented 34 per cent. by area and 34 per cent. by volume of the total, compared with 27.5 per cent. and 31 per cent. respectively in 1957. Table 17 below gives details by Conservancies.

	1957	1958		1957	1958
<b>GREAT BRITAIN—Total ... ..</b>	6,504	6,368	<b>SCOTLAND—Total ...</b>	1,140	962
<b>ENGLAND—Total ...</b>	4,103	4,577	<b>Conservancy</b>		
Conservancy			North ... ..	497	588
North-West ...	500	291	East ... ..	447	218
North-East ...	465	348	South ... ..	68	59
East ... ..	778	729	West ... ..	128	97
South-East ...	1,183	2,115	<b>WALES—Total ...</b>	1,261	829
South-West ...	597	419	<b>Conservancy</b>		
New Forest ...	342	394	North ... ..	596	388
Dean Forest ...	238	281	South ... ..	665	441

## Production and Disposal of Forest Products

92. The total volume of timber removed by thinning and clear felling from Commission forests during the year was 18·23 million hoppus feet overbark (softwoods 14·75 million, hardwoods 3·48 million), approximately 1·75 million hoppus feet less than in the previous year. Totals by countries were : England 9·69 million, Scotland 5·29 million and Wales 3·25 million. Thinnings comprised 14·55 million hoppus feet (softwoods 13·12 million, hardwoods 1·43 million) and clear fellings comprised 3·68 million hoppus feet (softwoods 1·63 million, hardwoods 2·05 million).

93. Timber merchants cut a total of 7·00 million hoppus feet (thinnings 5·74 million, clear fellings 1·26 million) or 38 per cent. of the total set out above, as compared with 7·07 million hoppus feet, or 35 per cent. of the total in 1957. The percentage cut by merchants in each country, with the corresponding figures for the previous year in brackets, were : England 25 per cent. (23 per cent.), Scotland 55 per cent. (47 per cent.), Wales 50 per cent. (47 per cent.). For thinnings alone the percentages were : England 23 per cent., Scotland 56 per cent., Wales 59 per cent.

94. During the year agreements were signed for sales of standing timber and thinnings totalling 9·36 million hoppus feet overbark. Twelve auction sales, at which a total of 1·589 million hoppus feet of standing timber and thinnings were offered, were held during the year. At seven sales in the south of England 683,000 hoppus feet were offered, and of this 569,000 hoppus feet (83 per cent.) were sold, the unsold lots being mature mixed hardwoods of inferior quality. All sales were well attended by the trade and there was a good demand for softwoods. In Scotland results were less satisfactory ; of a total of 761,000 hoppus feet of softwood thinnings offered at four sales, only 369,000 hoppus feet (48 per cent.) were sold. Two of these sales were held during a period when merchants were having great difficulty in disposing of their production, and comparatively little interest was shown in the lots offered ; in consequence only 20 per cent. of the total offered was sold. In the South Wales Conservancy 145,000 hoppus feet of standing softwood thinnings were offered at one sale ; the demand was keen and only one small lot of 4,500 hoppus feet remained unsold.

95. In England prices for softwoods remained firm throughout the year. Prices for hardwoods on the other hand, except in the case of high quality logs, showed a steady decline. In Scotland prices for softwoods were lower than in 1957, and reflected the depressed state of the market for mining timber. In Wales, however, prices for softwood thinnings increased by 2d.–3d. per hoppus foot compared with the previous year ; in the North Wales Conservancy the demand for standing softwood thinnings exceeded the supply and in the South Wales Conservancy merchants showed increased interest.

96. Disposals of produce converted to end-use specifications by Commission labour were as follows, including materials used internally for forest and estate purposes :

	<i>Millions of hoppus feet</i>
Round timber and saw logs ... ..	1·84
Telegraph, transmission and other selected poles ...	0·03
Mining timber ... ..	2·09
Posts, stakes, etc. ... ..	0·80
Pulpwood and boardmill material ... ..	2·11
Firewood ... ..	1·26
Miscellaneous ... ..	0·13
Sawn timber ... ..	0·27
	<hr/>
Total ...	8·53
	<hr/>

In addition, 2·96 million hoppus feet of sorted and unsorted poles were sold in the length to purchasers.

97. Direct sales of mining timber were, in total, 24 per cent. less than in the previous year, owing mainly to the increase in the volume of standing sales to timber merchants, and to reduced purchases by the National Coal Board, particularly in the latter half of the year. Sales of pulpwood and boardmill material increased by half a million hoppus feet.

### **Expenditure and Income**

98. Expenditure on the preparation of produce, including felling, conversion and despatch, was £1,033,000 (£1,182,000 in the previous year). Income from sales of standing timber amounted to £495,000 (£543,000 in the previous year). A further £1,550,000 (£1,606,000) was realised from other sales of produce, ranging in variety from tree lengths sold at stump to finished products such as pitprops. Minor produce, including Christmas trees, realised £123,000 (£122,000): and material to the value of £125,000 (£128,000) was used within the Commission for fencing, estate work and other purposes. Compensation received for damage to, and loss of, plantations amounted to £59,000 (£43,000). Stocks and work in progress decreased during the year by £100,000 (against an increase last year of £35,000). Gross income thus amounted to £2,252,000 (£2,477,000).

### **WORK STUDY**

99. In 1955 the Commission started to explore the possibilities of applying work study to forestry operations. The early results led to the conclusion that despite the special difficulties—such as the wide variability of natural factors inherent in forestry—wider and more detailed studies were justified ; when an initial survey by a firm of consultants in a group of forests in the South Scotland Conservancy was completed, steps were therefore taken to increase the small team of Commission officers who had been originally trained in work study, and to extend the investigations to other forests in the Border area and to North Wales. The Work Study staff was increased to ten, all of whom received a thorough training for this highly specialised work.

100. So far studies have been concentrated on the thinning of plantations, the increasing economic importance of this operation having determined its priority as the field most likely to yield useful results on a large scale. All phases of the work of thinning, from marking and measurement to despatch from the forest, have now been studied with a view to establishing standards for equipment, methods, piecework rates, the organisation of work and the control of production. A number of improvements of value to the Commission are emerging from these studies, and information about those of general interest will be published as soon as possible.

## ROADS AND BRIDGES

101. Road work was undertaken at 241 forests ; 415 miles of motorable road were completed and a further 474 miles were under construction at the end of the year. Over 5,000 miles were maintained. The weather curtailed the programme, but even so the mileage completed to the final metalled specification was the highest in any year so far. A high proportion of the work entailed heavy excavation and blasting in rock ; and increasing use was made of cheaply procured local materials such as gravels and quarry wastes. The work done in each country is given in Table 18 below :

### FOREST ROADS

Table 18 Year ended 30th September 1958

	Length of Road (Miles)		Number of Forests at which work was undertaken
	Completed	Under Construction	
GREAT BRITAIN: Total ...	415	474	241
England ... ..	99	228	92
Scotland ... ..	179	103	107
Wales ... ..	137	143	42

102. A heavy bridging programme was again carried out in Scotland, where 52 permanent bridges to take road traffic were completed.

103. Capital expenditure on roads and bridges was £1,641,000 (Appendix 2, page 53). Maintenance amounted to £202,000, and was charged to forestry operations. The corresponding expenditures in the previous year were £1,407,000 and £210,000 respectively.

## ESTATE MANAGEMENT

104. At 30th September, 1958, the Commission held over 850,000 acres of land which was not used for forestry : roughly half of this was administered by the Agricultural Departments, but the Commission were responsible for the estate management of the remainder, in addition to their 1,500,000 acres of forest land. The total estate under the Commission's direct management was therefore over 1,900,000 acres, with a total of 13,274 lettable subjects,

including forest properties, farms, holdings, residential properties, sporting leases, easements and permissions. Details are given in Table 19 below :

PROPERTIES MANAGED BY THE COMMISSION

Table 19

At 30th September, 1958

Number

Description	Number			
	Great Britain	England	Scotland	Wales
Forest Properties ... ..	4,959	1,888	2,333	738
Foresters Houses ... ..	917	409	333	175
Forest Workers Houses ... ..	2,528	895	1,359	274
Forest Workers Holdings ... ..	1,182	500	479	203
Miscellaneous ... ..	332	84	162	86
Other Properties ... ..	4,234	1,783	1,712	739
Farms and other agricultural subjects ...	2,095	753	803	539
Residential and miscellaneous ... ..	656	407	196	53
Sporting lettings ... ..	1,483	623	713	147
Easements, permissions, etc. ... ..	4,081	2,128	1,420	533

105. There were no new developments during the year. Good agricultural holdings, even in the more remote districts without main services, were in demand, but cottages without the attraction of a holding in the same type of district were almost impossible to let. Shooting leases, especially within easy reach of large centres of population, were again in keen demand and values consequently tended to rise.

### Buildings

106. The rate of progress in providing new housing was about the same as in the previous year. Sixty-four houses—against 60 in 1957—were completed ; of these 34 were in England, 18 in Scotland and 12 in Wales. At the end of the year 25 houses were under construction (against 36 in 1957). The main feature in the development of the forest villages was the improvement of facilities for schooling ; a primary school was opened by the Dumfries County Council at the village of Ae (see Plate 2), and the Northumberland County Council started work on a primary school for Byrness village in Redesdale.

107. The repair and maintenance and, where necessary, the modernisation of properties, continued—under the usual handicap, in many of the outlying districts, of obtaining contractors to carry out the work.

108. Capital expenditure totalled £390,000, against £406,000 in 1957. Expenditure on repairs and maintenance was £257,000 ; this is not comparable with the £159,000 spent in 1957 because in 1958 the estate account was altered to include all types of property, whereas in 1957 it was limited to lettable subjects only. Income from rents and royalties increased to £269,000, from £235,000 in 1957.

### RESEARCH

109. Research and special investigations into forestry problems were continued at the Forest Research Station at Alice Holt Lodge, near Farnham,

Surrey, and in experimental areas in many parts of England, Scotland and Wales. Expenditure amounted to £306,000, £6,000 more than in 1957 (Appendix 4, page 54).

110. The new building at the Research Station was nearing completion at the end of the year and was being occupied by stages as the various floors were ready. It is a three-storey building, 196 feet long by 36 feet wide, with a separate service block ; although the design is strictly functional it is pleasing to the eye despite its severity. It will provide excellent laboratory facilities and working conditions for research sections, which have had hitherto to improvise in huts or in unsuitable rooms in Alice Holt Lodge, and it will also house the Commission's Central Seed Store, with three refrigerated chambers capable of storing over 20 tons of seed.

111. During the year the Research Station received 231 visitors, among whom were forest officers and others from Australia, Brazil, British West Africa, Canada, Cyprus, Denmark, Finland, Germany, Ghana, India, Iraq, Iran, the Irish Republic, Japan, Kenya, Libya, Malaya, the Netherlands, Nigeria, Norway, Nyasaland, Pakistan, Poland, Rhodesia, Sierra Leone, South Africa, the Sudan, Sweden, Tanganyika, Turkey, Uganda, and the United States of America.

112. The important work undertaken is briefly outlined in the following paragraphs. Fuller accounts of research projects will be found in the *Report on Forest Research for the year ended March, 1958*.\*

### **Silviculture**

113. The Seed Laboratory continued to fulfil its primary function of testing the germination quality of seed used by the Commission. On behalf of the Forest Tree Seed Committee of the International Seed Testing Association, a complete draft of proposed amendments to the rules relating to forest tree seed was prepared by the staff. During the year a review of all the published literature on the storage of temperate forest tree seed was completed and published in *Forestry Abstracts*. Investigations on the long-term storage of beech mast continued ; it has been found that mast can be stored for two years at near-freezing temperatures and controlled moisture content, without serious deterioration. Work on *Abies* seed showed that stratification for a period of up to three months results in more rapid and uniform germination and a higher yield of seedlings.

114. Nursery research, which has been specially active during the last ten years, now receives less attention owing to the solution of a number of the major problems ; but a programme is still in progress. Research continues on undercutting tree seedlings, on the dates and rates of nitrogen application to conifer seedbeds, on the incidence of frost damage and—perhaps the most important of current nursery activities—on the packing and storage of plants. The use of polythene film as a wrapping material is now common practice, and experimental work is largely directed to details of the technique and to difficulties which have arisen in general experience.

115. A solution is still being sought for the problem of pre-emergence losses in conifer seedbeds, the causes of which are still largely unknown. The application of several fungicidal seed dressings before sowing has had little effect, and it is concluded that seed-borne fungi are not an important

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\* H.M.S.O., 9s. 6d.

cause of the losses which normally occur before the emergence of seedlings above the seedbed.

116. In the forest, the most important current investigations are on the nutrition of established crops, especially on infertile sites. A considerable programme of experiments has been carried out on checked or slow-growing coniferous crops, and on certain types of land such plantations have been improved by heavy applications of phosphate as the sole treatment. Elsewhere, other methods of site improvement have been found necessary. Much attention has been paid to the control of competing vegetation by chemicals, and recently the herbicide "Dalapon" has shown promise in the selective control of grasses.

117. Preliminary investigations into the manuring of pole-stage coniferous crops continued. Further experiments on the manuring of older crops not suffering from apparent deficiencies were started, and new experimental plots comparing the growth of mixtures of two species, with that of pure crops, were planted. Foliar analysis was used in the selection of experimental sites.

118. Studies on the afforestation of deep peat continued, with emphasis on the effect of fertilisers (phosphate at time of planting and potash on older crops). A new type of plough specially designed for deep peat was tested.

119. Many young plantations are on soils which are not easily penetrated by roots, and although early growth on such sites may be good, difficulties are encountered later on. Preliminary results from early experiments on the effect of drainage on the growth and quality of crops were studied in this connection.

120. Past work on comparing the ages and types of plants used for planting has often yielded inconclusive results. The hypotheses that the sturdiness of a plant is more important than its age or type, and that sturdiness is best gauged by the diameter of the plant at the root collar, were tested during the year.

121. Work on seed provenance continued to be an important feature of the research programme, although with a change of emphasis. New experiments with Sitka spruce and western hemlock were laid down; these are species in which differences of provenance, although not critical in making new plantations, may give rise to important variations in later growth and in timber quality. The results of older larch experiments were in course of publication. Provenance experiments with lodgepole pine allowed further conclusions to be drawn and led to the planting of new experimental plots.

122. The poplar experimental programme is now considerably reduced, and much of the effort is applied to the assessment of the field experiments (particularly the varietal trials) laid down since 1948. There is growing evidence of the importance of the balsam group of poplars (or balsam hybrids) in relation to other groups of poplars in use in Great Britain.

123. The continuing importance of elm in the timber trade encouraged the initiation of studies on the British elms. These studies are likely to present special problems owing to the botanical complexities of the species; the first stages will be exploratory, and necessarily closely linked with the evidence of merchants experienced in the utilisation of elm timber.



124. A general ecological survey of the status of an important exotic—Corsican pine—as a plantation species in Britain was largely completed. It is believed that this will emphasise the importance of the climatic factor with this species.

125. Considerable progress was made with the compilation of the results from earlier pruning experiments. These suggested, subject to further tests, that the most effective pruning treatments are more drastic than those normally employed.

126. The Soils Section began a programme of research on the nutrition of forest crops, in co-ordination with the more empirical silvicultural work on the improvement of forest sites.

### **Forest Pathology**

127. *Fomes annosus*, a fungus causing butt-rot and death of conifers, again received a major share of attention. Stump protection was introduced in many forests, with fewer difficulties than were expected. The survey of this fungus is being extended to a wide range of site types, in order to discover whether there are any sites where stump treatment is unnecessary to check its spread.

128. In the nurseries the wet summer caused a good deal of root-rot, while *Botrytis cinerea* developed earlier than usual. Experiments on the control of these diseases, as well as of *Didymascella thujina*, the Keithia disease of western red cedar, are still in progress. A trial to test the possibility of raising *Thuja* in a rotation of nurseries, with an interval between each crop in any one nursery, reached its second year.

129. An unidentified needle fungus of pine was found at Wareham Nursery on Corsican pine and *Pinus ponderosa*. It resembled the American *Scirrhia acicola* and was proved, by inoculation of healthy green needles of Corsican pine, to be an active parasite.

130. Natural infection trials of disease-resistant elms from Holland were successfully established on three sites in eastern England, and further steps were taken to co-ordinate the Commission's work on bacterial canker of poplar with research in Holland. It is already possible to compare assessments, and the differences resulting from the two methods of inoculation are under investigation.

131. The history of "group dying" in pole-stage crops caused by the fungus *Rhizina inflata* has now been studied in all its phases.

### **Forest Entomology**

132. Work was again concentrated largely on studies of the pine looper moth, *Bupalus piniarius*. The winter country-wide pupal survey revealed that the numbers of this pest were low in all regions. Research into factors controlling changes in population was continued, and another study plot established, this time at Cannock Chase Forest, Staffordshire, where an epidemic of the looper occurred in 1953. New methods for measuring population densities were tested, and biological studies on the parasites of the looper continued.

133. The distribution of the eight-toothed larch bark beetle, *Ips cembrae* Heer, which was first recorded in north-east Scotland in 1955, was re-surveyed. It has spread from the area it occupied in 1955, but only to a very limited extent. A joint project with the Forest Products Research Laboratory to study the importance of the pinhole borer, *Trypodendron lineatum* L., in softwood thinnings in west Scotland, was started following reports of damage by this insect. A trial of aerial application of insecticides, using rotary atomisers in place of the conventional boom rig, was carried out at Tentsmuir Forest, Fife, with promising results.

### **Forest Management**

134. Studies were carried out on the growing of hardwoods, and on the methods of determining the optimum density of forest roads under various conditions.

135. Comprehensive revised estimates of the area, volume and increment of British woodlands were prepared, the data being obtained partly from the routine census revision of the past few years, and partly from records of fellings, plantings and changes in ownership since the last complete census of 1947-49.

136. In Forest Mensuration, much of the year's work was concerned with methods of forecasting production from thinnings and fellings and various aids to the enumeration of growing stock were worked out. The recently-published alignment charts\* for the determination of stand volume are an example of these studies. Long term studies of growth and yield were continued; 171 permanent sample plots were re-measured and 39 new plots were established, bringing the total number at the end of the year to 744, after allowing for seven plots which were destroyed by wind-blow. Yield tables for oak and beech, and also for western hemlock\* were published; and a code of sample plot procedure was sent to the press†.

### **Statistics**

137. The design and analysis of experiments and sample surveys were undertaken for various sections of the Research Branch, for the Work Study Section, and for the Establishment and Finance Branches of the Commission. The use of electronic digital computers for the analysis of data on forest research and management greatly increased the range of problems which could be undertaken at an economic cost, and a special study was made of methods of multivariate analysis made possible by such computers.

### **Utilisation Research**

138. The Advisory Committee on the Utilisation of Home Grown Timber met in Chester in November and in London in May. After the meeting in Chester the Committee paid a visit to the new insulation board mill at Queensferry in Flintshire (Messrs. J. R. Gordon, Ltd.).

139. On the Committee's recommendation, and with the approval of the trades concerned, a report on the use of home-grown timber in the box, packing-case and pallet-making industries was published during the year.\*

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\* See Publications, page 39.

† Since published as Bulletin 31, *Code of Sample Plot Procedure*, H.M.S.O., 15s. 0d.

140. A survey of the species, grades and sizes of timber used in the building of traditional houses was started, and a number of housing sites in various parts of the country were visited.

141. With the co-operation of members of the home-grown timber trade, an enquiry was begun into the quantities and types of wood-waste arising from sawmills using home-grown timber.

142. The Committee were informed by the Director of the Forest Products Research Laboratory, Department of Scientific and Industrial Research, that the committee on the grading of sawn British hardwoods, which was referred to in last year's report, had completed its work and that its recommendations would be published. The Committee also had under consideration questions relating to the use of home-grown timber for the manufacture of paper pulp and various kinds of board ; the use of timber on farms ; and possible uses of bark.

### **Machinery Research**

143. Research continued on the mechanisation of forest operations, and took account both of machines designed specifically for forestry and of possible adaptations of agricultural machines.

144. Nursery mechanisation continued to be a major project. At Roudham Nursery in Norfolk, which is being used as a trial ground, every operation is now wholly or partly mechanised.

145. A complete answer to the drain cleaning problem was still elusive. Although there are many tractor-mounted machines which work very well, the problem of cleaning old drains in a close plantation has not been solved. A new machine working in the drain bottom has been designed, and will be tested in the coming year.

146. Several new winches were tested, and particularly good results were obtained from the new models which are carried on the three-point linkage of wheeled tractors. The speed with which these winches—the largest of which can pull up to 12,000 lb.—can be fitted and removed is their outstanding feature. Small portable powered winches are being worked on, to obtain lower weight and greater reliability.

147. Despite the increasing mileage of forest roads it is still necessary to experiment with off-the-road transport. Four-wheel drive conversions for standard tractors have produced favourable results.

148. Considerable progress has been made by British manufacturers in the production of lighter and more powerful one-man power saws, and a saw weighing under 28 lb. complete with chain, blade and fuel is now in sight.

### **Grants to Universities and Institutions**

149. Grants for research work on forest soils were made to the Imperial Forestry Institute, Oxford ; to the Macaulay Institute for Soil Research, Aberdeen ; and to the Rothamsted Experimental Station, Harpenden, Herts. Soil mycology investigations were continued under grant by Dr. I. Levisohn of Bedford College, London, and a grant was also made to the University College of North Wales, Bangor, for studies on this subject. The Botany

School at the University of Cambridge received a grant for investigations into the causes of outbreaks of the fungus *Fomes annosus*, and for studies on the ecology of fungi colonising coniferous tree stumps.

150. Other grants included those made for research on shelterbelts at the University of Edinburgh, for the study of morphological variations in coniferous species at the University of Aberdeen, for studies on the physiology of the flowering of forest trees at the University of Manchester, and for research on the fungus *Didymascella thujina* at the University of Nottingham. A grant was given to the British Leather Manufacturers Research Association for analyses of home-grown barks to determine their suitability for tanning.

## EDUCATION

### Forester Training Schools

151. The closure of Lynford Hall in Norfolk, in July, 1957, reduced the number of Forester Training Schools open in 1958 to four: one in England, in the Forest of Dean; two in Scotland, at Benmore, Argyll, and at Faskally, Perthshire (see Plate 4); and one in Wales, near Betws y Coed, Caernarvonshire. The course at these schools lasts two years, and during 1958, 164 students were in residence, of whom 79 were in their first year and 85 in their second. During the year there was a net loss of twelve first-year and four second-year students; of the 81 who completed the full course, 79 were awarded Forester's Certificates. Fifty-eight of the successful students entered the Forestry Commission and four went to private estates. Nine students nominated by the Government of Northern Ireland and three nominated by Northern Rhodesia, British Honduras and the Seychelles returned to their respective Services, while two went to Nyasaland and one to British Guiana. Two took up other employment.

### Short Courses for Forest Workers

152. Three six-week courses were again arranged and, as before, two were held at the Chatsworth Estate, Derbyshire, and one at the Atholl Estates, Dunkeld, Perthshire, by courtesy respectively of His Grace the Duke of Devonshire and of the Hon. Mrs. Campbell-Preston. Thirty forest workers attended the two Chatsworth courses and all successfully took the examination for the Woodman's Certificate of the Royal Forestry Society of England and Wales. Eighteen forest workers attended the course at Dunkeld and (with the exception of two who had passed previously) all passed the examination for the Junior Forester's Certificate of the Royal Scottish Forestry Society. All the men at the three courses received certificates of efficiency from the Forestry Commission.

### Forestry Apprenticeship Scheme

153. There was an increase in recruitment in England and in Wales. In Scotland, however, there was a falling-off, owing probably to difficulties of lodging and schooling, despite the co-operation of the local authorities in providing facilities for further education. During the year 49 youths completed their apprenticeship and were awarded certificates as skilled forest workers. At the end of the year 117 apprentices were in training (England 58, Scotland 6, and Wales 53).

## **Northerwood House**

154. Northerwood House, in the New Forest, was again used for forestry courses throughout the year. Twenty weeks were occupied by courses and study groups arranged for the Commission's staff: the subjects covered included forest management, fire protection, research, utilisation, mensuration, nursery management, silviculture, district administration, work study, and an introduction to the Commission's work for new entrants. Courses on forestry and forestry practice were held for landowners and agents, officers of local authorities, planning officers of county authorities, schoolteachers, camp bailiffs of the Boy Scouts Association and schoolteachers in training. Other meetings included a conference on the management of coniferous plantations.

155. Students from the Universities of Aberdeen, Edinburgh, and Oxford, and from the University College of North Wales, Bangor, were in residence for periods totalling 13 weeks.

## **Courses in Scotland**

156. Two courses for schoolteachers were held at Benmore Forester Training School.

## **Expenditure and Income**

157. Net expenditure (£118,000) was the same as in the previous year. Details are given in Appendix 5, page 54.

## **PUBLICATIONS**

158. Eleven new publications for sale were issued through H.M. Stationery Office and seven sale publications and four free pamphlets were revised and re-issued.\* The new sale publications, all published by H.M.S.O., were:

- (1) Annual Report of the Forestry Commission, 1957 (H.C. 220, Session 1957-58). (5s. 6d.)
- (2) Report on Forest Research, 1957. (9s. 6d.)
- (3) Leaflet 41. The Crested Tit. (1s. 0d.)
- (4) Leaflet 42. Woodpeckers in Woodlands. (1s. 0d.)
- (5) Leaflet 43. Keithia Disease of Thuja plicata. (1s. 3d.)
- (6) Forest Record 33. Provisional Yield Table for Western Hemlock in Great Britain. (1s. 9d.)
- (7) Forest Record 34. Experiments on the Chemical Control of Rhododendron ponticum. (9d.)
- (8) Forest Record 35. The use of Home-Grown Timber in Packaging and Materials Handling. (2s. 6d.)
- (9) Forest Record 36. Provisional Yield Tables for Oak and Beech in Great Britain. (2s. 6d.)
- (10) Forest Record 37. Alignment Charts and Form Height Tables for Determining Stand Volumes of Conifers, Oak and Beech. (1s. 9d.)
- (11) The Border. National Forest Park Guide. (5s. 0d.)

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\* Sale publications are issued through H.M.S.O. Free pamphlets are issued directly by the Commission and are obtainable on request from the Secretary, Forestry Commission, 25, Savile Row, W.1. A full list of publications (Sectional list No. 31) is available free of charge either from the Secretary or H.M.S.O.

159. An important revision was that of Bulletin 14, *Forestry Practice* (H.M.S.O., 5s. 6d.). Designed as a summary of methods of establishing forest nurseries and plantations, with advice on forestry questions for owners, agents, and foresters, this bulletin has always been in wide demand and over 15,000 copies have been issued since 1946. The text of this, the seventh edition, was completely revised by the Commission's staff in the light of recent advances in technique. Bulletin 17, *Cultivation of the Cricket Bat Willow*, was also revised, and re-issued by H.M.S.O. at 5s. 0d. ; it has been in circulation since 1936, and is now accepted as the standard work on the culture of a tree which, in addition to its traditional use, has considerable value for making chip baskets for marketing fruit and vegetables and also for paper pulp. The four free pamphlets brought up-to-date and re-issued were:

- Grants for Woodland Owners.
- Training as a Forester.
- Starting a School Forest.
- Traps for Grey Squirrels.

## PUBLICITY AND PUBLIC RELATIONS

160. The Commission's work and forestry in general were widely publicised, and special emphasis was given as usual to fire prevention and the general protection of Commission and private plantations. The continuing need of more land for planting, and for a closer association between forestry and agriculture, were also stressed whenever opportunity occurred.

161. The attractions of the National Forest Parks were well publicised. Facilities were provided for the Press to visit the Border National Forest Park, the most recently formed, on the occasion of the publication of a guide to the area. Press representatives were also taken on tours of Commission forests in other parts of the country.

162. In addition to giving publicity to the fire risk, the British Broadcasting Corporation provided a number of opportunities for the Commission's operations to be described in feature and farming programmes on sound radio and television. On three occasions forestry was specially featured in the B.B.C. television farming programme—in demonstrations of the integration of forestry and farming ; of the treatment of farm woodlands for commercial timber production ; and of the formation and value of shelter belts, not only for the benefit of crops and stock, but to provide timber for the farm.

163. Exhibits were again arranged at all the major agricultural shows: these were supplemented where practicable by demonstrations of forestry practice for the guidance of woodland owners and farmers. The programme was extended as far as possible to the smaller shows, which provide opportunities for contacts to be made between private woodland owners and officers of the Commission. As reported last year, the Commission have undertaken to treat woodland sites on or near show grounds acquired by agricultural societies, so that practical forestry demonstrations can be available. In 1958 this scheme was extended to the permanent show ground of the Three Counties Agricultural Society at Malvern.

164. A number of schools showed their practical interest in forestry. In some cases this was again met by the allocation of small plots in the Commission's forests under the arrangement whereby the plots are developed by the children themselves, their work being linked to subjects in the normal curriculum. Gifts of surplus trees were also made for planting in school grounds or for study in the classroom. Attention was directed to giving more help to schools in urban areas which are too far from Commission forests for field studies, and are precluded by lack of land from planting in the school precincts. On numerous occasions display material was lent, and forest officers frequently gave lectures to schools and youth organisations, as well as to various public bodies.

165. The Festival of Wales was supported in several ways, among them being the provision of trees to more than 200 schools for "Festival Planting", and the establishment of a commemorative grove in Coed Caerdydd, Glamorgan.

166. The Commission is greatly indebted to the Press and to the B.B.C., and to programme companies of Independent Television, for help in explaining various aspects of the Commission's aims and operations.

### NATIONAL FOREST PARKS

167. Although the summer was so unfavourable for campers and caravanners, increased attendances were recorded at most of the camping sites at the eight National Forest Parks.

168. In the Border National Forest Park the main camping site at Lewisburn, beside the North Tyne River in the heart of Kielder Forest, was completed by the building of a shelter hut. Nearly 10,000 overnight stays were recorded against 6,000 in the previous year. A second site higher up the Lewisburn stream was developed for the use of Boy Scouts, Girl Guides and other youth organisations. An illustrated guide book entitled "*The Border*" was published by H.M. Stationery Office, at 5s. 0d.: 2,000 copies were sold during the summer season. Organised visits to the Park included parties from camping clubs, natural history societies, the Workers' Educational Association, the Young Farmers, and several other organisations.

169. The New Forest proved more popular with campers than ever before, and a record number of 134,000 permits for overnight stays was issued, one-third of these being for members of youth organisations. In the Forest of Dean the main camping site showed a new record of 8,300 visitors. The celebrated viewpoint of Symonds Yat Rock, above the limestone gorges of the River Wye at the northern end of this Forest Park, is on the Commission's property, and for the convenience of the great numbers of people who come to enjoy it each summer a car park was laid out and a new refreshment chalet was built (see Plate 3). In keeping with the sylvan surroundings of the Highmeadow Woods nearby, this chalet was constructed in the traditional log-cabin style under the supervision of one of the Commission's Foresters.

170. The four Scottish National Forest Parks maintained their popularity. The public appreciation of the excellent camping ground on the eastern shore of Loch Lomond, in the Queen Elizabeth Forest Park, is shown by the increase in the number of campers from 6,000 in 1957 to 21,000 in 1958.

171. At Beddgelert, in the Snowdonia National Forest Park, attendances at the camping site again taxed its capacity. A new development was the adaptation of an old farm house as a recreational centre for a boys' club.

## CONFERENCES

172. The Seventh Session of the European Forestry Commission's Working Party on Afforestation and Reforestation is reported in paras. 36 and 37, page 15. In addition, the United Kingdom was represented by officers of the Commission at other international meetings as follows:

*Freiburg-in-Breisgau, Germany*, October, 1957—International Union of Forest Research Organisations, First Session of the Forest Economics Sub-Committee on Accounting: Mr. W. M. Cormack (Controller of Finance).

*Geneva*, October, 1957—Fifteenth Session of the Timber Committee of the Economic Commission for Europe: Mr. E. G. Richards (Utilisation Research Officer).

*Rome*, November, 1957—Ninth Session of the Conference of the Food and Agriculture Organisation of the United Nations: Sir Henry Beresford-Peirse (Deputy Director General) as a member of the United Kingdom delegation.

*Geneva*, February, 1958—Joint F.A.O.-E.C.E. Committee on Forest Working Techniques and the Training of Forest Workers, Second Sessions of the Study Group on the Testing of Forest Machinery and the Working Party on the Testing of Forest Tractors: Col. R. G. Shaw (Machinery Research Officer).

*Madrid*, April, 1958—Sixth Session of the F.A.O. Sub-Commission on Mediterranean Forestry Problems: Sir Henry Beresford-Peirse (Deputy Director General).

*Rome*, July, 1958—Fourteenth Session of the Standing Executive Committee of the International Poplar Commission: Mr. J. Jobling (District Officer, Research Branch).

*Geneva*, July, 1958—Joint F.A.O.-E.C.E. Committee on Forest Working Techniques and the Training of Forest Workers, First Session of the Study Group on the Application of Machinery to Forest Work: Mr. E. G. Richards (Utilisation Research Officer) and Mr. F. G. Chapman (Assistant Engineer, East Scotland Conservancy).

*Prague*, August, 1958—First Session of the International Conference for Insect Pathology and Biological Control: Dr. Myles Crooke (District Officer, Research Branch).

*Stockholm*, September, 1958—International Union of Forest Research Organisations, Meeting on Operational Efficiency: Mr. J. W. L. Zehetmayr (Divisional Officer on Work Study duties).

*Wageningen, Holland*, September, 1958—International Union of Forest Research Organisations, Second Session of the Forest Economics Sub-Committee on Accounting: Mr. W. M. Cormack (Controller of Finance).

*Brussels, September*, 1958—Permanent Committee of the International Union of Forest Research Organisations: Mr. James Macdonald (Director of Research and Education) in his capacity of President of the Union.





PLATE 1. European larch on the Cawdor Estate, Nairnshire.



PLATE 2. The village at the Forest of Ae, Dumfries-shire, is a good example of a new community created by large-scale afforestation in a relatively thinly populated countryside.

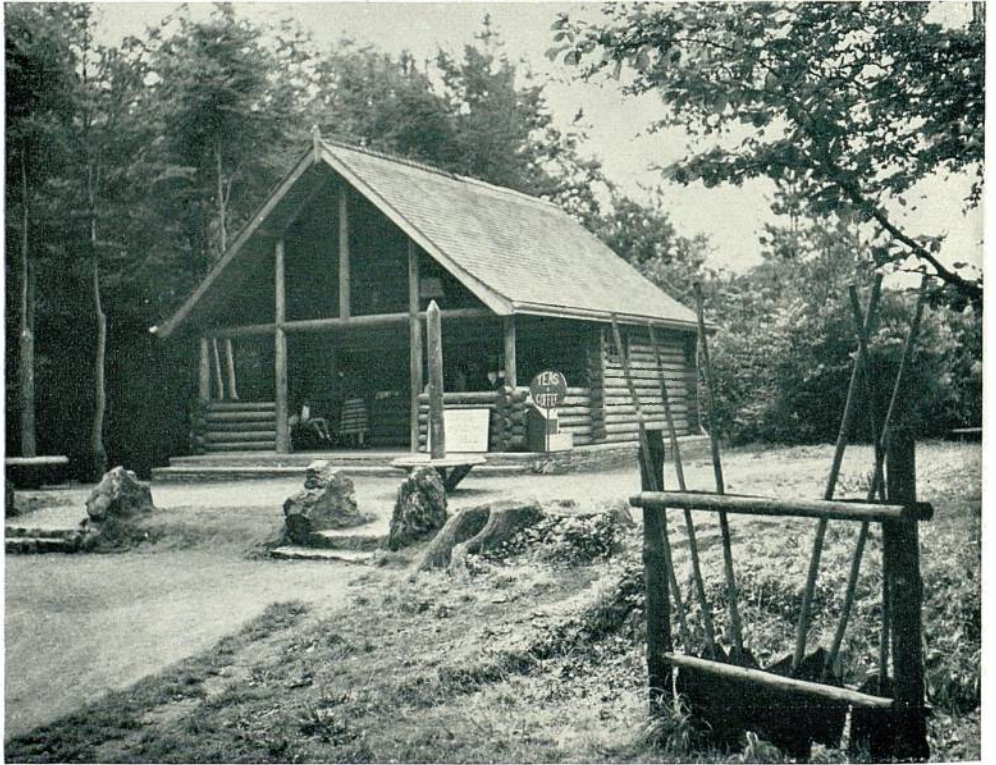


PLATE 3. The refreshment chalet built by the Commission at Symonds Yat in the Dean National Forest Park.



PLATE 4. The Faskally Forester Training School, beside the artificial hydro-electricity loch near Pitlochry, is set in a landscape in which forestry, hill grazing, arable farming and amenity harmonise.

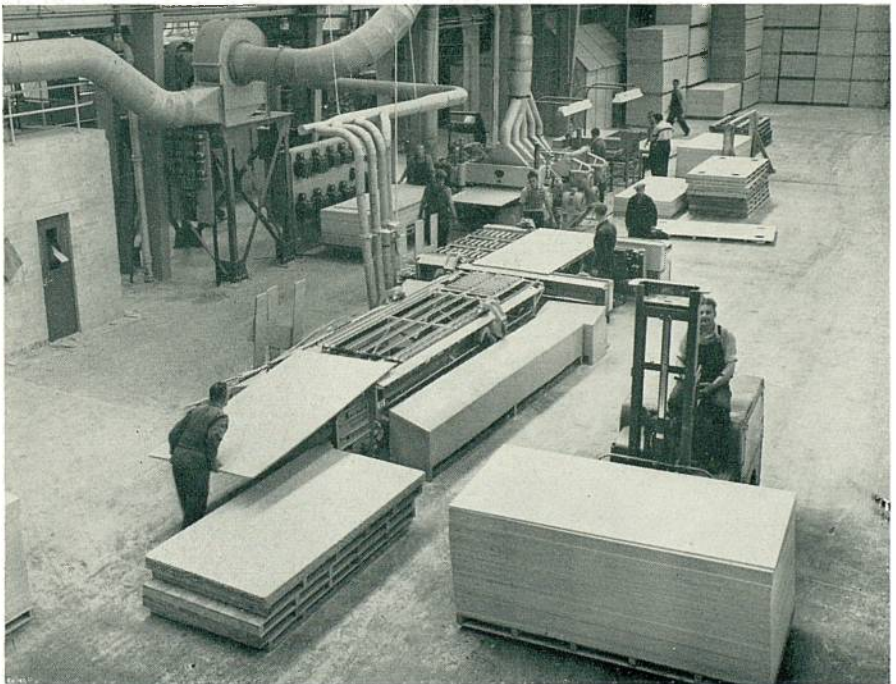


PLATE 5. Chipboard made from home-grown timber being processed in a factory at Annan, Dumfries-shire.

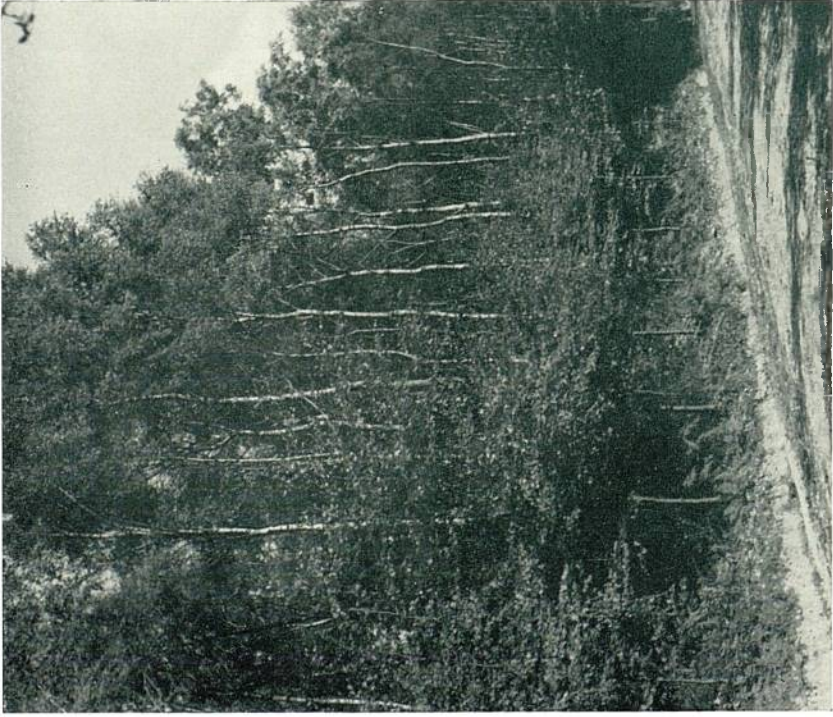


PLATE 6. Birch planted under scrub birch at Slindon Forest, Sussex; this alternative to clearing the scrub before planting can succeed with some species when it is used with discretion on suitable sites.

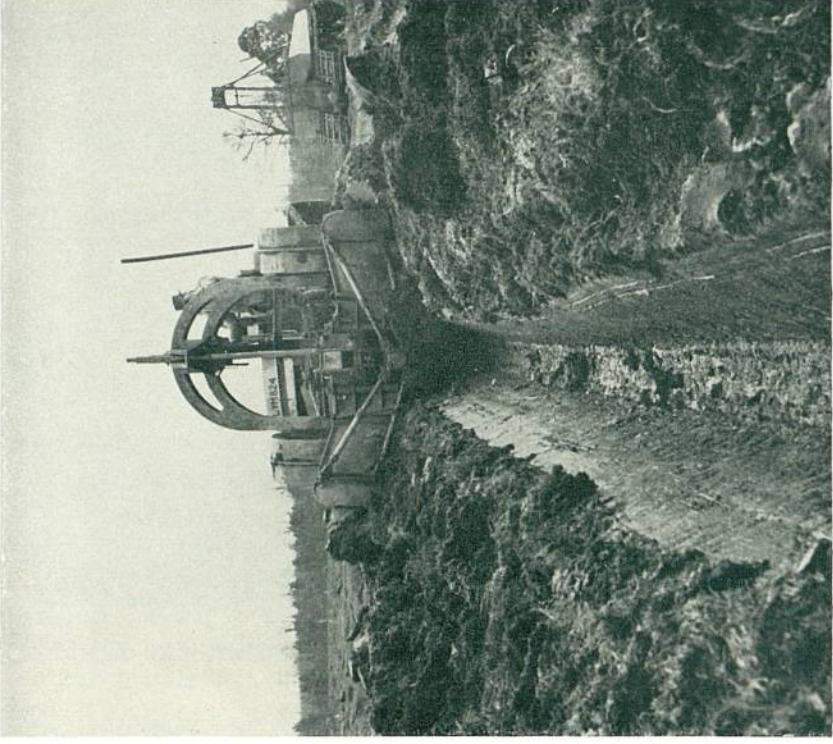


PLATE 7. Deep draining in preparation for planting in peat at Edgarhope Forest, Berwickshire.

173. The annual meeting of the British Association for the Advancement of Science was held in Glasgow in August–September, 1958. Papers for consideration by the Forestry Sub-Section were prepared by the following members of the Commission's staff :

Mr. A. Watt (Director for Scotland)—The management of fast-grown conifers.

Mr. J. R. Thom (Conservator in the office of the Director of Forestry for Scotland)—The value of improved tree seed and quality control in forest practice.

Mr. J. A. B. Macdonald (Conservator, South Scotland)—Integration of forestry and the hill sheep farm.

Mr. E. G. Richards (Utilisation Research Officer)—Market trends.

Mr. J. D. Matthews (District Officer, Research Branch)—The genetic quality of forest tree seed.

Mr. G. D. Holmes (District Officer, Research Branch)—Assessment and improvement of the sowing value of seeds.

#### STAFF

174. At 30th September, 1958, the Commission's non-industrial staff totalled 2,636, of which one half were in the Forester grades.

175. The number of industrial workers, men, women and juveniles, at the same date was 12,384, as compared with 13,040 the year before. The numbers in each country were: England, 5,222 ; Scotland, 4,017 ; Wales, 3,145.

#### **Wages and Conditions of Industrial Employees**

176. The wage rates of the Commission's forest workers were increased from 28th October, 1957, when the minimum adult male rate became 153s. per week. Later in the year the Forestry Commission Industrial and Trade Council again had before it a claim for increased rates of pay, and reached agreement on increases to be made effective early in the next forest year. Under this agreement the minimum adult male rate was to become 159s. 6d. from 27th October, 1958.

177. As mentioned in the report for the previous year, a claim for a reduction in the 47-hour working week, on which the Forestry Commission Industrial and Trade Council had failed to reach agreement, was referred to the Industrial Court. In January, 1958, the Court made an award which reduced the week by an hour to 46 hours, to be worked all the year round throughout the Commission. In their award the Court stated that it was made without prejudice to any further negotiations which might take place on the Council concerning other improvements offered in the course of the earlier negotiations on the claim. These included a proposal to introduce a five-day week for the major part of the year, i.e. for the nine months from the first Monday in February to the last Sunday in October.

178. The wages and conditions of service of forestry workers on private estates are the concern of the Agricultural Wages Boards. The Agricultural Wages Board for England and Wales awarded increases which made the minimum adult wage for males 150s. per week as from 28th October, 1957, and 156s. from 27th October, 1958. In Scotland, the Board made an award which raised the minimum male adult wage by 7s. to 145s. from 9th December, 1957.

## COMMITTEES

### National Committees

179. The National Committees met monthly except in August. The membership of these Committees at 30th September, 1958, was as follows:—

#### NATIONAL COMMITTEE FOR ENGLAND

Lt.-Col. Sir Richard C. G. Cotterell, Bt. (*Chairman*), Mr. C. M. Floyd, Mr. A. P. F. Hamilton, Mr. A. V. Hilton, Mr. E. Bryan Latham, The Duke of Northumberland. *Secretary to the Committee*: Mr. E. S. J. Hinds.

#### NATIONAL COMMITTEE FOR SCOTLAND

Sir John Stirling of Fairburn (*Chairman*), Major D. C. Bowser, The Earl Cawdor, Captain J. Craig, Mr. J. McNaughton, Major F. W. Strang Steel, Mr. Robert Taylor. *Secretary to the Committee*: Mr. A. D. Palmer.

#### NATIONAL COMMITTEE FOR WALES

Mr. Lloyd O. Owen (*Chairman*), Mr. A. P. F. Hamilton, Mr. J. E. Lewis, Dr. Richard Phillips, Mr. P. R. D. Spurgin, Mr. W. H. Vaughan. *Secretary to the Committee*: Mr. T. H. McGeorge.

### Regional Advisory Committees

180. The membership of the Committees at 30th September, 1958, was as follows:

#### ENGLAND

##### *North West Conservancy*

The Earl of Bradford (*Chairman*), Alderman Allen, Mr. J. L. Benson, Mr. J. T. Edmondson, Major Charles Graham, The Earl of Lonsdale, Mr. R. W. S. Thompson, Mr. C. J. Venables, Mr. D. H. White. *Secretary to the Committee*: Mr. J. Steele. The Committee met in October, 1957, and in May, 1958.

##### *North East Conservancy*

Lord Bolton (*Chairman*), Professor J. S. Allen, Mr. R. Bowman, Mr. R. H. B. Hamersley, Mr. W. P. Hedley, Mr. R. Minto, Mr. R. Stanley, Mr. H. Wardale, Mr. W. M. J. Worsley. *Secretary to the Committee*: Mr. L. A. Chaplin. The Committee met in December, 1957, and in June, 1958.

##### *East Conservancy*

Major Sir Richard Proby (*Chairman*), Col. M. E. St. J. Barne, Mr. J. S. L. Gilmour, Mr. N. D. G. James, Mr. J. C. P. Langton, Mr. G. Oates, Major R. B. Verney, Mr. S. A. Wegg, The Earl of Yarborough. *Secretary to the Committee*: Mr. G. H. Clark. The Committee met in September, 1958.

##### *South East Conservancy*

Mr. G. E. H. Palmer (*Chairman*), Mr. A. E. Aitkins, Mr. G. E. H. Calvert, Col. Sir Ralph S. Clarke, Viscount Cowdray, Mr. A. L. F. Hills, Sir William Mount, Bt., Mr. W. H. Pearson, Major R. E. Whitaker. *Secretary to the Committee*: Mr. H. W. Gulliver. The Committee met in February and May, 1958.

### *South West Conservancy*

Sir D. F. B. Stucley (*Chairman*), Mr. J. E. Garfitt, Mr. H. P. R. Hoare, Lord Hylton, Mr. A. E. Jordan, Mr. J. R. Maeer, Major J. L. Pilling, Mr. L. C. Wheeler, Lt.-Comdr. T. J. B. Mildmay-White. *Secretary to the Committee* : Mr. R. Coote. The Committee met in March and June, 1958.

## SCOTLAND

### *North Conservancy*

Major D. J. Brodie of Lethen (*Chairman*), Mr. J. Armstrong, Mr. G. Brown, Col. A. E. Cameron, Mr. C. Campbell, Mr. R. Dean, Mr. A. B. L. Munro-Ferguson, Mr. J. Grant, Mr. A. R. Mackenzie. *Secretary to the Committee* : Mr. M. Nicolson. The Committee met in November, 1957, and in May, 1958.

### *East Conservancy*

Professor H. M. Steven (*Chairman*), The Hon. James Bruce, The Lord Glentanar, Mr. J. B. Hendry, Sir Ian Forbes Leith, Mr. A. Duncan Millar, Lt.-Col. J. W. Nicol, Mr. R. A. Raffan, Mr. W. J. Riddoch. *Secretary to the Committee* : Mr. J. P. Lenman. The Committee met in November, 1957, and in May, 1958.

### *South Conservancy*

Major Simon F. Macdonald Lockhart (*Chairman*), Mr. A. B. Duncan, Mr. H. Foster, Mr. S. E. A. Landale, Mr. J. H. Mackay, Comdr. D. Herries Maxwell, Mr. D. M. McQueen, Major John Sprot, Mr. R. F. Wilson. *Secretary to the Committee* : Mr. T. Farmer. The Committee met in October, 1957, and in March, 1958.

### *West Conservancy*

Sir George I. Campbell, Bt., of Succoth (*Chairman*), Mr. P. Campbell, Major R. Orr Ewing, Lt.-Col. W. D. H. C. Forbes, Mr. R. M. Hamilton, Professor J. Kirkwood, Mr. W. D. MacGregor, Jr., Mr. P. S. Murray. *Secretary to the Committee* : Mr. B. Kinnaird. The Committee met in November, 1957, and in March and July, 1958.

## WALES

### *North Conservancy*

Col. P. R. Davies-Cooke (*Chairman*), Mr. R. W. Allan, Capt. G. L. Bennett-Evans, Mr. T. Jones, Capt. J. Hext Lewis, Professor E. C. Mobbs, Lt.-Col. H. M. C. Jones-Mortimer, Mr. David Tudor, Col. J. F. Williams-Wynne. *Secretary to the Committee* : Mr. K. Mayhew. The Committee met in November, 1957, and in March and June, 1958.

### *South Conservancy*

Major C. G. Traherne (*Chairman*), Mr. D. G. Badham, Mr. B. Davies, Major J. D. D. Evans, Mr. I. G. Gordon, Mr. H. A. Hyde, Mr. A. J. Llewellyn, Mr. M. H. Maxwell, Brigadier R. P. Waller. *Secretary of the Committee* : Mr. E. H. Bradford. The Committee met in October, 1957, and in May, 1958.

## Home Grown Timber Advisory Committee

181. Meetings of the Home Grown Timber Advisory Committee were held in January, April and September, 1958. In addition to normal matters arising out of the Forestry Act, 1951, the use of home-grown timber by the nationalised industries and in the fencing of new highways and motor roads was discussed. Pending the formation of a woodland owners association it was not practicable to give effect to the re-constitution recommended by the Committee on Marketing of Woodland Produce, and it was therefore decided to re-appoint the Committee on normal lines for a period of three years from 1st July, 1958.

The membership of the Committee at 30th September, 1958, was as follows:

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. Watt	...	
Mr. G. B. Ryle	...	
Mr. J. Macdonald	...	
Mr. H. A. Turner	...	
Mr. J. May	...	Board of Trade
Lord Bolton	... ..	} County Landowners Association
Major Sir Richard G. Proby, Bt.	...	
Mr. W. E. Hiley	... ..	
Mr. Langshaw Rowland	... ..	
The Duke of Buccleuch	... ..	} Scottish Landowners Federation
The Earl Cawdor	... ..	
The Earl of Dundee	... ..	
Capt. J. Maxwell Macdonald	... ..	
Mr. G. R. Jacobs	... ..	} Federated Home Timber Association
Mr. C. J. Venables	... ..	
Mr. G. E. H. Calvert	... ..	
Mr. F. Sellars	... ..	
Mr. J. C. McGregor	... ..	} Home Timber Merchants Associa- tion of Scotland
Mr. W. J. Riddoch	... ..	
Mr. R. Finlay Wilson	... ..	
Mr. J. B. Dawson	...	Timber Trades Federation

*Secretary* : Mr. H. R. Flowers.



## PRIVATE FORESTRY\*

182. Expenditure on services to woodland owners during the year was £864,000. The greater part of this was in respect of payments under the Dedication Scheme, which totalled £497,000. Payments for planting completed outside the Dedication Scheme amounted to £97,000, of which Small Woods Planting Grants accounted for £64,000. Other payments included: Thinning Grants £44,000; Scrub Clearance Grants £52,000; Grants to Co-operative Societies £3,000; payments for the destruction of grey squirrels £20,000. The cost of administration, including advisory services, was £148,000. From Appendix 7, page 55, it will be seen that, excluding administration and advisory services, total payments increased by £55,000. Payments under the Dedication Scheme increased by £56,000; the level of other payments was much as in the previous year, except that the amount paid for destroying grey squirrels fell by £7,000 owing to the discontinuance of the bonus scheme.

### The Dedication Scheme

183. The total area dedicated was brought up to 540,418 acres by the addition during the year of 55,037 acres on 156 estates. This was an increase of nearly 15,000 acres on the area added in 1957; nearly all of it occurred in England, with a slight falling-off in Wales. Dedications completed are, however, only a partial guide to progress, and statistics for schemes in their preliminary stages have also to be taken into account. These show that although at the end of the year the area of schemes approved and agreed for dedication was, at 45,700 acres, about the same as in 1957, the area in the still earlier stage of preparing Plans of Operations had fallen from 72,000 to 59,000 acres. Details of the progress of the scheme are given in Table 20 below.

#### PROGRESS OF DEDICATION

Table 20                      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, 1948-58	1,289	540,418	821	268,894	367	250,494	101	21,030
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
1957 ...	141	40,100	97	21,534	27	15,984	17	2,582
1958 ...	156	55,037	110	37,330	34	15,934	12	1,773
Withdrawals and Adjustments	— 2	— 239	—	— 46	— 2	— 193	—	—

\* This section should be read in conjunction with the reference to private forestry in paragraphs 1, 2, 6-7, and 15-20, on pages 7-8, 10, and 12.

## Approved Woodlands

184. The Approved Woodlands Scheme allows the owners of woodlands managed in accordance with a Plan of Operations approved by the Commission to receive planting grants (but not maintenance grants) at half the rate fixed for the Dedication Scheme, without the fuller commitments that the latter entails. At the end of 1958 a total of 149,800 acres on 482 estates had been accepted under the scheme; this was shared between the three countries as follows: England, 108,400 acres on 399 estates; Scotland, 37,400 acres on 63 estates; Wales, 4,000 acres on 20 estates. Additions during the year totalled 12,700 acres on 55 estates, as compared with 24,800 acres on 82 estates in 1957. At the end of the year, 103 estates were preparing Plans of Operations for 25,400 acres for acceptance under the scheme.

## Planting on Private Estates

185. Table 21 summarises the area of planting, under all grant schemes, which was inspected and passed for payment during the year. These figures include some 6,500 acres planted in previous years.

### PLANTING UNDER GRANT-AIDED SCHEMES

Table 21

Areas inspected and passed for payment  
Year ended 30th September, 1958

Acres

	Planting under Dedication	Small Woods Planting	Approved Woods Planting	*Poplar Planting	Total
Number of Schemes	1,079	929	351	101	2,460
GREAT BRITAIN ...	22,353	4,583	4,311	309	31,556
England ... ..	10,008	2,613	2,742	269	15,632
Scotland ... ..	10,478	1,241	1,465	25	13,209
Wales ... ..	1,867	729	104	15	2,715

\* In addition 3,458 trees (2,839 in England and 619 in Scotland) were planted in lines and qualified for grants on the "per tree" basis.

186. Of the total area of planting inspected and passed during 1958, 71 per cent. was in Dedicated Woods, while Small Woods and Approved Woods accounted for 15 per cent. and 14 per cent. respectively. The proportion of planting in Dedicated Woods was a little higher than in 1957; Small Woods and Approved Woods planting were in about the same ratio as before. Block planting of poplar increased slightly, but fewer poplars were planted in lines.

187. The total acreage planted annually on private estates includes a considerable area planted without the aid of grants. Statistics for this area are not available but it is estimated that in 1958 it was about 3,000 acres: with the 29,100 acres planted under the various grant schemes, the total planted by private owners in 1958 reached the encouraging figure of 32,100 acres—500 acres more than in 1957, and the highest in any year since the war. Details by countries are shown in Table 22 opposite.

ESTIMATED AREA OF PRIVATE PLANTING

Table 22

Year ended 30th September, 1958

Acres

	Grant-aided	Planted without the aid of Grants	Total
GREAT BRITAIN ... ..	29,100	3,000	32,100
England ... ..	14,900	1,800	16,700
Scotland ... ..	11,700	1,100	12,800
Wales ... ..	2,500	100	2,600

188. As compared with 1957, the increase was most marked in England, where the area planted rose by 2,700 acres. In Scotland there was a fall of some 2,400 acres, while Wales recorded little change. The proportion of bare land planted by private owners shows a tendency to increase, although the replanting of felled woodland naturally continues to account for much the larger part of their programmes.

**Scrub Clearance Grants**

189. Since these grants were started in 1954 about 15,000 acres of scrub have been cleared with their aid. During the year, 615 schemes covering the clearance of 4,574 acres of scrub were inspected and passed for the first payment; although the area was slightly smaller than in 1957, the number of schemes increased by about 25 per cent. About three-quarters of the area was in Dedicated Woodlands. Details by countries are given in Table 23 below.

SCRUB CLEARANCE GRANTS

Schemes inspected and passed for First Payment

Year ended 30th September, 1958

Table 23

	Number of Schemes	Area (acres)
GREAT BRITAIN ... ..	615	4,574
England ... ..	413	2,981
Scotland ... ..	82	762
Wales ... ..	120	831

**Thinning Grants**

190. Up to the end of the year 122,500 acres, with a yield of 38½ million hoppus feet, had been thinned with the aid of these grants. In comparison with 1957, the area of thinning inspected and passed for payment rose slightly, but the estimated yield fell a little.

THINNING GRANTS

Schemes Inspected and Passed for Payment

Year ended 30th September, 1958

Table 24

	Number of Schemes	Area (acres)	Estimated Volume (cubic feet)
GREAT BRITAIN ... ..	842	11,694	3,051,091
England ... ..	591	7,408	1,773,182
Scotland ... ..	207	3,798	1,115,882
Wales ... ..	44	488	162,027

## Loans to Woodland Owners

191. Loans were in considerably less demand and the amount lent to woodland owners fell to £30,000, compared with £47,000 in the previous year. At the end of the year the cumulative total lent to owners, and still outstanding, was £118,000.

## Licensing of Timber Felling

192. During the year, 6,015 licences, authorising the felling of 38·229 million hoppus feet of timber, were issued. The corresponding figures in 1957 were 6,788 licences and 41·744 million hoppus feet. A summary of licences issued in 1958 is given below :

	<i>Hoppus feet</i> <i>(millions)</i>
<i>Conifers</i>	
Over 6 inches quarter-girth at breast height ...	7·688
Thinnings over 6 inches quarter-girth at breast height ... ..	2·561
6 inches quarter-girth and under at breast height ... ..	5·952
	<hr/>
Conifer Total	16·201
<i>Broadleaved species</i>	
Over 6 inches quarter-girth at breast height ...	20·741
6 inches and under at breast height ... ..	1·287
	<hr/>
Broadleaved Total	22·028
	<hr/>
Grand Total	38·229
	<hr/>

193. The Home Grown Timber Advisory Committee were as usual consulted on the felling quota for the year, and in view of the fact that for several years the hardwood quota had not been taken up it was agreed that a quota for hardwoods should not be imposed. With regard to conifers, a partial review of stocks had shown that a further increase was justified, and the quota was therefore raised from 7·3 to 8·0 million hoppus feet. Subsequently the quotas were removed in the light of the statement made in Parliament on 24th July, following the Government's review of forestry policy (see page 7).

194. Of the licences issued during the year, 2,077 authorised the clear felling of 20,926 acres. An analysis of these licences shows that 1,299, covering 13,508 acres, were issued subject to replanting and maintenance conditions; that 395, covering 3,669 acres, were for fellings on Dedicated Woodlands; and that the remainder of 383, covering 3,749 acres, were issued without replanting conditions. The Commission will acquire 2,151 acres of the area on which replanting conditions were not imposed, while 361 acres were for the felling of an overwood growing above an established crop; with the areas subject to replanting conditions and those on Dedicated Woodlands, the restocking of 19,689 acres is thus assured out of the total of 20,926 acres on which clear felling was authorised during the year.

195. In addition, 85 licences were issued to replace time-expired licences ; these covered the felling of 1,405 acres, of which at least 1,341 acres will be replanted.

196. The administrative cost of licensing during the year was £75,000 ; in the previous year it was £56,000 but, owing to a change in the method of allocating overheads, the two figures were not strictly comparable.

RADNOR, *Chairman.*

R. C. G. COTTERELL.

LLOYD O. OWEN.

JOHN STIRLING.

W. H. VAUGHAN.

A. P. F. HAMILTON.

D. C. BOWSER.

ROBERT TAYLOR.

BRYAN LATHAM.

F. W. STRANG STEEL.

H. A. TURNER, *Secretary,*

25, Savile Row,

London, W.1.



# APPENDICES

## Year Ended 30th September, 1958

### Appendix 1

#### FINANCIAL STATEMENT\*

1957 £000's		1958 £000's
9,360	TO BE ACCOUNTED FOR Forestry Fund ...	8,993
	Other Expenditure:	
886	Provision for Depreciation and Pensions and Gratuities ... ..	819
Cr. 23	Net variation in work in progress, stocks, debtors, sundry balances and cash ... ..	968
863		1,787
10,223		10,780
	SUMMARY OF EXPENDITURE	
2,571	Capital Expenditure (Appendix 2) ...	2,579
5,893	Forestry Operations (Appendix 3) ...	6,383
821	Private Forestry (Appendix 4) ...	864
300	Research (Appendix 5)... ..	306
118	Education (Appendix 6) ... ..	118
520	General Administration (Appendix 7)	530
10,223		10,780

### Appendix 2

#### CAPITAL EXPENDITURE

1957 £000's		1958 £000's
233	Land ... ..	187
136	Standing Timber ... ..	132
406	Buildings ... ..	390
1,407	Roads and Bridges ... ..	1,641
340	Vehicles, Machines and Equipment ...	298
47	Loans to Private Woodland Owners ...	30
2	Miscellaneous ... ..	Cr. 99
2,571		2,579

\* Appendix 1 is a statement of the expenditure 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 1 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 1, 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 7.

### Appendix 3

#### FORESTRY OPERATIONS EXPENDITURE

1957 £000's		1958 £000's
1,955	Preparatory work and formation of plantations	1,948
1,409	Maintenance of plantations ... ..	1,726
474	Forest protection ... ..	439
1,182	Preparation of produce ... ..	1,033
3,388	Overhead expenses ... ..	3,495
<hr/>		<hr/>
8,408		8,641
	Deduct:	
2,442	Sales of timber and other forest produce ... ..	2,352
	Increase in stocks of felled timber and other forest produce ... ..	Dr.100
35	Sundry receipts ... ..	6
38		
<hr/>		<hr/>
2,515		2,258
<hr/>		<hr/>
5,893		6,383
<hr/>		<hr/>

### Appendix 4

#### RESEARCH EXPENDITURE

1957 £000's		1958 £000's
165	Silviculture, including Nursery work ...	161
19	Genetics ... ..	23
42	Management ... ..	41
29	Pathology and Entomology ... ..	27
5	Machinery ... ..	3
8	Utilisation ... ..	1
15	Grants to Institutions ... ..	14
17	Miscellaneous ... ..	20
—	Directorate Administration ... ..	16
<hr/>		<hr/>
300		306
<hr/>		<hr/>

### Appendix 5

#### EDUCATION EXPENDITURE

1957 £000's		1958 £000's
132	Forester Training Schools ...	108
7	Short Courses ... ..	7
5	Forestry Apprenticeship Scheme	5
10	Northerwood House ... ..	12
3	Miscellaneous ... ..	1
—	Directorate Administration ... ..	16
<hr/>		<hr/>
157		149
	Deduct:	
21	Value of Student Labour	15
18	Other ... ..	16
<hr/>		<hr/>
39		31
<hr/>		<hr/>
118		118
<hr/>		<hr/>



## Appendix 6

### GENERAL ADMINISTRATION AND MISCELLANEOUS EXPENDITURE

<i>1957</i> <i>£000's</i>		<i>1958</i> <i>£000's</i>
238	Directorate Offices ... ..	... 223
215	Headquarters ... ..	... 222
56	Administration of Felling Licensing	... 75
11	Information and Shows ... ..	... 10
520		530

## Appendix 7

### EXPENDITURE ON PRIVATE FORESTRY

<i>1957</i> <i>£000's</i>		<i>1958</i> <i>£000's</i>
441	Grants under Dedication Schemes ... ..	... 497
61	Small Woods Planting Grants ... ..	... 64
31	Approved Woodlands Planting Grants ...	... 30
2	Poplar Planting Grants ... ..	... 2
—	Other Planting Grants ... ..	... 1
535		594
47	Thinning Grants ... ..	... 44
47	Scrub Clearance Grants ... ..	... 52
2	Grants to Co-operative Societies	... 3
27	Grey Squirrel Bonus ... ..	... 20
3	Miscellaneous ... ..	... 3
661		716
160	Administration, including Advisory Services ...	... 148
821		864

PLANTATIONS MADE DURING THE YEAR ENDED

Appendix 8

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 ...	52,398	48,544	3,854	29,974	482	18,570	3,372
ENGLAND: ...	17,175	13,913	3,262	6,203	404	7,710	2,858
Conservancy:							
North West ...	3,637	3,023	614	1,701	42	1,322	572
North East ...	5,051	4,522	529	3,519	133	1,003	396
East ...	2,838	2,176	662	487	97	1,689	565
South East ...	2,370	1,623	747	118	74	1,505	673
South West ...	2,425	1,934	491	242	50	1,692	441
New Forest ...	502	409	93	125	3	284	90
Dean Forest...	352	226	126	11	5	215	121
SCOTLAND: ...	24,863	24,655	208	16,600	49	8,055	159
Conservancy:							
North ...	7,344	7,335	9	3,875	1	3,460	8
East ...	5,087	4,997	90	2,834	17	2,163	73
South...	8,129	8,069	60	7,181	10	888	50
West ...	4,303	4,254	49	2,710	21	1,544	28
WALES: ...	10,360	9,976	384	7,171	29	2,805	355
Conservancy:							
North ...	5,713	5,552	161	3,940	12	1,612	149
South...	4,647	4,424	223	3,231	17	1,193	206

30TH SEPTEMBER, 1958—SUMMARY BY CONSERVANCIES

Total plants used	Species Planted, including Beating Up (Thousands of plants)										
	Scots Pine	Corsi-can Pine	Euro-pean Larch	Japane-se Larch	Douglas Fir	Norway Spruce	Sitka Spruce	Oak	Beech	Other Species	
										Conifers*	Broad-leaved
101,719	19,787	4,666	789	12,351	6,045	9,524	24,580	2,349	3,683	16,862	1,083
31,121	5,047	3,397	212	2,377	3,299	3,475	3,794	1,962	2,918	3,776	864
6,597	1,557	666	67	562	235	361	1,606	520	139	650	234
9,647	2,264	254	3	1,192	254	465	2,063	244	493	1,978	437
5,547	505	1,200	60	44	1,023	1,260	—	557	593	264	41
3,863	233	453	9	251	826	650	—	248	799	302	92
4,163	274	571	63	278	820	627	122	197	710	464	37
656	160	177	—	17	92	10	3	40	108	44	5
648	54	76	10	33	49	102	—	156	76	74	18
50,421	14,402	768	503	6,586	1,291	4,265	12,775	148	169	9,368	146
15,791	8,524	246	318	1,227	424	761	2,224	13	8	2,030	16
11,583	4,271	112	52	1,798	185	1,283	1,199	47	66	2,518	52
14,199	490	315	95	2,556	486	932	6,018	50	47	3,156	54
8,848	1,117	95	38	1,005	196	1,289	3,334	38	48	1,664	24
20,177	338	501	74	3,388	1,455	1,784	8,011	239	596	3,718	73
9,896	167	308	74	893	693	890	4,540	140	241	1,907	43
10,281	171	193	—	2,495	762	894	3,471	99	355	1,811	30

Note.—\* "Other Conifers" includes 12,129,000 lodgepole pine. See also Appendix 9.

Appendix 9

SUMMARY OF SPECIES USED FOR PLANTING AND BEATING UP

Thousands of plants

Year ended 30th September 1958

SPECIES	GREAT BRITAIN			ENGLAND			SCOTLAND			WALES		
	Total	Planting	Beating up	Total	Planting	Beating up	Total	Planting	Beating up	Total	Planting	Beating up
	All Species...	101,719	78,822	22,897	31,121	24,238	6,883	50,421	40,065	10,356	20,177	14,519
Scots pine ...	19,787	14,747	5,040	5,047	3,573	1,474	14,402	11,055	3,347	338	119	219
Corsican pine ...	4,666	3,201	1,465	3,397	2,503	894	768	460	308	501	238	263
European larch ...	789	630	159	212	163	49	503	414	89	74	53	21
Japanese larch ...	12,351	8,771	3,580	2,377	1,742	635	6,586	4,903	1,683	3,388	2,126	1,262
Douglas fir ...	6,045	4,665	1,380	3,299	2,687	612	1,291	908	383	1,455	1,070	385
Norway spruce ...	9,524	7,559	1,965	3,475	2,814	661	4,265	3,421	844	1,784	1,324	460
Sitka spruce ...	24,580	21,129	3,451	3,794	3,237	557	12,775	11,129	1,646	8,011	6,763	1,248
Western hemlock ...	1,174	851	323	275	217	58	324	254	70	575	380	195
Western red cedar ...	746	507	239	207	171	36	147	126	21	392	210	182
Lodgepole pine ...	12,129	9,071	3,058	2,225	1,779	446	7,934	6,210	1,724	1,970	1,082	888
Hybrid larch ...	41	36	5	3	3	—	38	33	5	—	—	—
Lawson cypress ...	645	469	176	470	346	124	85	52	33	90	71	19
Picea omorika ...	3	2	1	—	—	—	1	1	—	2	1	1
Abies grandis ...	528	457	71	266	238	28	96	76	20	166	143	23
Spanish chestnut ...	25	7	18	22	5	17	1	1	—	2	1	1
Birch ...	92	58	34	80	48	32	9	8	1	3	2	1
Beech ...	3,683	2,907	776	2,918	2,409	509	169	139	30	596	359	237
Oak ...	2,349	1,817	532	1,962	1,543	419	148	118	30	239	156	83
Sycamore ...	665	434	231	579	365	214	74	60	14	12	9	3
Other Conifers ...	1,596	1,259	337	330	248	82	743	644	99	523	367	156
Other Broadleaved ...	301	245	56	183	147	36	62	53	9	56	45	11

**SUMMARY AREA STATEMENT OF LAND USE: BY CONSERVANCIES**

**Appendix 10**

At 30th September, 1958

Acres

Country or Conservancy	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
GREAT BRITAIN ... ..	2,361,387	30,456	21,942	1,172,127	326,216	863,044
ENGLAND: ... ..	702,558	6,607	10,568	454,110	96,112	152,336
North West Conservancy	114,445	1,743	1,894	75,510	14,546	24,389
North East Conservancy	230,359	3,652	1,399	134,608	32,533	63,218
East Conservancy ...	111,799	584	2,254	88,092	12,434	11,273
South East Conservancy	60,447	192	2,178	43,663	14,496	2,288
South West Conservancy	80,807	292	2,133	57,294	18,232	5,281
New Forest ... ..	77,710	128	374	33,132	2,435	42,143
Dean Forest ... ..	26,991	16	336	21,811	1,436	3,744
SCOTLAND: ... ..	1,322,254	16,649	8,214	506,853	169,007	646,394
North Conservancy ...	492,830	3,876	3,468	129,531	47,357	315,942
East Conservancy ...	273,758	2,851	2,236	140,375	44,673	88,710
South Conservancy ...	256,982	7,191	938	119,866	50,988	86,128
West Conservancy ...	298,684	2,731	1,572	117,081	25,989	155,614
WALES: ... ..	336,575	7,200	3,160	211,164	61,097	64,314
North Conservancy ...	179,780	3,952	1,761	113,052	23,475	43,253
South Conservancy ...	156,795	3,248	1,399	98,112	37,622	21,061

**AREA STATEMENT OF LAND USE: BY FORESTS—ENGLAND**

**Appendix 11**

At 30th September, 1958

Acres

Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH WEST CONSERVANCY: TOTAL ... ..	114,445	1,743	1,894	75,510	14,546	24,389
Arden, Warwick & Worcs.	1,028	—	62	344	684	—
Bagot, Staffs ... ..	1,342	—	106	792	549	1
Bawtry, Notts ... ..	586	3	6	524	2	60
Blengdale, Cumberland ...	1,282	46	—	1,122	96	64
Bowland, Lancs & Yorks...	936	94	36	500	395	41
Cannock, Staffs ... ..	6,595	—	12	5,871	672	52
Cartmel, Lancs ... ..	883	74	5	223	616	44
Causeway Wood, Salop ...	355	—	77	299	56	—
Charnwood, Leicester ...	275	—	14	275	—	—
Corvedale, Salop ... ..	397	18	30	300	84	13
Cotgrave, Notts & Leicester	529	10	2	409	119	1
Dalton, Westmorland & Lancs ... ..	986	19	74	898	33	55
Delamere, Cheshire* ...	2,163	—	33	2,023	120	20
Ennerdale, Cumberland ...	7,584	10	8	2,625	84	4,875
Foremark Woods, Derby ...	479	—	82	124	355	—
Foulshaw Wood, Westmorland ... ..	600	63	4	266	334	—

*Note.*—In Appendices 11–13 former Crown Woods are indicated by asterisks.

Appendix 11—continued

Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Gisburn, Yorks ... ..	3,149	—	—	2,737	287	125
Greystoke, Cumberland ...	2,145	—	—	1,798	106	241
Grizedale, Lancs ... ..	7,229	97	139	5,363	1,012	854
Habberley, Salop ... ..	841	40	53	730	104	7
Hardknott, Cumberland & Lancs ... ..	8,292	9	29	1,665	530	6,097
Hope, Derby ... ..	2,988	11	—	705	310	1,973
Inglewood, Cumberland ...	1,814	—	122	789	972	53
Kershope, Cumberland ...	12,028	51	—	9,667	98	2,263
Kinver, Staffs ... ..	740	5	36	681	29	30
Launde, Leicester & Rutland ... ..	491	—	—	90	401	—
Long Mynd, Salop ... ..	926	—	17	753	127	46
Longtown, Cumberland ...	391	—	18	293	32	66
Lyth, Westmorland ... ..	629	—	35	57	196	376
Matlock, Derby ... ..	1,253	235	—	560	691	2
Miterdale, Cumberland† ...	1,567	—	58	580	745	242
Mortimer, Hereford & Salop	8,582	—	6	8,212	36	334
Oakamoor, Staffs ... ..	1,047	—	90	518	526	3
Packington, Warwick ...	715	—	57	247	468	—
Sherwood, Derby, Notts & Yorks ... ..	14,692	75	371	12,832	1,491	369
Spadeadam, Cumberland	8,909	837	—	2,727	1,294	4,888
Swynnerton, Staffs ... ..	2,160	—	152	1,890	249	21
Thornthwaite, Cumberland	5,875	32	147	4,375	344	1,156
Walcot, Salop ... ..	1,656	14	13	1,623	16	17
Walton Woods, Cumberland	306	—	—	23	283	—
<b>NORTH EAST CONSERVANCY:</b>						
<b>TOTAL ... ..</b>	<b>230,359</b>	<b>3,652</b>	<b>1,399</b>	<b>134,608</b>	<b>32,533</b>	<b>63,218</b>
Allendale, Northumberland	369	—	—	—	365	4
Allerston, Yorks ... ..	10,599	—	121	9,503	349	747
Ampleforth, Yorks ... ..	5,429	109	68	3,283	1,888	258
Arkengarthdale, Yorks ...	1,599	—	—	1,120	343	136
Bingley, Yorks ... ..	57	—	20	20	37	—
Cawthorne, Yorks... ..	689	—	4	144	545	—
Chillingham, Northumberland ... ..	775	—	39	587	164	24
Chopwell, Durham* ... ..	2,076	—	87	1,433	536	107
Cleveland, Yorks ... ..	4,088	116	128	1,851	2,175	62
Doncaster, Yorks ... ..	1,114	—	37	749	358	7
Fountains, Yorks ... ..	1,143	—	95	274	865	4
Hambleton, Yorks... ..	4,279	135	134	1,355	2,734	190
Hamsterley, Durham ... ..	6,150	—	—	5,478	344	328
Harwood, Northumberland	6,347	535	—	3,931	1,897	519
Hebden Royd, Yorks ... ..	2,196	—	—	2	2,083	111
Holmfirth, Yorks ... ..	904	39	—	145	707	52
Jervaulx, Yorks ... ..	1,624	41	96	719	901	4
Kidland, Northumberland	3,001	303	—	1,794	1,169	38
Kielder, Northumberland... ..	72,533	526	11	44,037	1,985	26,511
Knaresborough, Yorks ... ..	680	—	30	553	127	—
Langdale, Yorks ... ..	14,810	116	72	6,009	778	8,023
Londesborough, Yorks ...	896	23	50	473	407	16
Ray, Northumberland ... ..	1,996	209	—	1,938	23	35
Redesdale, Northumberland	17,156	20	—	11,642	226	5,288
Rievaulx, Yorks ... ..	3,173	43	—	319	2,649	205
Rosedale, Yorks ... ..	11,501	306	24	6,972	1,381	3,148
Rothbury, Northumberland	4,120	204	105	2,770	975	375

† Formerly Irton.

Appendix 11—continued

Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Scardale, Yorks ... ..	1,101	36	—	719	93	289
Selby, Yorks ... ..	1,530	—	24	966	562	2
Skipton, Yorks ... ..	164	—	—	3	161	—
Slaley, Northumberland & Durham ... ..	2,330	—	44	1,427	831	72
Tong Woods, Yorks ... ..	195	—	—	159	36	—
Wark, Northumberland ...	36,448	768	—	21,427	1,952	13,069
Weardale, Durham ... ..	4,386	123	—	123	842	3,421
Wharnciffe, Yorks ... ..	1,105	—	22	594	453	58
Widehaugh, Northumberland ... ..	70	—	—	—	—	70
Wynyard, Durham ... ..	1,821	—	78	857	952	12
York, Yorks ... ..	1,905	—	110	1,232	640	33
<b>EAST CONSERVANCY:</b>						
<b>TOTAL ... ..</b>	<b>111,799</b>	<b>584</b>	<b>2,254</b>	<b>88,092</b>	<b>12,434</b>	<b>11,273</b>
Ampthill, Beds ... ..	1,545	8	77	725	739	81
Bardney, Lincs ... ..	4,092	18	104	3,615	348	129
Beechwood, Beds & Herts	474	—	68	217	257	—
Bernwood, Oxon ... ..	1,483	22	97	762	721	—
Bramfield, Herts & Essex ...	1,296	—	65	693	582	21
Burwell, Lincs ... ..	682	17	56	648	32	2
Chilterns, Bucks & Oxon...	3,511	5	304	2,302	1,149	60
Ditton, Cambs ... ..	319	—	50	238	81	—
Dunwich, Suffolk ... ..	1,639	106	26	1,443	166	30
Gaywood, Norfolk ... ..	1,003	4	107	681	302	20
Hazelborough, Bucks & Northants* ... ..	2,560	—	14	2,131	78	351
Hevingham, Norfolk ... ..	1,452	7	77	1,025	401	26
Holt, Norfolk ... ..	852	7	34	753	25	74
Honeywood, Essex ... ..	981	2	85	167	802	12
Huntingdon, Hunts & Cambs ... ..	623	—	79	141	482	—
Kesteven, Lincs & Rutland	4,733	107	139	3,207	1,220	306
The King's Forest, Suffolk	6,054	81	8	5,280	187	587
Laughton, Lincs ... ..	2,144	—	30	2,041	51	52
Lavenham, Suffolk ... ..	716	2	81	200	516	—
Pytchley, Northants ... ..	495	—	32	279	216	—
Rendlesham, Suffolk ... ..	4,766	5	14	3,759	56	951
Rockingham, Northants	6,019	6	187	5,189	397	433
Salcey, Bucks & Northants*	1,337	—	49	1,274	35	28
Shouldham, Norfolk ... ..	1,290	—	11	1,061	143	86
Swaffham, Norfolk ... ..	3,813	—	15	3,290	2	521
Swanton, Norfolk ... ..	1,298	1	—	1,109	3	186
Thetford Chase, Norfolk & Suffolk ... ..	43,223	86	58	36,053	1,283	5,887
Tunstall, Suffolk ... ..	3,088	3	—	2,878	39	171
Walden, Essex ... ..	1,021	7	85	419	576	26
Walsham, Norfolk ... ..	811	2	58	662	143	6
Waveney, Suffolk & Norfolk	484	—	18	344	101	39
Whaddon Chase, Bucks ... ..	584	—	50	117	467	—
Wigsley, Lincs & Notts ... ..	2,184	—	75	1,559	229	396
Willingham, Lincs... ..	2,711	88	58	2,253	362	96
Yardley Chase, Beds & Northants ... ..	2,516	—	43	1,577	243	696

Appendix 11—continued

Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
<b>SOUTH EAST CONSERVANCY:</b>						
TOTAL ... ..	60,447	192	2,178	43,663	14,496	2,288
Abinger, Surrey ... ..	1,291	—	38	512	618	161
Alice Holt, Hants & Surrey*	2,342	—	9	2,010	50	282
Alton, Hants ... ..	1,080	62	—	873	94	113
Andover, Hants ... ..	1,647	—	108	1,157	343	147
Arundel, Sussex ... ..	2,553	—	99	2,261	260	32
Ashley Hill, Berks ... ..	401	—	49	279	119	3
Badbury, Berks ... ..	578	—	46	271	307	—
Basing, Hants ... ..	211	—	—	204	7	—
Bedgebury, Kent & Sussex*	2,375	—	42	2,074	88	213
Bere, Hants* ... ..	1,972	—	69	1,588	358	26
Bishopstoke, Hants ... ..	404	—	54	285	118	1
Bramshill, Berks & Hants...	4,531	6	14	4,062	331	138
Brightling, Sussex ... ..	2,078	78	72	878	1,179	21
Bucklebury, Berks ... ..	285	—	23	246	39	—
Challock, Kent ... ..	2,378	4	66	1,736	636	6
Charlton, Sussex ... ..	2,628	—	104	1,920	707	1
Chiddingfold, Surrey & Sussex ... ..	2,213	—	54	2,078	128	7
Chilworth, Hants ... ..	1,122	—	48	120	996	6
Corhampton, Hants ... ..	525	—	30	196	329	—
Crawley, Hants ... ..	329	—	—	316	13	—
Effingham, Surrey ... ..	542	—	40	284	257	1
Friston, Sussex ... ..	1,986	—	—	1,723	238	25
Gravetye, Sussex ... ..	910	—	11	392	31	487
Groombridge, Sussex & Kent ... ..	155	—	6	111	36	8
Havant, Hants ... ..	1,343	—	93	541	800	2
Hemsted, Kent ... ..	1,024	1	28	974	17	33
Hursley, Hants ... ..	2,412	—	117	1,429	983	—
Joydens Wood, Kent ... ..	333	—	30	64	269	—
Lyminge, Kent ... ..	2,594	—	51	2,410	126	58
Marden, Sussex ... ..	1,200	—	14	915	184	101
Maresfield, Sussex ... ..	738	—	63	456	280	2
Micheldever, Hants ... ..	3,046	15	103	2,546	438	62
Mildmay, Kent ... ..	272	6	18	209	63	—
Orlestone, Kent ... ..	1,085	—	56	943	140	2
Pen, Hants ... ..	314	—	4	141	170	3
Queen Elizabeth Forest, Hants & Sussex ... ..	2,477	7	64	1,630	718	129
Rochester, Kent ... ..	536	8	19	75	438	23
Rogate, Sussex ... ..	637	—	23	411	190	36
St. Leonards, Sussex ... ..	1,436	—	43	636	760	40
Shipburne, Kent ... ..	458	—	38	319	137	2
Slindon, Sussex ... ..	1,193	—	52	1,154	39	—
Southwater, Sussex ... ..	579	—	24	423	136	20
Vinehall, Sussex ... ..	1,452	—	90	1,040	371	41
Westbury, Hants ... ..	490	—	—	477	3	10
Westerham, Kent & Surrey	476	—	32	88	383	5
Wilmington, Sussex ... ..	881	—	131	622	221	38
Winterfold, Surrey... ..	321	—	68	265	56	—
Witley Park, Surrey ... ..	612	5	35	319	292	1
Woking Office Grounds ...	2	—	—	—	—	2



Appendix 11—continued

Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
<b>SOUTH WEST CONSERVANCY:</b>						
<b>TOTAL ... ..</b>	<b>80,807</b>	<b>292</b>	<b>2,133</b>	<b>57,294</b>	<b>18,232</b>	<b>5,281</b>
Aconbury, Hereford ... ..	613	—	—	88	525	—
Bampton, Devon ... ..	719	—	22	152	567	—
Bentley, Hants & Wilts ... ..	3,102	—	214	1,235	1,855	12
Blackdown Woods, Dorset ... ..	262	—	—	—	235	27
Blandford, Dorset ... ..	2,827	83	20	1,639	975	213
Bodmin, Cornwall... ..	1,491	—	14	1,278	47	166
Bradon, Wilts ... ..	1,827	—	87	1,324	398	105
Brendon, Somerset ... ..	2,861	—	44	2,309	256	296
Bruton, Somerset & Wilts... ..	1,035	—	23	1,028	—	7
Charmouth, Devon & Dorset ... ..	942	19	18	721	176	45
Collingbourne, Wilts ... ..	1,336	—	—	1,221	104	11
Cowley Woods, Gloucester ... ..	493	25	25	205	287	1
Croft Pascoe, Cornwall ... ..	453	—	6	40	413	—
Dartmoor, Devon ... ..	2,287	—	2	1,689	—	598
Dunster, Somerset... ..	2,022	—	53	1,241	180	601
Dymock, Gloucester & Hereford* ... ..	1,720	—	5	1,521	127	72
Eggesford, Devon ... ..	1,207	14	24	1,020	169	18
Erme, Devon ... ..	641	—	21	203	435	3
Fernworthy, Devon ... ..	1,505	—	—	1,501	—	4
Gardiner, Dorset & Wilts... ..	1,751	—	110	1,217	517	17
Glynn, Cornwall ... ..	2,518	—	49	2,064	322	132
Haldon, Devon ... ..	4,282	—	82	3,808	422	52
Halwill, Devon & Cornwall ... ..	4,918	5	44	3,870	360	688
Hartland, Devon & Cornwall ... ..	2,167	23	11	1,753	300	114
Haugh, Hereford ... ..	1,008	—	36	851	137	20
Herodsfoot, Cornwall ... ..	817	—	32	737	54	26
Honiton, Devon ... ..	1,481	—	156	714	738	29
Lydford, Devon ... ..	639	—	6	557	40	42
Mendip, Somerset... ..	1,223	2	119	1,141	—	82
Middlemarsh Woods, Dorset ... ..	331	—	38	41	290	—
Moccas, Hereford ... ..	973	—	111	363	610	—
Molton Woods, Devon ... ..	570	2	22	252	316	2
Neroche, Somerset & Devon ... ..	2,445	6	68	1,055	1,300	90
Okehampton, Devon ... ..	519	—	—	476	4	39
Pershore, Worcs ... ..	375	—	28	167	207	1
Plym, Devon ... ..	1,783	—	83	1,441	338	4
Poorstock, Dorset & Somerset ... ..	1,864	—	72	512	1,352	—
Purbeck, Dorset ... ..	1,595	21	32	1,437	59	99
Quantock, Somerset ... ..	2,766	12	31	2,314	98	354
St. Clement, Cornwall ... ..	454	—	14	285	164	5
Savernake, Wilts & Berks... ..	4,443	—	41	2,715	1,450	278
Sedgemoor, Somerset ... ..	431	—	30	334	97	—
Shepton, Somerset... ..	160	—	—	22	136	2
Stanway, Gloucester ... ..	1,150	5	20	427	79	644
Stokeleigh, Somerset ... ..	639	—	46	510	122	7
Wareham, Dorset ... ..	6,181	64	100	4,436	1,622	123
West Woods, Wilts ... ..	978	—	—	909	—	69
Wilsey Down, Cornwall ... ..	1,428	—	65	1,239	125	64
Wyre, Worcester & Hereford ... ..	3,575	11	109	3,232	224	119

Appendix 11—continued

Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NEW FOREST: TOTAL ... ..	77,710	128	374	33,132	2,435	42,143
Brighstone, Isle of Wight ...	1,594	—	19	1,316	86	192
Combley, Isle of Wight ...	753	—	—	548	194	11
Ferndown, Dorset ...	2,018	13	23	1,060	409	549
Hurn, Hants ... ..	1,529	92	—	874	308	347
Lytchett, Dorset ... ..	102	—	—	—	102	—
New Forest, Hants* ...	65,544	—	281	24,091	1,052	40,401
Osborne, Isle of Wight ...	233	—	11	178	48	7
Parkhurst, Isle of Wight* ...	1,440	—	11	1,007	125	308
Ringwood, Dorset & Hants	3,934	23	—	3,709	—	225
Shalfleet, Isle of Wight ...	563	—	29	349	111	103
DEAN FOREST: TOTAL ... ..	26,991	16	336	21,811	1,436	3,744
Dean Forest, Gloucester, Hereford & Monmouth*	25,190	1	272	20,235	1,274	3,681
Tidenham Chase, Gloucester	1,801	15	64	1,576	162	63

AREA STATEMENT OF LAND USE: BY FORESTS—SCOTLAND

Appendix 12 At 30th September, 1958 Acres

Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
NORTH CONSERVANCY: TOTAL ... ..	492,830	3,876	3,468	129,531	47,357	315,942
Achnasheen, Ross ... ..	754	23	79	353	261	140
Achnashellach, Ross ...	19,674	—	—	928	24	18,722
Aigas, Inverness ... ..	2,143	5	70	643	734	766
Ardross, Ross ... ..	6,373	36	264	4,607	675	1,091
Assich, Nairn ... ..	1,326	47	6	853	251	222
Balblair, Sutherland & Ross	6,234	141	12	1,866	454	3,914
Battan, Inverness ... ..	2,167	63	1	1,466	354	347
Boblainy, Inverness ... ..	2,690	1	94	2,534	1	155
Borgie, Sutherland ... ..	2,706	53	1	1,343	—	1,363
Ceannacroc, Inverness ...	19,881	120	81	1,868	2,246	15,767
Clach Liath, Ross ... ..	2,280	146	10	1,236	643	401
Clunes, Inverness ... ..	7,261	120	25	2,006	673	4,582
Craig Phadrig, Inverness ...	211	—	—	203	—	8
Craigs, Ross ... ..	2,022	153	48	1,586	323	113
Creag nan Eun, Inverness	1,922	—	—	1,364	6	552
Culloden, Inverness ... ..	2,447	—	4	2,365	29	53
Dornoch, Sutherland ... ..	2,844	75	145	1,150	317	1,377
Dunnet, Caithness ... ..	879	22	—	263	545	71
Eilanreach, Inverness ... ..	922	—	—	829	—	93
Farigaig, Inverness ... ..	7,087	114	88	2,172	1,399	3,516
Ferness, Nairn ... ..	1,494	3	—	1,021	6	467

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural Unplantable, &c.
Findon, Ross ... ..	2,366	—	—	2,244	11	111
Fiunary, Argyll ... ..	18,392	240	—	4,689	1,678	12,025
Glen Affric, Inverness ... ..	53,254	—	457	4,153	4,757	44,344
Glen Brittle, Skye, Inverness ... ..	8,858	—	—	1,578	52	7,228
Glen Cripesdale, Argyll ... ..	7,290	23	42	388	2,092	4,810
Glen Garry, Inverness ... ..	23,028	131	50	5,046	896	17,086
Glen Hurich, Argyll ... ..	15,180	—	60	3,118	683	11,379
Glen Loy, Inverness ... ..	2,546	—	—	1,941	106	499
Glen Righ, Inverness ... ..	5,883	28	1	2,535	12	3,336
Glen Shiel, Ross ... ..	3,653	—	—	763	—	2,890
Glen Urquhart, Inverness... ..	16,276	51	205	3,898	1,228	11,150
Glen Varragill, Skye, Inverness ... ..	8,546	102	—	390	325	7,831
Guisachan, Inverness ... ..	5,644	30	134	2,033	969	2,642
Healaval, Skye, Inverness... ..	1,265	112	—	330	597	338
Inchnacardoch, Inverness... ..	9,527	102	—	2,543	386	6,598
Inshriach, Inverness ... ..	11,837	364	4	3,283	3,235	5,319
Inverinate, Ross ... ..	1,234	—	—	1,038	—	196
Kessock, Ross ... ..	1,666	136	—	1,316	45	305
Kilcoy, Ross ... ..	3,564	—	25	2,981	113	470
Lael, Ross ... ..	3,583	58	20	2,244	414	925
Laiken, Nairn ... ..	838	—	—	823	3	12
Leanachan, Inverness ... ..	19,137	15	346	3,296	3,112	12,729
Longart, Ross ... ..	1,522	43	—	1,304	142	76
Millbuie, Ross ... ..	7,336	—	—	6,730	9	597
Morangie, Ross ... ..	7,562	—	232	5,085	736	1,741
Naver, Sutherland... ..	16,908	114	—	114	5,037	11,757
Nevis, Inverness ... ..	7,659	—	—	977	3	6,679
North Strome, Ross ... ..	1,969	25	—	884	28	1,057
Oykell, Ross & Sutherland ... ..	4,581	215	85	1,536	2,307	738
Portclair, Inverness ... ..	5,500	—	—	2,341	12	3,147
The Queen's Forest, Inverness ... ..	12,500	8	2	3,237	75	9,188
Raasay, Isle of Raasay, Inverness... ..	749	7	1	536	35	178
Ratagan, Inverness & Ross ... ..	5,831	100	—	1,682	741	3,408
Rumster, Caithness ... ..	2,362	50	—	917	—	1,445
Salen, Mull, Argyll ... ..	25,592	194	176	5,114	3,474	17,004
Shin, Sutherland ... ..	39,519	215	85	3,333	204	35,982
Slattadale, Ross ... ..	1,742	—	—	863	289	590
South Laggan, Inverness ... ..	4,192	—	—	1,110	—	3,082
South Strome, Ross ... ..	3,556	22	3	1,270	40	2,246
Strath Conon, Ross ... ..	3,289	—	101	2,076	609	604
Strath Dearn, Inverness ... ..	4,238	75	45	2,409	211	1,618
Strath Mashie, Inverness ... ..	4,542	22	186	1,363	2,010	1,169
Strath Nairn, Inverness ... ..	2,437	21	19	1,185	162	1,090
Strathy, Sutherland ... ..	804	31	—	245	336	223
Sunart, Argyll ... ..	2,569	72	100	1,281	820	468
Torrachilty, Ross ... ..	7,941	148	154	1,726	422	5,793
Urray, Ross ... ..	998	—	7	881	—	117
Hoy Experiments, Orkney ... ..	32	—	—	32	—	—
Lewis Experiments, Isle of Lewis, Ross ... ..	16	—	—	14	—	2
<b>EAST CONSERVANCY:</b>						
<b>TOTAL ... ..</b>	<b>273,758</b>	<b>2,851</b>	<b>2,236</b>	<b>140,375</b>	<b>44,673</b>	<b>88,710</b>
Allean, Perth ... ..	9,875	159	42	2,185	2,136	5,554
Alltcailleach, Aberdeen ... ..	3,806	—	—	3,487	230	89

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
Benachie, Aberdeen ...	6,264	119	89	3,175	836	2,253
Bin, Aberdeen & Banff ...	8,599	117	141	6,204	1,394	1,001
Blackcraig, Perth ...	2,451	36	—	1,667	291	493
Blackhall, Kincardine ...	4,684	12	21	2,838	1,710	136
Blairadam, Fife & Kinross	2,568	22	9	1,923	400	245
Carden, Fife ...	547	—	—	536	2	9
Clashindarroch, Aberdeen	18,419	285	—	10,937	1,189	6,293
Countesswells, Aberdeen & Kincardine ...	877	—	28	687	141	49
Craigvinean, Perth... ..	4,286	—	18	3,411	101	774
Culbin, Moray & Nairn ...	7,738	77	—	7,275	—	463
Cushnie, Aberdeen ...	2,143	—	—	31	1,186	926
Dallas, Moray ...	2,081	—	1	1,012	340	729
Forest of Deer, Aberdeen... ..	3,456	—	28	2,227	785	444
Delgaty, Aberdeen & Banff	2,220	86	—	1,394	819	7
Drummond Hill, Perth ...	7,416	—	16	4,281	575	2,560
Drumtochty, Kincardine ...	9,685	296	38	4,445	3,323	1,917
Durriss, Aberdeen & Kincardine	4,618	82	1	4,225	100	293
Edensmuir, Fife ...	1,794	2	—	1,581	74	139
Elchies, Moray ...	4,355	20	261	1,113	1,974	1,268
Faskally, Perth ...	1,043	—	26	274	652	117
Fetteresso, Kincardine ...	8,463	302	49	5,292	605	2,566
Fonab, Perth ...	2,237	115	—	1,246	494	497
Glendevon, Perth & Kinross	915	—	—	876	—	39
Glendoll, Angus ...	3,713	91	2	856	622	2,235
Glenerrochty, Perth ...	2,509	62	16	785	1,338	386
Glenisla, Angus & Perth ...	12,002	187	100	2,911	3,228	5,863
Glenlivet, Banff ...	7,446	274	—	5,940	330	1,176
Glenprosen, Angus ...	8,326	88	—	196	1,304	6,826
Hallyburton, Angus & Perth	2,123	—	16	1,969	128	26
Inglismaldie, Angus & Kincardine	1,412	—	54	1,344	61	7
Keillour, Perth ...	1,880	—	24	1,564	257	59
Kemnay, Aberdeen ...	1,398	—	25	1,328	53	17
Kinfauns, Perth ...	826	—	28	821	5	—
Kirkhill, Aberdeen ...	2,028	16	19	1,936	1	91
Ledmore, Perth ...	117	—	—	—	—	117
Lossie, Moray ...	1,904	—	—	1,669	3	232
Midmar, Aberdeen ...	2,110	—	73	1,188	422	500
Monaughty, Moray ...	4,345	—	29	3,845	142	358
Montreathmont, Angus ...	2,783	—	92	2,616	122	45
Newton, Moray ...	175	—	—	—	—	175
Newtyle, Moray ...	1,928	—	—	1,718	25	185
Pitfichie, Aberdeen ...	7,110	134	27	5,059	952	1,099
Pitmedden, Fife & Perth ...	2,118	—	4	1,934	67	117
Rannoch, Perth ...	45,396	38	150	2,955	11,822	30,619
Rosarie, Banff ...	6,536	—	262	4,735	489	1,312
Roseisle, Moray ...	2,026	—	—	1,964	—	62
Scotmore, Banff & Moray	820	—	—	817	—	3
Speymouth, Moray & Banff	12,480	91	333	9,512	1,861	1,107
Strathord, Perth ...	1,608	10	93	1,365	239	4
Teindland, Moray ...	3,155	—	101	2,238	206	711
Tentsmuir, Fife ...	4,053	—	20	3,370	34	649
Tornashean, Aberdeen ...	9,388	130	—	2,208	1,605	5,575
Whitehaugh, Aberdeen ...	1,503	—	—	1,210	—	293

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural Unplantable, &c.
<b>SOUTH CONSERVANCY:</b>						
TOTAL ... ..	256,982	7,191	938	119,866	50,988	86,128
Forest of Ae, Dumfries ...	12,639	494	14	11,569	497	573
Arcleoch, Ayrshire ...	3,782	235	—	235	3,154	393
Auchenroddan, Dumfries...	777	—	3	751	—	26
Bareagle, Wigtown ...	2,385	98	50	674	1,419	292
Brownmoor, Dumfries ...	828	40	16	553	265	10
Cairn Edward, Kirkcudbright	28,482	1,425	2	13,444	7,250	7,788
Cardrona, Peebles ... ..	1,859	—	—	1,413	—	446
Carrick, Ayr ... ..	32,605	577	—	7,120	2,268	23,217
Castle O'er, Dumfries & Selkirk ... ..	8,691	126	6	7,458	343	890
Change, Ayr ... ..	2,389	2	—	1,744	—	645
Clauchrie, Dumfries ...	639	—	—	567	5	67
Clydesdale, Lanark ...	897	—	33	376	504	17
Corriedoo, Kirkcudbright	1,022	—	—	964	1	57
Craik, Roxburgh & Selkirk	4,443	60	2	3,813	116	514
Dalbeattie, Kirkcudbright	6,310	222	84	4,943	832	535
Dalmacallan, Dumfries ...	2,127	43	67	1,596	484	47
Dreva, Peebles ... ..	1,354	—	77	803	524	27
Dundeugh, Kirkcudbright	5,964	313	—	3,735	1,082	1,147
Duns, Berwick ... ..	1,051	31	48	631	416	4
Eddleston, Peebles... ..	963	—	53	58	869	36
Edgarhope, Berwick & Midlothian ... ..	1,848	—	17	1,215	133	500
Elibank & Traquair, Selkirk & Peebles ... ..	5,594	217	—	3,386	924	1,284
Fleet, Kirkcudbright ...	1,375	—	18	1,220	32	123
Garcrogo, Kirkcudbright...	1,914	81	—	1,616	2	296
The Garraries, Kirkcudbright	7,712	218	—	781	3,203	3,728
Glengap, Kirkcudbright ...	2,265	88	5	1,969	212	84
Glentress, Peebles ... ..	2,359	—	6	1,964	11	384
Glen Trool, Kirkcudbright & Ayr ... ..	55,641	1,004	—	12,304	11,762	31,575
Greskine, Dumfries ... ..	3,357	115	48	2,419	680	258
Kilgrammie, Ayr ... ..	570	—	—	563	1	6
Kilsture, Wigtown... ..	511	—	—	507	—	4
Kirroughtree, Kirkcudbright	10,761	285	24	5,347	2,589	2,825
Laurieston, Kirkcudbright	4,533	256	37	3,262	1,123	148
Mabie, Kirkcudbright & Dumfries... ..	3,569	59	77	2,737	522	310
Newcastleton, Roxburgh & Dumfries... ..	7,754	244	2	5,139	2,225	390
Penninghame, Wigtown ...	5,162	239	61	2,527	919	1,716
Saltoun, East Lothian & Midlothian ... ..	885	—	52	368	468	49
Selm Muir, Midlothian & West Lothian ... ..	584	—	33	338	237	9
Stenton, East Lothian & Berwick ... ..	1,249	12	53	627	574	48
Upper Nithsdale, Dumfries	1,024	—	—	25	986	13
Watermeetings, Lanark ...	3,247	212	—	507	1,286	1,454
Wauchope, Roxburgh ...	13,480	434	6	7,050	2,287	4,143
Yair Hill, Selkirk & Roxburgh	2,342	61	44	1,536	783	23
Bush Nursery, Midlothian	9	—	—	—	—	9
Whittingehame Seed Orchard, East Lothian	30	—	—	12	—	18

Appendix 12—continued

Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
WEST CONSERVANCY:						
TOTAL ... ..	298,684	2,731	1,572	117,081	25,989	155,614
Achaglachgach, Argyll ...	3,901	80	69	1,971	1,020	910
Ardfin, Jura, Argyll ...	1,179	70	—	213	743	223
Ardgartan, Argyll ...	20,940	248	155	5,353	1,425	14,162
Asknish, Argyll ...	5,899	—	—	3,739	1	2,159
Barcaldine, Argyll ...	6,024	144	—	4,230	26	1,768
Benmore, Argyll ...	9,587	34	4	3,066	280	6,241
Carradale, Argyll ...	10,919	55	30	4,819	115	5,985
Carron Valley, Stirling ...	6,637	—	—	4,485	36	2,116
Corlarach, Argyll ...	5,121	65	1	2,329	238	2,554
Creran, Argyll ...	2,031	36	17	246	1,283	502
Cumbernauld, Dunbarton & West Lothian... ..	915	95	5	217	508	190
Dalmally, Argyll ...	4,091	151	19	1,168	2,461	462
Devilla, Fife & Clackmannan	3,397	—	252	2,476	747	174
Fearnoch, Argyll ...	1,342	—	4	1,133	—	209
Garadhban, Stirling & Dunbarton	1,297	—	20	1,218	28	51
Garelochhead, Dunbarton	1,048	22	53	687	225	136
Garshelloch, Stirling ...	684	—	5	396	288	—
Glenbranter, Argyll ...	8,712	80	—	3,599	157	4,956
Glenceo, Argyll ...	380	—	5	317	49	14
Glendaruel, Argyll ...	7,045	141	4	2,130	865	4,050
Glendochart, Perth ...	5,417	—	—	—	775	4,642
Glenduror, Argyll ...	8,318	—	—	2,660	19	5,639
Glenfinart, Argyll ...	8,712	71	20	3,196	10	5,506
Glenrickard, Arran, Buteshire	7,866	119	—	819	2,571	4,476
Inverinan, Argyll ...	12,796	93	93	5,307	802	6,687
Inverliever, Argyll* ...	29,634	126	147	6,517	717	22,400
Kilmartin, Argyll ...	1,563	12	193	510	997	56
Kilmichael, Argyll... ..	10,055	3	59	5,235	1	4,819
Kilmory, Argyll ...	3,960	151	20	2,448	450	1,062
Knappdale, Argyll ...	19,696	—	23	6,740	7	12,949
Leapmoor, Renfrew ...	539	—	37	167	372	—
Lennox, Stirling & Dunbarton	785	9	24	630	108	47
Loch Ard, Perth & Stirling	32,450	504	101	18,241	2,311	11,898
Loch Eck, Argyll ...	5,501	1	—	2,414	28	3,059
Loch Etive, Argyll... ..	5,888	—	—	41	2,199	3,648
Minard, Argyll ...	5,327	2	40	3,624	64	1,639
Rowardennan, Stirling ...	9,468	191	29	1,957	1,404	6,107
Saddell, Argyll ...	5,699	7	—	1,518	453	3,728
St. Fillans, Perth ...	1,968	50	108	1,166	686	116
Strathlachlan, Argyll ...	7,616	—	3	2,667	301	4,648
Strathyre, Perth ...	10,671	8	13	5,810	44	4,817
Tighnabruaich, Argyll ...	2,231	117	—	560	1,111	560
Torrie, Perth ...	1,157	36	19	1,040	10	107
Tulliallan, Fife ...	112	—	—	—	—	112
Rannoch Moor Experimental Plot, Argyll ...	106	10	—	22	54	30

AREA STATEMENT OF LAND USE: BY FORESTS—WALES

Appendix 13

At 30th September, 1958

Acres

Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Afforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
<b>NORTH CONSERVANCY:</b>						
TOTAL ... ..	179,780	3,952	1,761	113,052	23,475	43,253
Aberhirnant, Merioneth ...	6,663	213	—	3,040	688	2,935
Aeron, Cardigan ... ..	2,998	323	74	1,294	1,473	231
Arfon, Caernarvon ... ..	399	—	32	32	273	94
Bechan, Montgomery ... ..	681	10	37	550	130	1
Beddgelert, Caernarvon ...	3,321	6	44	1,930	272	1,119
Breidden, Montgomery & Salop ... ..	701	—	35	465	179	57
Carno, Montgomery ... ..	929	—	3	867	5	57
Ceiriog, Denbigh ... ..	1,629	41	22	1,178	304	147
Clocaenog, Denbigh & Merioneth	18,865	231	3	12,037	2,305	4,523
Clwyd, Denbigh & Flint ...	1,869	34	48	1,478	17	374
Coed Sarnau, Radnor ... ..	5,917	152	20	4,175	1,030	712
Coed y Brenin, Merioneth	19,374	281	213	11,281	1,075	7,018
Cynwyd, Merioneth ... ..	1,894	—	—	1,653	115	126
Deudraeth, Merioneth† ...	2,754	12	84	1,050	866	838
Dovey, Merioneth & Montgomery	19,351	422	75	14,567	1,664	3,120
Dyfnant, Montgomery ... ..	7,926	249	108	3,632	1,394	2,900
Edw, Radnor† ... ..	351	—	37	73	278	—
Elwy, Denbigh & Flint ... ..	1,456	—	72	1,226	209	21
Glanllyn, Merioneth ... ..	1,079	12	17	770	257	52
Goror, Denbigh & Salop... ..	747	—	33	613	113	21
Gwydyr, Caernarvon & Denbigh	19,947	89	90	12,174	560	7,213
Hafren, Montgomery ... ..	10,765	272	102	7,964	420	2,381
Halcyn, Denbigh & Flint†	975	3	81	668	209	98
Kerry, Montgomery, Salop & Radnor ... ..	2,750	14	39	2,530	94	126
Llambed, Cardigan & Carmarthen†	1,743	116	28	1,178	490	75
Llangollen, Denbigh ... ..	1,036	37	41	888	137	11
Lleyn, Caernarvon ... ..	2,208	90	34	868	1,154	186
Maelor, Denbigh, Flint & Salop ... ..	539	—	—	221	258	60
Mathrafal, Montgomery ... ..	2,587	75	96	1,730	821	36
Môn, Anglesey ... ..	3,683	150	4	2,061	933	689
Myherin, Cardigan ... ..	6,112	201	—	3,392	91	2,629
Penllyn, Merioneth ... ..	1,023	—	—	682	85	256
Radnor, Radnor & Hereford	6,368	15	81	4,914	387	1,067
Rheidol, Cardigan† ... ..	4,094	4	31	2,681	1,039	374
Taliesin, Cardigan & Montgomery	6,636	424	31	2,153	2,715	1,768
Tanat, Montgomery & Denbigh	961	41	85	733	153	75
Tarenig, Cardigan & Montgomery	4,463	318	1	2,175	990	1,298
Ystwyth, Cardigan ... ..	4,982	117	60	4,129	292	561
Chirk Depot, Denbigh ... ..	4	—	—	—	—	4

† The following forests have been renamed (new name in brackets): Pencerrig (Edw), Hafod Fawr (Deudraeth), St. Asaph (Halcyn), Derry Ormond (Llambed), Brynmawr (Rheidol).

Appendix 13—continued

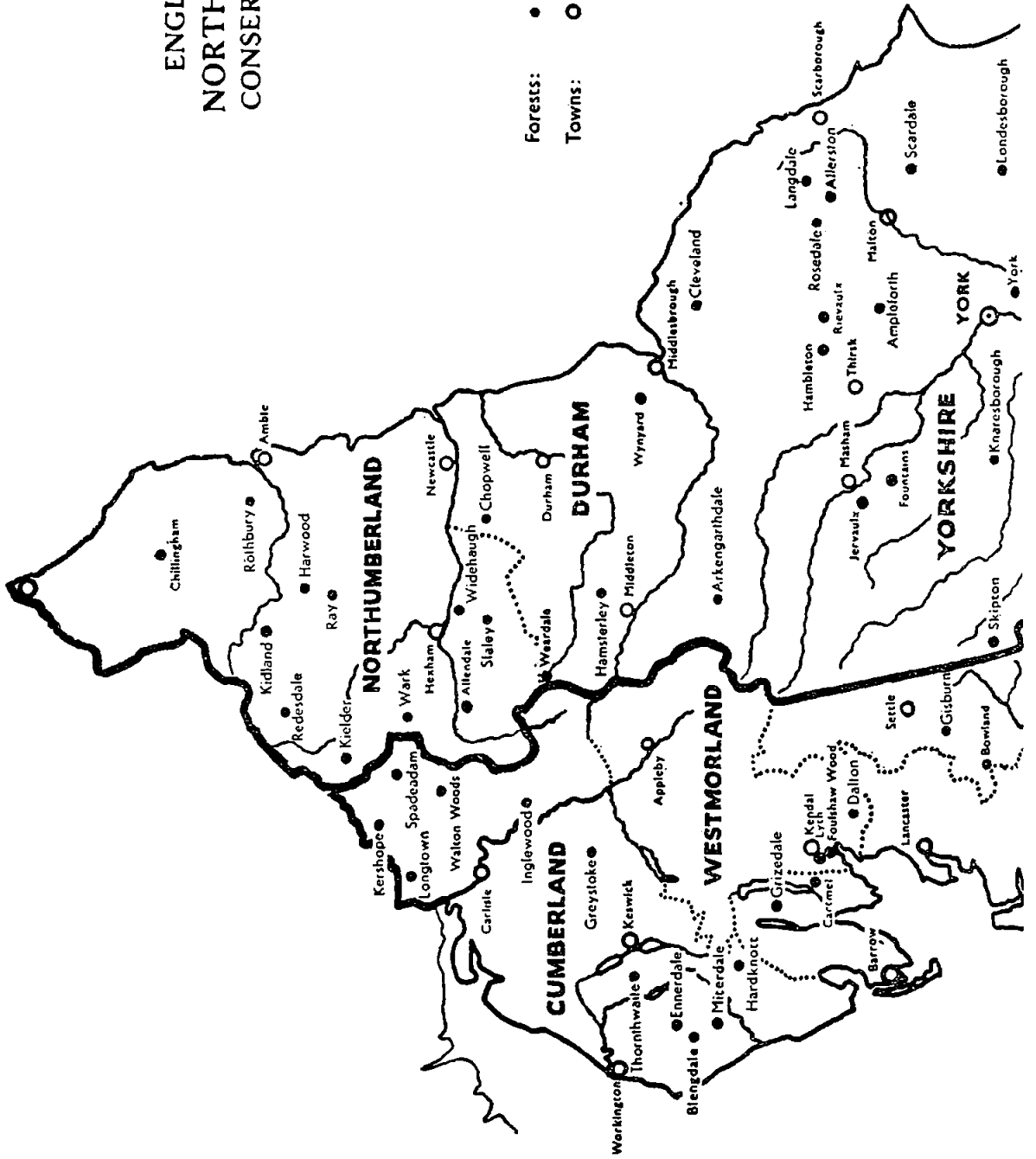
Forest	Total	Planted during year ended 30th September, 1958		Under Plantations	Provisional Allocation of Other Land	
		Aforested	Re-planted		Plantable	Agricultural, Unplantable, &c.
<b>SOUTH CONSERVANCY:</b>						
<b>TOTAL ... ..</b>	<b>156,795</b>	<b>3,248</b>	<b>1,399</b>	<b>98,112</b>	<b>37,622</b>	<b>21,061</b>
Bannau, Brecon ... ..	5,231	212	2	2,922	1,389	920
Brechfa, Carmarthen ... ..	16,232	93	41	12,596	812	2,824
Brecon, Brecon ... ..	2,210	27	—	1,605	306	299
Caeo, Carmarthen... ..	5,009	—	110	3,347	770	892
Chepstow, Monmouth ... ..	2,175	26	56	1,845	325	5
Cilgwyn, Carmarthen ... ..	1,271	64	51	1,043	226	2
Coed Caerdydd, Glamorgan	1,077	—	12	452	608	17
Coed Morgannwg, Glamorgan	38,021	675	93	25,296	6,721	6,004
Coed y Rhaiadr, Brecon ... ..	2,954	106	—	1,492	1,151	311
Conwil Elvet, Carmarthen	491	113	—	113	377	1
Crychan, Brecon & Carmarthen	9,653	294	53	8,356	191	1,106
Draethen, Glamorgan & Monmouth	1,325	—	31	570	747	8
Ebbw, Monmouth... ..	7,459	91	178	4,520	2,367	572
Gamrhiw, Brecon ... ..	1,164	177	14	808	248	108
Giedd, Brecon ... ..	746	—	—	574	31	141
Glasfynydd, Brecon & Carmarthen	3,583	—	28	3,324	160	99
Gower, Glamorgan ... ..	1,082	—	20	430	644	8
Goytre, Monmouth ... ..	720	—	10	449	266	5
Gwendraeth, Carmarthen... ..	282	—	—	68	212	2
Hay, Brecon, Hereford & Radnor ... ..	1,883	77	—	1,242	543	98
Irfon, Brecon ... ..	4,198	235	—	1,280	2,300	618
Llanddowror, Carmarthen	1,113	7	90	692	373	48
Llandeilo, Carmarthen ... ..	1,254	61	23	843	274	137
Llantrisant, Glamorgan ... ..	801	—	—	795	4	2
Monmouth, Monmouth ... ..	1,611	35	6	769	839	3
Mynydd Ddu, Brecon & Monmouth ... ..	3,384	—	122	2,464	396	524
Pembrey, Carmarthen ... ..	4,500	51	11	1,987	373	2,140
Penllergaer, Glamorgan ... ..	601	31	4	526	47	28
Preseli, Pembroke & Carmarthen	1,087	72	9	546	422	119
St. Gwynno, Glamorgan ... ..	5,516	28	27	3,330	1,545	641
Slebech, Pembroke ... ..	2,024	4	87	1,477	499	48
Tair Onen, Glamorgan ... ..	918	4	43	644	42	232
Talybont, Brecon ... ..	3,790	176	—	2,240	1,349	201
Teifi, Carmarthen & Cardigan	1,115	40	68	753	339	23
Tintern, Monmouth* ... ..	5,280	5	23	4,624	268	388
Towy, Cardigan, Brecon & Carmarthen ... ..	13,465	439	—	1,897	9,153	2,415
Tyddewi, Pembroke ... ..	948	105	—	396	529	23
Wentwood, Monmouth ... ..	2,622	—	187	1,797	776	49

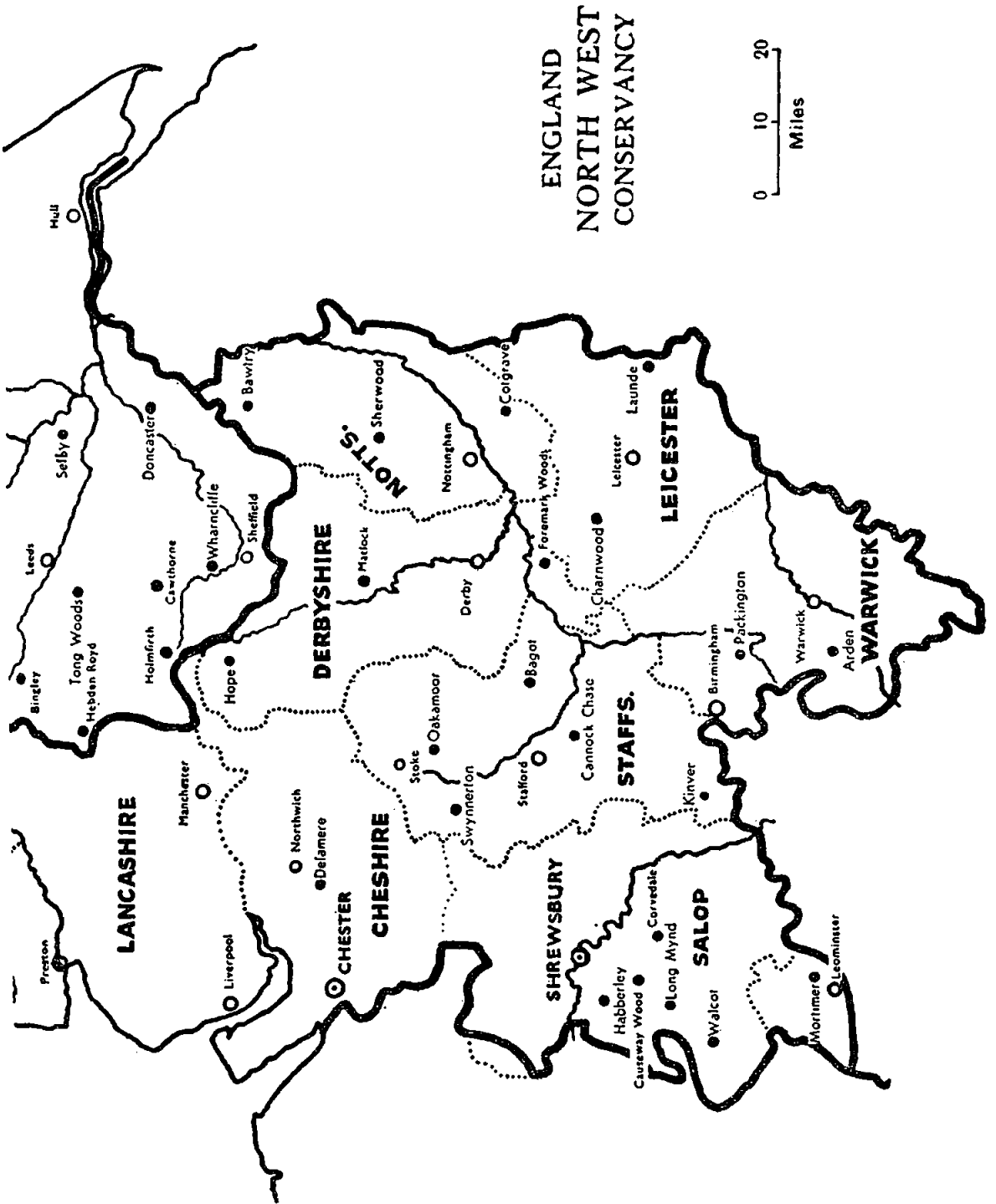


## **MAPS**

**Maps showing the distribution of the Commission forests, and the boundaries of the Conservancies, as at 30th September, 1958, follow overleaf.**

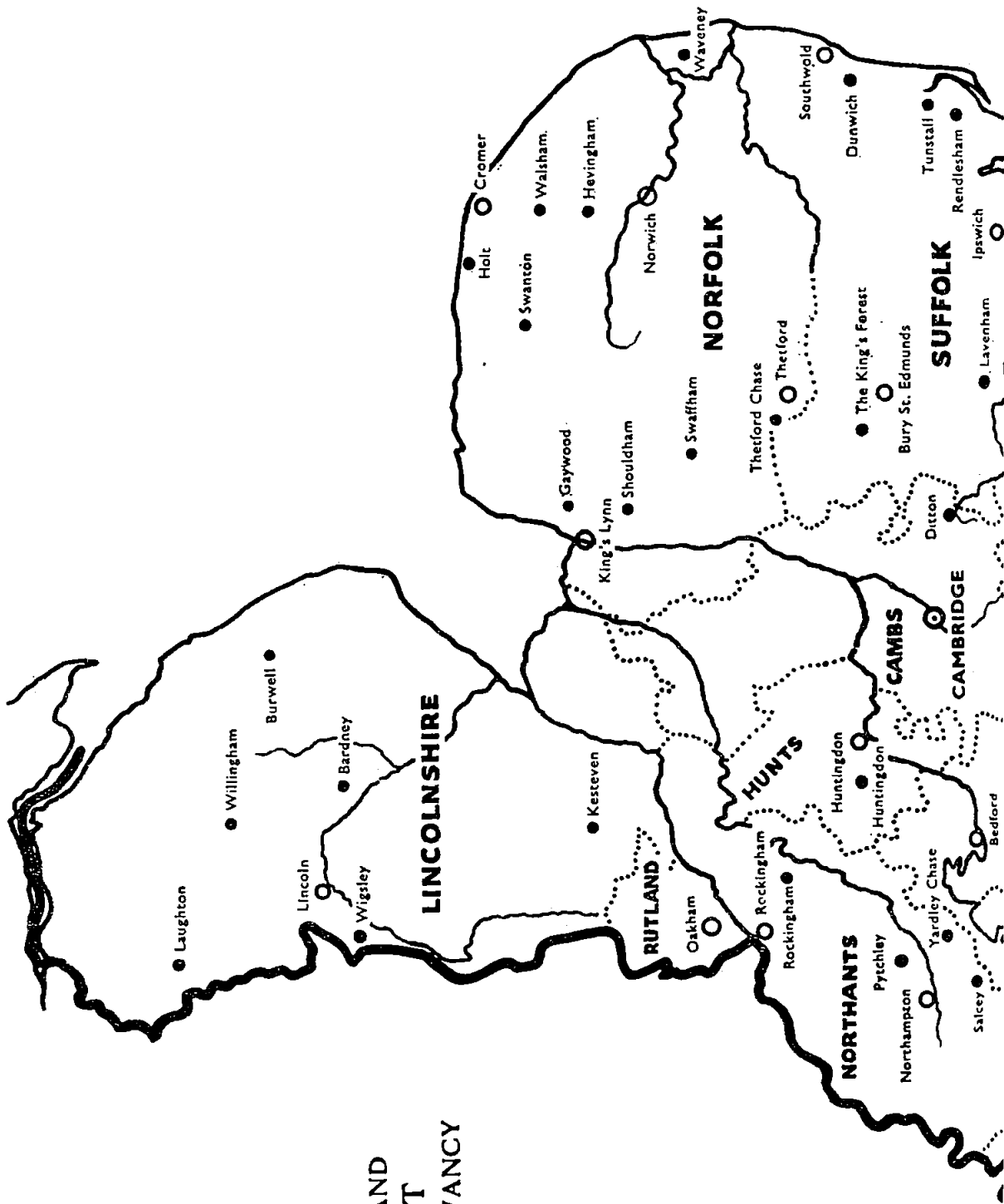
ENGLAND  
NORTH EAST  
CONSERVANCY

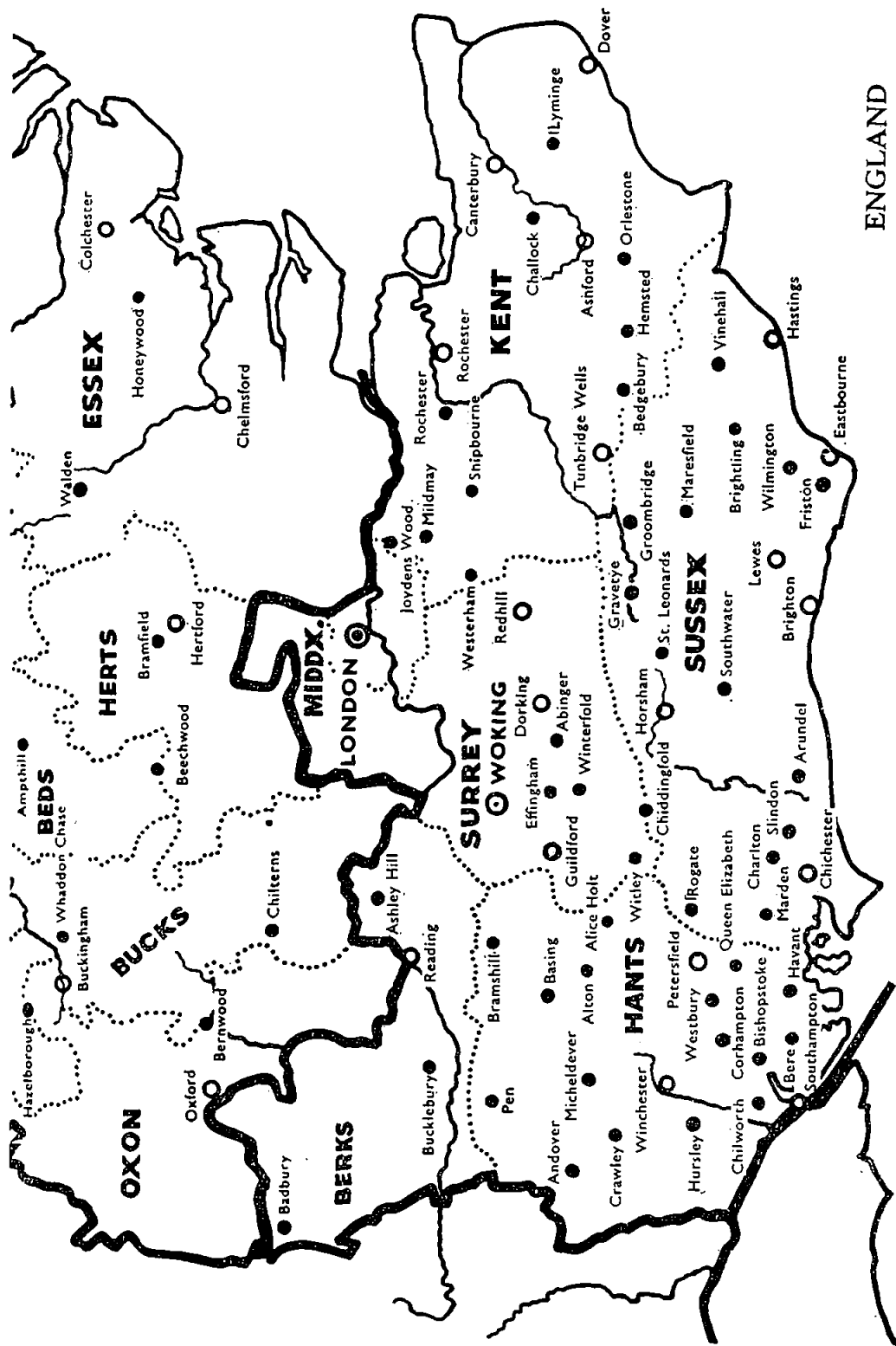




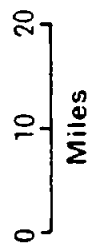
ENGLAND  
EAST  
CONSERVANCY

Forests: ●  
Towns: ○





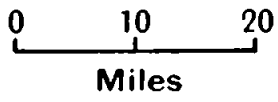
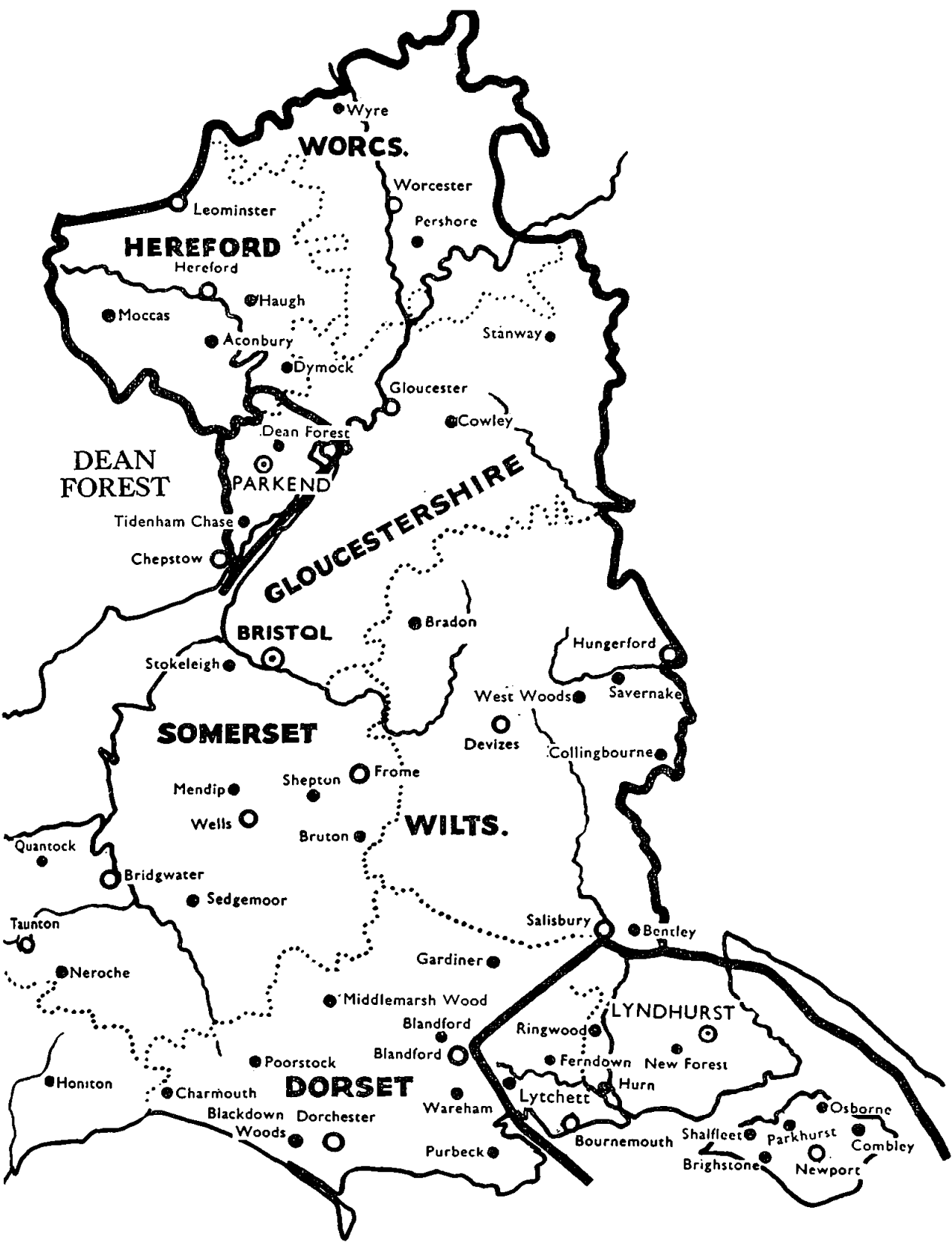
ENGLAND  
SOUTH EAST  
CONSERVANCY



Forests: ●  
 Towns: ○

ENGLAND  
 SOUTH WEST  
 CONSERVANCY

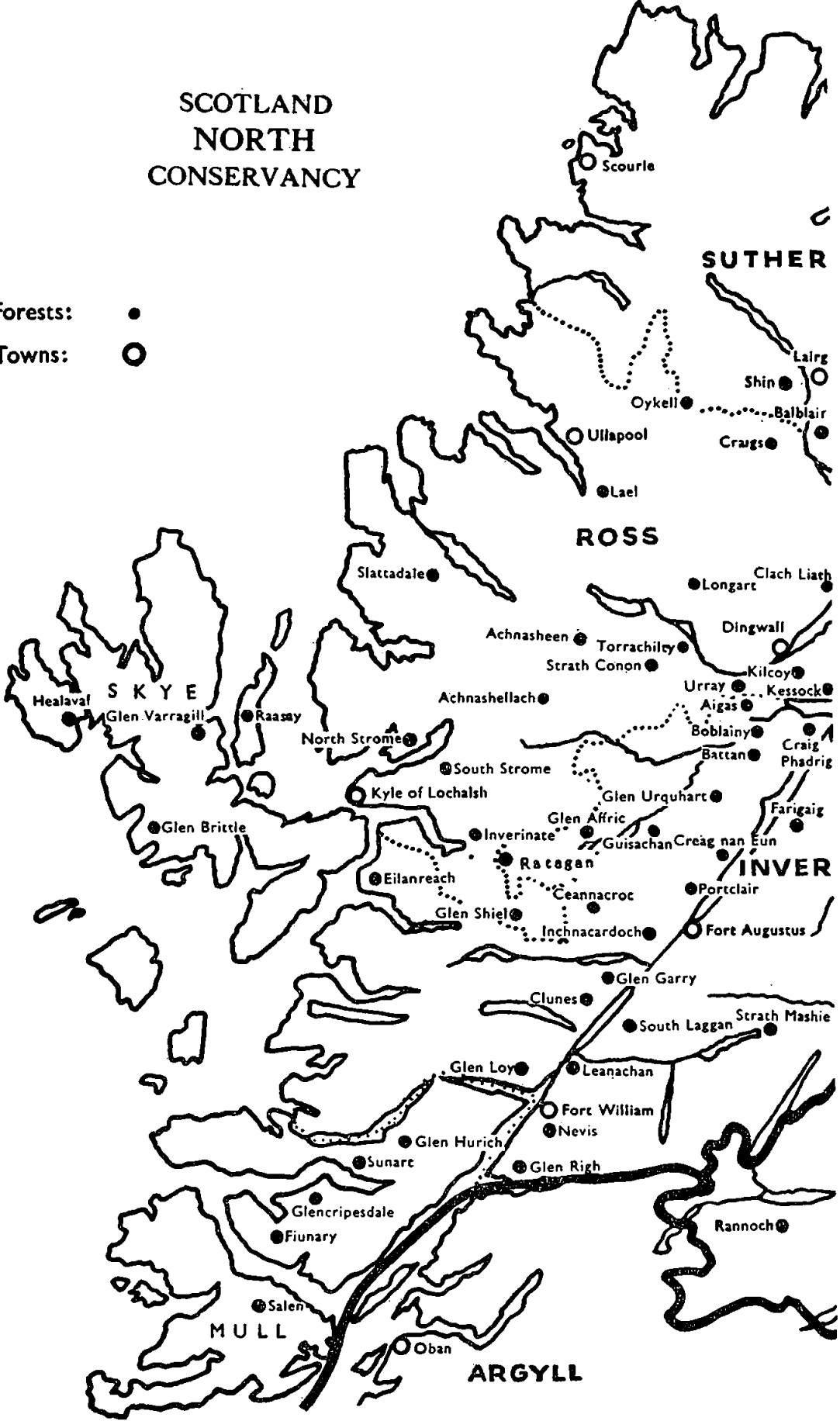




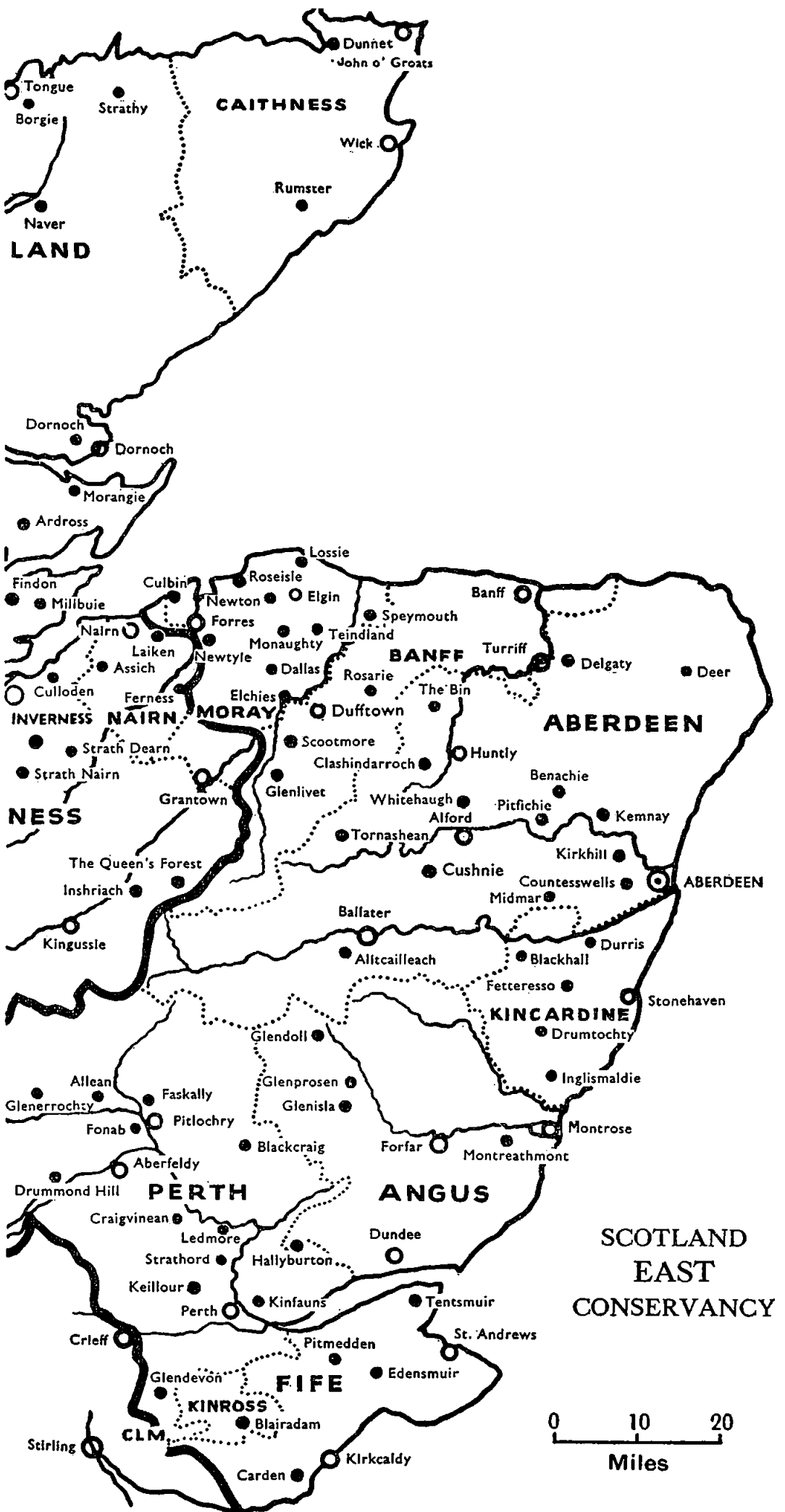
NEW FOREST

SCOTLAND  
NORTH  
CONSERVANCY

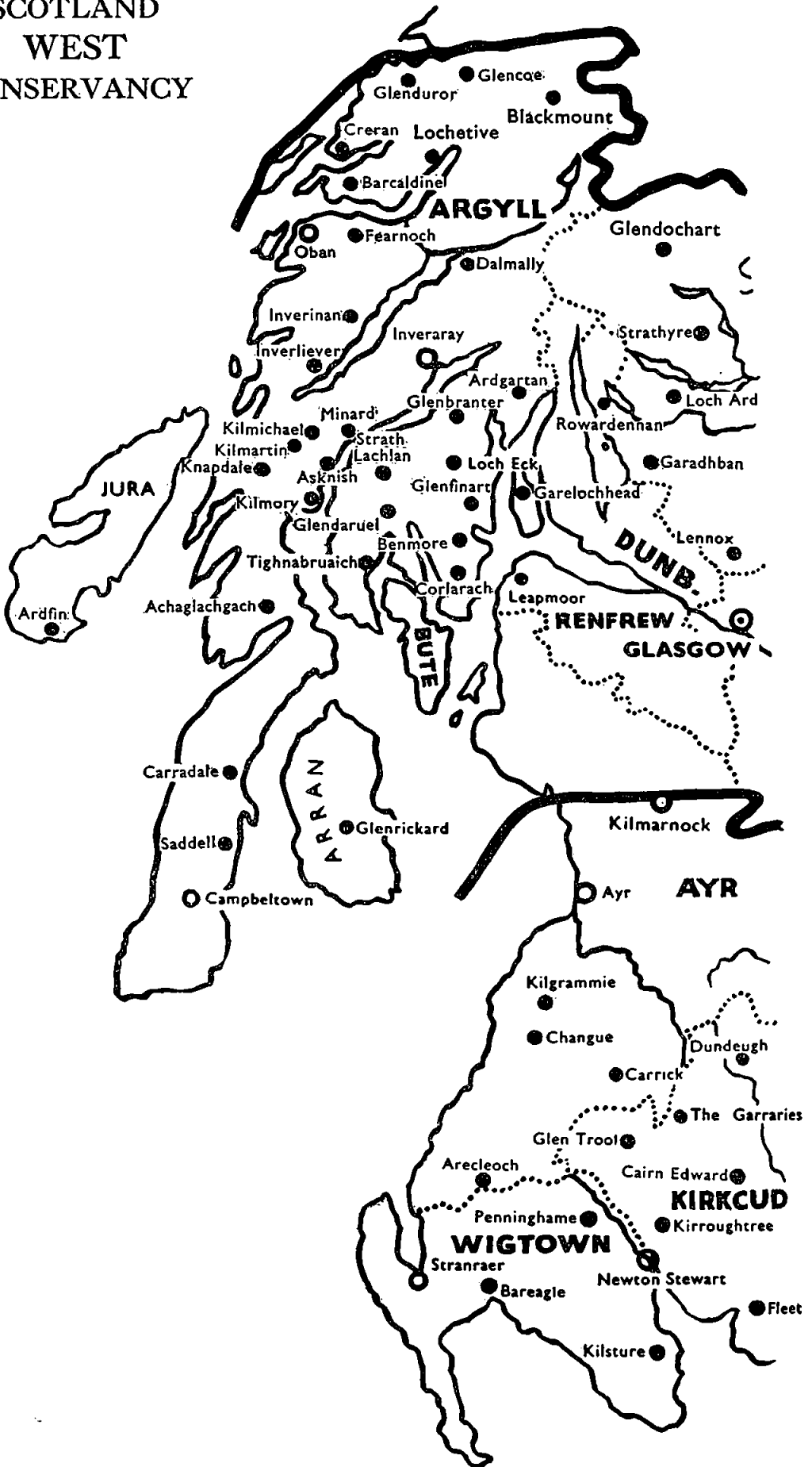
- Forests: ●  
Towns: ○





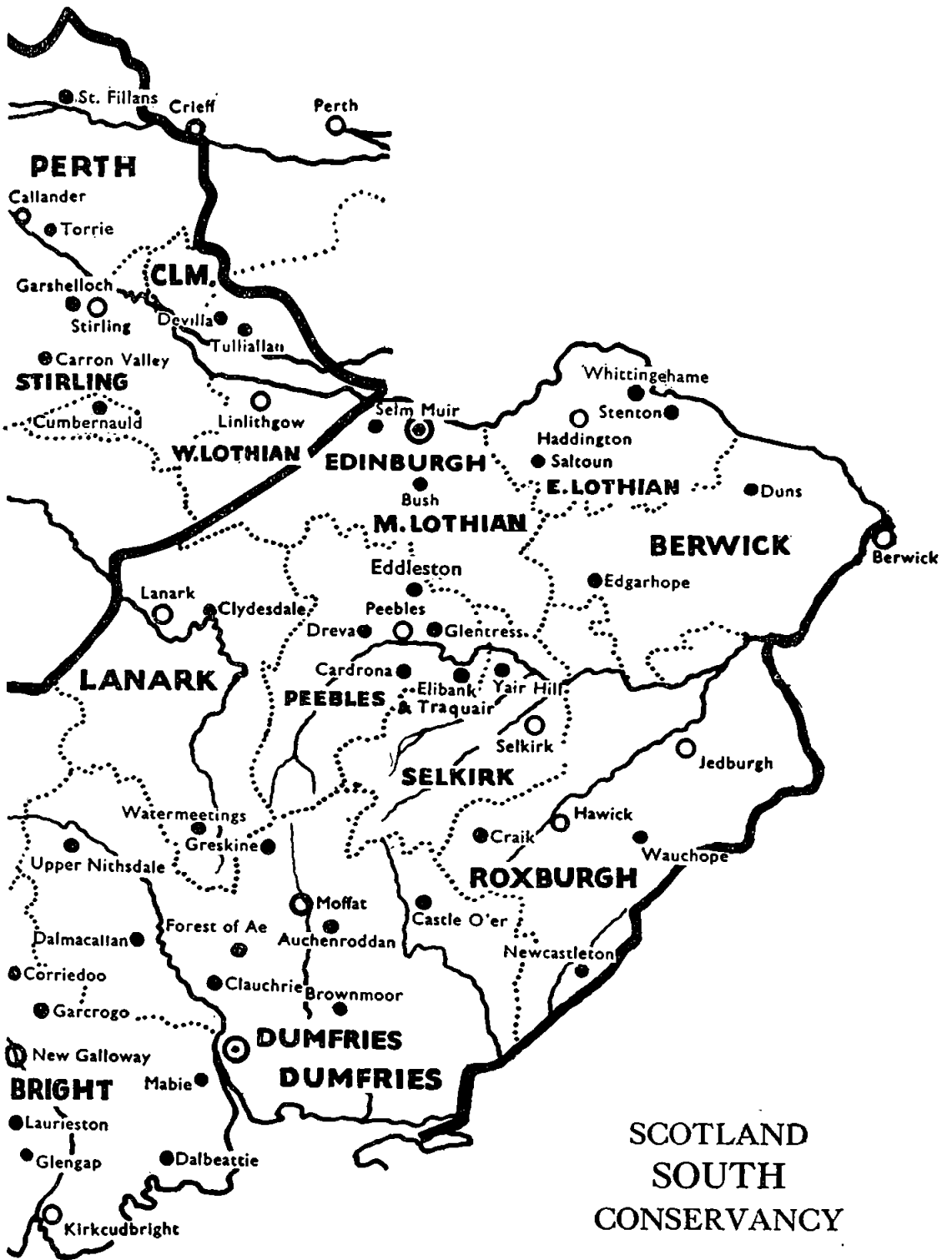


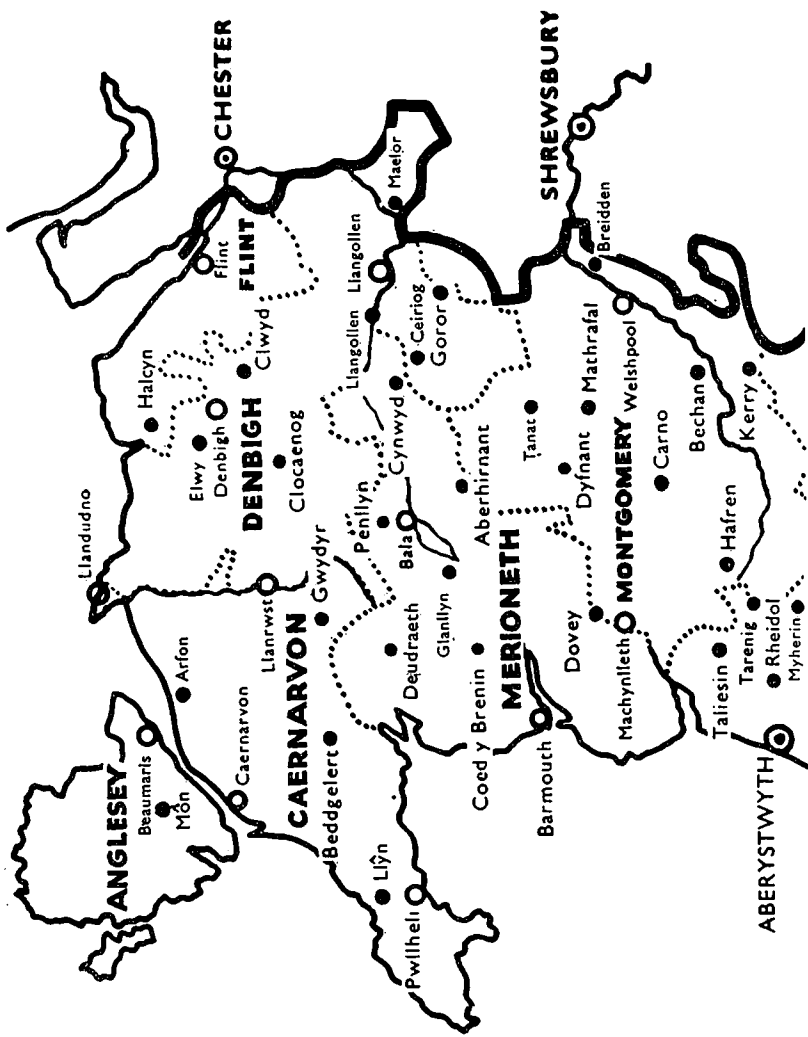
SCOTLAND  
WEST  
CONSERVANCY



Forests: ●

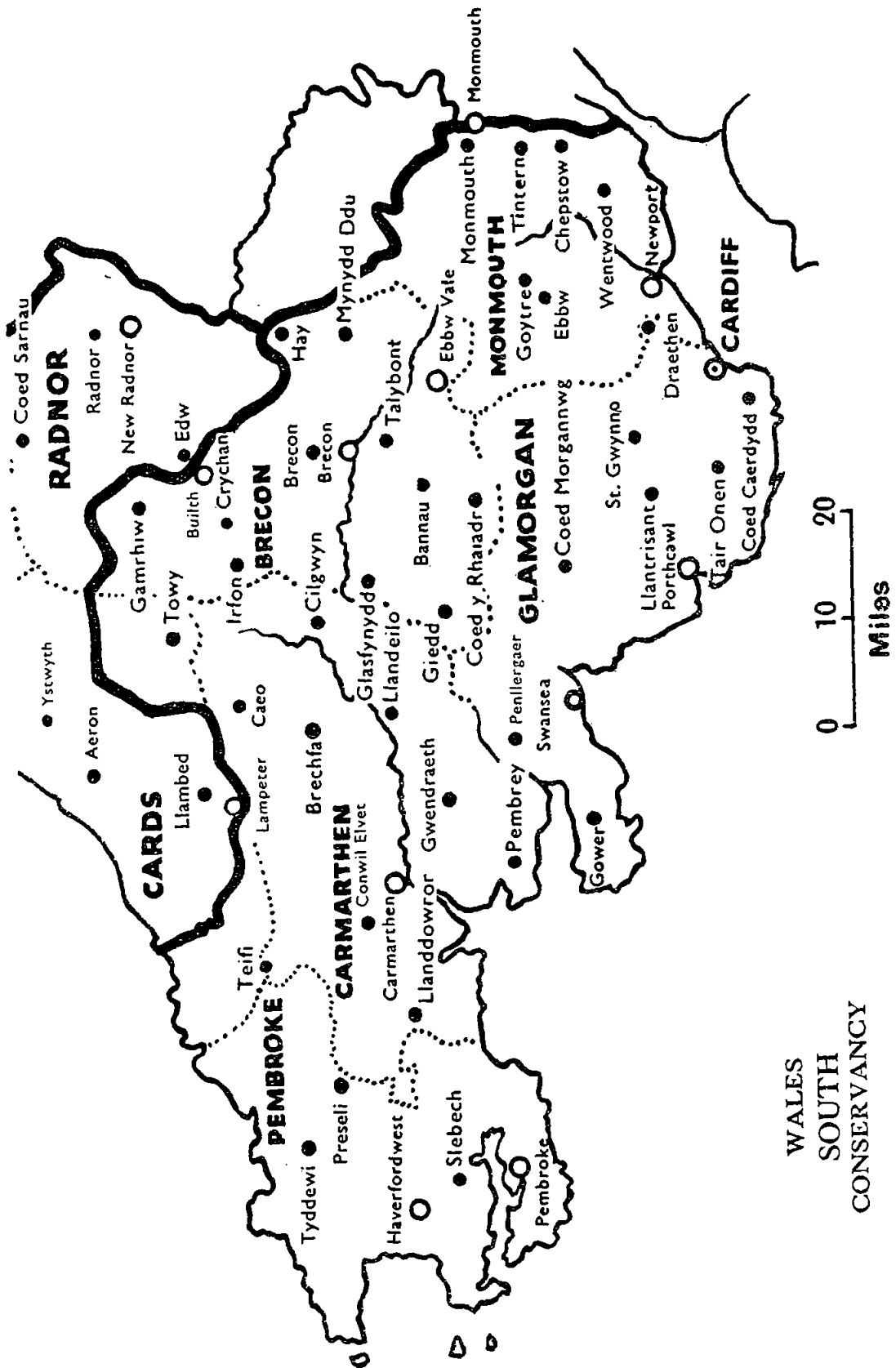
Towns: ○





WALES  
NORTH  
CONSERVANCY

- Forests: ●
- Towns: ○



WALES  
SOUTH  
CONSERVANCY

## Addresses of the Main Offices of the Forestry Commission

Headquarters of the Forestry Commission:

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

Director of Forestry for England:

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

Director of Forestry for Scotland:

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

Director of Forestry for Wales:

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

Director of Research and Education:

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

### Conservancy Offices

England:

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

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

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

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

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

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* 608.)

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

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

West: 20, Renfrew 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.)