

FORESTRY COMMISSION

Fortieth
Annual Report of the
Forestry Commissioners
for the year ended
30th September 1959

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

*Ordered by The House of Commons to be Printed
4th April 1960*

LONDON

HER MAJESTY'S STATIONERY OFFICE

PRICE 5s. 6d. NET



THE FORESTRY COMMISSIONERS

at 30th September, 1959

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

Major D. C. Bowser, O.B.E.

Lt.-Col. Sir Richard Cotterell, Bt., J.P.

Mr. A. P. F. Hamilton, C.I.E., O.B.E., M.C.

Mr. Edward Bryan Latham, M.M.

Mr. Lloyd O. Owen, J.P.

Sir John Stirling of Fairburn, K.T., M.B.E.

Major F. W. Strang Steel.

Mr. Robert Taylor, J.P.

Director-General: Sir Arthur Gosling, K.B.E., C.B., F.R.S.E.

Deputy Director-General: Sir Henry Beresford-Peirse, Bt., C.B., F.R.S.E.

Secretary: Mr. H. A. Turner.

Director of Forestry for England: Mr. G. B. Ryle.

Director of Forestry for Scotland: Mr. A. Watt.

Director of Forestry for Wales: Mr. J. R. Thom.

Director of Research and Education: Mr. James Macdonald, C.B.E.

CONTENTS

	<i>Page</i>
NAMES OF COMMISSIONERS AND SENIOR STAFF	2
WILLIAM HUBERT VAUGHAN, D.L., C.B.E., J.P.	5
THE FIRST FORTY YEARS ...	6
The Commission's Plantations	6
Private Forestry ...	10
The Timber Trade ...	11
Technical Advances ...	12
 FOREST YEAR: 1st OCTOBER 1958 TO 30th SEPTEMBER 1959	
GENERAL REVIEW	16
THE YEAR'S WORK	19
Private Forestry	19
Forestry Commission Operations	20
Finance	20
Staff	21
Acquisition of Land	21
Planting... ..	21
Production and Disposal of Forest Produce	21
Research	22
Education	24
Publications	24
National Forest Parks...	24
 COMMITTEES	26
National Committees	26
Regional Advisory Committees	26
Home Grown Timber Advisory Committee	28
 APPENDIX I. FINANCIAL AND STATISTICAL TABLES	29
<i>Table</i>	
1. Forestry Fund: Summary	29
2. Account of Forestry Operations	30
3. Nurseries Account	30
4. Services other than Forestry Operations	32
5. Balance Sheet	34
6. Land Use	36
7. Land Managed by Agricultural Departments	36
8. Forest Land Acquired, in Year	36
9. Summary Statement of Land Acquired, to end of year	37
10. Stocks of Nursery Plants... ..	37
11. Nursery Plants Sold to Trade	37
12. Seed Imports	38
13. Planting in the Year	39
14. Progress of Planting in Last Ten Years	39

	<i>Page</i>
15. Species Planted in the Year	40
16. Fires ...	41
17. Causes of Fires	41
18. Areas and Volumes Thinned and Felled	42
19. Sales of Timber	42
20. Roads	43
21. Properties Managed	43
22. New Houses ...	43
23. Dedication Scheme ...	44
24. Approved Woodlands Scheme ...	44
25. Area Planted by Private Owners ...	45
26. Volume Licensed for Felling and Thinning	45
27. Area Licensed for Clear Felling... ..	45
28. Land Use and Planting by Forests—England ...	46
29. Land Use and Planting by Forests—Scotland...	51
30. Land Use and Planting by Forests—Wales	56
31. England: Main Statistics	58
32. Scotland: Main Statistics	60
33. Wales: Main Statistics ...	62
APPENDIX II. MAPS	65
England	66
Scotland	72
Wales ...	76
ADDRESSES OF THE MAIN OFFICES OF THE FORESTRY COMMISSION ...	78
PLATES	<i>... Central Inset</i>

ACKNOWLEDGMENTS

Plate 5, by Mr. R. B. Turner, of Manchester, is reproduced by courtesy of the Civic Trust. Plates 11 and 12 are by Mr. W. D. Bevan, of Glyncoirwg, Glamorgan. The remaining illustrations are drawn from the Commission's own collection.

FORTIETH ANNUAL REPORT
OF THE
FORESTRY COMMISSIONERS
FOR THE YEAR ENDED
30th SEPTEMBER, 1959

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

28th January, 1960

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 40th Annual Report of the Forestry Commissioners which covers the Forest Year ended 30th September, 1959, and contains a review of the first forty years of the Commission's existence.

I am, Gentlemen,

Your obedient Servant,

(Sd.) RADNOR,

Chairman.

WILLIAM HUBERT VAUGHAN, D.L., C.B.E., J.P.

1. On 17th April, 1959, Mr. W. H. Vaughan, universally known as Billy, died on his way home from a meeting of the Commission. At the time of his appointment as a Commissioner in 1948 he was a guard in the railway service. He continued to combine that service with his work as a political agent in the Labour interest and with his varied public duties: for example, as a Forestry Commissioner, a National Parks Commissioner, Chairman of the Welsh Land Settlement Association, a member and Vice-Chairman of the Glamorgan Agricultural Executive Committee, as Mayor and Alderman of Port Talbot, as a Justice of the Peace and as Deputy Lieutenant of his native county of Glamorgan. He made a valuable contribution to the Commission's work, which he placed high among his many activities. His early years in the mining valleys of South Wales made him

especially appreciative of the opportunities the Commission provided for stable employment in the service of the community, and his primary interest was therefore in the social aspects of the Commission's work. But his interests were wide, and his commonsense, his sound judgment and his courage were shown whatever the problem under discussion: many a time he was the first to point to the way out of an apparent impasse in a characteristically modest, even hesitant, summing-up which went straight to the heart of the matter. He inspired respect and affection in all who knew him; and though small in stature, he had a great heart.

THE FIRST FORTY YEARS

THE COMMISSION'S PLANTATIONS

2. The Forestry Act 1919, "an Act for establishing a Forestry Commission for the United Kingdom, and promoting afforestation and the production and supply of timber therein, and for purposes in connexion therewith", received the Royal Assent on the 19th August, 1919, came into effect on the first day of September of that year. The first tree was planted on 8th December, 1919, at Eggesford in Devon, where in 1956 Her Majesty the Queen unveiled a stone recording the planting of the Commission's first million acres.

3. It is appropriate to review, forty years after the first planting, what has been done and what the taxpayer has to show for his money. By 30th September, 1959, the Commission's estate totalled over 2,400,000 acres, of which 1,224,000 acres were already planted and 316,000 acres remained to be planted, making altogether about 1,540,000 acres of forest land, an area greater than the whole of Northumberland or of Sutherland. There are forests in every county in Great Britain except London and Middlesex, from Borgie near Cape Wrath to Croft Pascoe on the Lizard. Their names make a sonorous roll-call: Mortimer, Arden and Micheldever; Moccas and Arkengarthdale; Watermeetings and Wauchope; Leanachan, Glenshiel and Rosarie; Llanddowror, Crychan, Coed y Brenin—the King's Forest, and Coed y Rhaiadr—the Wood of the Waterfall. The staff numbers 15,161, of whom 1,764 are forest officers, foresters, land agents and engineers in the field, 885 are indoor staff—such as executive and clerical officers, draughtsmen, shorthand typists—and 12,512 are forest workers, lorry drivers, warreners, shepherds and other manual workers. The Commission have acquired or built 4,600 houses and nearly 6,000 miles of road. The annual wage bill now amounts to more than £6 million. Net grants from the Exchequer since 1919 total £108 million; in return the Commission have provided an asset which already, when it is still very far from mature, can be conservatively valued at over £140 million. Even if they were not continuing to plant at the rate of something like 60,000 acres a year for the next five years, and at a reduced rate thereafter, the asset would continue to grow, by the natural increment of the trees. The produce of the plantations has already yielded £27·7 million, and the annual income, which is almost exclusively from thinnings and not from clear fellings of mature crops, is now running at the order of £2·2 million per annum, a rate which will greatly increase in a few years' time when the intensive plantings of the post-war years come into production.

4. The eventual yield on the taxpayer's money invested in the Commission's estate is expected to be of the order of 3 per cent., compound interest. This is in the Commission's view a satisfactory return, although to many it may seem low compared with yields expected from capital invested in commercial enterprises today. But the Commission can by no means always place strictly commercial considerations first—for example they can normally invest not in the most productive forestry land but in land which is marginal for agriculture: which means that they cannot always use the most productive species.

5. So much for the tangible assets; there are others less obvious. The Commission was set up primarily as an instrument for securing safety in war, by providing a reserve of timber, and partly as an insurance against possible shortage of world supplies. The strategic value of forestry is no longer so strongly emphasised, and there is no immediate prospect of shortage of imported timber, though some long-term forecasts at least point to a fairly rapid drying up of the exploitable resources of timber overseas. As these aspects have receded, the social aspects of forestry have assumed greater prominence. The Commission have, directly or indirectly, brought men and their families back to the land consistently and on an increasing scale. The numbers directly employed are impressive enough; to them must be added all those who, in increasing numbers as the woods mature, and as the Commission's plantations increase in area, will be employed by timber merchants and wood-using industries, and in the ancillary services such as shops, post offices, schools and libraries, which must be provided or enlarged, and can be economically maintained when there is a reasonably-sized community to support. For the most part this expansion of employment has been, and will continue to be, in the remote uplands, where until the Commission's arrival there had been a steady exodus of the young and active to the towns, who left behind them an ageing population, derelict homesteads, churches, chapels and schools, even whole hamlets, and land going back to a wilderness.

6. When the population of an area begins to fall, the social services—schools, roads, shops—inevitably begin to be neglected or abandoned; and this in turn accelerates the drift from the land. The increase of population following large scale planting creates both a need and a justification for improvements, and this tends to reverse the process. The most striking examples occur where the Commission has created a new village. For example, to provide a stable labour force for the forest of Inverliever beside Loch Awe in Argyll, a new forest village, now of 47 houses, has been built at Dalavich. In 1908, when there was no forestry activity there, the resident population of this area was 55, of whom only 11 were children under the age of 16. The population is now 318; there are over 125 schoolchildren, for whom the County Council has built a new school in the village. This is only one of the more obvious examples; all communities where forestry is undertaken on a large scale benefit in the same way.

7. In some quarters forestry has been described as an alien activity, an unnatural way of life, for the people of this country. But, in many areas, the traditional way of life had gone before the Commission appeared, and

cannot be replaced. Even if the criticism is a fair one, it ignores the remarkable resilience of our race, and its power to adapt itself to changed circumstances. The tenants and workers on upland farms do not themselves find workers in the forests aliens: the communities to which forestry has been added are becoming remarkably close-knit, a process which is naturally enough all the more pronounced where, for example, it is possible to provide village halls to serve as a centre for social activities for all elements in the community, and where the Commission are able to help in other ways, for example by providing labour at harvest time.

8. This is an extension of the integration of land use, which was described in the Zuckerman Report* and is in fact the Commission's policy: the marriage of forestry and pastoral farming to the benefit of both.

9. Many Commission workers combine forestry and farming: since 1919 the Commission have established over 1,000 Forest Workers' Holdings, each of a few acres, where the tenant agrees to carry out for the Commission, and the Commission on its side guarantees, a minimum of 150 days work in each year. Many of these holdings provide striking examples of the success of private enterprise coupled with regular participation in the State undertaking.

10. Another school of thought holds not so much that forestry is an alien activity, as that it bears an alien face: that the Commission have irretrievably ruined many square miles of unspoilt upland by imposing large blocks of commercially managed conifers on land where the natural cover is heather, bracken, moorgrass or scrub. The Commission would agree that there are some few areas, such as the heart of the Lake District, where large-scale conifer plantations, however well planned, will not be acceptable, at least in this generation: but they submit that, outside those exceptional areas, skilfully planned and intelligently managed conifer plantations, on sites where the soil and climate are best suited to conifers—and this describes most sites used by the Commission outside Southern England and many within it—can be a positive enhancement to the scenery as soon as they have passed out of the thicket stage, when no plantation—conifer or broadleaved—is beautiful. In particular they would not agree with the proposition that conifer plantations, if they are planted at all in National Park areas and areas of outstanding natural beauty, can only be regarded as a necessary evil; after all, tourists go to Sweden, to the Black Forest, to the Jura and to many other places where conifers predominate. The Commission admits that there are examples in their earlier plantations of defects such as straight rides, or fire lines, which unnecessarily ignored natural features. The Commission can have no complaint when criticism is directed to that kind of thing, though they can complain when their use of conifers is attributed to a wilful insensitiveness to natural beauty. There is no truth in the accusation that the Commission are prejudiced against hardwoods, and where hardwoods will make a worthwhile crop the Commission will continue to plant them. But the Commission have to make the best use of the land available to them; and if hardwoods will not grow well they believe that it would be as great an aesthetic mistake to plant

* *Forestry, Agriculture and Marginal Land*, H.M.S.O., 1957, 4s. 0d.

them as it is to disguise modern houses or offices, built of brick and concrete and steel, as Tudor cottages or Georgian mansions.

11. The Commission claim that, as the forests mature, they will be seen for what they are: at once an economic asset and a source of positive pleasure to the eye and spirit. Many have already reached that stage: Crychan and Dovey in Wales, Strathyre and Knapdale in Scotland, Queen Elizabeth Forest near Buriton on the borders of Sussex and Hampshire, are all examples.

12. The forests offer something more than visual pleasure and an economic return. It was very early recognised that, since many acquisitions, in the upland areas at least, include land which is too high or too exposed for tree planting, an opportunity arose to meet the growing pressure of townspeople for access to open country and especially to the hills. Accordingly it was decided to declare suitable areas as National Forest Parks, where access could be encouraged in co-operation with such bodies as the Ramblers Association and the Youth Hostels Association and could be aided by a modest provision of footpaths and camping sites. The first Park was opened in 1935, in Argyll. Since then others have been formed on Loch Lomond-side—named the Queen Elizabeth Forest Park in honour of Her Majesty's Coronation—and at Glenmore, Glentworth, Snowdonia, the Border and Hardknott.* The New Forest and the Forest of Dean have been traditionally, for many years, open to the public, and the Forest of Dean, with neighbouring forests in Monmouthshire, has also formally been declared a National Forest Park. Altogether the seven Parks now in being extend to over 400,000 acres, of which 180,000 acres is under trees. As funds permit, camping sites and shelters, parking places and footpaths are provided, and a Guide to each Park gives visitors an indication of the history, natural history and geology.

13. It is not only in the Forest Parks that visitors are welcome: the Commission encourage the public to visit their forests—and here the word "their" has a double meaning—to the greatest possible extent. In periods of high fire risk, entry to young plantations must be closely controlled. There are plantations where there is a sporting tenancy or where the sporting rights may have been reserved to the vendor or lessor, or where a neighbour's interests require some restriction on the public in the Commission's plantations. But, broadly speaking, the public are welcome in the woods. There must necessarily be restrictions on the use of motor vehicles which might interfere with timber felling or haulage; but this may even be an advantage, since it is increasingly rare to find places where one can be free of the noise and danger of motor traffic.

14. The interest taken by a number of schools and schoolteachers in forestry is very encouraging, and the Commission do all they can to foster it. Some schools have been allocated woodland on which to establish school forests and so follow the work of the Cymmer Afan Secondary Modern School at Argoed in the Afan Valley, South Wales, where forestry operations carried out by the children have been associated with traditional subjects in the school curriculum. Recently a class of the Woodhill Primary School

* Hardknott has since ceased to be regarded as a Forest Park, as the bulk of the land originally held by the Commission and not planted is to be sold.

at Woolwich set an example to other schools in towns and cities by undertaking a forestry project involving two and a half hours' work a week for a year, the practical work taking place in a local park.

15. There is thus growing up a generation of young people who have come to accept the Commission's forests as places where, quite simply, they can enjoy themselves, and in return learn how to protect the forests and help foresters by an understanding of their work.

PRIVATE FORESTRY

16. So far the review has covered only the Commission's direct work in building up a publicly-owned forest estate. Their responsibilities do not end there; they are charged with the duty "of promoting forestry"—and not solely state forestry. Progress in private forestry, though less evident to the layman, since it cannot be so spectacular to bring back unproductive or devastated woods into production as it is to create woodlands and forests where none existed, has nevertheless been most impressive. Despite lack of funds, labour and housing difficulties, shortage of plants, high taxation, and uncertainty about the future, many private owners have put their woods in order and have undertaken heavy commitments for the future. To have done so is evidence of courage and of faith in forestry.

17. Progress between the two wars was modest, but even so a total of over 125,000 acres was planted. In the second world war, as in the first, private woodland estates made a vital contribution to victory by providing 40 million tons of timber, thus substantially reducing the burden on shipping and, more important, saving the lives of seamen. By the end of the war it was calculated that 484,000 acres had been exploited, either by clear felling or by the removal of all worthwhile timber.

18. Before the war the Commission and private owners had discussed together how best private owners could be encouraged and helped to manage their woods more efficiently. Discussion was resumed during the war when the pattern of war-time devastation was more clearly revealed, and resulted in the preparation of the Dedication Scheme, sponsored by representatives of the owners as well as by the Commission. An owner dedicating his woods undertakes in perpetuity not to use his woods for any purpose other than the production of timber in accordance with the rules and practice of good forestry and, while he remains the owner, to work to a Plan of Operations approved by the Commission, to maintain the necessary records and to employ skilled supervision. In return, the Commission undertake to pay grants, the amount of which is reviewed from time to time. Owners who are unable or unwilling to dedicate but are willing to manage their woods according to a Plan approved by the Commission are also eligible for grants, though not on the full scale of the Dedication Scheme; grants for scrub clearance and for the planting of small woods are also available.

19. The Commissioners' Reports on Post War Forest Policy* in which the Dedication Scheme was outlined, postulated a total planting by private

* *Post-war Forest Policy*. Cmd. 6447, H.M.S.O., 1943, 4s. 0d., and *Post-war Forest Policy, Private Woodlands*, Cmd. 6500, H.M.S.O., 1944, 6d.

owners, in the first decade, of 200,000 acres at a rate rising to 25,000 acres per annum after the first four years. This programme, like that proposed for the Commission, assumed a more rapid recovery from the war than was in fact realised ; but the annual planting programme had in fact been surpassed by 1956 and is now running at over 30,000 acres per annum. Altogether since the end of the war over 260,000 acres have been planted by private owners. This represents an outstanding contribution to the country's timber resources.

20. The total cost to the Exchequer of grants to private woodland owners since 1919 amounted, by 30th September, 1959, to £5·0 million, of which by far the greater part—£4·5 million—has been paid since the end of the 1939–45 war. In return, out of the total of 2·3 million acres of privately owned woods which, according to the 1947 Census, were then capable of economic management, some 859,000 acres are, or are soon likely to be, covered by Plans of Operation approved by the Commission, and 372,000 acres have been acquired by the Commission. It is estimated that another 234,000 acres are being efficiently managed without the aid of grants. Thus more than half all privately owned woods are now being, or are on the way to being, skilfully managed, and the nation has acquired indirectly a most valuable investment in an essential raw material, at a modest cost to the taxpayer.

21. The Commission, as well as private woodland owners, recognise that the great effort which has gone into the rehabilitation of private woods would be largely wasted if their produce could not find a market at prices which represent a fair return on capital ; and the problem of marketing—which is common both to the private owners and to the Commission—has assumed greater importance in recent years. It was very thoroughly examined by the Committee on the Marketing of Woodland Produce* which reported in 1956 ; and it was in accordance with a recommendation of that Committee that the associations representing private woodland owners have been recast. One of the main objects of the new associations—the Timber Growers Association in England and Wales and the Scottish Woodland Owners Association, joining together as the Forestry Committee of Great Britain—will be to ensure that produce comes forward in a regular flow and that, if necessary, means are created to ensure that any potential surplus of production can be absorbed. This is a major task, and one which will mean a heavy call on the energy and enthusiasm of private woodland owners ; but the Commission are confident that the challenge will be met.

THE TIMBER TRADE

22. The third and indispensable partner in forestry is the home timber trade. The home timber merchants and contractors, whose skill and energy contributed so greatly to the war effort in 1914–18, and again in 1939–45, have a major part to play in the harvesting of the new plantations. This will call for a major readjustment, as did the problems of the war and early post-war years. Some of the traditional markets (for example the market for second grade oak for railway wagons) where they have not disappeared

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

altogether, can no longer provide steady employment. In others, there is more competition by other materials. And there have been changes in the type of materials the trade has to handle ; owing to wartime fellings the proportion of saw timber in conventional sizes is small, and the increasing output of small softwood thinnings calls for a technique which is new to many merchants. Consequently capital re-equipment and some reorganisation, for example in the direction to which the recent creation of the Home Grown Timber Marketing Corporation points, may well be necessary. The Associations representing the home timber industry, and the Timber Development Association, are alive to these problems, their approach to which is marked by a refreshing alertness and willingness to experiment.

TECHNICAL ADVANCES

23. If there has been a revolution in the place that forestry occupies in the national life, there has also been a revolution in forestry itself ; and the story of expansion told so far in this review must be completed with an account of how that expansion has been made possible.

24. In 1919 the old traditions of forestry, brought to their highest perfection in the late eighteenth and early nineteenth centuries, had almost gone. During the second half of the nineteenth century, mainly as a result of growing industrialisation, the old forestry received blows from which it did not recover ; its ruin was finally accomplished in this 20th century with wars and heavy taxation, which brought about the collapse and break-up of many of the large estates on which it had always been based. Thus, although the Commission could build on the work of one or two notable pioneers in modern forestry—for example Sir John Stirling Maxwell's work in turf planting and the use of fertilisers at Corrour in Inverness-shire—they had largely to create for themselves a new technique of large-scale afforestation. To-day their achievements are acknowledged by foresters throughout the world, and even the oldest-established and the largest forest services are able to learn something from this country.

25. The main credit for the adaptation of new techniques to the new conditions, and for the improvisation of new techniques, must go to the general body of Foresters and District Officers in the field, and the general directing staff. But the two specialist branches, Research and Education, also made a significant contribution. In 1919 the Research Branch consisted of one man ; today it numbers 194 and it is recognised as one of the leading forest research establishments in the world.

26. Since the main bulk of the Commission's needs for professional forest staff could be met by the university schools of forestry, the primary task of the Education Branch has been, throughout the Commission's history, to train the large numbers of foresters required. The two Forester Training Schools in existence before 1919 were insufficient, and three new schools were opened in 1920. Since then 1,778 men have qualified as Foresters at the Commission's schools, now four in number ; most of them have taken jobs with the Commission, but a number have gone into private forestry in this country, and others to overseas forest services and timber companies. In recent years the Branch has also arranged courses—usually of six weeks' duration—for employees on private estates, and it has also provided short

refresher courses for land owners and agents, local authority staffs, school-teachers and others outside the Commission's service.

27. It would be impossible, in a short review, to give a full account of the technical advances which have arisen in the course of the Commission's work, and have in turn made that work possible ; all that can be done is to pick out a few characteristic examples.

28. In the early years the main effort was concentrated on forming plantations, though even in those days a modest start was made on the problems which would inevitably emerge once the new plantations reached the thinning stage.

29. Nursery practice had a long tradition behind it in this country, and the Commission's task was to adapt the systems which had been developed in commercial and estate nurseries to the different conditions required for a large-scale state afforestation programme in which the main species used would be conifers. A number of important changes adopted by the Commission have now become standard, for example the use of grit as a covering for seed beds, to prevent frost-lift and otherwise to facilitate handling ; stratification of stored seed of some species ; and perhaps most important, the widespread use of woodland and heathland sites for the production of seedlings. It is now generally possible to produce strong one-year-old seedlings, big enough to line out, where before two-year-old seedlings were the rule, and the production of usable plants per pound of seed sown has doubled or trebled. In recent years the main progress has been in mechanisation, which is leading to the abandonment of many small hand-worked nurseries in favour of large specially laid out nurseries where machines can be used for almost every operation ; and the chemical control of weeds has greatly reduced the cost of the most expensive operation in nursery work.

30. From the early days of the Commission, it was recognised that drainage and cultivation of the peat-covered and heathland sites, on which so much of the afforestation work was inevitably carried out, was essential for rapid establishment and satisfactory growth, but the necessity to do this by hand placed a severe restriction on the extent of success that could be achieved. A major break-through came just before and during the 1939-45 war, with the introduction of tracked tractors and the development of specialised ploughs which made deep draining and intensive cultivation possible. With the help of these machines it is now possible to deal effectively with land which was formerly difficult to treat at all ; good crops of trees can be grown on sites which would otherwise yield only a poor scrubby growth. The problems of establishing plantations on a wide variety of soil types have now been satisfactorily solved, by ploughing, by draining where necessary, and by the use of fertilisers on sites of low natural fertility. There is still a problem on the poorer peats of the north-west of Scotland because, although crops of conifers can be established on those lands, we do not yet know whether they will maintain their initial growth. This is a subject on which research is proceeding. The difficulties met with in attempts at afforestation in the high country of the southern Pennines, where atmospheric pollution aggravates the difficulties caused by exposure on poor soil, have also still to be overcome. In the upland areas, conifers must be the main crop ; elsewhere, even where hardwoods have

always been the traditional crop, it is now recognised that, except possibly for use as pulp wood, and to a limited extent as coppice, the growing of hardwoods is not likely to prove an economic proposition unless high-grade timber can be produced. This has led to a marked change since the war in the techniques adopted, by the restriction of hardwoods—and oak in particular—to high-grade sites, and the abandonment, except in limited areas, of the planting of hardwoods pure, the practice being to mix them, in various patterns, with conifers. In dealing with cut-over and derelict broadleaved woodland, practice has moved away from clearance of all growth and full replanting, to the retention of much of the coppice and scrub growth as shelter, in the shade of which new crops are established. This practice, though not a new one, is now being widely and successfully followed; it has aroused considerable interest among European foresters, particularly those in France.

31. The principle of using plants grown only from selected seed, which has now been generally accepted, has already shown striking results in young beech plantations where the straightness and vigour of the trees is in marked contrast to those formed early in the Commission's history, when less attention was paid to seed origins. Similar, but perhaps less striking, results will follow from the more careful selection of seed now being made for all species, and from the tree breeding programme undertaken by the Research Branch.

32. A change of emphasis in the Commission's main effort—from the formation of plantations to their management—began to appear when the first plantations came into the thinning stage. This was in the last years before the war, and progress was checked during the war when only a small "caretaker" staff was available to maintain the immature plantations and to carry out a reduced planting programme. After the war there was pressure on all fronts—arrears of maintenance had to be overtaken, a great new planting programme was introduced and the earliest plantations were coming into production. Consequently, that period was marked rather by the application of current techniques than by technical developments. In the last few years, problems of harvesting have come to the front. By far the greatest part of the yield from our forests comes from thinnings, and it has been necessary to look at the thinning from both the silvicultural and the marketing points of view. Within the limits imposed by the silvicultural needs of the plantations, thinning is being recognised as an important instrument of management; foresters now realise that as well as being silviculturists they are part of a large commercial undertaking, and it was significant that when the Commission set up a Work Study Section their first concern was with the production side of the work. Already the effects are being seen in the introduction of new and up-to-date hand tools, rationalised methods of logging and properly calculated piece-work and incentive schemes. In the early stages of this era of production, it was appropriate also to arrange with the Forests Products Research Laboratory of the Department of Scientific and Industrial Research, at Princes Risborough, that a large proportion of the time of that Laboratory should be devoted to the determination of the various properties of home-grown timbers.

33. By no means least important of the latest techniques are the first steps that have been taken in experimenting with the use of fertilisers in checked plantations and pole-stage crops. The use of fertilisers, particularly phosphates, and surface vegetation treatment, have given excellent results on some checked plantations, and it is reasonable to expect that with judicious application they may well raise the production of relatively slow growing crops.

34. In fire protection the introduction of radio equipment was a major step forward, and on the statistical side the calculation of the expenditure theoretically justifiable on plantations at risk has helped to control costs. In protection against insect damage, spraying from the air is a valuable weapon in cases of any major attack by injurious species such as the pine looper moth (*Bupalus piniarius*), while in the field of forest pathology, the wide-spread incidence of the fungus *Fomes annosus* has been countered by treating all stumps with creosote or other deterrents to prevent infection in the remaining trees and in subsequent crops.

35. Until the end of the war there was virtually no building of forest roads. Since then, 4,000 miles of relatively cheap low-grade forest roads, using, in the more hilly districts, cheap local material—river gravel, morainic gravel and so on—have been built and the Commission are within sight of catching up the arrears of road-making. In the flatter country, particularly in the south of England and on heavy clay lands, heavily cambered graded roads of the parent material, well compacted, sown with grass and regularly mown, have been made as a cheap, useful and attractive method of giving access to the plantations for light traffic; metalling will come later when production begins.

36. British forestry has reached the point at which substantial progress has been made in repairing the damage caused by 19th century neglect and the excessive fellings of two wars. The problems of creating and establishing the country's forest estate have largely been solved; the problems of how best to manage it so as to reap a return on the investment, while at the same time preserving the asset so laboriously built up, are now to be faced.

FOREST YEAR : 1st OCTOBER, 1958 TO 30th SEPTEMBER, 1959

GENERAL REVIEW

37. There are no major developments in the Commission's work to be reported. A start has been made on the programme announced by the Minister of Agriculture in the House of Commons on 24th July, 1958, that for the five-year period 1959 to 1963 the planting programme would be about 300,000 acres, to be reduced in the period 1964 to 1968 to about 235,000 acres. Planting in the year amounted to 55,136 acres, an advance of 2,738 acres on the previous year and a little more than the programme set at the beginning of the year. The programme announced by the Government in 1958 stressed the need for the Commission to expand in the upland areas, where the social benefits of forestry are most marked. In fulfilment of this policy, and in keeping with the Government's policies for development in the Highlands* and in Mid-Wales†, the area planted included 10,350 acres in the Highland counties and 8,560 acres in upland Wales.

38. The Commission were faced with difficulty in acquiring all the land necessary to support this programme, and in the year the net plantable area acquired amounted to only 38,810 acres, distributed as follows:—

England ...	11,052 acres
Scotland ...	19,939 acres
Wales ...	7,819 acres

The reserve of plantable land at the end of the year fell by 9,700 acres to 316,500 acres, equivalent to five times the average annual planting programme for the next five years. This reserve is too small for the most economic working, particularly as much of the land available for planting in the immediate future is in areas where an increase in the rate of planting would only mean that they would be fully planted within a relatively few years, and before the earlier plantations had reached the stage when the men no longer needed for further planting could find work within them. In other areas, where the Commission hold tenanted land, the obvious solution—a more ruthless resumption of land from tenants—is not one which the Commission would wish to contemplate.

39. In private forestry the most important development was the completion of arrangements, in accordance with the recommendations of the Watson Report‡, for the formation of an effective association of woodland owners, which was made a condition precedent to the changes in the grant system and an increase in the level of grants foreshadowed in the Ministerial statement of 24th July, 1958. In England and Wales the Timber Growers Organisation was formed under the auspices of the Country Landowners Association. In Scotland a new body, the Scottish Woodland Owners Association, was set up. This Association, sponsored by the Scottish

* *Review of Highland Policy*, Cmd. 785, 1959. H.M.S.O., 9d.

† *Mid-Wales Investigation Report: Conclusions on Recommendations*, Cmd. 9809, 1956. H.M.S.O., 6d.

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

Landowners Federation, has taken over the entire organisation and functions of the Co-operative Forestry Society (Scotland) Limited, which since 1911 has made so important a contribution to private forestry in that country. Co-ordination of the work of these two bodies will be in the hands of the Forestry Committee of Great Britain, which will also represent the woodland owners of Great Britain when it is necessary to speak for them as a whole. This Committee had not been formally constituted at the end of the year ; for the time being its functions were being discharged by the United Kingdom Forestry Committee.

40. The requisite condition having thus been met, the changes in grants came into effect at the beginning of the forest year under report. On dedicated estates the annual maintenance grant of 5s. 6d. per acre was replaced by an annual management grant of 18s. per acre on the first 100 acres, 12s. per acre the next 100 acres, and 7s. per acre on the remainder. At the same time the planting grant for approved woodlands was raised from one half to the full rate (£20 per acre) for which dedicated woods are eligible. The introduction of the new rates was announced in Parliament on 20th July, 1959, and the first payment of management grants was made on the same day.

41. A major concern of both private woodland owners and the Commission is the problem of marketing, both short-term and long-term. The general revival in economic activity during the year resulted in increased consumption of sawn softwoods and sawn hardwoods, and a reversal of the falling price trends ; but this increased demand was not reflected in an increased production of home-grown sawn timber. Production and prices for softwood saw timber and prime quality hardwoods were maintained, but the demand for the inferior grades continued to be disappointing. Prices for softwood thinnings tended to fall.

42. Reduced production of coal, readjustment of pitprop stocks, and the continued decline in the use of timber in mining led to a lower intake of home-grown timber into the mines. Total consumption during 1959 fell by approximately 12 per cent., and consumption of home-grown pitwood by about 6 per cent.

43. In June, 1959, a national agreement for a period of one year for peeled pitprops was negotiated with the National Coal Board. The new price of 5s. 4½d. per hoppus foot, delivered to colliery, was about 10 per cent. less than the previous prices ruling in England and Wales, and about 5 per cent. less than those in Scotland. No agreement was reached on prices for unpeeled pitwood and laggings sold by weight to the South West Division of the National Coal Board, nor for sawn hardwood and softwood mining timber in England and Wales. In Scotland it was agreed—again for one year—to continue deliveries of hardwood and softwood sawn mining timber to Scottish collieries at 1958-59 prices, with adjustments for certain specifications.

44. The new groundwood pulp mill at Ellesmere Port in Cheshire started working and deliveries to this mill largely accounted for an increase in production of pulp wood. In August, 1959, the formation of a new company, Scottish Pulp (Development) Ltd., was announced. The new com-

pany, representing four of the main paper and paper-board interests in the Country (Messrs. Bowaters, Wiggins Teape, Albert E. Reed and Thames Board Mills) is to investigate the possibility of establishing a pulp mill in the Scottish Highlands. Plans for the establishment of a new chipboard factory at Inverness were also announced.

45. In May, 1959, the Home Grown Timber Marketing Corporation was established by the home timber merchants. Its aims are to promote the use of home-grown timber, to investigate new markets, to help merchants to meet the bulk demands of industry and to provide consumers with a high standard of quality and service. Among its initial successes was the securing of the contract for timber fencing on the Doncaster by-pass.

46. While the situation for current production had thus improved, if only slightly, from the low level of the previous year, the major problem—which is to ensure that adequate markets at fair prices are available in time to take the greatly increased output which will result in a few years from the earlier plantings of the Commission, and from the vastly increased planting of the post-war years, both private and State—remains a subject of discussion throughout British forestry. Some fear arose, and found expression in a debate in the House of Lords on 28th July, 1959, of the effect on the paper and board making industries, and so indirectly on the home timber trade and woodland owners, of the formation of the European Free Trade Association. Similar fears have been expressed by the sawmilling, joinery, wood wool and wood flour industries, which are all users of home-grown softwood. The Commission, though they agree that there is no room for complacency, believe that those fears are exaggerated. They recognise that it cannot be expected that all industries in the United Kingdom will enjoy benefits from the European Free Trade Association, even though the Government consider that over the whole industrial field the proposal will be to the advantage of the country's economy. But, even for those industries which at present fear increased competition, the extended period over which the tariff is to be removed gradually will give time for adjustment to meet the new trading conditions, and the general economic advantage to all the members of such an association of countries will lead to a greater demand for goods of all types, and incidentally for the containers in which they are shipped, which are normally made of wood in some form. The Commission have noted the Government's hope that long before the duties on imported goods have been completely removed, successful negotiations will have been completed for the establishment of a wider Free Trade Area of all the O.E.E.C. countries, which will reduce the competition from Scandinavia which the wood-processing industries of the United Kingdom expect in a European Free Trade Association. The Commission also note the importance which the Government attach to fair conditions of trading within the European Free Trade Association, and that Article 17 of the Convention confirms the right of all member countries to take action against dumped or subsidised imports. The Commission believe that the modern pulp mills and board factories in the United Kingdom, which are sited close to the forests from which they will draw their raw material in the form of thinnings, should be able to compete successfully with their competitors in Scandinavia, and still pay a fair price to the grower.

47. The report* of the consultant appointed by the European Productivity Agency of O.E.E.C. to investigate small-scale pulping in Western Europe was published in April, 1959. Although the report† of the same consultant who, at the invitation of the Commission, extended his survey in this country to include the economics of small building board plants was not published until shortly after the end of the forest year, it is convenient to comment on both reports together. The main conclusions of the two reports are that small-scale pulp mills are not likely to be economic except where they can be grafted on to certain types of existing paper mills, and that to be economic, new board mills must also have a fairly large capacity ; they should, wherever possible, be integrated with existing wood-using industries which could provide part of the raw material in the form of wood waste.

48. The Commissioners, in publishing the two reports, expressed the hope that interested industries would study them and come forward with their proposals for establishing new mills in different parts of the country, and already a number of firms have declared an interest in further studying the feasibility of establishing new pulp mills and board mills. Although the reports have indicated the general picture, much more detailed study will be required for particular projects for particular areas. The Commission will continue to provide, as they have for such projects as the chipboard factory at Annan in Dumfries-shire and the hardwood pulping mill at Sudbrook on the Severn, all the information they can about future supplies of the raw material which industrialists require before embarking on the very large capital expenditure required. They will also, where practicable, go further and guarantee minimum supplies at a fair price where that is necessary to enable a start to be made.

49. For the first time in their history, the Commission's affairs were debated by the Scottish Grand Committee, on 2nd July, 1959. Generally, Members taking part in the debate gave their approval to the Commission's work in Scotland, though they had criticisms to offer. One which calls for comment here related to the long delay between the end of the forest year and the appearance of the statutory Report to Parliament. To assist in meeting this justifiable criticism, it was necessary to reduce the time taken in compilation, and this has been done by modifying the form of the report. The text has been reduced to a minimum and the bulk of the statistical information shown in appendices ; and, in accordance with another suggestion by members of the Grand Committee, the major statistics for each of the three countries are shown in separate sections (Tables 31 to 33) as well as in the main series of tables for Great Britain as a whole.

THE YEAR'S WORK

PRIVATE FORESTRY

50. Private owners planted 32,106 acres under the various grant schemes. About 2,700 acres are estimated to have been planted without grant aid, and thus the total area planted on private estates was just over 34,800 acres.

* *Small Pulp Mill Survey*. H.M.S.O., 1959, 4s.

† *Board Mill Survey*. H.M.S.O., 1959, 5s.

51. The area dedicated rose by 35,363 acres net to 575,781 acres, and the number of dedication schemes by 182 to 1,471. In addition, preparations for dedicating another 108,095 acres, representing 398 schemes, were well advanced. The acreage of woods not dedicated but managed according to a plan of operations approved by the Commissioners rose by 5,023 acres (44 schemes) to 154,855 acres (526 schemes); plans of operations for a further 20,573 acres (81 schemes) were in hand. Grants paid amounted to £904,000; details are given in Tables 4 and 23-25 of Appendix I.

FORESTRY COMMISSION OPERATIONS

52. Over most of Great Britain (north and west Scotland being an exception) the brilliant summer, so welcome to the inhabitants of this rainwashed island in contrast to the miserably wet and sometimes cool summers to which we have been recently accustomed, presented problems to foresters. In the nurseries growth got away to a good start and throughout the year weed growth was nothing compared to what we are accustomed to expect. It is not, however, possible to say how much this was due to the long drought and how much to the use of the new weed-killing techniques introduced on a significant scale in the last few years. In the plantations the year was marked, as would be expected, by an unprecedented number of fires, amounting in total to 5,600, which exceeds the previous record (in 1955) by over 2,750. Many Foresters were on call almost continuously from April to October, in a situation which could almost literally be called explosive. A typical report reads:—

“The public thronged the forest throughout the season and constant vigilance was necessary and was indeed maintained without complaint every day of the week; 44 fires occurred with the loss of only 5.3 acres. It was only through the speedy and determined action of staff that disastrous losses were avoided”.

The vigilance of the staff, coupled with the improvements in communications and technique which are continually being introduced, meant, however, that only five fires caused damage assessed at over £1,000, or burnt more than 20 acres; altogether the total loss of plantations amounted to the relatively small area of 396 acres out of the total of close on 1½ million acres of plantations at risk. This reflects great credit on the Commission's staff and on the Fire Services, whose response to calls has been uniformly prompt and effective. The public, both those who were called on and those who gave help of their own initiative, have also earned the Commission's thanks.

53. Arrangements have been made to record exceptional effects of high temperatures and the long drought on trees and on forestry practice. Questionnaires have been addressed to all Commission forests and to some private estates and some special investigations will be put in hand. In addition other information will be obtained from normal forest and Research Branch records.

Finance

54. Receipts from the Grant-in-Aid voted by Parliament amounted to £10,217,000, and payments accounted for £13,076,547. Receipts for the sale of timber, rents and sundry sources amounted to £3,198,164.

Staff

55. At 30th September, 1959, the non-industrial staff totalled 2,649, as compared with 2,636 a year before. Of these one-half were in the Forester grades. At the same date, the number of industrial workers, men, women and juveniles, was 12,512,* an increase of 128.

56. As reported last year, an increase in the basic weekly wage for adult male workers to 159s. 6d., negotiated on the Commission's Industrial and Trade Council, came into force on 27th October, 1958; there have been no changes in the rate since then. A claim for a reduced working week, referred to the Industrial Court following a failure to agree on the Council, was rejected by the Court in August, 1959.

Acquisition of Land

57. The gross area acquired, including land to which entry was allowed in advance of legal completion, was 62,291 acres, of which 40,998 acres were plantable. Disposals and adjustments of areas totalled 20,296 acres, of which 2,188 acres were plantable land and the remainder unplatable or grazing and other agricultural land. The net addition to the Commission's estate was 41,995 acres, of which 38,810 acres were plantable. Of this 63% was bare land, 35% was old woodland and 2% standing woods. By the end of the year the Commission's estate had reached a total of 2,403,000 acres, of which 1,543,100 acres was forest land, that is acquired plantations, plantations established by the Forestry Commission, land remaining to be planted and nurseries, the balance consisting of rough grazing and other agricultural land, Forest Workers Holdings and unplatable and miscellaneous land. The average price paid for plantable land was £3 14s. 0d. per acre against £3 4s. 0d. in 1958. Prices per acre ranged from £1 5s. 0d. for 42 acres of derelict woodland which is likely to be costly to rehabilitate, to £12 for 59 acres of land with exceptionally good access and valuable sporting rights available for letting. The range of £3 10s. to £6 per acre covered 58% of the prices paid. As in the previous year, the average rent paid for plantable land was 3s. per acre; rents ranged from 1s. 7d. per acre for 308 acres of rough grazing in the far north of Scotland to 6s. 6d. per acre for 241 acres of high quality forest land. Over 60% of the leases were within the range of 2s. to 3s. 6d. per acre.

Planting

58 The area planted was 55,136 acres, an increase of 2,738 acres over 1958. Of this, 17,781 acres were in England, 25,651 acres in Scotland and 11,704 acres in Wales. The proportion between the planting of bare land (60%) and the replanting of old woodlands (40%) remained much as in previous years.

Production and Disposal of Forest Produce

59. The total volume thinned and clear felled in Commission forests was 18.6 million hoppus feet, an increase of 0.4 million over the previous year. Of this quantity, timber merchants cut 7.9 million hoppus feet (7.0 in 1958) or 43% (38% in 1958); the balance was cut by direct labour. Direct sales of mining timber fell by about 15%; there was a slight increase in the

* This figure includes 244 part-time workers; the number of part-time workers on 1st October, 1958 was 233.

volume of pulpwood despatched, while sales of saw logs remained at about the same level as in 1958.

60. During the year agreements were signed for sales by tender of standing timber and thinnings totalling 10·7 million hoppus feet, an increase of 1·3 million over the previous year. Five auction sales were held during the year; 0·8 million hoppus feet were sold, the unsold lots which failed to reach the reserve prices being mainly parcels of inferior mixed hardwoods for which there was little demand.

Research

61. A major event of the year was the opening in April of the extension to the Research Station at Alice Holt near Farnham in Surrey. It has provided much needed laboratory accommodation, a new central seed store worked in close conjunction with the new seed testing laboratory, photographic dark rooms and a number of offices. Open days were held in July when the work of the Station as a whole was shown to a large number of distinguished visitors and to the Press, and during the year there have been over five hundred visitors from all over the world.

62. Apart from the expansion of work on the properties of home grown timber (see para. 68) there were no major developments in research, and it is sufficient here to refer to some of the more interesting or significant work in progress; full details will be given in the Reports on Forest Research covering the year, which will be published later.*

63. In the nurseries, research work on the wrapping of plants, for transport or storage, in polythene film is in its last stages, and attention has been paid to the possibilities of refrigerated storage of nursery stock. Experiments on thinning, regeneration and drainage continue, and afforestation problems in marginal areas—at high levels, on exposed sea coasts, in areas of atmospheric pollution and on deep acid peat—continue to take a prominent place in the programme.

64. Further experiments on the manuring of pole-stage crops have been laid down with the help of the Macaulay Institute for Soil Research, Aberdeen; and work on checked or slow-growing plantations has been extended to several new areas. On one site, in Cornwall, applications of fertiliser from the air were made on an extensive scale, the opportunity being taken to study various features of this method such as unevenness of distribution and the interception of granules in crop foliage. Research on the use of herbicides in the forests has been extended to practical scale trials of woody weed control, and increasing attention has been paid to the control of grass.

65. In pathology the chief interest has been the extension of studies of the fungus *Fomes annosus*, which causes serious losses through butt rot and death of conifers. In entomology the annual winter survey of the pupal numbers per acre of the pine looper moth (*Bupalus piniarius*), revealed population increases in many pine forests, but the numbers of eggs deposited were lower than expected and the rate of parasitism of these eggs by the parasitic insects of the genus *Trichogramma* was high. Insecticidal control was, therefore, unnecessary.

* Reports on Forest Research, H.M.S.O.: 1959, in the press; and 1960, in preparation.

66. The statistical section has continued to develop the use of electronic computing in such problems as the determination of site factors on growth and timber properties, the factors contributing to the strength of pitprops, the sampling of nutrients in plant foliage, the analysis of perennial crop data, and the development of tree growth.

67. Research on utilisation has continued with the help of the Advisory Committee on the Utilisation of Home Grown Timber, which met in November, 1958, and July, 1959, and inspected the house being built of home-grown timber at Joydens Wood in Kent. The survey of the species, grades and sizes of timber used in the building of traditional houses was completed, and the Committee recommended that the report on this work should be published.*

68. In collaboration with the Department of Scientific and Industrial Research (Forest Products Research Laboratory), a start was made on a comprehensive enquiry into the properties of home-grown softwoods in relation to their silvicultural treatment. It was decided to give priority to a study on Sitka spruce.

69. Research on the use of machinery and the development of existing machines for use in forestry has continued. An Advisory Committee on Machinery Research, including representatives of timber merchants, land-owners and engineering institutions, was appointed. In their competition for forest machinery in November, 1958, the Royal Agricultural Society of England awarded a bronze medal to a machine developed by the Commission's Machinery Development Officer; this machine is a powered sulky or two-wheeled carriage, with the aid of which logs weighing up to half a ton can be picked up and carried, clear of the ground, under the control of one man.

70. Grants for research on forest soils were made to the Imperial Forestry Institute, Oxford, the Macaulay Institute, Aberdeen, and to the Rothamsted Experimental Station. Soil mycology investigations were continued by Dr. I. Levisohn of Bedford College, London; a grant was also made to the University College of North Wales at Bangor, for studies on this subject. A grant to the Botany School, University of Cambridge, covered investigations into the control of the fungus *Fomes annosus*.

71. Other grants included those made for shelterbelt and for soil fauna research being undertaken at the University of Edinburgh; for botanical studies of tree races at the University of Aberdeen; for work on larch canker at the Botany Department, University of Southampton; for studies on the physiology of flowering of forest trees at Manchester University and the University College of North Wales, Bangor, for investigations into water relations by the Imperial Forestry Institute at Oxford University, and to the British Leather Manufacturers Research Association for the analyses of home-grown bark for tanning. The grants to Oxford and Aberdeen Universities for research on costs in private woodlands were continued.

* Since issued as Forest Record No. 42, *Use of Home-Grown Softwood in House Construction*, H.M.S.O., 1959, 1s. 3d.

Education

72. Sixty-three students at the Commission's four residential Forester Training Schools obtained the Forester's Certificate on completing their course; 45 of them joined the Commission, and the remainder entered either Government service in Northern Ireland, private estate employment in Great Britain, or forest services overseas.

73. Three courses, each of six weeks' duration, were organised for forestry workers from private estates, two being at Chatsworth in Derbyshire and one on the Atholl Estate, Dunkeld, Perthshire, by courtesy of the owners concerned. Forty-four men attended, and only one failed to obtain either the Woodman's Certificate of the Royal Forestry Society of England and Wales, or the Junior Forester's Certificate of the Royal Scottish Forestry Service. At Northerwood House in the New Forest, 25 courses were given for Commission staff and seven for landowners and others, including a course for schoolteachers interested in forestry. In addition, for over four months of the year, the house was used to accommodate groups of forestry students from the Universities.

Publications*

74. Seven new publications for sale were issued through H.M. Stationery Office:

- (1) Report of the Forest of Dean Committee 1958, Cmd. 686, 1959. (8s. 0d.)
- (2) Thirty-Ninth Annual Report of the Forestry Commission, 1958. (H.C. 274, Session 1958-59.) (5s. 0d.)
- (3) Small Pulp Mill Survey: Economic Study. (4s. 0d.)
- (4) Report on Forest Research 1958. (9s. 6d.)
- (5) Bulletin 31. Code of Sample Plot Procedure. (15s. 0d.)
- (6) Leaflet 44. Voles and Field Mice. (1s. 0d.)
- (7) Forest Record 38. Design of Poplar Experiments. (1s. 9d.)

75. Two free pamphlets were issued: *Forestry in England* and *Forestry and the Town School*; the latter was written by a teacher in one of the schools of the London County Council, and describes how forestry may be profitably related to other subjects in the curriculum.

National Forest Parks

76. The continued popularity of open air holidays which has meant an increasing use of the Parks, allied with the exceptional summer, led to very heavy pressure. At the Whitsun weekend, for example, there were over 2,000 campers and caravanners at Lewisburn in the Border Forest Park, opened only in 1957. Altogether between April and October at the eight camp sites (Christchurch in the Forest of Dean, Beddgelert in Snowdonia, etc.) over 213,000 overnight stays were recorded. There is evidence in

* 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, 25, Savile Row, London, W.1. A full list of all publications (Sectional List No. 31) is available free of charge either from the Secretary or H.M.S.O.

the form of appreciative letters that the facilities provided—such as shower rooms and cooking shelters—and the absence of all but essential rules, met a real need for which the Commission will have to continue to cater on an increasing scale.

RADNOR, *Chairman*.

R. C. G. COTTERELL.

LLOYD O. OWEN.

JOHN STIRLING.

A. P. F. HAMILTON.

D. C. BOWSER.

ROBERT TAYLOR.

BRYAN LATHAM.

F. W. STRANG STEEL.

E. GWYN DAVIES.

H. A. TURNER, *Secretary*.

25, Savile Row,
London, W.1.

COMMITTEES

National Committees

The National Committees met monthly except in August. The membership of these Committees at 30th September, 1959, 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. E. Bryan Latham, The Duke of Northumberland, Mr. W. H. Pearson. *Secretary to the Committee*: Mr. A. D. Palmer.

NATIONAL COMMITTEE FOR SCOTLAND

Major D. C. Bowser (*Chairman*), Major D. J. Brodie, Captain J. Craig, Mr. J. McNaughton, Sir John Stirling of Fairburn, Major F. W. Strang Steel, Mr. Robert Taylor. *Secretary to the Committee*: Mr. T. H. McGeorge.

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. *Secretary to the Committee*: Mr. G. F. Taylor.

Regional Advisory Committees

The membership of the Committees at 30th September, 1959, was as follows:

ENGLAND

North West Conservancy

The Earl of Bradford (*Chairman*), Alderman J. V. 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. W. Elliott. The Committee met in October, 1958, and March and June, 1959.

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, 1958, and June, 1959.

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 October, 1959.

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., Major R. E. Whitaker. *Secretary to the Committee* : Mr. H. W. Gulliver. The Committee met in October, 1958, and June, 1959.

South West Conservancy

Sir Dennis F. B. Stucley (*Chairman*), Mr. J. E. Garfitt, Mr. H. P. R. Hoare, Lord Hylton, Mr. A. E. Jordan, Mr. J. R. Maer, Major J. L. Pilling, Mr. L. C. Wheeler, Lt.-Comdr. T. J. B. Mildway-White. *Secretary to the Committee* : Mr. R. Coote. The Committee met in March and July, 1959.

SCOTLAND

North Conservancy

Mr. A. B. L. Munro-Ferguson (*Chairman*), Mr. J. Armstrong, Mr. G. Brown, Col. A. E. Cameron, Mr. C. Campbell, Mr. R. Dean, Mr. J. Grant, Mr. A. R. Mackenzie. *Secretary to the Committee* : Mr. M. Nicolson. The Committee met in November, 1958, and January, 1959.

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. Steele. The Committee met in November, 1958, and May, 1959.

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, 1958, and March, 1959.

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, Mr. P. S. Murray. *Secretary to the Committee* : Mr. B. Kinnaird. The Committee met in December, 1958, and July, 1959.

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, 1958, and June, 1959.

South Conservancy

Colonel 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, Col. M. H. Maxwell, Brigadier R. P. Waller. *Secretary to the Committee*: Mr. E. H. Bradford. The Committee met in October, 1958, and June, 1959.

Home Grown Timber Advisory Committee

The membership of the Committee at 30th September, 1959, 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. G. B. Ryle	...	
Mr. A. Watt	...	
Mr. J. R. Thom	...	
Mr. J. Macdonald...	...	
Mr. H. A. Turner...	...	
Mr. J. May	...	Board of Trade
Lord Bolton	...	} Timber Growers Organisation
Major Sir Richard G. Proby, Bt.	...	
Mr. W. E. Hiley	...	
Mr. Langshaw Rowland	...	
The Duke of Buccleuch	...	} Scottish Woodland Owners Association
Lt.-Col. W. D. H. C. Forbes	...	
Capt. J. Maxwell Macdonald	...	
Mr. A. B. L. Munro-Ferguson	...	
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 Association of Scotland
Mr. W. J. Riddoch	...	
Mr. R. Finlay Wilson	...	
Mr. J. B. Dawson...		Timber Trades Federation
		<i>Secretary</i> : Mr. H. R. Flowers.

The Committee met in March and November, 1959.

APPENDIX I

FINANCIAL AND STATISTICAL TABLES

FORESTRY FUND: SUMMARY

Table 1

Years ended 30th September

£

	Balance from Preceding Year	Receipts			Payments
		Total	From Parliamen- tary Votes	From sales of produce, rents, etc.	
GRAND TOTAL 1920-1959 ...	—	143,221,937	107,830,800	35,391,137	142,811,034
1920-1929	—	4,421,484	3,570,000	851,484	4,502,018
1930-1939	—	8,114,652	6,292,800	1,821,852	7,926,093
1940-1949	—	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	13,415,164	10,217,000	3,198,164	13,076,547
1960	410,903	—	—	—	—

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

The balance carried forward to 1960 consists of £501,963 cash at bank (Table 5), less £91,060 for cash suspense items included in sundry debit balances and sundry creditors (Table 5).

Table 2

ACCOUNT OF FORESTRY OPERATIONS FOR THE

1958 £000's		1959 £000's	1959 £000's
	Preparation and formation of plantations:—		
458	Preparation of ground including ploughing	538	
644	Planting including cost of plants ...	852	
523	New drains and fences	502	
		—	1,892
	Maintenance of plantations:—		
218	Beating up including cost of plants ...	243	
860	Weeding and cleaning plantations ...	1,053	
325	Maintenance of drains and fences ...	384	
25	Enrichment, including cost of plants ...	41	
202	Maintenance of roads	264	
		—	1,985
	Forest protection:—		
217	Fire protection ...	260	
222	Other protection ...	228	
		—	488
	Production:—		
825	Felling, extraction and processing	778	
209	Carriage and other expenditure	195	
103	Felled timber: decrease in stocks and work in progress	40	
		—	1,013
524	Estate expenses		558
			5,936
	Overheads:—		
	Forest (including wet time, holidays etc. of Forest		
2,403	Workers and salaries and expenses of Foresters) ...	2,262	
146	District (salaries and expenses of District Officers) ...	150	
	Conservancy (salaries and expenses of Conservancy		
579	Office staff)	595	
353	Directorate and Headquarters (salaries and expenses)...	537	
		—	3,544
5,199	Interest on capital advanced by the Exchequer		5,846
13	Lake Vyrnwy Joint Forestry Scheme (with Liverpool		
	Corporation)		7
14,048			15,333

Table 3

NURSERIES ACCOUNT FOR

1958 £000's		1959 £000's
178	Seedbeds ...	166
239	Transplant lines...	255
98	Other expenditure	121
311	Overheads ...	267
—	Decrease in Stocks	37
826		846

YEAR ENDED 30TH SEPTEMBER, 1959

<i>1958</i> <i>£000's</i>								<i>1959</i> <i>£000's</i>
<i>2,168</i>	Sales of Forest Produce	...	...	...	...	...	£000's	2,085
<i>125</i>	Forest Produce used on the Commission's Estate...							141
<i>51</i>	Sundry forestry income					...		284
<i>251</i>	Estate income				...	...		<u>309</u>
								2,819
<i>11,453</i>	Balance, being net cost of growing timber during the year							12,514

14,048

15,333

THE YEAR ENDED 30TH SEPTEMBER 1959

<i>1958</i> <i>£000's</i>								<i>1959</i> <i>£000's</i>
<i>105</i>	Sales of plants	...	...	...	...	...	...	116
<i>216</i>	Increase in Stocks	...	...	...	...	...	...	—
<i>7</i>	Sundry income	...	...	...	...	...	...	3
<i>498</i>	Plants used in the Commission's forests (charged in Table 2)						...	<u>727</u>
								846
<i>826</i>								<u>846</u>

Table 4

NET EXPENDITURE ON SERVICES OTHER THAN FORESTRY OPERATIONS
DURING THE YEAR ENDED 30TH SEPTEMBER 1959

1958 £000's		1959 £000's
<i>PRIVATE FORESTRY</i>		
	Grants under Dedication Schemes:—	
3	Basis I	2
385	Basis II: Planting Grants	471
—	Management Grants*	103
109	Maintenance Grants	110
30	Approved Woodlands Planting Grants	54
64	Small Woods Planting Grants	73
3	Other Planting Grants	3
52	Scrub Clearance Grants	55
44	Thinning Grants	32
3	Grants to Co-operative Societies	1
23	Miscellaneous	4
179	Administration including advisory services	178
895		1,086
<i>RESEARCH</i>		
161	Silviculture, including Nursery Work	176
23	Genetics	25
41	Mensuration, Census, etc.	39
27	Pathology and Entomology	31
3	Machinery	5
1	Utilisation	2
14	Grants to Institutions	15
20	Miscellaneous	21
30	Administration	26
320		340
1,215	Carry forward	1,426

* It was not possible to pay all management grants due in the Forest Year 1959: the balance will be paid in 1960.

Table 4—continued

1958 £000's		1959 £000's
1,215	<i>Brought forward</i>	1,426
	<i>EDUCATION</i>	
83	Forester Training Schools ...	75
7	Short Courses for Forest Workers	6
5	Forestry Apprenticeship Scheme	6
7	Northerwood House ...	6
1	Miscellaneous	1
21	Administration	20
124		114
	<i>SPECIAL SERVICES</i>	
75	Licensing of Felling ...	68
10	Information and Shows ...	12
7	Miscellaneous	7
4	Administration	4
96		91
1,435		1,631

Note.—Total net expenditure from 29th November, 1919 to 30th⁵September, 1959, under the main heads of this table was as follows:—

	£000's
Private Forestry	6,778
Research	2,924
Education	2,020
Special Services	2,593
	14,315

Table 5

BALANCE SHEET AS AT

1958 £000's		1959 £000's	1959 £000's
	Capital Account:—		
78,094	To 30th September 1958	85,652	
8,993	Grants in aid of Forestry Fund during year	10,217	
<u>87,087</u>		<u>95,869</u>	
1,435	Deduct cost of services other than Forestry Operations (Table 4)	1,631	
<u>85,652</u>		<u>94,238</u>	
36,639	Interest accrued	42,485	
<u>122,291</u>			136,723
979	Value of properties, including New and Dean Forests, acquired under Forestry (Transfer of Woods) Orders, 1924-45		979
9	Value at 21 September, 1939 of properties acquired under Forestry (Transfer of Woods from the Secretary of State for Air) Order, 1939		9
23	Value of properties acquired by transfer from the Minister of Agriculture, Fisheries and Food under Section 4 of Forestry Act, 1945		23
8	Value of timber acquired by transfer from H.M. Board of Admiralty under Section 4 of Forestry Act, 1945		8
73	Gifts of land and buildings		73
<u>123,383</u>			<u>137,815</u>
1,743	Provision for pensions and gratuities		6,391
472	Sundry Creditors		601
	Insurance Account:—		
	Balance at 30th September 1958...	310	
	Provision made during year ...	47	
		<u>357</u>	
	Less—Losses during year	26	
<u>310</u>			<u>331</u>
<u>125,908</u>			<u>145,138</u>

30TH SEPTEMBER, 1959

1959

1958 £000's	At 30th Septem- ber 1958	Net addi- tions during year	Depre- ciation for year	
	£000's	£000's	£000's	£000's
Fixed Assets, at cost less Depreciation:				
Land	4,405	267	—	4,672
Roads and bridges	9,616	1,752	—	11,368
Buildings	8,289	295	132	8,452
Powered vehicles and machines ...	753	68	77	744
Sundry plant, equipment and furni- ture	152	46	31	167
23,215	23,215	2,428	240	25,403
Current Assets:—				
59 Farm stocks		48		
2,733 Nursery stocks, supplies at forests, etc. ...		2,718		
512 Felled timber: stocks and work in progress ...		472		
426 Debtors and sundry debit balances		435		
118 Loans to Private Woodland Owners		133		
144 Cash at banks and in hand		502		
				4,308
Debentures and shares:—				
15 Debentures in Cowal-Ari Sawmilling Co. Ltd., Argyll		15		
1 Shares in Parkend Saw Mills Ltd., Forest of Dean		1		
				16
Forests—Net cost of growing timber:—				
To 30th September, 1958		98,685		
Adjustment to provision for pensions and gratuities		4,147		
During year:—				
Net cost transferred from Forestry Operations Account (Table 2)		12,514		
98,685 Growing timber purchased		65		
				115,411
125,908				145,138

LAND USE

Table 6

At 30th September, 1959

Thousand acres.

	Great Britain	England	Scotland	Wales
Total area	2,403·4	712·1	1,348·3	343·0
Forest land: Total	1,543·1	566·6	695·6	280·9
Acquired plantations	82·9	51·7	25·1	6·1
Planted by Forestry Commission	1,141·6	418·0	506·9	216·7
To be planted	316·5	96·1	162·8	57·6
Nurseries	2·1	0·8	0·8	0·5
Other land: Total	860·3	145·5	652·7	62·1
Agricultural and grazing	535·3	63·3	422·6	49·4
Forest Workers Holdings	13·5	6·2	4·9	2·4
Unplantable and miscellaneous	311·5	76·0	225·2	10·3

LAND MANAGED BY THE AGRICULTURAL DEPARTMENTS

Table 7

At 30th September, 1959

Acres.

	Great Britain	England	Scotland	Wales
Total	415,711	50,865	335,184	29,662
Forest land	32,036	911	30,298	827
Agricultural and other land	383,675	49,954	304,886	28,835

FOREST LAND ACQUIRED IN FOREST YEAR 1959

Table 8

Acres.

	Great Britain	England	Scotland	Wales
Total area	38,810	11,052	19,939	7,819
Standing woods	811	326	249	236
Bare land for afforestation	24,417	2,749	16,308	5,360
Former woodland for replanting	13,582	7,977	3,382	2,223

SUMMARY STATEMENT OF LAND ACQUIRED TO THE END OF
FOREST YEAR 1959

Table 9

Acres.

	Great Britain	England	Scotland	Wales
Total acquired	2,285,334	611,965	1,335,723	337,646
By lease or feu: Total	636,092	251,298	282,377	102,417
Forest land	475,820	226,990	165,126	83,704
Other land	160,272	24,308	117,251	18,713
By purchase: Total	1,649,242	360,667	1,053,346	235,229
Forest land	1,001,864	302,894	506,406	192,564
Other land	647,378	57,773	546,940	42,665

STOCKS OF NURSERY PLANTS

Table 10

At 30th September, 1959

Thousand plants.

	Great Britain	England	Scotland	Wales
Total Stocks... ..	466,614	130,239	253,960	82,415
Transplants	173,694	54,418	81,675	37,601
Seedlings	292,920	75,821	172,285	44,814

NURSERY PLANTS SOLD TO THE TRADE IN THE FOREST YEAR 1959

Table 11

Thousand plants.

	Total	Transplants	Seedlings
All Species: Total	22,358	8,916	13,442
Coniferous: Total	20,888	8,611	12,277
Scots Pine	4,136	2,285	1,851
Corsican Pine	453	39	414
Lodgepole Pine	663	501	162
European Larch	1,816	700	1,116
Japanese Larch	1,583	890	693
Douglas Fir	1,788	648	1,140
Norway Spruce	4,289	2,730	1,559
Sitka Spruce	4,156	605	3,551
Other conifers	2,004	213	1,791
Broadleaved: Total	1,470	305	1,165
Ash	19	3	16
Oak	524	103	421
Beech	884	162	722
Other broadleaved species	43	37	6

SEED IMPORTS BY THE FORESTRY COMMISSION IN THE FOREST YEAR 1959

Table 12

Species	Quantity (lb.)	Origin
All Species: Total	33,458	—
Conferous: Total	16,156	—
Corsican Pine	1,983	Corsica
Lodgepole Pine... ..	200	British Columbia (coastal)
Lodgepole Pine... ..	541	Vancouver Island, B.C.
Lodgepole Pine... ..	64	British Columbia (interior)
Lodgepole Pine... ..	92	Oregon (coastal)
Lodgepole Pine... ..	1	Alaska
Pinus peuke	75	Yugoslavia
Pinus pinaster	33	Portugal
Pinus radiata	35	New Zealand
Japanese Larch... ..	1,000	Japan
Douglas Fir	790	British Columbia (coastal)
Douglas Fir	19	Washington State
Norway Spruce... ..	3,000	Austria
Sitka Spruce	804	Queen Charlotte Islands, B.C.
Sitka Spruce	520	Vancouver Island, B.C.
Sitka Spruce	676	Washington State (coastal)
Sitka Spruce	20	Alaska
Abies grandis	3,000	Washington State
Abies nobilis	2,000	Oregon
Abies concolor (var. lowiana)	248	Oregon
Abies nordmanniana	82	Bavaria
Abies nordmanniana	10	Austria
Abies nordmanniana	2	Caucasus
Tsuga heterophylla	449	Vancouver Island, B.C.
Tsuga heterophylla	2	Queen Charlotte Islands, B.C.
Tsuga heterophylla	10	British Columbia (interior)
Thuja plicata	22	Queen Charlotte Islands, B.C.
Thuja plicata	138	Vancouver Island, B.C.
Thuja plicata	56	British Columbia (interior)
Thuja plicata	26	Oregon
Thuja plicata	113	Washington State
Cryptomeria japonica	22	Japan
Sequoia sempervirens	30	California
Sequoiadendron giganteum	28	California
Other conifers	65	—
Broadleaved: Total... ..	17,302	—
Red Oak	6,600	Poland
Beech	700	Holland
Sweet Chestnut... ..	9,900	France
Other broadleaved	102	—

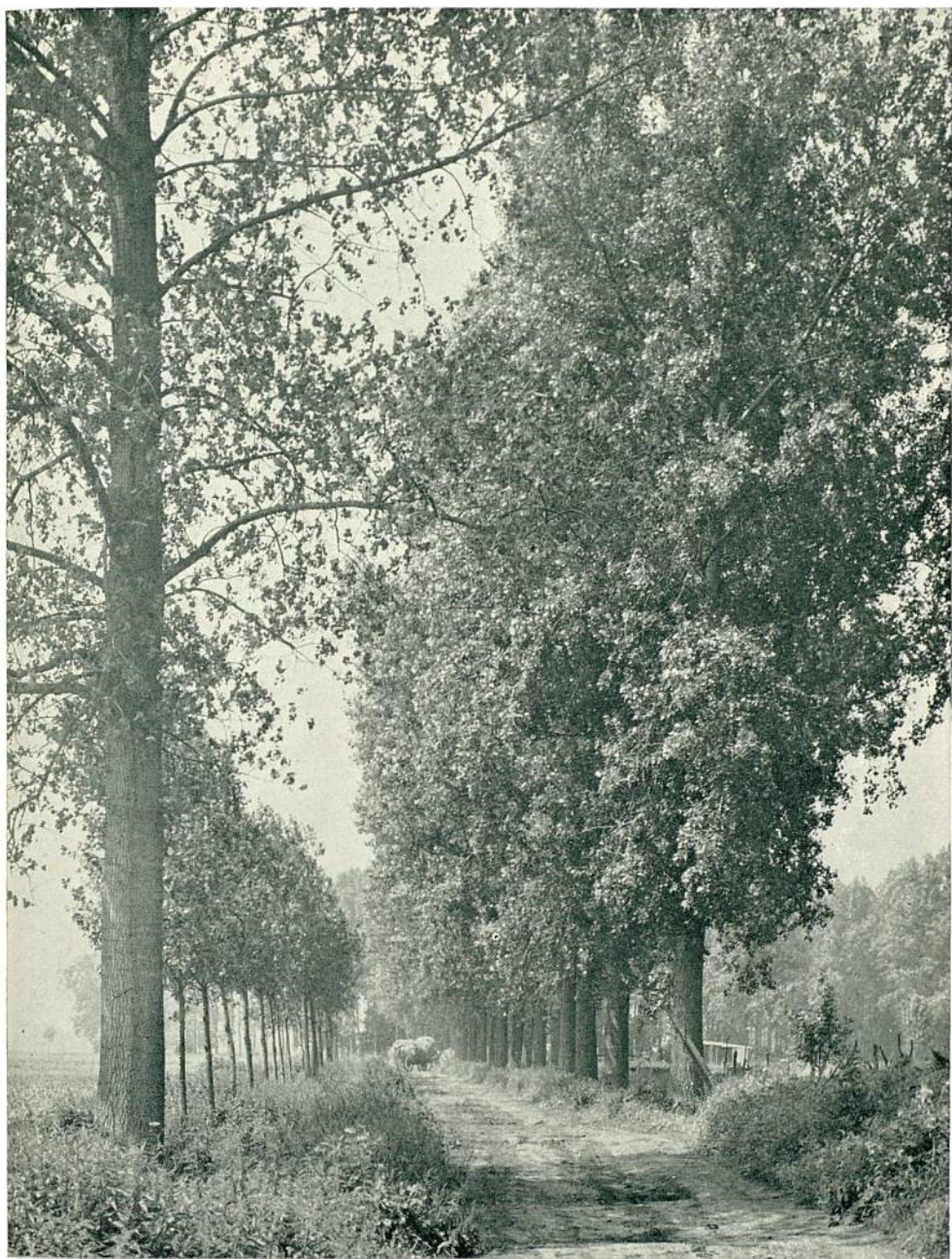


PLATE 1. Poplars (*Populus robusta*) on a private estate.
(Lt.-Col. E. R. Pratt's Ryston Hall estate, near Downham Market, Norfolk.)



PLATE 2. Clocaenog Forest, Denbighshire and Merioneth. Dragging out 27-year-old Sitka spruce.

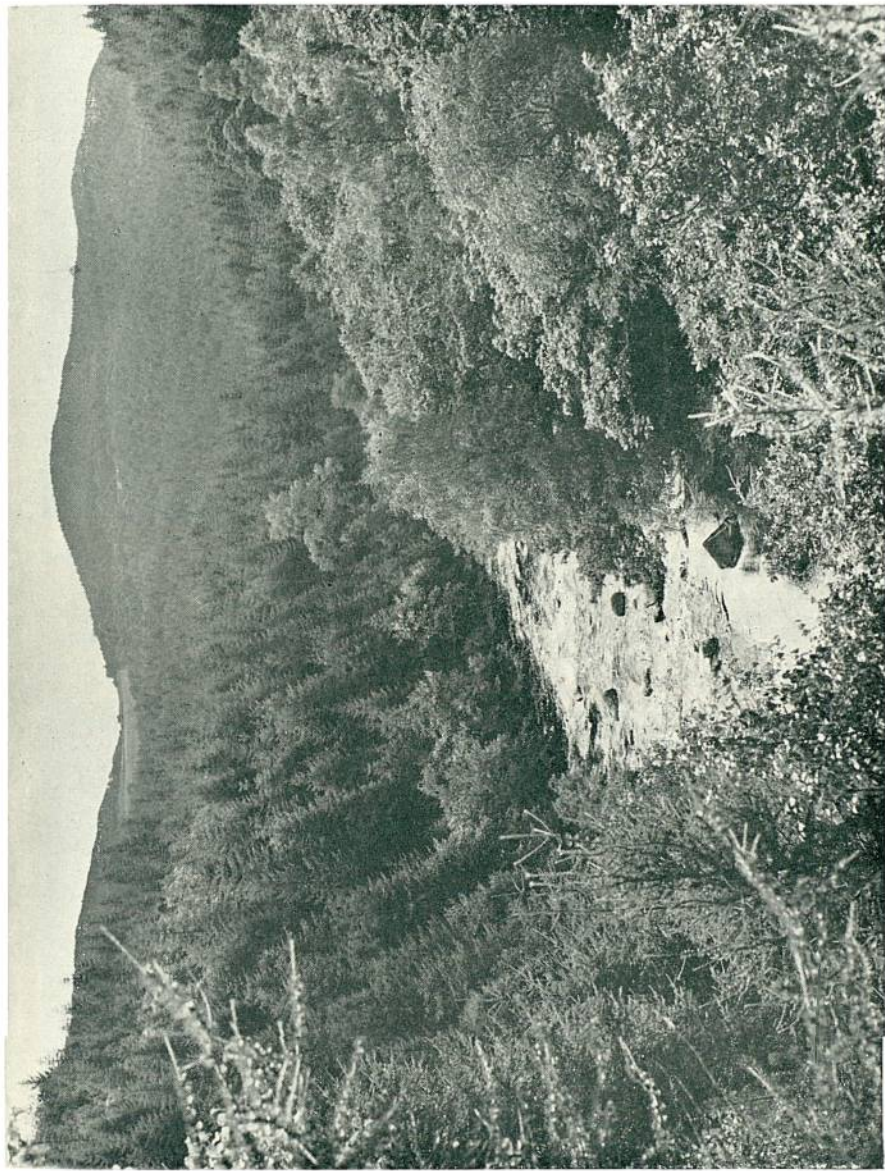


PLATE 3. Coed-y-Brenin, Merioneth: the Mawddach Valley near Dolgellau.
Conifer plantations 28 years old.



PLATE 4. The depot at Brandon in Suffolk, where in the Forest Year about 50,000 tons of produce, mainly from Thetford Chase, was handled.



PLATE 5. These houses built for the Forestry Commission at Bamford, Derbyshire, won the Civic Trust's Building Award for the Peak National Park in 1959.

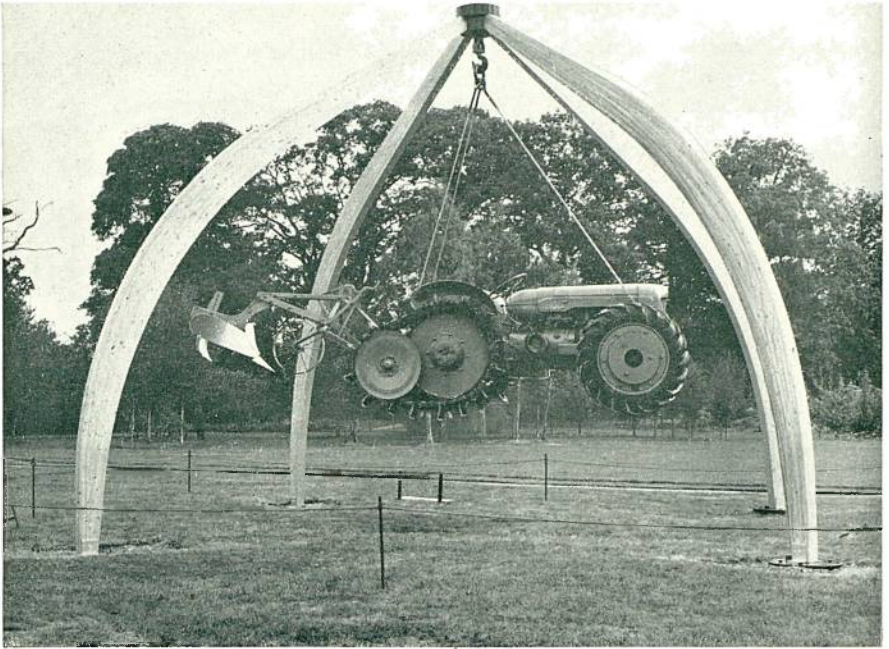


PLATE 6. These laminated arches were made from run-of-the-mill Sitka spruce—not specially selected thinnings—from Commission plantations in Argyll, about 30 years old. The laminae are $\frac{3}{4}$ in. thick and each 28-foot length was made up by scarfing random lengths, of which more than half are under 7 feet long. The arches are designed to carry a load of 5 tons.

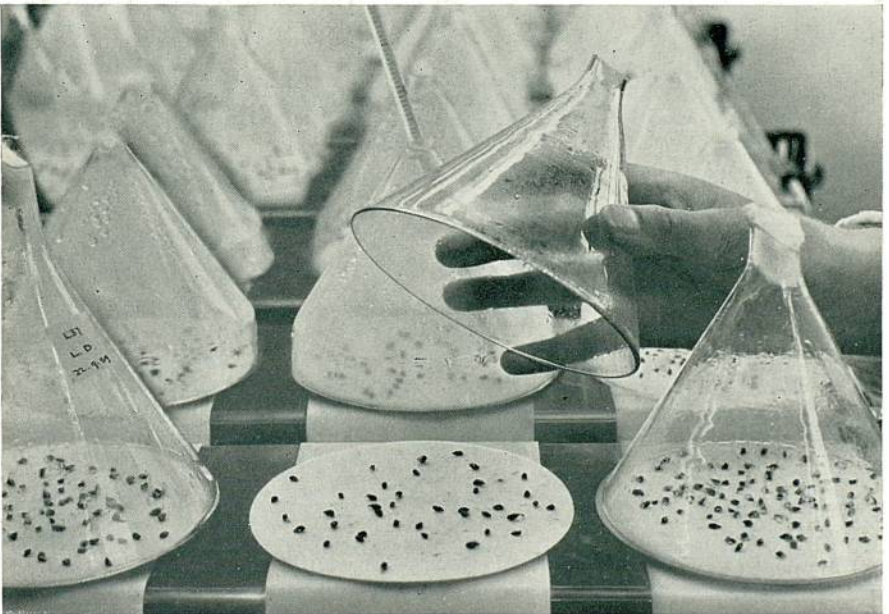


PLATE 7. Alice Holt Research Station: testing seed for germination.



PLATE 8. 1919. Derelict heathland before planting.



PLATE 9. 1934. The plantation after fifteen years' growth.



PLATE 10. 1959. Forty years after planting and still growing.

THE DEVELOPMENT OF A CORSICAN PINE PLANTATION AT
RENDLESHAM FOREST, NEAR WOODBRIDGE, SUFFOLK.



PLATE 11. The site of the Cymmer Afan School forest plot near Port Talbot, Glamorgan, in 1952 (see p. 9).

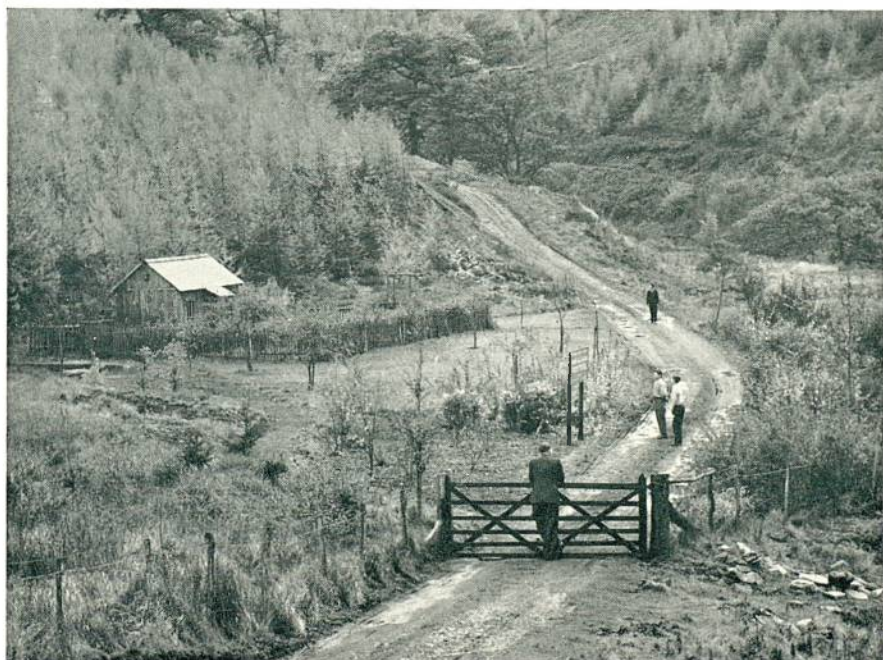


PLATE 12. The same site in 1959.

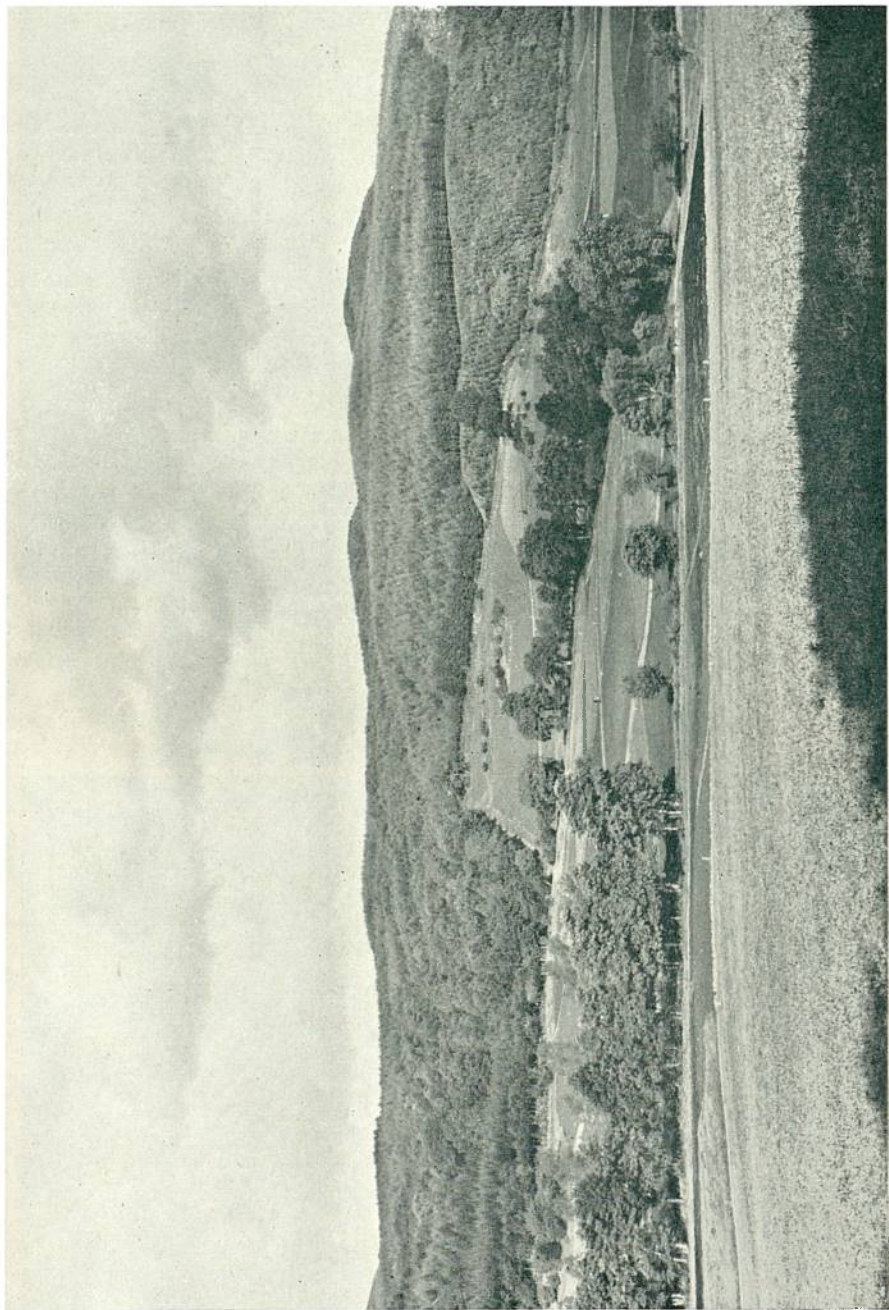


PLATE 13. Kirtroughtree Forest near Newton Stewart, Kirkcudbrightshire: the nursery in the foreground.

PLANTING IN THE FOREST YEAR 1959

Table 13

Acres.

						Total	Afforested	Replanted
Great Britain	...	...	...	...	...	55,136	33,573	21,563
Conifer	...	...	...	...	...	52,193	33,266	18,927
Broadleaved	...	...	...	...	...	2,943	307	2,636
England	...	...	...	...	...	17,781	6,817	10,964
Conifer	...	...	...	...	...	15,198	6,559	8,639
Broadleaved	...	...	...	...	...	2,583	258	2,325
Scotland	...	...	...	...	...	25,651	18,396	7,255
Conifer	...	...	...	...	...	25,540	18,367	7,173
Broadleaved	...	...	...	...	...	111	29	82
Wales	...	...	...	...	...	11,704	8,360	3,344
Conifer	...	...	...	...	...	11,455	8,340	3,115
Broadleaved	...	...	...	...	...	249	20	229

PROGRESS OF PLANTING IN THE LAST TEN FOREST YEARS, 1950-59

Table 14

Acres.

Year						Great Britain	England	Scotland	Wales
1950	...	...	...	...	...	53,737	17,728	24,345	11,664
1951	...	...	...	...	...	57,164	17,491	26,960	12,713
1952	...	...	...	...	...	61,632	18,055	30,978	12,599
1953	...	...	...	...	...	67,610	21,508	34,337	11,765
1954	...	...	...	...	...	70,437	22,994	34,344	13,099
1955	...	...	...	...	...	67,906	21,222	34,042	12,642
1956	...	...	...	...	...	62,400	20,822	29,751	11,827
1957	...	...	...	...	...	57,881	19,332	26,696	11,853
1958	...	...	...	...	...	52,398	17,175	24,863	10,360
1959	...	...	...	...	...	55,136	17,781	25,651	11,704

SPECIES PLANTED IN THE FOREST YEAR 1959

Table 15 Thousands plants.

Country or Conservancy	Total	Scots Pine	Corsican Pine	Lodgepole Pine	European Larch	Japanese Larch	Douglas Fir	Norway Spruce	Sitka Spruce	Oak	Beech	Other species	
												Conifer	Broad- leaved
Great Britain ...	104,700	18,094	4,644	14,379	1,876	7,246	5,374	9,309	28,906	1,165	2,754	9,777	1,176
England, Total	32,817	4,829	3,008	2,406	727	1,416	2,709	4,144	4,814	964	2,258	4,606	936
<i>Conservancy:</i>													
North West...	6,604	1,358	766	255	87	348	276	426	1,631	200	191	845	221
North East ...	10,977	2,018	129	2,049	305	818	239	697	2,757	59	408	1,084	414
East ...	5,346	693	795	1	130	—	555	1,417	—	417	516	779	43
South East ...	4,018	236	532	13	64	160	621	687	—	85	699	839	82
South West...	4,024	133	387	88	93	73	804	698	425	154	334	703	132
New Forest...	980	191	370	—	—	12	111	50	1	15	49	178	3
Dean Forest	868	200	29	—	48	5	103	169	—	34	61	178	41
Scotland, Total	50,255	12,672	788	9,838	1,118	3,240	950	3,234	14,996	113	119	3,103	84
<i>Conservancy:</i>													
North ...	15,754	8,078	311	1,994	539	1,011	357	505	2,605	—	8	340	6
East ...	13,282	3,526	64	3,832	392	330	153	949	2,827	78	73	1,041	17
South ...	13,445	307	373	3,091	109	1,610	324	717	6,112	9	25	732	36
West ...	7,774	761	40	921	78	289	116	1,063	3,452	26	13	990	25
Wales, Total ...	21,628	593	848	2,135	31	2,590	1,715	1,931	9,096	88	377	2,068	156
<i>Conservancy:</i>													
North ...	9,791	123	411	503	20	316	656	794	5,323	23	160	1,396	66
South ...	11,837	470	437	1,632	11	2,274	1,059	1,137	3,773	65	217	672	90

FIRES IN FORESTS IN THE FOREST YEAR 1959

Table 16

	Great Britain	England	Scotland	Wales
Number of fires ...	5,600	4,479	826	295
Area burned (acres) ...	396	270	77	49
Value of damage	£27,149	£17,658	£5,026	£4,465

CAUSES OF FIRES IN THE FOREST YEAR 1959

Table 17

Number

	Great Britain	England	Scotland	Wales
Total	5,600	4,479	826	295
Railways	4,895	4,025	735	135
Adjoining land	269	150	33	86
Public	263	177	35	51
Commission employees	15	8	1	6
Incendiarism	3	2	1	—
Miscellaneous	46	33	7	6
Unknown	109	84	14	11

AREAS OF PLANTATIONS AND VOLUMES OF TIMBER THINNED AND FELLED
IN THE FOREST YEAR 1959

Table 18

	Felled		Thinned		Total Volume Felled and Thinned (000 hoppus feet)
	Area (acres)	Volume (000 hoppus feet)	Area (acres)	Volume (000 hoppus feet)	
Great Britain ...	6,227	4,023·6	45,559	14,585·7	18,609·3
England, Total ...	4,311	2,523·1	23,059	6,648·4	9,171·5
<i>Conservancy:</i>					
North West ...	440	158·1	5,503	1,655·1	1,813·2
North East ...	826	190·1	2,891	488·4	678·5
East ...	477	212·0	7,450	2,109·0	2,321·0
South East ...	1,773	731·1	1,224	315·8	1,046·9
South West ...	265	238·6	2,436	732·7	971·3
New Forest ...	262	409·3	1,357	587·7	997·0
Dean Forest ...	268	583·9	2,198	759·7	1,343·6
Scotland, Total ...	840	706·0	15,328	5,238·5	5,944·5
<i>Conservancy:</i>					
North ...	438	322·3	3,012	1,473·3	1,795·6
East ...	246	315·0	5,381	1,506·2	1,821·2
South ...	56	28·9	2,887	966·5	995·4
West ...	100	39·8	4,048	1,292·5	1,332·3
Wales, Total ...	1,076	794·5	7,172	2,698·8	3,493·3
<i>Conservancy:</i>					
North ...	620	369·2	4,292	1,746·2	2,115·4
South ...	456	425·3	2,880	952·6	1,377·9

SALES OF TIMBER IN THE FOREST YEAR 1959

Table 19

Million hoppus Feet.

Description	Great Britain	England	Scotland	Wales
Trees Sold Standing ...	7·19	2·38	3·15	1·66
Converted* ...	8·80	5·54	2·49	0·77
Round timber and saw logs ...	1·80	1·29	0·46	0·05
Telegraph and other selected poles ...	0·04	0·04	—	—
Mining timber ...	1·76	1·13	0·34	0·29
Posts and stakes ...	1·75	0·37	1·32	0·06
Pulpwood and boardmill material ...	2·16	1·72	0·21	0·23
Sawn timber (roundwood equivalent) ...	0·07	—	0·06	0·01
Firewood ...	0·92	0·71	0·09	0·12
Miscellaneous ...	0·30	0·28	0·01	0·01
Poles Sold in Length (other than Selected)...	1·18	0·57	0·17	0·44

Note.—In addition 0·5 million hoppus feet were converted and used internally for forest and estate purposes. (England 0·2, Scotland 0·2, Wales 0·1.)

CONSTRUCTION AND MAINTENANCE OF FOREST ROADS IN THE FOREST YEAR 1959

Table 20

Miles.

	Great Britain	England	Scotland	Wales
Completed during year	449	151	177	121
Under construction at end of year	435	210	125	100
Maintained during year	5,712	2,614	1,990	1,108

PROPERTIES MANAGED BY THE COMMISSION

Table 21

At 30th September, 1959

Number.

Description	Great Britain	England	Scotland	Wales
Forest Properties	4,997	1,927	2,323	747
Foresters' Houses	932	417	337	178
Forest Workers' Houses	2,507	888	1,349	270
Forest Workers' Holdings... ..	1,168	483	484	201
Miscellaneous	390	139	153	98
Other Properties	4,421	1,837	1,804	780
Farms and other agricultural subjects	2,134	737	833	564
Residential and miscellaneous	669	396	227	46
Sporting lettings	1,618	704	744	170
Easements, permissions, etc.	4,448	2,353	1,504	591

NEW HOUSES COMPLETED IN THE FOREST YEAR AND UNDER CONSTRUCTION AT 30TH SEPTEMBER 1959

Table 22

Number.

	Great Britain	England	Scotland	Wales
Completed	32	21	10	1
Under construction... ..	17	5	6	6

PROGRESS OF THE DEDICATION SCHEME FOR PRIVATE ESTATES
IN THE FOREST YEAR 1959

Table 23

	Great Britain		England		Scotland		Wales	
	Number	Area (acres)	Number	Area (acres)	Number	Area (acres)	Number	Area (acres)
<i>Schemes completed:</i>								
Total	1,471	575,781	962	295,294	391	257,760	118	22,727
At end of previous year (1958) ...	1,289	540,418	821	268,894	367	250,494	101	21,030
During year (net)	182	35,363	141	26,400	24	7,266	17	1,697
<i>Approved or in preparation at end of year</i>	398	108,095	254	64,988	63	29,689	81	13,418

PROGRESS OF THE APPROVED WOODLANDS SCHEME FOR PRIVATE ESTATES
IN THE FOREST YEAR 1959

Table 24

	Great Britain		England		Scotland		Wales	
	Number	Area (acres)	Number	Area (acres)	Number	Area (acres)	Number	Area (acres)
<i>Schemes completed:</i>								
Total	526	154,855	434	109,366	71	40,964	21	4,525
At end of previous year (1958) ...	482	149,832	399	108,428	63	37,419	20	3,985
During year (net)	44	5,023	35	938	8	3,545	1	540
<i>Approved or in preparation at end of year</i>	81	20,573	76	18,835	4	1,510	1	228

ESTIMATED AREA PLANTED BY PRIVATE OWNERS IN THE FOREST YEAR 1959

Table 25

Acres.

	Great Britain	England	Scotland	Wales
Total	34,800	16,800	15,300	2,700
Dedicated Woodlands	23,200	9,500	11,800	1,900
Approved Woodlands	4,400	2,800	1,500	100
Other Woodlands (estimated)	7,200	4,500	2,000	700

VOLUME OF TIMBER LICENSED FOR FELLING AND THINNING ON PRIVATE ESTATES IN THE FOREST YEAR 1959

Table 26

	Great Britain	England	Scotland	Wales
Total volume (million Hoppus feet)... ..	28·9	18·0	8·9	2·0
Conifer	12·7	4·8	7·2	0·7
Broadleaved... ..	16·2	13·2	1·7	1·3
Number of licences issued	4,155	2,977	795	383

AREA LICENSED FOR CLEAR FELLING ON PRIVATE ESTATES IN THE FOREST YEAR 1959

Table 27

Acres.

	Great Britain	England	Scotland	Wales
Total	18,318	12,370	4,005	1,943
Conditional licences	11,645	7,459	3,014	1,172
Unconditional licences	6,673	4,911	991	771

LAND USE AND PLANTING BY FORESTS—ENGLAND

Note:

In Tables 28–30, former Crown Woods are indicated by asterisks, *, and new units, begun in 1959, by a dagger sign, †.

Table 28

Acres.

	Land use at 30th September, 1959				Planted in forest year 1959		
	Total	Under plantations	To be planted	Agricultural and other land	Total	Afforested	Replanted
NORTH WEST ENGLAND CONSERVANCY:							
TOTAL	116,639	78,963	15,264	22,412	3,513	1,767	1,746
Arden, Warwick & Worcs.	876	403	473	—	106	—	106
Bagot, Staffs	1,397	862	531	4	70	—	70
Bawtry, Notts	586	502	24	60	37	—	37
Blengdale, Cumberland ...	1,282	1,178	40	64	56	56	—
Bowland, Lancs & Yorks...	936	622	273	41	122	93	29
Cannock, Staffs	6,595	5,964	579	52	147	—	147
Causeway Wood, Salop ...	355	355	—	—	56	—	56
Charnwood, Leicester ...	275	275	—	—	—	—	—
Corvedale, Salop	397	340	44	13	43	—	43
Cotgrave, Notts & Leicester	529	448	80	1	39	21	18
Dalton, Westmorland & Lancs	1,029	980	—	49	77	—	77
Delamere, Cheshire*	2,163	2,059	84	20	60	—	60
Dunsmore, Warwick.† ...	317	47	270	—	—	—	—
Ennerdale, Cumberland ...	7,584	2,709	—	4,875	84	84	—
Foremark Woods, Derby...	479	175	304	—	55	—	55
Gisburn, Yorks	3,149	2,737	334	78	—	—	—
Greystoke, Cumberland ...	2,631	1,801	589	241	—	—	—
Grizedale, Lancs	7,236	5,573	809	854	210	128	82
Habberley, Salop	841	813	19	9	83	47	36
Hardknott, Cumberland & Lancs	8,292	1,703	524	6,065	38	—	38
Haslingden, Lancs†	65	—	65	—	—	—	—
Haughmond, Salop†	254	31	223	—	—	—	—
Hope, Derby	2,988	736	279	1,973	33	33	—
Inglewood, Cumberland ...	1,825	915	857	53	126	—	126
Kershope, Cumberland ...	11,616	9,686	35	1,895	19	19	—
Kinver, Staffs	740	690	24	26	23	9	14
Launde, Leicester & Rutland	756	115	641	—	24	—	24
Lindale, Lancs & Westmorland†	2,655	688	1,446	521	114	60	54
Long Mynd, Salop	926	774	93	59	13	1	12
Longtown, Cumberland ...	331	301	30	—	2	—	2
Matlock, Derby	1,370	771	599	—	211	207	4
Miterdale, Cumberland ...	1,567	662	608	297	82	79	3
Mortimer, Hereford & Salop	8,639	8,212	93	334	—	—	—
Oakamoor, Staffs	1,047	593	451	3	66	—	66
Packington, Warwick ...	715	247	468	—	36	—	36
Sherwood, Derby, Notts & Yorks	14,901	13,072	1,356	473	347	15	332
Spadeadam, Cumberland ...	8,909	3,565	2,213	3,131	838	838	—
Swynnerton, Staffs	2,160	2,023	120	17	130	—	130
Thornthwaite, Cumberland	6,264	4,664	413	1,187	140	77	63
Walcot, Salop	1,656	1,623	16	17	—	—	—
Walton Woods, Cumberland	306	49	257	—	26	—	26

† Lindale, Lancs and Westmorland, comprises forests formerly known as Cartmel, Lyth, and Foulshaw Wood.

Table 28—continued

	Land use at 30th September, 1959				Planted in forest year 1959		
	Total	Under plantations	To be planted	Agricultural and other land	Total	Afforested	Replanted
NORTH EAST ENGLAND CONSERVANCY:							
TOTAL	232,610	140,486	29,089	63,035	5,653	3,839	1,814
Allendale, Northumberland	369	69	296	4	69	—	69
Allerston, Yorks	10,599	9,555	287	757	72	30	42
Ampleforth, Yorks	5,759	3,460	2,034	265	103	4	99
Arkengarthdale, Yorks ...	1,599	1,120	343	136	—	—	—
Bingley, Yorks	57	40	17	—	13	5	8
Cawthorne, Yorks	689	205	484	—	62	—	62
Chillingham, Northumber-							
land	986	659	303	24	69	—	69
Chopwell, Durham*	2,079	1,452	520	107	26	—	26
Cleveland, Yorks	3,903	2,146	1,695	62	295	196	99
Doncaster, Yorks... ..	1,373	763	603	7	35	—	35
Fountains, Yorks... ..	1,387	436	947	4	126	—	126
Hambleton, Yorks	4,279	1,772	2,317	190	416	235	181
Hamsterley, Durham	6,150	5,535	287	328	60	—	60
Harwood, Northumberland	6,347	4,531	1,352	464	600	600	—
Hebden Royd, Yorks	2,196	2	2,083	111	—	—	—
Holmfirth, Yorks	904	173	679	52	28	28	—
Jervaulx, Yorks	1,624	924	696	4	205	3	202
Kidland, Northumberland	3,790	2,077	1,610	103	265	265	—
Kielder, Northumberland	72,354	44,329	1,693	26,332	292	260	32
Knarsborough, Yorks	680	568	110	2	10	—	10
Langdale, Yorks	14,810	6,210	585	8,015	211	150	61
Londesborough, Yorks	948	582	350	16	93	68	25
Ray, Northumberland	1,996	1,969	—	27	31	31	—
Redesdale, Northumberland	17,252	11,866	99	5,287	224	200	24
Rievaulx, Yorks	3,315	700	2,410	205	307	259	48
Rosedale, Yorks	11,525	7,317	1,092	3,116	348	303	45
Rothbury, Northumberland	4,135	3,015	745	375	245	201	44
Scardale, Yorks	1,101	749	63	289	30	14	16
Selby, Yorks	1,743	1,042	699	2	23	—	23
Skipton, Yorks	164	3	161	—	—	—	—
Slaley, Northumberland &							
Durham	2,330	1,548	710	72	121	14	107
Tong Woods, Yorks	195	159	36	—	—	—	—
Wark, Northumberland	36,448	22,032	1,347	13,069	605	603	2
Weardale, Durham	4,386	493	472	3,421	370	370	—
Wharcliffe, Yorks	1,181	640	480	61	30	—	30
Widehaugh, Northumber-							
land	70	—	—	70	—	—	—
Wynyard, Durham	1,821	961	848	12	117	—	117
York, Yorks	2,066	1,384	636	46	152	—	152
EAST ENGLAND CONSER-							
VANCY:							
TOTAL	113,502	90,482	12,845	10,175	2,702	411	2,291
Ampthill, Beds	1,545	838	626	81	117	12	105
Bardney, Lincs	4,479	3,661	689	129	139	—	139
Beechwood, Beds & Herts	491	269	222	—	72	—	72
Bernwood, Oxon & Bucks	1,662	986	676	—	137	—	137
Bramfield, Herts & Essex...	1,296	737	538	21	75	—	75
Burwell, Lincs	682	648	32	2	—	—	—
Chilterns, Bucks & Oxon...	3,664	2,567	1,038	59	266	27	239
Ditton, Cambs	319	285	34	—	47	5	42
Dunwich, Suffolk	1,652	1,478	145	29	35	3	32

Table 28—continued

	Land use at 30th September, 1959				Planted in forest year 1959		
	Total	Under plantations	To be planted	Agricultural and other land	Total	Afforested	Replanted
Gaywood, Norfolk ...	1,188	780	388	20	105	52	53
Hazelborough, Bucks & Northants* ...	2,569	2,165	53	351	40	—	40
Hevingham, Norfolk ...	1,452	1,102	323	27	82	12	70
Holt, Norfolk ...	852	753	25	74	21	—	21
Honeywood, Essex ...	1,089	277	799	13	111	—	111
Huntingdon, Hunts & Cambs ...	690	201	489	—	51	—	51
Kesteven, Lincs & Rutland	5,019	3,392	1,353	274	196	39	157
The King's Forest, Suffolk	5,999	5,373	462	164	96	95	1
Laughton, Lincs ...	2,203	2,041	101	61	—	—	—
Lavenham, Suffolk ...	889	316	573	—	104	2	102
Pytchley, Northants ...	495	325	170	—	48	—	48
Rendlesham, Suffolk ...	4,766	3,772	44	950	12	12	—
Rockingham, Northants ...	6,019	5,233	353	433	166	—	166
Salcey, Bucks & Northants*	1,337	1,308	1	28	38	3	35
Shouldham, Norfolk ...	1,290	1,127	77	86	87	16	71
Swaffham, Norfolk ...	3,811	3,271	30	510	5	—	5
Swanton, Norfolk ...	1,298	1,110	2	186	10	2	8
Thetford Chase, Norfolk & Suffolk ...	42,694	36,159	1,269	5,266	178	97	81
Tunstall, Suffolk ...	3,077	2,889	41	147	14	13	1
Walden, Essex ...	1,383	516	841	26	97	—	97
Walsham, Norfolk ...	811	707	98	6	43	—	43
Waveney, Suffolk & Norfolk	484	366	81	37	22	2	20
Whaddon Chase, Bucks ...	700	268	432	—	63	—	63
Wigsley, Lincs & Notts ...	2,242	1,558	287	397	73	—	73
Willingham, Lincs ...	2,830	2,409	319	102	137	19	118
Yardley Chase, Beds & Northants ...	2,525	1,595	234	696	15	—	15
SOUTH EAST ENGLAND CONSERVANCY							
TOTAL ...	61,697	44,892	14,549	2,256	2,342	59	2,283
Abinger, Surrey ...	1,330	574	595	161	64	—	64
Alice Holt, Hants & Surrey* ...	2,342	1,950	110	282	18	—	18
Alton, Hants ...	1,329	1,053	163	113	128	—	128
Andover, Hants ...	1,647	1,158	342	147	84	—	84
Arundel, Sussex ...	2,553	2,221	300	32	65	—	65
Ashley Hill, Berks ...	401	319	79	3	40	—	40
Badbury, Berks ...	578	322	256	—	51	—	51
Basing, Hants ...	234	204	30	—	23	—	23
Bedgebury, Kent & Sussex*	2,375	2,082	74	219	54	—	54
Bere, Hants* ...	1,971	1,618	327	26	57	—	57
Bishopstoke, Hants ...	404	286	117	1	1	—	1
Bramshill, Berks & Hants	4,531	4,081	302	148	40	12	28
Brightling, Sussex...	2,078	943	1,114	21	72	—	72
Bucklebury, Berks ...	300	267	33	—	22	—	22
Challock, Kent ...	2,487	1,691	783	13	84	—	84
Charlton, Sussex ...	2,628	2,012	615	1	92	18	74
Chiddingfold, Surrey & Sussex ...	2,249	2,077	165	7	13	—	13
Chilworth, Hants ...	1,295	260	1,024	11	110	—	110
Corhampton, Hants ...	276	165	111	—	21	—	21
Crawley, Hants ...	329	311	18	—	12	4	8
Effingham, Surrey ...	639	306	332	1	22	—	22
Friston, Sussex ...	1,986	1,723	238	25	—	—	—

Table 28—continued

	Land use at 30th September, 1959				Planted in forest year 1959		
	Total	Under plantations	To be planted	Agricultural and other land	Total	Afforested	Replanted
Gravetye, Sussex, Kent & Surrey (1)	1,122	419	225	478	13	—	13
Havant, Hants & Sussex... ..	1,343	611	730	2	70	—	70
Hemsted, Kent	1,024	973	18	33	32	—	32
Hursley, Hants	2,412	1,452	960	—	113	—	113
Lyminge, Kent	2,548	2,370	167	11	56	—	56
Marden, Sussex	1,200	821	278	101	19	—	19
Maresfield, Sussex (1)	1,001	681	319	1	95	—	95
Micheldever, Hants	3,046	2,671	313	62	139	—	139
Mildmay, Kent & Surrey (2)	1,156	456	695	5	82	2	80
Orlestone, Kent	1,191	921	268	2	24	—	24
Pen, Hants... ..	462	181	278	3	27	—	27
Queen Elizabeth Forest, Hants & Sussex... ..	2,477	1,683	670	124	79	—	79
Rochester, Kent	578	120	435	23	28	15	13
Rogate, Sussex	637	459	136	42	48	—	48
St. Leonards, Sussex	1,442	650	753	39	54	—	54
Shippbourne, Kent... ..	458	352	104	2	36	—	36
Slindon, Sussex	1,193	1,101	92	—	28	—	28
Southwater, Sussex	623	449	149	25	30	—	30
Vinehall, Sussex	1,452	1,062	349	41	94	—	94
Westbury, Hants	490	477	3	10	—	—	—
Wilmington, Sussex	881	708	135	38	106	—	106
Winterfold, Surrey	381	308	73	—	43	—	43
Witley Park, Surrey	616	344	271	1	53	8	45
Woking Office Grounds	2	—	—	2	—	—	—
SOUTH WEST ENGLAND CONSERVANCY:							
TOTAL	82,592	59,026	18,860	4,706	2,643	472	2,171
Aconbury, Hereford	613	147	466	—	58	—	58
Bampton, Devon	786	226	559	1	71	2	69
Bentley, Hants & Wilts	3,102	1,475	1,615	12	241	—	241
Blackdown Woods, Dorset	282	—	255	27	—	—	—
Blandford, Dorset... ..	2,827	1,837	777	213	202	19	183
Bodmin, Cornwall	1,513	1,285	62	166	25	—	25
Bradon, Wilts	2,129	1,364	660	105	48	—	48
Brendon, Somerset*	3,327	2,639	360	328	104	43	61
Bruton, Somerset & Wilts	1,192	1,031	154	7	8	1	7
Charmouth, Devon & Dorset	1,122	773	306	43	42	42	—
Collingbourne, Wilts	1,336	1,254	71	11	33	—	33
Cowley Woods, Gloucester	493	237	255	1	36	—	36
Croft Pascoe, Cornwall	453	75	378	—	35	—	35
Dartmoor, Devon	2,287	1,689	—	598	—	—	—
Dymock, Gloucester, Hereford & Worcester	1,876	1,528	287	61	7	—	7
Eggesford, Devon... ..	1,207	1,080	109	18	60	—	60
Erme, Devon	641	231	407	3	28	—	28
Fernworthy, Devon	1,505	1,499	2	4	7	—	7
Gardiner, Dorset & Wilts	1,751	1,316	418	17	98	—	98

Notes:

(1) Gravetye and Maresfield Forests now include land formerly allocated to Groombridge Forest.

(2) Mildmay Forest now includes the former Joydens Wood and Westerham Forests.

Note: * Dunster Forest was merged with Brendon, following resumption of certain woodlands by the Commissioners of Crown Lands.

Table 28—continued

	Land use at 30th September, 1959				Planted in forest year 1959		
	Total	Under plantations	To be planted	Agricultural and other land	Total	Afforested	Replanted
Glynn, Cornwall	2,640	2,116	392	132	83	—	83
Haldon, Devon	4,567	3,928	587	52	118	—	118
Halwill, Devon & Cornwall	5,289	3,978	657	654	104	54	50
Hartland, Devon & Cornwall	2,290	1,845	331	114	87	57	30
Haugh, Hereford	1,008	870	118	20	38	—	38
Herodsfoot, Cornwall	817	757	34	26	21	—	21
Honiton, Devon	2,125	1,056	1,040	29	211	34	177
Lydford, Devon	639	567	30	42	10	—	10
Mendip, Somerset	1,223	1,141	—	82	—	—	—
Middlemarsh Woods, Dorset	405	96	309	—	55	—	55
Moccas, Hereford	973	407	566	—	45	10	35
Molton Woods, Devon	859	303	541	15	40	3	37
Neroche, Somerset	1,985	969	926	90	44	—	44
Okehampton, Devon	519	476	4	39	3	—	3
Pershore, Worcs	459	202	256	1	11	—	11
Plym, Devon	1,783	1,486	293	4	58	—	58
Poorstock, Dorset & Somerset	2,039	572	1,467	—	58	—	58
Purbeck, Dorset	1,595	1,437	59	99	—	—	—
Quantock, Somerset	2,766	2,336	76	354	22	—	22
St. Austell, Cornwall†	160	—	160	—	—	—	—
St. Clement, Cornwall	454	305	144	5	20	—	20
Savernake, Wilts & Berks	4,443	2,778	1,385	280	67	—	67
Sedgemoor, Somerset	452	355	97	—	21	—	21
Shepton, Somerset	256	159	95	2	—	—	—
Stanway, Gloucester	1,150	444	62	644	17	—	17
Stokeleigh, Somerset	639	566	59	14	56	—	56
Wareham, Dorset... ..	6,625	4,661	1,825	139	197	122	75
West Woods, Wilts	978	909	—	69	—	—	—
Wilsey Down, Cornwall	1,428	1,331	31	66	95	68	27
Wyre, Worcester & Salop	3,584	3,290	175	119	59	17	42
NEW FOREST:							
TOTAL	78,014	33,816	3,777	40,421	536	209	327
Brightstone, Isle of Wight...	1,618	1,354	72	192	34	34	—
Combley, Isle of Wight	753	544	198	11	—	—	—
Ferndown, Dorset	2,018	1,112	357	549	66	—	66
Hurn, Hants	1,529	1,019	163	347	145	145	—
Lytchett, Dorset	102	20	82	—	20	—	20
New Forest, Hants*	65,545	24,411	2,455	38,679	178	—	178
Osborne, Isle of Wight	241	178	56	7	—	—	—
Parkhurst, Isle of Wight*...	1,583	1,021	254	308	22	—	22
Ringwood, Dorset & Hants	4,062	3,766	71	225	29	—	29
Shalfleet, Isle of Wight	563	391	69	103	42	30	12
DEAN FOREST:							
TOTAL	27,086	21,994	1,726	3,366	392	60	332
Dean Forest, Gloucester, Hereford & Monmouth*	25,180	20,323	1,551	3,306	303	25	278
Tidenham Chase, Gloucester	1,906	1,671	175	60	89	35	54

LAND USE AND PLANTING BY FORESTS—SCOTLAND

Table 29

Acres.

	Land use at 30th September, 1959				Planted in forest year 1959		
	Total	Under plantations	To be planted	Agricultural and other land	Total	Afforested	Replanted
NORTH SCOTLAND CONSERVANCY:							
TOTAL ...	510,836	137,452	50,701	322,683	8,163	4,538	3,625
Achnasheen, Ross ...	754	465	149	140	112	43	69
Achnashellach, Ross ...	19,674	928	424	18,322	—	—	—
Aigas, Inverness ...	2,143	718	659	766	75	75	—
Ardross, Ross ...	6,373	4,905	377	1,091	298	—	298
Assich, Nairn ...	1,326	908	196	222	55	49	6
Balblair, Sutherland & Ross	6,527	2,016	650	3,861	150	150	—
Battan, Inverness]... ..	2,167	1,500	321	346	33	14	19
Boblainy, Inverness ...	2,690	2,534	1	155	—	—	—
Borgie, Sutherland ...	2,706	1,373	—	1,333	30	30	—
Ceannacroc, Inverness ...	13,611	2,069	2,118	9,424	200	112	88
Clach Liath, Ross ...	2,197	1,440	321	436	204	156	48
Clunes, Inverness ...	7,261	2,179	500	4,582	173	105	68
Craig Phadrig, Inverness...	211	198	3	10	—	—	—
Craigs, Ross ...	2,022	1,741	168	113	155	78	77
Creag nan Eun, Inverness	2,139	1,364	222	553	—	—	—
Culloden, Inverness ...	2,447	2,332	94	21	—	—	—
Dornoch, Sutherland ...	2,854	1,411	276	1,167	261	250	11
Dunnet, Caithness ...	871	288	514	69	25	25	—
Eilanreach, Inverness ...	922	829	—	93	—	—	—
Farigaig, Inverness ...	7,254	2,415	1,620	3,219	224	—	224
Ferness, Nairn ...	1,494	1,024	6	464	4	4	—
Findon, Ross ...	2,366	2,244	10	112	—	—	—
Fiunary, Argyll ...	18,391	4,953	1,414	12,024	264	219	45
Glen Affric, Inverness ...	53,099	4,549	4,361	44,189	480	—	480
Glen Brittle, Skye, Inverness	8,858	1,595	435	6,828	17	17	—
Glen Cripesdale, Argyll ...	7,290	488	1,992	4,810	100	60	40
Glen Garry, Inverness ...	23,027	5,215	649	17,163	211	94	117
Glen Hurich, Argyll ...	15,180	3,181	620	11,379	63	—	63
Glen Loy, Inverness ...	2,546	1,940	106	500	—	—	—
Glen Righ, Inverness ...	5,845	2,545	256	3,044	44	44	—
Glen Shiel, Ross ...	3,653	762	—	2,891	—	—	—
Glen Urquhart, Inverness	18,839	4,208	1,612	13,019	310	—	310
Glen Varragill, Skye, Inverness	8,546	508	559	7,479	118	118	—
Guisachan, Inverness ...	5,644	2,179	823	2,642	150	—	150
Healaval, Skye, Inverness	1,265	462	465	338	132	132	—
Inchnacardoch, Inverness	9,527	2,649	280	6,598	108	56	52
Inshriach, Inverness ...	11,606	3,740	2,909	4,957	447	408	39
Inverinate, Ross ...	1,234	1,038	—	196	—	—	—
Kessock, Ross ...	1,666	1,346	15	305	30	30	—
Kilcoy, Ross ...	3,564	3,030	69	465	50	—	50
Lael, Ross ...	3,583	2,319	339	925	75	20	55
Laiken, Nairn ...	844	824	8	12	—	—	—
Leanachan, Inverness ...	26,712	3,831	2,577	20,304	535	109	426
Millbuie, Ross ...	7,336	6,728	11	597	—	—	—
Morangie, Ross ...	7,575	5,325	509	1,741	260	—	260
Naver, Sutherland ...	17,266	364	5,095	11,807	250	250	—
Nevis, Inverness ...	7,659	977	4	6,678	—	—	—
North Strone, Ross ...	1,969	809	29	1,131	19	18	1
Oykell, Ross & Sutherland	4,322	1,846	1,738	738	310	180	130
Portclair, Inverness ...	5,500	2,353	—	3,147	11	—	11
The Queen's Forest, Inverness	12,500	3,266	101	9,133	29	28	1

Table 29—continued

	Land use at 30th September, 1959				Planted in forest year 1959		
	Total	Under plantations	To be planted	Agricultural and other land	Total	Afforested	Replanted
Raasay, Isle of Raasay, Inverness ...	749	544	27	178	11	7	4
Ratagan, Inverness & Ross	5,831	1,754	659	3,418	82	76	6
Rumster, Caithness ...	2,362	959	—	1,403	42	42	—
Salen, Mull, Argyll ...	25,605	5,467	3,125	17,013	355	298	57
Shin, Sutherland ...	39,421	3,826	1,147	34,448	493	484	9
Slattadale, Ross ...	1,972	939	378	655	89	89	—
South Laggan, Inverness...	4,192	1,110	—	3,082	—	—	—
South Strone, Ross ...	3,556	1,290	320	1,946	20	20	—
Strath Conon, Ross ...	3,289	2,184	501	604	108	20	88
Strath Dearn, Inverness ...	8,915	2,466	1,836	4,613	55	13	42
Strath Mashie, Inverness...	4,542	1,599	1,874	1,069	236	148	88
Strath Nairn, Inverness ...	2,437	1,219	128	1,090	35	—	35
Strathy, Sutherland ...	804	281	300	223	36	36	—
Sunart, Argyll & Inverness	2,569	1,396	705	468	115	35	80
Torrachilty, Ross (!) ...	18,491	3,580	4,096	10,815	474	396	78
Urray, Ross ...	998	881	—	117	—	—	—
Hoy Experiments, Orkney	32	32	—	—	—	—	—
Lewis Experiments, Isle of Lewis, Ross ...	16	14	—	2	—	—	—
EAST SCOTLAND CONSERVANCY:							
TOTAL ...	277,236	145,948	35,853	95,435	5,731	3,619	2,112
Allean, Perth ...	9,875	2,389	2,629	4,857	207	206	1
Alltcaileach, Aberdeen ...	3,806	3,588	129	89	116	—	116
Aultmore Banff ...	466	—	466	—	—	—	—
Benachie, Aberdeen ...	6,264	3,428	583	2,253	254	103	151
The Bin, Aberdeen & Banff	8,133	6,406	843	884	204	200	4
Blackcraig, Perth ...	3,360	1,760	962	638	90	64	26
Blackhall, Kincardine ...	4,898	3,011	1,749	138	168	119	49
Blairadam, Fife & Kinross	2,543	1,974	326	243	54	44	10
Carden, Fife ...	547	536	2	9	—	—	—
Clashindarroch, Aberdeen	18,668	11,217	1,226	6,225	280	280	—
Craigvinean, Perth ...	4,286	3,454	58	774	65	—	65
Culbin, Moray & Nairn	7,738	7,275	—	463	—	—	—
Cushnie, Aberdeen ...	3,154	254	1,797	1,103	69	—	69
Delgaty, Aberdeen & Banff	2,278	1,551	720	7	157	—	157
Drummond Hill, Perth ...	7,416	4,358	519	2,539	68	64	4
Drumtochty, Kincardine...	9,190	4,728	3,049	1,413	285	285	—
Durris, Aberdeen & Kincardine	4,729	4,341	94	294	73	19	54
Edensmuir, Fife ...	1,957	1,666	144	147	68	47	21
Elchies, Moray ...	4,407	1,366	1,772	1,269	258	44	214
Faskally, Perth ...	1,061	300	636	125	27	—	27
Fetteresso, Kincardine ...	8,463	5,624	273	2,566	332	247	85
Fonab, Perth ...	2,248	1,346	405	497	104	9	95
Forest of Deer, Aberdeen...	3,473	2,377	652	444	150	150	—
Glendevon, Perth & Kinross	954	872	43	39	—	—	—
Glendoll, Angus ...	3,713	984	494	2,235	128	125	3
Glenarrochty, Perth ...	2,891	879	1,616	396	94	67	27
Glenisla, Angus & Perth ...	11,100	3,164	2,245	5,691	256	186	70
Glenlivet, Banff ...	9,217	6,301	1,646	1,270	378	378	—
Glenprosen, Angus ...	8,326	296	1,896	6,134	105	105	—
Hallyburton, Angus & Perth	2,123	1,997	100	26	28	—	28

Note:

(1) Torrachilty includes the former Longart Forest.

Table 29—continued

	Land use at 30th September, 1959				Planted in forest year 1959		
	Total	Under plantations	To be planted	Agricultural and other land	Total	Afforested	Replanted
Inglismaldie, Angus & Kincardine	1,731	1,374	350	7	21	—	21
Keillour, Perth ...	2,042	1,681	295	66	86	—	86
Kemnay, Aberdeen ...	1,398	1,359	22	17	31	—	31
Kinfauns, Perth ...	826	824	2	—	3	—	3
Kirkhill, Aberdeen (1) ...	2,969	2,616	196	157	40	—	40
Ledmore, Perth ...	117	—	—	117	—	—	—
Lossie, Moray ...	1,904	1,669	3	232	—	—	—
Midmar, Aberdeen ...	1,340	1,104	3	233	70	64	6
Monaughty, Moray ...	4,345	3,823	184	338	—	—	—
Montreathmont, Angus ...	2,782	2,649	89	44	33	—	33
Newton, Moray ...	175	—	—	175	—	—	—
Newtyle, Moray (2) ...	4,009	2,739	356	914	9	9	—
Pitfichie, Aberdeen ...	7,110	5,107	87	1,916	48	—	48
Pitmedden, Fife & Perth...	2,223	1,934	165	124	—	—	—
Rannoch, Perth ...	45,667	3,327	3,591	38,749	409	277	132
Rosarie, Banff ...	6,536	5,058	166	1,312	326	—	326
Roseisle, Moray ...	2,093	1,962	69	62	—	—	—
Scotmore, Banff & Moray	821	817	—	4	—	—	—
Speymouth, Moray & Banff	12,470	9,845	1,587	1,038	337	281	56
Strathord, Perth ...	1,623	1,453	166	4	85	85	—
Teindland, Moray ...	3,153	2,361	121	671	123	103	20
Tentsmuir, Fife ...	3,968	3,329	20	619	34	—	34
Tornashean, Aberdeen ...	9,147	2,266	1,306	5,575	58	58	—
Whitehaugh, Aberdeen ...	1,503	1,209	1	293	—	—	—
SOUTH SCOTLAND CONSERVANCY:							
TOTAL ...	260,876	127,659	50,322	82,895	7,836	7,314	522
Forest of Ae, Dumfries ...	13,024	12,036	398	590	501	498	3
Arcleloch, Ayrshire ...	3,923	495	3,035	393	260	260	—
Auchenroddan, Dumfries	777	751	—	26	—	—	—
Bareagle, Wigtown ...	2,386	875	1,218	293	202	175	27
Brownmoor, Dumfries ...	828	597	222	9	44	40	4
Cairn Edward, Kirkcudbright	28,482	14,552	7,598	6,332	1,109	1,108	1
Cardrona, Peebles ...	1,859	1,413	—	446	—	—	—
Carrick, Ayr ...	35,075	7,570	1,813	25,692	454	449	5
Castle O'er, Dumfries & Selkirk ...	8,691	7,560	190	941	102	102	—
Change, Ayr ...	2,447	1,747	55	645	—	—	—
Clauchrie, Dumfries ...	639	567	5	67	—	—	—
Clydesdale, Lanark ...	938	410	510	18	34	5	29
Corriedoo, Kirkcudbright	1,045	994	1	50	—	—	—
Craik, Roxburgh & Selkirk	4,443	3,893	35	515	80	77	3
Dalbeattie, Kirkcudbright	6,208	5,153	622	433	210	204	6
Dalmacallan, Dumfries ...	2,196	1,714	435	47	104	21	83
Dreva, Peebles ...	1,354	878	449	27	75	—	75
Dundeugh, Kirkcudbright	5,964	3,978	839	1,147	243	243	—
Duns, Berwick ...	1,172	727	444	1	88	62	26
Eddleston, Peebles ...	963	188	739	36	130	117	13
Edgarhope, Berwick & Midlothian ...	1,889	1,245	140	504	30	23	7

Notes:

(1) Kirkhill includes the former Countesswells Forest.

(2) Newtyle includes the former Dallas Forest.

Table 29—continued

	Land use at 30th September, 1959				Planted in forest year 1959		
	Total	Under plantations	To be planted	Agricultural and other land	Total	Afforested	Replanted
Elibank & Traquair, Selkirk & Peebles	5,594	3,589	921	1,084	203	203	—
Fleet, Kirkcudbright	1,375	1,220	32	123	—	—	—
Garcrogo, Kirkcudbright	1,914	1,618	—	296	2	—	2
Glengap, Kirkcudbright	2,265	2,017	164	84	48	46	2
Glentress, Peebles... ..	2,355	1,961	10	384	7	—	7
Glen Trool, Kirkcudbright & Ayr	53,362	13,427	12,501	27,434	1,123	1,123	—
Greskine, Dumfries	3,407	2,571	578	258	152	152	—
Kilgrammie, Ayr	570	563	1	6	—	—	—
Kilsture, Wigtown	1,076	558	514	4	51	51	—
Kirroughtree, Kirkcudbright	10,761	5,680	2,255	2,826	333	323	10
Laurieston, Kirkcudbright	4,533	3,511	878	144	249	248	1
Mabie, Kirkcudbright & Dumfries	3,568	2,884	376	308	149	140	9
Newcastleton, Roxburgh & Dumfries	7,754	5,438	1,926	390	301	300	1
Penninghame, Wigtown	5,162	2,788	881	1,493	264	223	41
Saltoun, East Lothian & Midlothian	943	425	464	54	59	—	59
Selm Muir, Midlothian & West Lothian	584	361	214	9	23	—	23
Stenton, East Lothian & Berwick	1,298	670	563	65	60	54	6
The Garraries, Kirkcudbright	7,712	1,083	2,902	3,727	302	302	—
Upper Nithsdale, Dumfries	3,217	105	2,808	304	93	80	13
Watermeetings, Lanark	3,247	713	1,080	1,454	206	206	—
Wauchope, Roxburgh	13,495	7,500	1,847	4,148	447	439	8
Yair Hill, Selkirk & Roxburgh	2,342	1,634	659	49	98	40	58
Bush Nursery, Midlothian	9	—	—	9	—	—	—
Whittingehame Seed Orchard, East Lothian	30	—	—	30	—	—	—
WEST SCOTLAND CONSERVANCY:							
TOTAL	299,304	120,951	25,875	152,478	3,921	2,925	996
Achaglachgach, Argyll	3,901	2,144	847	910	173	167	6
Ardfin, Jura, Argyll	1,179	296	660	223	83	83	—
Ardgartan, Argyll... ..	20,959	5,744	1,053	14,162	384	198	186
Asknish, Argyll	5,899	3,720	1	2,178	—	—	—
Barcaldine, Argyll	6,064	4,246	50	1,768	14	3	11
Benmore, Argyll	9,587	3,099	246	6,242	38	—	38
Blackmount, Argyll ⁽¹⁾	106	34	42	30	12	12	—
Carradale, Argyll... ..	10,919	4,896	112	5,911	85	46	39
Carron Valley, Stirling	6,637	4,501	20	2,116	16	16	—
Corlarach, Argyll... ..	3,962	2,375	192	1,395	48	38	10
Creran, Argyll	2,031	331	1,198	502	85	78	7
Cumbernauld, Dunbarton & West Lothian	1,039	334	504	201	110	92	18
Dalmally, Argyll	2,805	1,064	1,555	186	29	—	29
Devilla, Fife & Clackmannan	3,427	2,707	541	179	232	92	140
Fearnoch, Argyll	1,342	1,133	—	209	—	—	—

⁽¹⁾ Formerly called Rannoch Moor.

Table 29—continued

	Land use at 30th September, 1959				Planted in forest year 1959		
	Total	Under plantations	To be planted	Agricultural and other land	Total	Afforested	Replanted
Garadhban, Stirling & Dunbarton	1,392	1,244	97	51	20	—	20
Garelochhead, Dunbarton	1,131	770	225	136	82	—	82
Garshelloch, Stirling ...	774	407	367	—	—	—	—
Glenbranter, Argyll ...	8,712	3,682	74	4,956	83	83	—
Glencoe, Argyll ...	380	317	49	14	—	—	—
Glendaruel, Argyll ...	6,372	2,226	143	4,003	96	84	12
Glendochart, Perth ...	5,417	20	755	4,642	20	20	—
Glenduror, Argyll ...	7,925	2,673	74	5,178	13	—	13
Glenfinart, Argyll...	8,712	3,196	4	5,512	4	—	4
Glenorchy, Argyll† ...	1,533	304	947	282	138	138	—
Glenrickard, Arran, Buteshire	8,238	1,064	3,961	3,213	240	240	—
Inverinan, Argyll ...	12,796	5,408	803	6,585	101	42	59
Inverliever, Argyll* ...	29,561	6,688	575	22,298	173	115	58
Kilmartin, Argyll ...	1,615	870	689	56	360	349	11
Kilmichael, Argyll ...	10,078	5,235	24	4,819	—	—	—
Kilmory, Argyll ...	4,151	2,513	602	1,036	65	65	—
Knapdale, Argyll ...	20,620	6,754	711	13,155	21	7	14
Leapmoor, Renfrew ...	754	206	546	2	39	—	39
Lennox, Stirling & Dunbarton	829	670	112	47	40	7	33
Loch Ard, Perth & Stirling	32,449	18,619	1,933	11,897	378	378	—
Loch Eck, Argyll ...	5,501	2,415	27	3,059	1	1	—
Loch Etive, Argyll ...	5,888	56	2,184	3,648	15	15	—
Minard, Argyll ...	5,327	3,660	28	1,639	36	—	36
Rowardennan, Stirling ...	9,468	2,157	1,204	6,107	200	166	34
Saddell, Argyll ...	5,699	1,619	352	3,728	101	101	—
St. Fillans, Perth ...	2,128	1,244	726	158	93	59	34
Strathlachlan, Argyll ...	7,615	2,702	266	4,647	35	—	35
Strathyre, Perth ...	10,671	5,834	281	4,556	24	24	—
Tighnabruaich, Argyll ...	2,442	763	1,053	626	203	203	—
Torrie, Perth ...	1,157	1,011	42	104	31	3	28
Tulliallan Nursery, Fife ...	112	—	—	112	—	—	—

LAND USE AND PLANTING BY FORESTS—WALES, 1959

Table 30

Acres.

	Land use at 30th September, 1959				Planted in forest year 1959		
	Total	Under plantations	To be planted	Agricultural and other land	Total	Afforested	Replanted
NORTH WALES CONSERVANCY:							
TOTAL	181,966	119,059	21,289	41,618	5,968	4,305	1,663
Aberhiraunt, Merioneth ...	6,663	3,136	186	3,341	97	97	—
Aeron, Cardigan	3,170	1,743	1,201	226	449	431	18
Arfon, Caernarvon	515	53	368	94	21	15	6
Bechan, Montgomery	695	594	100	1	46	9	37
Beddgelert, Caernarvon ...	3,338	1,998	221	1,119	68	—	68
Breidden, Montgomery & Salop	701	494	151	56	37	13	24
Carno, Montgomery	1,149	877	166	106	7	—	7
Ceiriog, Denbigh	1,644	1,241	253	150	66	51	15
Clocaenog, Denbigh & Merioneth	18,490	12,338	2,128	4,024	371	315	56
Clwyd, Denbigh & Flint ...	2,039	1,493	176	370	32	4	28
Coed Sarnau, Radnor	7,556	4,502	2,013	1,041	136	102	34
Coed y Brenin, Merioneth	18,382	11,629	972	5,781	364	259	105
Cynwyd, Merioneth	1,894	1,671	97	126	18	—	18
Deudraeth, Merioneth* ...	2,892	1,150	864	878	100	35	65
Dovey, Merioneth & Montgomery	19,761	15,018	1,732	3,011	463	322	141
Dyfnant, Montgomery	7,652	4,365	719	2,568	733	713	20
Edw, Radnor	424	153	271	—	77	—	77
Elwy, Denbigh & Flint	1,550	1,301	229	20	90	—	90
Glanllyn, Merioneth	1,107	893	163	51	135	103	32
Goror, Denbigh & Salop ...	747	691	36	20	80	77	3
Gwydyr, Caernarvon & Denbigh	19,960	12,443	440	7,077	270	212	58
Hafren, Montgomery	10,789	8,190	282	2,317	205	129	76
Halcyn, Denbigh & Flint	975	744	133	98	82	—	82
Kerry, Montgomery, Salop & Radnor	2,850	2,608	117	125	77	48	29
Llambod, Cardigan & Carmarthen	1,745	1,330	364	51	152	90	62
Llangollen, Denbigh	1,044	905	128	11	17	8	9
Llyn, Caernarvon	2,255	1,076	993	186	208	154	54
Maelor, Denbigh, Flint & Salop	561	221	260	80	—	—	—
Mathrafal, Montgomery & Salop	2,650	1,836	779	35	105	3	102
Môn, Anglesey	3,823	2,193	940	690	127	96	31
Myherin, Cardigan	6,140	3,486	86	2,568	94	68	26
Penllyn, Merioneth	1,023	772	—	251	90	87	3
Radnor, Radnor & Hereford	6,398	5,040	291	1,067	126	33	93
Rheidol, Cardigan	4,293	2,722	1,155	416	54	—	54
Tallesin, Cardigan & Montgomery	6,681	2,453	2,484	1,744	300	298	2
Tanat, Montgomery & Denbigh	961	779	107	75	46	26	20
Tarenig, Cardigan & Montgomery	4,463	2,622	543	1,298	447	447	—
Ystwyth, Cardigan	4,982	4,299	141	542	178	60	118
Chirk Depot, Denbigh ...	4	—	—	4	—	—	—

Table 30—continued

	Land use at 30th September, 1959				Planted in forest year 1959		
	Total	Under plantations	To be planted	Agricultural and other land	Total	Afforested	Replanted
SOUTH WALES CONSERVANCY:							
TOTAL ...	161,024	103,722	36,339	20,963	5,736	4,055	1,681
Bannau, Brecon ...	5,197	3,177	1,110	910	255	253	2
Brechfa, Carmarthen ...	15,870	12,867	589	2,414	285	236	49
Brecon, Brecon ...	2,267	1,634	333	300	37	11	26
Caeo, Carmarthen ...	5,053	3,606	537	910	269	215	54
Chepstow, Monmouth ...	2,175	1,810	356	9	40	—	40
Cilgwyn, Carmarthen ...	1,284	1,106	176	2	63	23	40
Coed Caerdydd,							
Glamorgan	1,319	518	781	20	70	—	70
Coed Morgannwg,							
Glamorgan	38,647	26,397	6,050	6,200	1,130	1,075	55
Coed y Rhaiadr, Brecon	2,954	1,582	1,061	311	90	90	—
Conwil Elvet, Carmarthen	687	257	429	1	144	125	19
Crychan, Brecon &							
Carmarthen	9,473	8,483	64	926	132	122	10
Draethen, Glamorgan &							
Monmouth	1,326	580	738	8	10	—	10
Ebbw, Monmouth ...	7,821	4,916	2,329	576	396	264	132
Gamrhiw, Brecon...	1,107	829	171	107	21	3	18
Giedd, Brecon ...	664	589	16	59	15	—	15
Glasfynydd, Brecon &							
Carmarthen	3,583	3,362	122	99	38	38	—
Gower, Glamorgan ...	1,121	438	675	8	9	—	9
Goytre, Monmouth ...	726	505	216	5	56	—	56
Gwendraeth, Carmarthen	471	69	373	29	1	—	1
Hay, Brecon, Hereford &							
Radnor ...	1,877	1,303	476	98	61	4	57
Irfon, Brecon ...	4,161	1,598	2,020	543	318	270	48
Llanddowror, Carmarthen	1,276	813	452	11	121	18	103
Llandeilo, Carmarthen ...	1,114	889	115	110	46	22	24
Llantrisant, Glamorgan ...	816	794	20	2	2	—	2
Monmouth, Monmouth ...	1,668	851	815	2	82	—	82
Mynydd Ddu, Brecon &							
Monmouth ...	3,399	2,558	317	524	94	40	54
Pembrey, Carmarthen ...	4,542	2,049	351	2,142	62	61	1
Penllergaer, Glamorgan ...	601	564	9	28	38	38	—
Preseli, Pembroke &							
Carmarthen	1,239	577	542	120	23	23	—
St. Gwynno, Glamorgan...	6,581	3,674	1,643	1,264	314	181	133
Slebech, Pembroke ...	2,084	1,566	437	81	90	4	86
Tair Onen, Glamorgan ...	979	655	90	234	11	10	1
Talybont, Brecon ...	3,737	2,559	1,047	131	319	241	78
Teifi, Carmarthen &							
Cardigan	1,117	861	233	23	108	—	108
Tintern, Monmouth* ...	5,193	4,666	285	242	56	—	56
Towy, Cardigan, Brecon &							
Carmarthen ...	15,213	2,510	10,254	2,449	613	572	41
Tydweli, Pembroke ...	1,029	566	440	23	170	116	54
Wentwood, Monmouth ...	2,653	1,944	667	42	147	—	147

Table 31
ENGLAND
Main statistics for the year ended 30th September, 1959

FORESTRY COMMISSION					
LAND USE AT THE END OF THE YEAR					
Total area					<i>Acres</i> 712,140
Forest land: Total	...				566,573
Acquired plantations	...	...			51,687
Planted by Forestry Commission					417,972
To be planted	...	...	...		96,110
Nurseries	...	...	...		804
Other land: Total					145,567
Agricultural and grazing	...	...	...		63,374
Forest Workers' Holdings		...	...		6,240
Unplantable and miscellaneous	...	...			75,953
FOREST LAND ACQUIRED IN THE YEAR					
Total area	...				<i>Acres</i> 11,052
Standing woods	...	...	...		326
Bare land for afforestation	...				2,749
Former woodland for replanting					7,977
PLANTING IN THE YEAR					
Total area					<i>Acres</i> 17,781
Afforested					6,817
Replanted					10,964
AREAS OF PLANTATIONS AND VOLUMES OF TIMBER THINNED AND FELLED IN THE YEAR					
		<i>Area</i> (<i>acres</i>)	<i>Volume</i> (<i>hoppus</i> <i>feet</i>)		
Total		—			9,171,500
Felled	...	4,311	2,523,056		
Thinned	...	23,059	6,648,444		
CONSTRUCTION AND MAINTENANCE OF ROADS					
Total completed during year	...	...	...	...	<i>Miles</i> 151
Under construction at end of year	...	...	...	...	210
Maintained during year	...	...	...	...	2,614
Number of forest workers employed at end of year: 5,201 (including 160 part-time workers).					

Table 31—*continued*

ENGLAND

Main statistics for the year ended 30th September, 1959

PRIVATE FORESTRY

PROGRESS OF THE DEDICATION SCHEME

			<i>Number</i>	<i>Area (acres)</i>
Total Schemes completed to date	...	...	962	295,294
Schemes completed during year (net)	...	...	141	26,400
Schemes approved or in preparation at end of year	...	...	254	64,988

PROGRESS OF THE APPROVED WOODLANDS SCHEME

			<i>Number</i>	<i>Area (acres)</i>
Total Schemes completed to date	...	...	434	109,366
Schemes completed during year (net)	...	...	35	938
Schemes approved or in preparation at end of year	...	...	76	18,835

ESTIMATED AREA PLANTED BY PRIVATE OWNERS IN THE YEAR

		<i>Acres</i>
Total area	...	16,800
Dedicated Woodlands	...	9,500
Approved Woodlands	...	2,800
Other Woodlands (estimated)	...	4,500

Table 32
SCOTLAND
Main statistics for the year ended 30th September, 1959

FORESTRY COMMISSION					
LAND USE AT THE END OF THE YEAR					
Total area	...	...	...	...	<i>Acres</i> 1,348,252
Forest land: Total					695,558
Acquired plantations	...	...			25,067
Planted by Forestry Commission					506,943
To be planted	...	...	...		162,751
Nurseries	...	...	...	...	797
Other land: Total					652,694
Agricultural and grazing	...	...			422,600
Forest Workers' Holdings			...		4,886
Unplantable and miscellaneous	...				225,208
FOREST LAND ACQUIRED IN THE YEAR					
Total area					<i>Acres</i> 19,939
Standing woods	...	...	...		249
Bare land for afforestation	...				16,308
Former woodland for replanting					3,382
PLANTING IN THE YEAR					
Total area					<i>Acres</i> 25,651
Afforested					18,396
Replanted					7,255
AREAS OF PLANTATIONS AND VOLUMES OF TIMBER THINNED AND FELLED IN THE YEAR					
			<i>Area</i> (<i>acres</i>)	<i>Volume</i> (<i>Hoppus</i> <i>feet</i>)	
Total			—	5,944,527	
Felled	...		840	705,996	
Thinned	...		15,328	5,238,531	
CONSTRUCTION AND MAINTENANCE OF ROADS					
Total completed during year	...	...	...	...	<i>Miles</i> 177
Under construction at end of year	...	...	...	...	125
Maintained during year	...	...	...	...	1,990

Number of forest workers employed at end of year: 4,173 (including 39 part-time workers).

Table 32—*continued*

SCOTLAND

Main statistics for the year ended 30th September, 1959

PRIVATE FORESTRY

PROGRESS OF THE DEDICATION SCHEME

	<i>Number</i>	<i>Area (acres)</i>
Total Schemes completed to date ...	391	257,760
Schemes completed during year (net) ...	24	7,266
Schemes approved or in preparation at end of year ...	63	29,689

PROGRESS OF THE APPROVED WOODLANDS SCHEME

	<i>Number</i>	<i>Area (acres)</i>
Total Schemes completed to date ...	71	40,964
Schemes completed during year (net) ...	8	3,545
Schemes approved or in preparation at end of year ...	4	1,510

ESTIMATED AREA PLANTED BY PRIVATE OWNERS IN THE YEAR

	<i>Acres</i>
Total area	15,300
Dedicated Woodlands ...	11,800
Approved Woodlands ...	1,500
Other Woodlands (estimated)	2,000

Table 33
WALES
Main Statistics for the year ended 30th September, 1959

FORESTRY COMMISSION				
LAND USE AT THE END OF THE YEAR				
Total area				<i>Acres</i> 342,990
Forest land: Total	...			280,893
Acquired plantations	...	...		6,161
Planted by Forestry Commission				216,620
To be planted	...	...	...	57,628
Nurseries	...	...	...	484
Other land: Total	...	...	...	62,097
Agricultural and grazing	...	...		49,360
Forest Workers' Holdings				2,396
Unplantable and miscellaneous	...			10,341
FOREST LAND ACQUIRED IN THE YEAR				
Total area				<i>Acres</i> 7,819
Standing woods	...	...	...	236
Bare land for afforestation	...			5,360
Former woodland for replanting				2,223
PLANTING IN THE YEAR				
Total area				<i>Acres</i> 11,704
Afforested				8,360
Replanted				3,344
AREAS OF PLANTATIONS AND VOLUMES OF TIMBER THINNED AND FELLED IN THE YEAR				
		<i>Area</i> (<i>acres</i>)	<i>Volume</i> (<i>Hoppus</i> <i>feet</i>)	
Total		—	3,493,321	
Felled	...	1,076	794,476	
Thinned	...	7,172	2,698,845	
CONSTRUCTION AND MAINTENANCE OF ROADS				
Total completed during year	...	...	...	<i>Miles</i> 121
Under construction at end of year	...	...	...	100
Maintained during year	...	...	...	1,108
Number of forest workers employed at end of year: 3,138 (including 45 part-time workers).				

Table 33—*continued*

WALES

Main statistics for the year ended 30th September, 1959

PRIVATE FORESTRY

PROGRESS OF THE DEDICATION SCHEME

			<i>Number</i>	<i>Area (acres)</i>
Total Schemes completed to date	...	...	118	22,727
Schemes completed during year (net)	...	...	17	1,697
Schemes approved or in preparation at end of year	...	...	81	13,418

PROGRESS OF THE APPROVED WOODLANDS SCHEME

			<i>Number</i>	<i>Area (acres)</i>
Total Schemes completed to date	...	...	21	4,525
Schemes completed during year (net)	...	...	1	540
Schemes approved or in preparation at end of year	...	...	1	228

ESTIMATED AREA PLANTED BY PRIVATE OWNERS IN THE YEAR

	<i>Acres</i>
Total area	2,700
Dedicated Woodlands ...	1,900
Approved Woodlands ...	100
Other Woodlands (estimated)	700

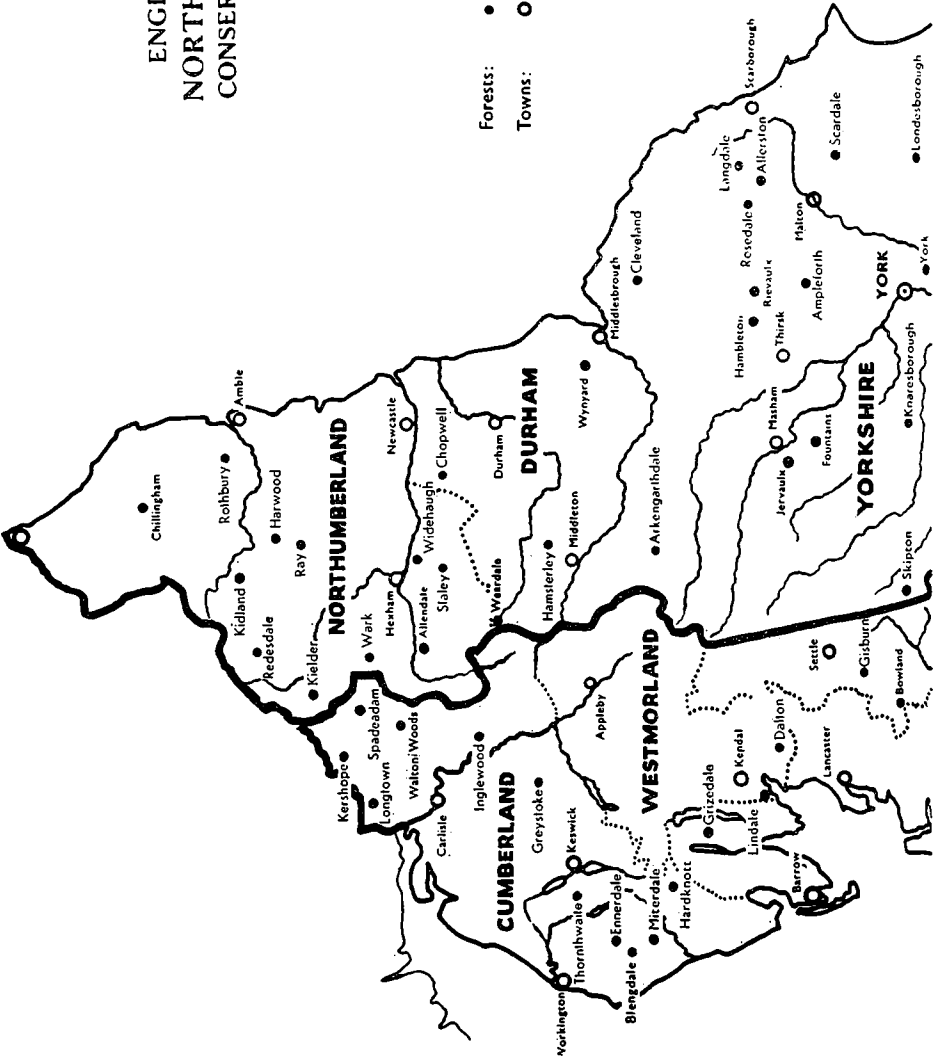
APPENDIX II

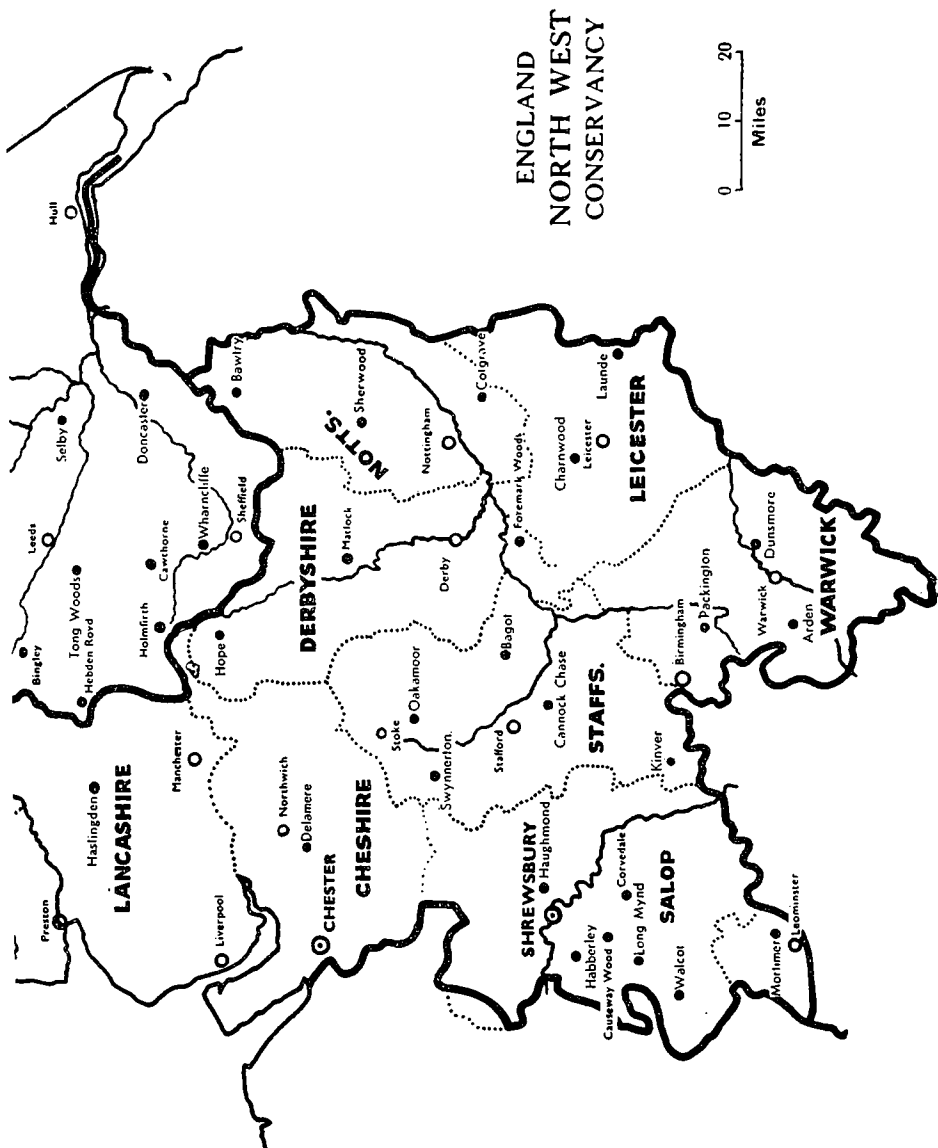
MAPS

**Maps showing the distribution of the Commission
forests, and the boundaries of the Conservancies, as
at 30th September, 1959, follow overleaf.**

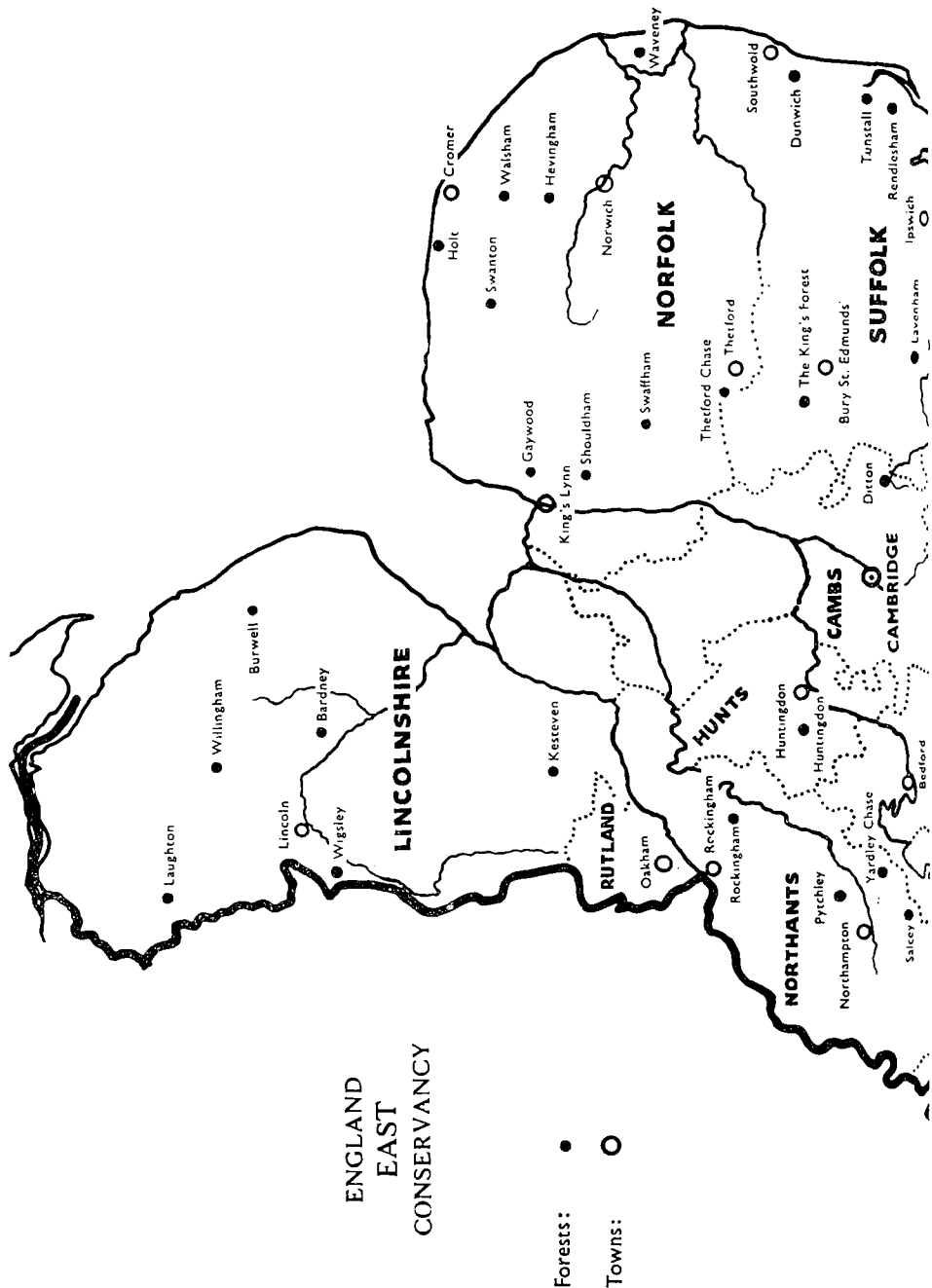
ENGLAND NORTH EAST CONSERVANCY

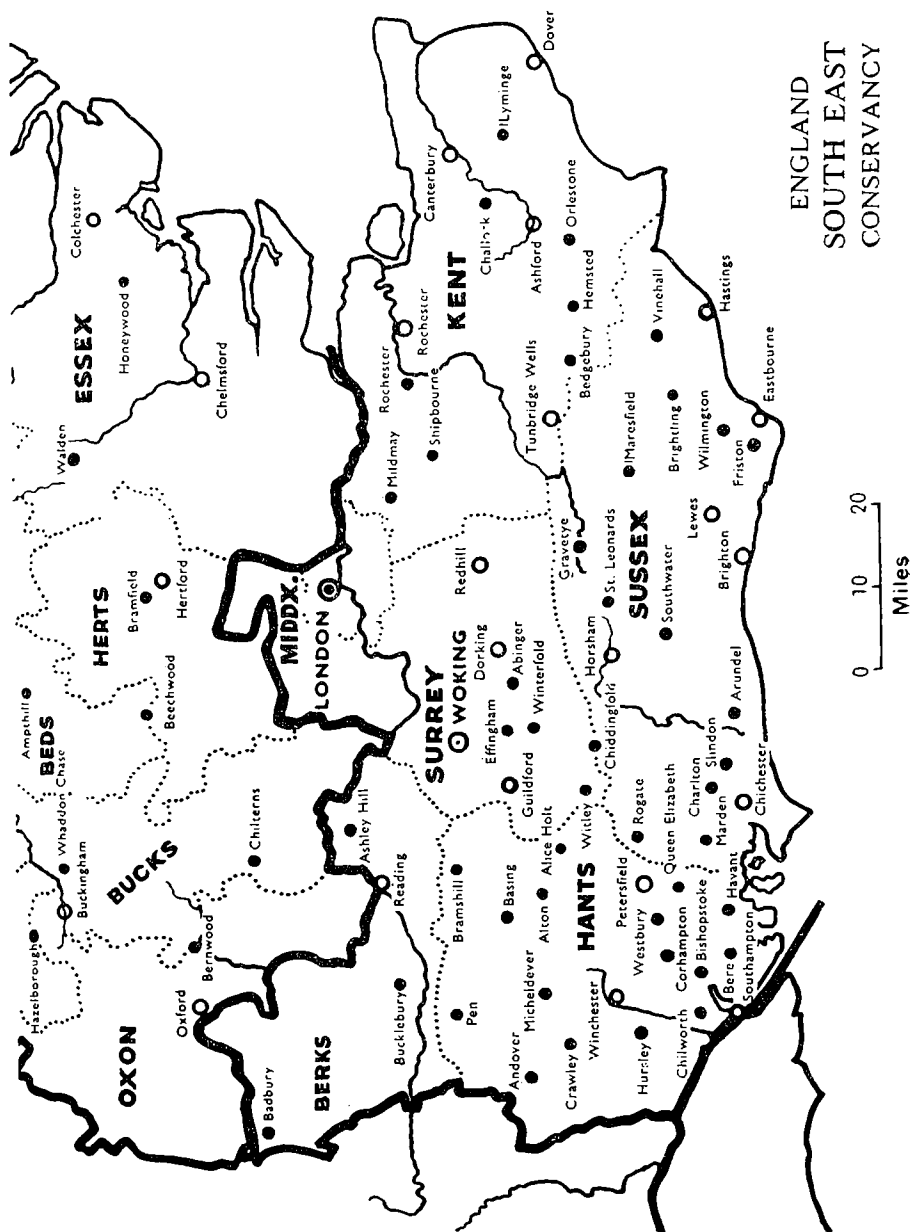
Forests: ●
Towns: ○





ENGLAND EAST CONSERVANCY



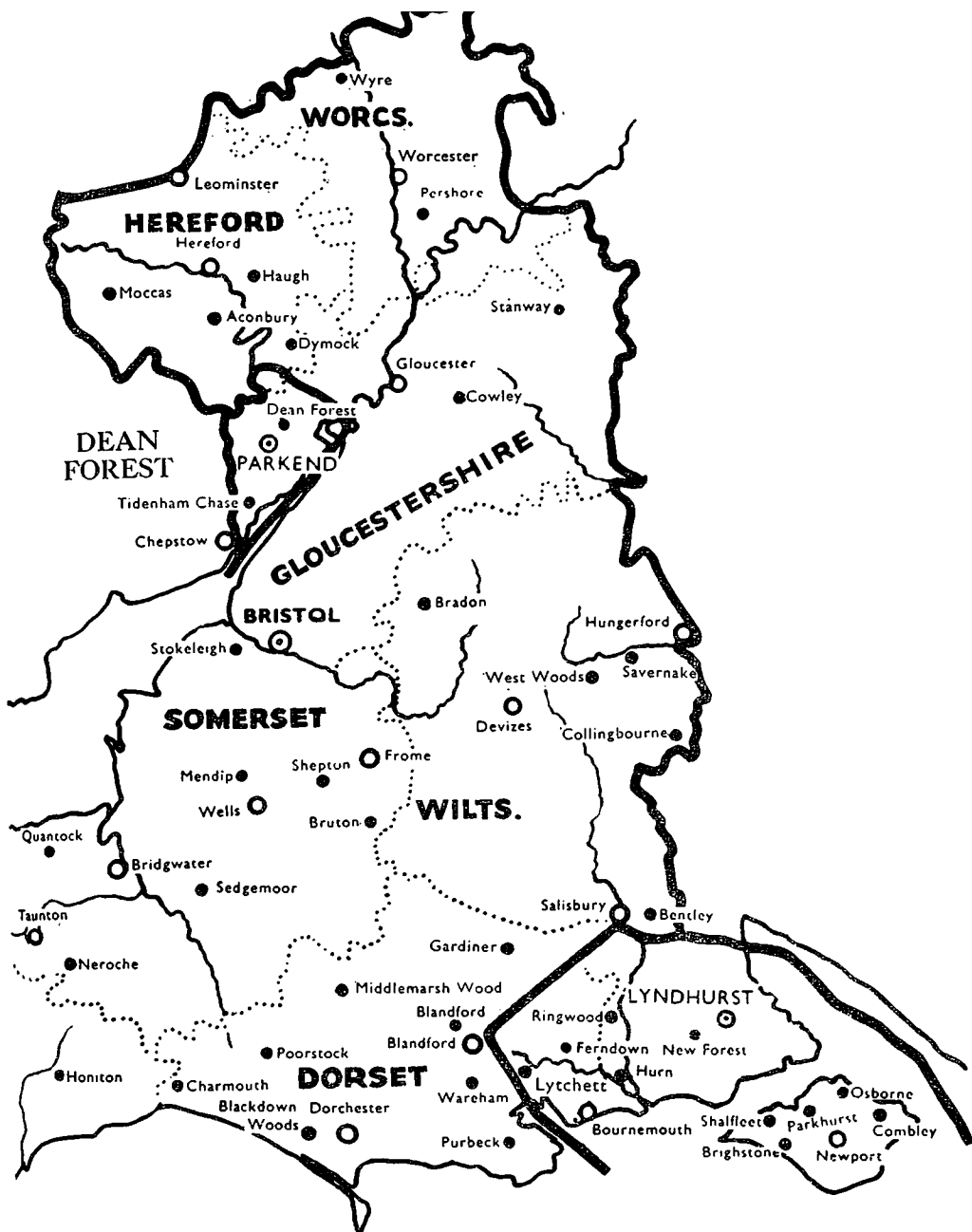


Forests: ●

Towns: ○

ENGLAND
SOUTH WEST
CONSERVANCY



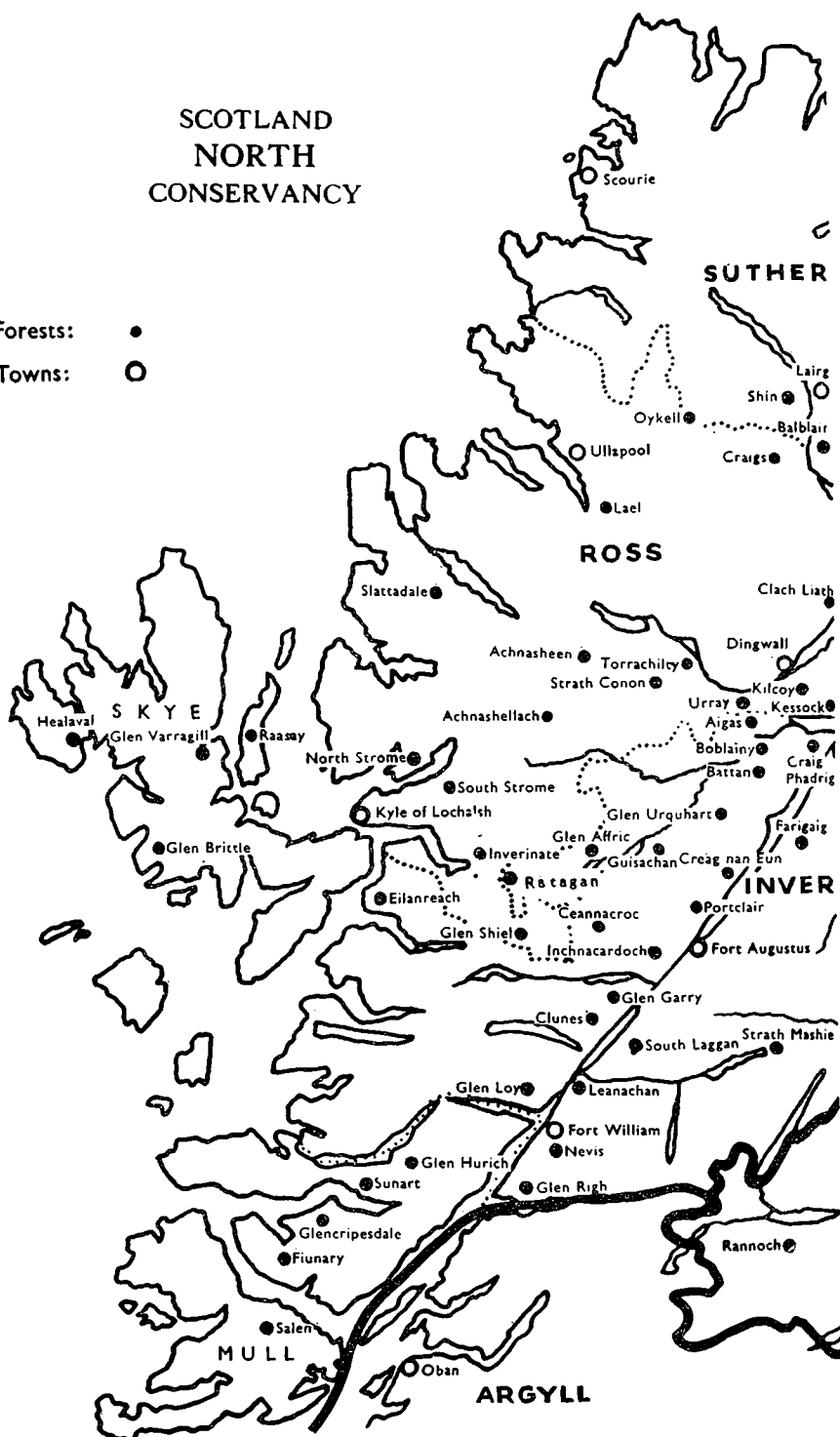


NEW FOREST

0 10 20
Miles

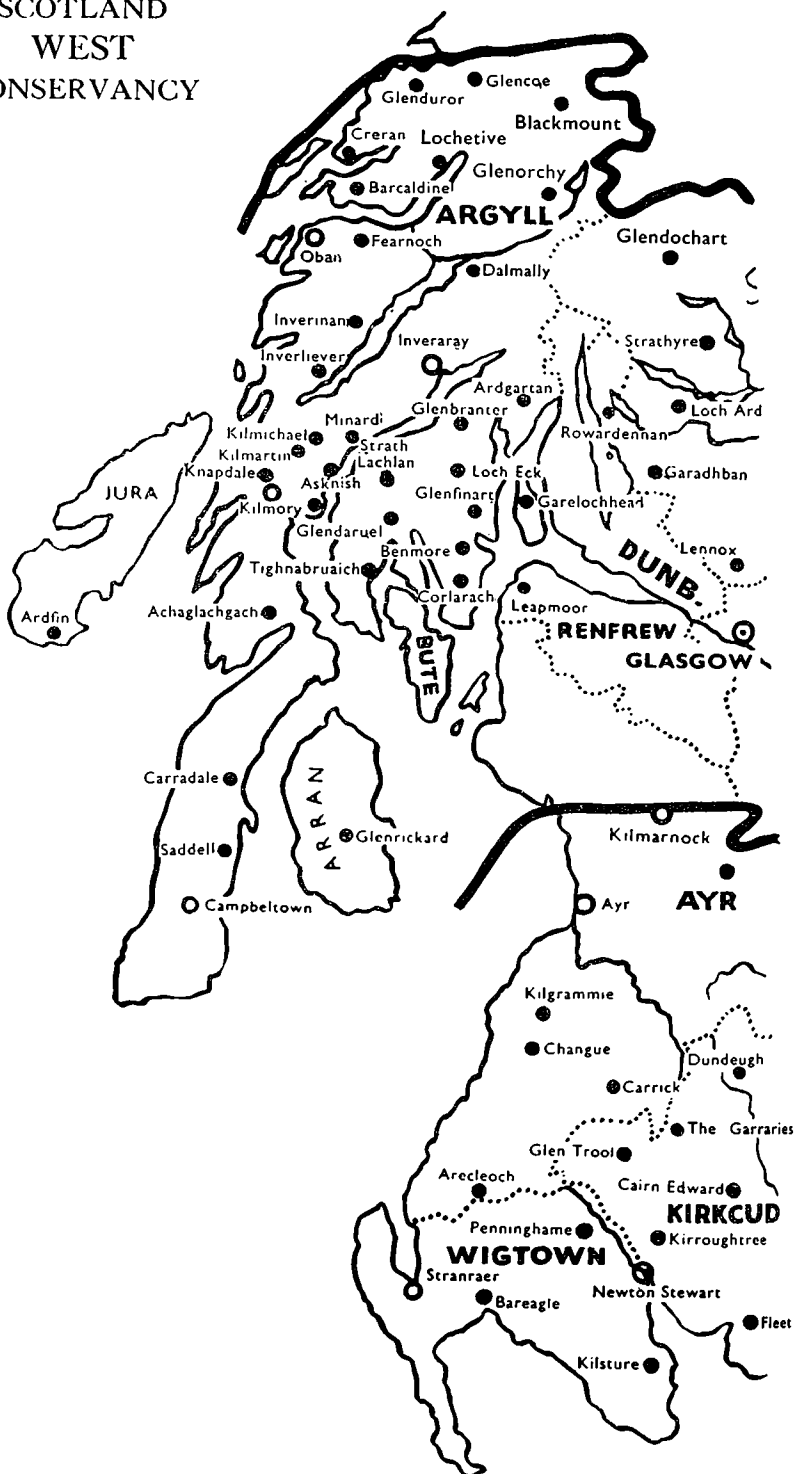
SCOTLAND NORTH CONSERVANCY

Forests: ●
Towns: ○

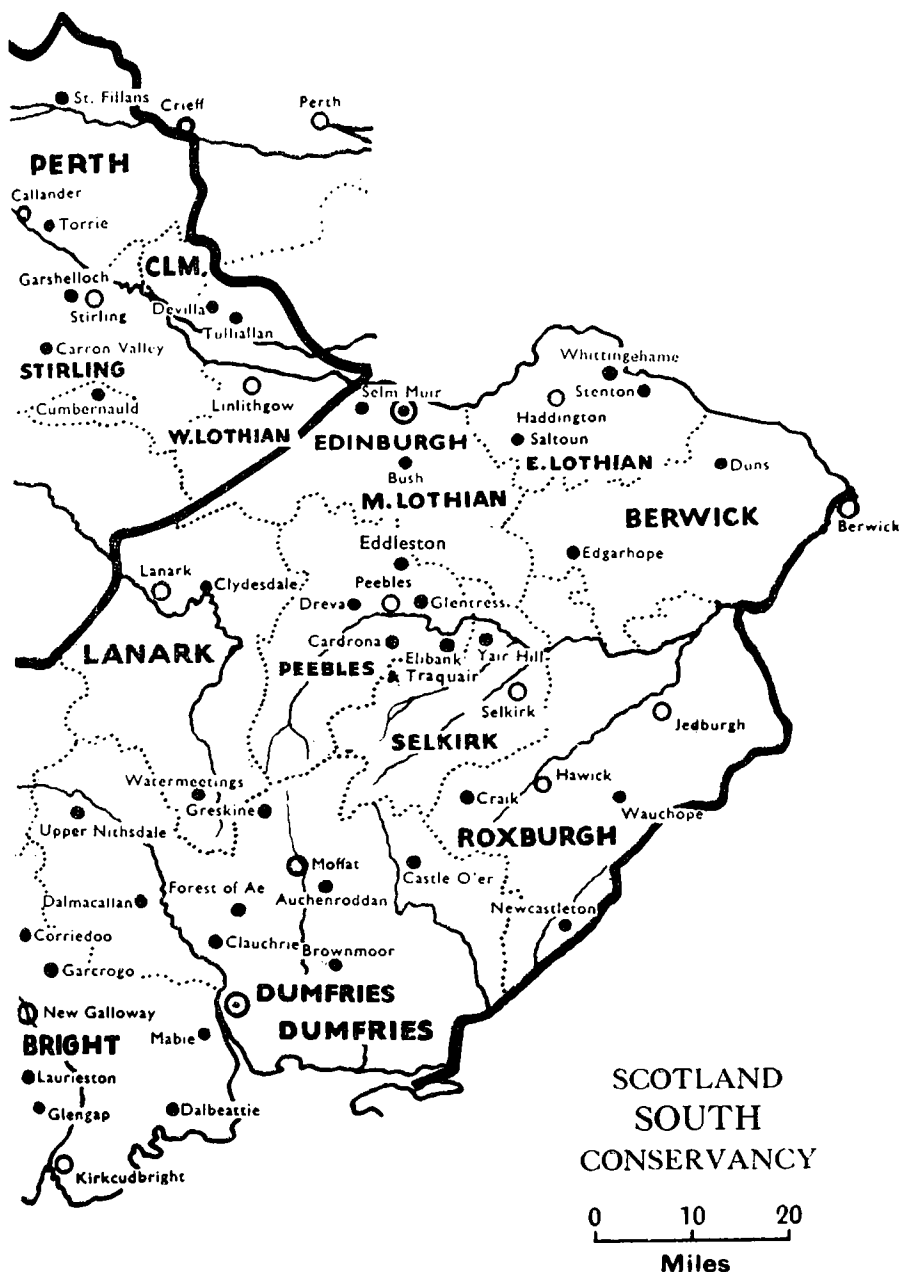




SCOTLAND
WEST
CONSERVANCY



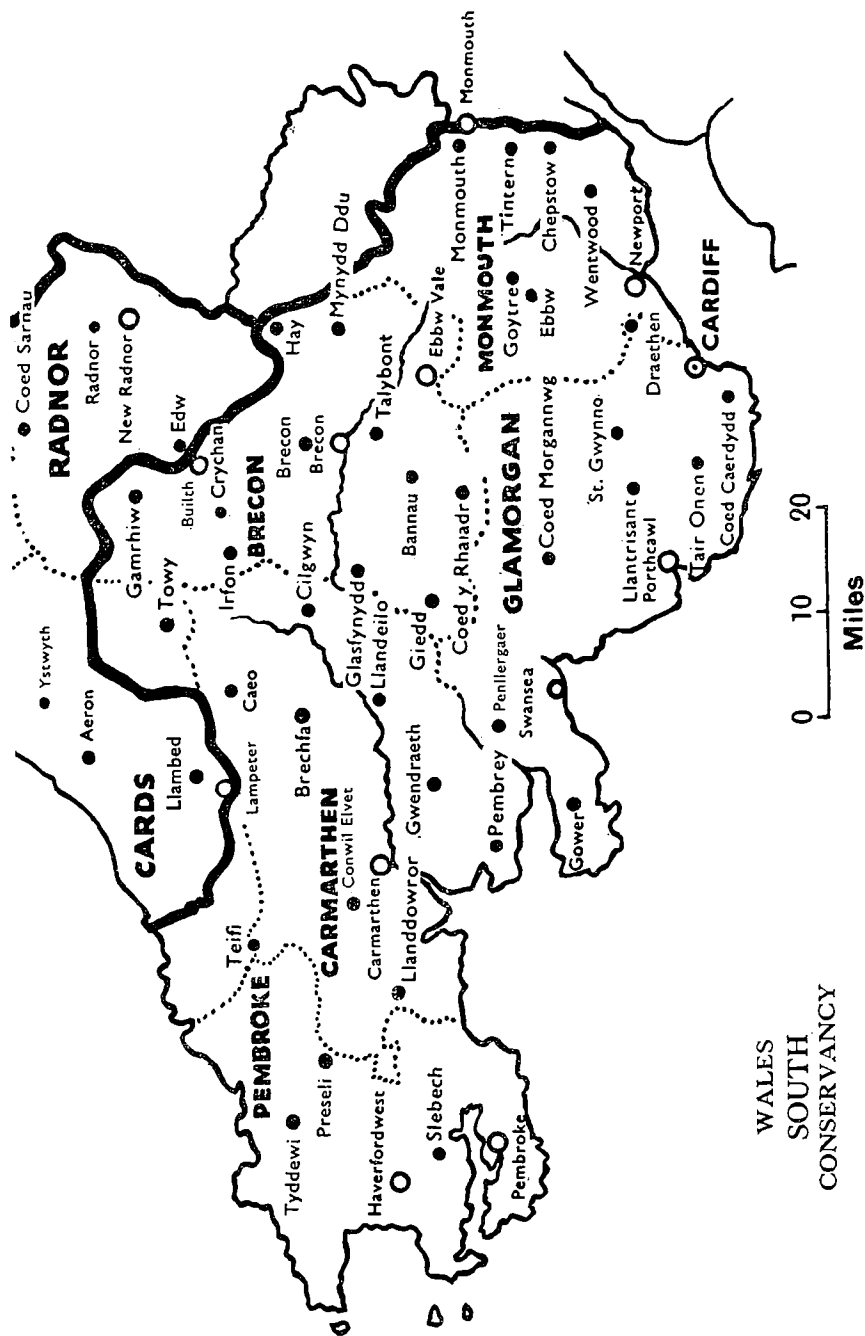
Forests: ●
Towns: ○



[illegible]

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.)

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: Whitmead 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* 62131.)

Research Station

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

Education Branch

Chief Education Officer:

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