


The logo consists of the words "Forestry Commission" in a smaller font above the word "ARCHIVE" in a larger, bold font. Both are enclosed within a dashed-line rectangular border.

Forestry Commission
ARCHIVE

A vertical photograph of a forest landscape. In the foreground, two tall, dark tree trunks stand prominently. The background is filled with trees showing vibrant autumn foliage in shades of yellow and orange. A body of water in the middle ground reflects the surrounding trees and sky.

Forestry Commission
58th Annual Report and Accounts 1977-78

Cover picture:

Autumn colours – Faskally Wood near Pitlochry

(E3579)

Fifty-Eighth Annual
Report and Accounts of the
Forestry Commission
for the year ended
31st March 1978

together with the

Comptroller and
Auditor General's Report on the Accounts

*Presented to Parliament in pursuance of Section 45 of the
Forestry Act 1967 and Section 5 of the Exchequer and
Audit Departments Act 1921*

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FORESTRY COMMISSION

231, Corstorphine Road
Edinburgh, EH12 7AT

20 July 1978

To:

The Rt Hon JOHN SILKIN MP,
Minister of Agriculture, Fisheries and Food

The Rt Hon BRUCE MILLAN MP,
Secretary of State for Scotland

The Rt Hon JOHN MORRIS QC, MP,
Secretary of State for Wales

Gentlemen

In pursuance of Section 45 of the Forestry Act 1967, I have the honour to transmit the 58th Annual Report of the Forestry Commissioners which covers the year ended 31 March 1978.

I am, Gentlemen,
Your obedient Servant,
(Sgd) JOHN MACKIE
Chairman

The Forestry Commissioners and Senior Staff at 31st March 1978

Forestry Commissioners

Mr J. Mackie, *Chairman*

Mr G. D. Holmes, *Deputy Chairman and Director General*

Captain D. S. Bowser JP

Mr A. M. Donnet CBE, JP

The Rt Hon J. D. Gibson-Watt MC, DL

Mr J. M. Hunter MC

Mr C. G. A. Latham FCA

Mr D. A. Mithen

Mr G. G. Stewart MC, TD

Sir Ralph Verney BT., KBE, JP, DL

Senior Staff

Secretary: Mr P. J. Clarke

Senior Officer for Wales: Mr J. W. L. Zehetmayr VRD

Director (Research and Development): Mr D. R. Johnston

Director (Land Use Planning): Mr E. G. Richards MC

Director (Estate Management): Mr J. R. Booth MC

Director (Forest Management): Mr J. N. Kennedy

Controller of Finance: Mr C. F. Turquand FCA

Deputy Establishment Officer: Mr M. P. Shapcott

Conservators

England

North West:	Mr J. H. James
North East:	Mr J. A. Spencer
East:	Mr B. W. Holtam
New Forest and South East:	Mr C. D. Begley
South West and Dean Forest:	Mr L. C. Troup

Scotland

North:	Mr R. G. Cathie
East:	Mr A. Morrison
South:	Mr E. J. M. Davies
West:	Mr D. Y. M. Robertson

Wales

North:	Mr R. T. Bradley
South:	Mr J. W. L. Zehetmayr VRD

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Acknowledgements

The photograph for Plate 4 was taken by Mr M. Sangster and those for Plate 5 by Dr Raymond Parks. The cover and other pictures were taken by Mr D. M. B. Green, a Forestry Commission staff photographer. Mr J. Williams prepared the line drawings.

General Review

The Wood Production Outlook in Britain – a Review

1 The concern throughout the world about the future availability of finite resources has emphasised the need for appraising the balance of wood demand and supply in the long term, and in particular its implications for wood production and forestry strategy in Britain, which is heavily dependent on imported supplies of wood. We therefore invited a group of officials – drawn mainly from our own staff, but including representatives of the Department of Industry and the Princes Risborough Laboratory of the Building Research Establishment – to review wood production in Britain up to the middle of the next century, a timescale never attempted before. The review, entitled “The Wood Production Outlook in Britain”, was completed at the end of 1977. It represents the collective views of the group, reached on an exploratory and personal basis, and does not bind their parent departments.

2 We recognise that consideration of wood production and forestry strategy cannot proceed in isolation or be divorced from other decisions about the countryside. We accordingly regarded the group’s report as a consultative document, and by the end of the year had circulated it widely among Government departments and agencies, local authority organisations, and bodies with an interest in agriculture, forestry, wood production and the environment, including our own advisory committees, in order to encourage wider debate. We shall eventually discuss the comments we receive with the Home Grown Timber Advisory Committee before reaching our own conclusions on the report and making recommendations to Forestry Ministers.

3 Shortly before the circulation of our own review group’s report, we learned that the Centre for Agricultural Strategy at Reading University had decided independently to undertake a study entitled “A Forestry Strategy for the UK”. This will propose a strategy for the next 25 to 50 years, taking into account the requirements for forest products in the United Kingdom in the first 50 years of the next century. This study will clearly overlap our own to a certain extent and we shall be discussing with the Centre the possible relationship between the two.

Forestry Taxation and Grants

4 A substantial part of our Report last year was devoted to the measures announced by the Minister of State, Treasury, on 30 March 1977 following the report to Ministers by the Interdepartmental Review Group on forestry taxation and grants. These measures were largely concerned with improving the grant-aid arrangements for private forestry. Besides significant increases in the levels of grant-aid and the encouragement to sound management of plantations through the introduction of a new management grant under the Basis III

Dedication Scheme, a new Small Woods Scheme was introduced which in effect replaced the previous grant-aid scheme closed in 1972.

5 In the months following this announcement, we consulted the Countryside Commissions to ensure that the new Small Woods Scheme was consistent with their own grant-aid arrangements for small amenity plantings; discussions were also held with the local authority associations and the Agricultural Departments about the consultative arrangements for Small Woods Scheme applications. Arrangements satisfactory to all parties were worked out and are now in operation. We also had extensive discussions with the Forestry Committee of Great Britain about the detailed rules and procedures to be followed in implementing the new grant measures, and we acknowledge the constructive and speedy manner in which the Committee's representatives dealt with the problems we identified. This enabled us to announce the details of the arrangements in a new edition of our booklet "Advice for Woodland Owners" in August 1977, in good time for the introduction of the new grants from 1 October 1977.

6 The only taxation change contained in the Minister of State's announcement in March 1977 was the abandonment of the link between the Capital Transfer Tax relief available under Schedule 9 of the 1975 Finance Act and the dedication schemes. However, in his statement of 26 October 1977, the Chancellor of the Exchequer announced a further significant change, which was to extend the special business relief at the new 50 per cent rate to Capital Transfer Tax payments deferred after that date under the Schedule 9 arrangements. This further relief, which can be seen as completing the measures flowing from the work of the Interdepartmental Review Group, was widely welcomed in the private sector. Subsequent discussions between the Forestry Committee of Great Britain, the Inland Revenue and the Forestry Commission resulted in some consequential adjustments being made in the 1978 Finance Bill. These covered a retrospective entitlement to business relief at the 50 per cent rate to options made under the Schedule 9 arrangements from 1 April 1975, and, for owners who had rejected an option to defer Capital Transfer Tax payments under these arrangements prior to the Chancellor's statement in October 1977, the opportunity to change their minds. The Forestry Committee of Great Britain has recognised these further changes as important, and expressed its gratitude for the trouble taken to understand the private sector's problems.

7 We hope that the substantial changes made over the past year in the support arrangements for the private sector will have the desired effect of restoring confidence and allowing private planting to return to a reasonable level. It is too early, however, to prove this, since it takes upwards of three years for owners' planting intentions to be reflected in the planting statistics. This is partly because our statistics of private planting are, for practical reasons, based on grants paid during the financial year, which relate on average to planting done 12 months earlier. The figures given in Table 3 of Appendix VII thus relate largely to planting done in the period before the announcement of the new grant and fiscal changes discussed above. A rise in planting in response to the new measures will, in any case, come about only if sufficient land for new planting becomes available. There will also be problems associated with tree stocks; sowing in forest nurseries has declined in recent years in parallel with the decline in private planting and it will take a few years to build up the stocks needed to maintain any increase in planting. There are welcome signs, however, of cautious optimism in the private sector, not

only from statements made by representative organisations but from a renewed interest by private buyers in the land market and the increased deliveries of seed to tree nurseries for the 1978 sowing season, which are some 20 per cent higher than in the previous year. It is also encouraging that, despite the decline in new planting noted in recent years, the area of land offered for dedication under the Basis III Scheme has been maintained at a level of between 16,000 and 21,000 hectares a year since the introduction of the scheme in October 1974. It is only right to point out, however, that the amount of land brought into the scheme is not a reliable indicator of the likely level of annual planting at any given time, since planting programmes are spread out over a number of years in accordance with the individual five-year plans of operations agreed between owners and the Commission. We shall of course be keeping a close watch on the situation generally, but given the interaction of the various factors described above it will necessarily take a few years for the full impact of the new measures to make itself felt.

8 In concluding our comments under this heading, we should like to record our appreciation of the cordial and constructive relationship that exists between the Commission and the private sector of the forestry industry, at both national and local levels. Among other things, this good relationship enabled the Commission representatives on the Interdepartmental Review Group to speak with fuller knowledge and authority on the problems faced by private woodland owners.

The Commission's Finances

Public Accounts Committee

9 The Director General, as Accounting Officer, was due to be examined by the Public Accounts Committee on 21 June 1978 following the report by the Comptroller and Auditor General on the accounts of the Forestry Enterprise for the year ended 31 March 1977 and the quinquennial review and revaluation. We shall be commenting on this in detail in next year's report.

Grant-in-Aid

10 Payments of £61 million show an increase of £5.2 million (9 per cent) over the previous year due to the continuing effect of inflation. Receipts increased by £6.3 million (21 per cent) to £35.9 million mainly due to increased timber prices, especially sawlogs, as well as a general improvement in miscellaneous income (recreation, rents, etc). After adjusting for changes in the working balance, the call on public funds was £24.7 million being £2.3 million (9 per cent) less than the £27 million required for 1976-77. The statement of Forestry Fund receipts and payments, together with notes and explanations, appears at Table 1 of Appendix VI.

State of the Wood Market

11 The past year has been marked by a series of events which have had an adverse effect on the market for pulpwood and wood used in the manufacture of particle board. We have dealt with these matters in detail later in the Report (paragraphs 57 and 58). In summary the level of demand was low over the year as a whole reflecting the general economic stagnation. Competition from overseas suppliers of wood and wood products was intense, especially for particle board

where the home producers' market share fell sharply. One of the major particle board mills ceased trading in September 1977 and production under new ownership did not resume until March 1978. A number of pulp mills also found it necessary to close down for varying periods, while prices for imported pulp weakened in the autumn of 1977. Overall deliveries of wood for pulp and particle board manufacture fell by 13 per cent and 15 per cent respectively and there was a drop in the price of both categories of wood. Despite these difficulties in the market for small diameter roundwood, the total volume harvested was only 2½ per cent lower than the preceding year. This was largely due to increases in sawlog sales and sales to smaller local markets.

Future Wood Production

12 An event of major importance in the year was the revision of our estimates of wood production, to which further reference is made in paragraphs 51 and 52. In the 20 years ahead, wood production from the Commission's forests is expected to more than double from the average of 2 million cubic metres in the last two years to 4.6 million cubic metres by the mid-1990s.

Availability of Land for Planting

13 As reported in more detail in paragraphs 32 and 33, the total area of plantable land acquired during the year was 6,507 hectares. This is disappointingly low when seen against our need to acquire plantable land at an average rate of 18,000 hectares a year to achieve the new planting component of the target we have been set by Ministers. In addition, the economic planning of a steady plant production programme and the need for continuity of employment call for the maintenance of reserves of plantable land equal to the total of about five years' planting programmes. As shown, however, in Diagram 1 on page 16 and Table 6 of Appendix VII, our reserves have fallen to 83,337 hectares, while the net area of plantable land acquired over the last ten years has averaged only 13,700 hectares. Unless the availability of land improves dramatically, our programme of new planting will need to be reduced over the next ten years or so to a figure around the average rate of acquisitions. In an effort to expand our acquisitions in the upland areas of the north of England we have recently appointed acquisition officers in the Conservancies concerned.

Devolution

14 During the year the Government published two separate devolution Bills for Scotland and Wales in place of the earlier Scotland and Wales Bill. The effect of these new Bills, which were still being considered by Parliament at the end of the year under report, would be substantially the same as far as forestry is concerned. They propose that forestry functions should be devolved with the exception of fiscal, regulatory and international matters, but that the Forestry Commission should be maintained as the instrument for carrying out Scottish and Welsh policies, for which it would be financed by and accountable to the Scottish and Welsh administrations. The Commission would continue to be responsible to Parliament at Westminster for forestry in England and for non-devolved matters. Strong representations have been made to the Government by representatives of the private forestry sector, as well as by our own main advisory body, the Home Grown Timber Advisory Committee, to have forestry dealt with as a reserved subject in line with agriculture. Whatever the eventual outcome, we are well placed as Forestry Authority to deal with forestry policy either on a Great Britain or a devolved basis because of our organisation in

which a central management directs policies and provides common services, such as research, on an economic scale while devolving the maximum responsibility to Conservators as regional managers.

Plant Health

Dutch Elm Disease

15 Dutch elm disease has rightly been described as a biological disaster. Despite intensive efforts by our research staff and their counterparts in the EEC and North America, no means has been found of eradicating the disease, and the strategy we have recommended to local authorities for the coming year has been based on what we consider to be the most realistic approach in the circumstances, which is to concentrate resources on slowing down the development of the disease in those areas where this course stands the best chance of success. Further details of this strategy and our latest estimate of the progress of the epidemic are given in paragraphs 93–97.

Other Losses in Broadleaved Trees

16 Serious losses in broadleaved trees, particularly of beech in southern England, were reported during the year. In the majority of cases, the trees were seriously weakened during the 1976 drought and died a year or so later. Suggestions that a new epidemic disease of beech might be responsible for these deaths were not substantiated. Considerable efforts were made by the Commission to give a balanced view of tree diseases and disorders in order to allay fears that devastating problems were likely to occur in a wide range of broadleaved trees.

Pine Beauty Moth

17 In last year's Report we mentioned the damage done to plantations in Sutherland as a result of an infestation of Pine beauty moth (Plate 5). Action was taken to control the pest biologically by spraying with a bacillus preparation, but unfortunately this was not successful and a total of 240 hectares of Lodgepole pine plantations were destroyed. An insecticide approved under the Pesticides Safety Precautions Scheme will be applied from the air to all Lodgepole pine plantations in the area in an effort to kill the larvae of the moth. 5,000 hectares will be involved in the operation, which will be carried out in June 1978. It will be preceded by extensive consultations and publicity locally, and monitored by the Nature Conservancy Council, the water authorities and other bodies.

EEC Plant Health Directive

18 Preparations for domestic legislation to implement the provisions of the EEC Plant Health Directive (77/99/EEC) have begun following extensive negotiations in Brussels. As we stated in our last Report, the Directive, which we are required to implement by 21 December 1978, is concerned with protective measures against the introduction into Member States of organisms harmful to plants or plant products. It covers wood which retains all or part of its natural round surface, with or without bark. The Directive's aim is to harmonise plant health import controls by achieving as far as possible common plant health measures which, while affording adequate protection and improved standards for Member States, will also facilitate trade. As we said last year, it is our view that these new arrangements will result in a considerable improvement in the

overall protection that will be provided against the introduction of forest pests and diseases into Britain.

19 Growing concern has been expressed over the past year about the possibility of Oak wilt being brought into this country on oak or Sweet chestnut imports from North America. This disease was first reported in the United States in 1942 and since that time has spread to some 20 central and eastern states. Although it has been responsible for considerable damage in certain areas, it has not reached epidemic proportions. We are nevertheless taking the potential threat that this poses to the oak population in Britain very seriously. We have introduced a new Order, which came into operation on 11 July 1977, imposing new and more stringent conditions on the permitted landing of oak and Sweet chestnut (see paragraph 75); this largely anticipates the implementation of the provisions of the EEC Plant Health Directive mentioned in the previous paragraph.

20 Our present prohibition on the import of spruce wood with bark attached will remain. The risk involved is serious in relation to Britain's large investment in spruce forests, and specific control is necessary. The exception, allowed under licence, for the ladder manufacturing industry to import such wood with bark attached for trade purposes, has been monitored carefully throughout the year and is being reviewed in the light of experience with a view to the imposition of more stringent conditions.

Snow Damage

21 Foresters have to contend with a number of natural hazards, besides pests and diseases, which can rapidly undo years of patient effort. From time to time we have had to report losses of plantations through fire and windblow, but the past year was fortunately relatively free of damage through these two causes. Damage to plantations by snow is usually light in this country. We did, however, lose some 30,000 cubic metres of timber in the heavy snowfalls last winter. Further details are given in paragraph 38.

Day Visitor Survey

22 Later in this Report (paragraphs 41–43) we refer to the continued expansion of recreational facilities in Commission forests. This expansion is in line with the Commission's recreational policy, as formally re-stated in Appendix V of our 1975–76 Report. That statement concluded that the main demand for countryside recreation is from those who want to spend a day in the country; they come mainly from towns, usually by car, and their principal requirement is for somewhere to park, to picnic and to walk for fairly short distances.

23 In the summer of 1977 we carried out a survey to estimate the number of visits which were made to Commission land. Only those who arrived by car were counted. During the season, which ran from mid-May to mid-September, the estimated number of visits to car parks provided for the use of the public was 9 million; the average length of stay was about 1½ hours. On the basis of information collected in the past about visits at other times of the year, we estimated that there had been about 15 million visits to car parks during 1977 as a whole. Assessments were also made of cars stopping at roadside parking places – verges, lay-bys and gateways – adjacent to Commission land. It was estimated that in about half of these cases people left their cars to walk in the woods. The total of such visits in the survey season was 6 million, implying a

total of about 9 million during the whole year. We therefore estimated that some 24 million visits were made to Commission land during 1977. This represents an increase in the order of 50 per cent since our last estimate was made ten years ago, and strikingly confirms the value of the nation's forests as a source of public enjoyment as well as a provider of timber for British industry.

The Queen's Silver Jubilee

24 Loyal greetings were sent to Her Majesty on her Silver Jubilee and each Conservancy commemorated the occasion by linking particular projects with Jubilee year. These included two visitor centres, a forest drive, forest walks and facilities for observing wildlife. In addition, a number of planting schemes were chosen as a lasting reminder of the event and suitable plaques were erected.

25 Many distinguished people helped us to identify the various projects with Jubilee year. We were especially pleased that HRH Princess Anne, during a tour in the south west of Scotland, graciously performed the ceremony to name the public road which runs through the Galloway Forest Park from Newton Stewart to New Galloway, as "The Queen's Way" (Plate 1). This road follows, in part, the old Edinburgh road which ran from central Scotland to Whithorn and was used by the Scottish court including Mary Queen of Scots. The celebrations at Dalavich Forest Village, Inverliever, Argyll, were particularly appropriate as they marked the 25th year in the life of the village.

Prime Minister's Visit

26 On 5 September 1977, during his Scottish tour, the Prime Minister paid a visit to Culloden Forest and the Forest Industry Training Centre there.

Senior Staff

27 Mr R. A. Innes, Conservator North Scotland, retired on 31 December 1977 and was succeeded by Mr R. G. Cathie on promotion to Conservator. Mr Cathie was formerly an Assistant Conservator in the South Wales Conservancy.

28 Mr P. A. Innes, a Conservator in the Estate Management Division, retired on 28 February 1978. His successor was Mr J. M. Gwynn, who was a Principal Land Agent in the Division before his promotion to Conservator.

29 There was one further change in senior staff immediately following the year under report. Mr B. W. Holtam, Conservator East England, retired on 7 April 1978 and was succeeded by Mr R. M. Hewitt, previously an Assistant Conservator in the North East England Conservancy.

Staff Numbers

30 On 31 March 1978 the Commission employed 2,246 non-industrial staff (compared with 2,257 the previous year) and 5,922 industrial staff (102 more than last year).

Forestry Enterprise

Planting

31 The weather again caused problems in nurseries and much of our planting was delayed. The cold, wet spring mentioned in last year's Report continued into April and made it difficult to lift plants. There followed an exceptionally warm and dry period in late May which added to the difficulties of late planting, and further cold, wet weather and prolonged snowfalls from October to March resulted in very little autumn and early spring planting being carried out. As a consequence, the area of new planting and restocking taken together was 17,264 hectares against a budgeted programme of 20,400 hectares.

Land Acquisition

A Disappointing Year

32 The total area of plantable land acquired was 6,865 hectares, including 194 hectares under plantations. The distribution was:—

	<i>Total plantable area acquired</i>
	<i>hectares</i>
England	16
Scotland	6,785
Wales	74

The average cost of plantable land was £164 per hectare, an increase of 10 per cent compared with the average for 1976–77 of £149 per hectare.

33 The area of new land we obtained for planting was disappointingly small. In large part this was due to a shortage of land coming on to the market leading to keen competition. The prospects for the ensuing year are no brighter and there is evidence that there is likely to be a sharp increase in land prices. As a result of the low level of acquisitions last year and in previous years the Commission's reserves of plantable land have fallen below a desirable level. We have commented upon this already in paragraph 13, and the position is illustrated in Diagram 1 on page 16.

Tree Seed

34 Seed crops were generally poor compared with last year, particularly those of broadleaved trees. Shortages of broadleaved species can normally be made up by importing from continental sources, but seed crops were poor throughout Europe this year. Acorns were in particularly short supply and we were able to sow only one-fifth of our planned programme. Of the coniferous species, only collections of Lodgepole pine and Hybrid larch were adequate. Fortunately we were able to import satisfactory quantities of the main north west American species.

ACQUISITION OF LAND, RESERVES OF PLANTABLE LAND
AND NEW PLANTING 1967-68 TO 1977-78

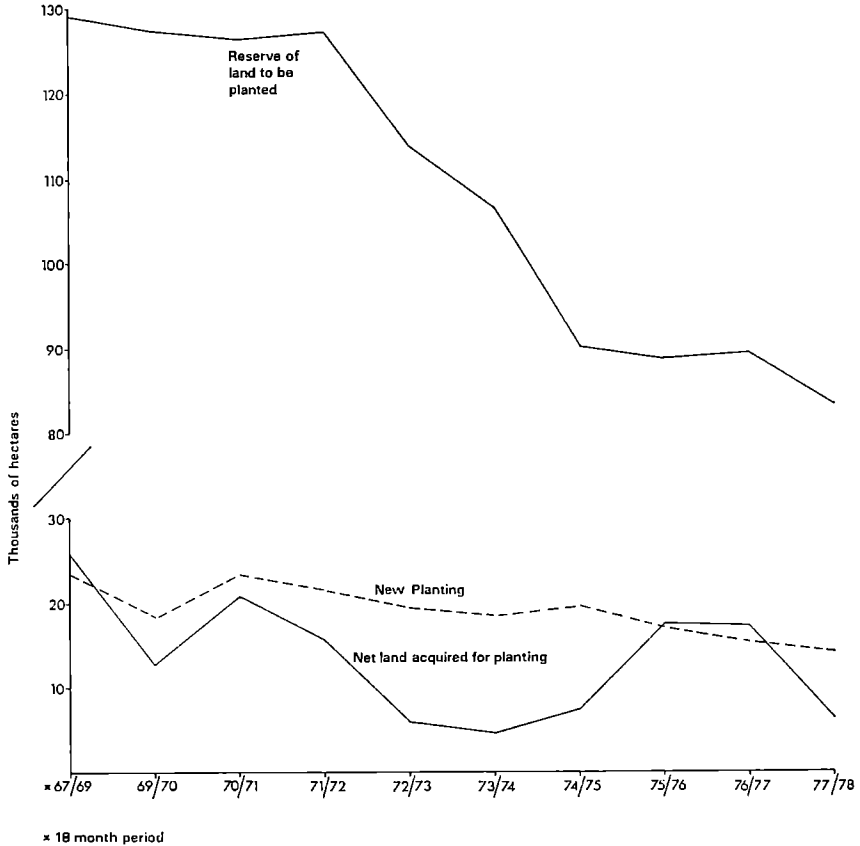


DIAGRAM 1. Land acquired for planting is shown as the net plantable area, i.e. areas of plantations which have been acquired, and plantable land disposed of in exchanges, have been deducted.

35 Deliveries of seed from Commission and private sources to trade nurseries for the 1978 sowing season are estimated to have been about 20 per cent higher than in 1977.

Forest Protection

Fire

36 Despite cold wet weather in the traditional months for high fire danger, there was an exceptional hot dry period in late April and May 1977 and this was the main cause for the above average loss of 473 hectares of plantations.

Wind and Snow Damage

37 Wind caused relatively little trouble during the year with damage confined generally to extensions of areas previously windthrown. The main exception was in central Wales where the volume of windthrown timber in Commission plantations during the winter months amounted to 100,000 cubic metres.

38 The severe blizzards which swept the country in late January and early February caused unusually heavy damage to plantations in the north east of Scotland. The weight of accumulated snow on the crowns of the trees flattened young plantations and broke stems and branches of older trees. Over 30,000 cubic metres of timber were affected and work programmes had to be rearranged to clear up the damage and harvest as much as possible of the timber. Buried fences alongside public roads were damaged during snow clearance operations and deer gained access to some plantations over snow-covered fences. In other parts of the country only sporadic damage was reported and little interference with work programmes was experienced. Our staff assisted the police and local authorities in the worst hit areas in road clearance, rescue and supply operations, both during and after the blizzards; this was gratefully acknowledged by all those concerned.

Nature Conservation

Nature Conservation Review

39 This review, published jointly by the Nature Conservancy Council and the Natural Environment Research Council, identifies 735 sites of biological importance which merit safeguarding as the key part of the nation's wildlife heritage. The sites cover nearly 1 million hectares of land and include 60,000 hectares (6 per cent) of Forestry Commission land. Most of the woodland sites are already protected by management plans of one kind or another, but in Scotland alone about 200,000 hectares of bare land have been scheduled which are of potential interest to forestry, including some very large areas of upland and peatland.

Otters

40 The otter was accorded statutory protection in England and Wales during the year as a result of its inclusion in Schedule 1 of the Conservation of Wild Creatures and Wild Plants Act 1975. Although we have no reason to think that otters have been hunted on Commission land for many years, we have followed the lead given in the Act and have formally banned otter hunting on all our land, in Scotland as well as in England and Wales.

Recreation

41 The Achray Forest Drive in our West Scotland Conservancy was officially opened in July when a plaque was unveiled to commemorate The Queen's Silver Jubilee. The ceremony was performed by Mr Andrew Keir, the actor, who then drove round the seven miles of forest road in a vintage Bentley. The drive starts and finishes on the Duke's Road, which is a popular scenic route from Aberfoyle through the Trossachs, and parking areas are provided at suitable places to enable visitors to walk or picnic in this beautiful forest within the Queen Elizabeth Forest Park. This new development is in accordance with our policy of operating a limited number of forest drives as toll roads through selected forests. These drives are particularly appreciated by the elderly and disabled, to whose needs the Commission is paying increasing attention. Apart from the forest drives, we now have five forest paths designed and laid out with specially graded surfaces for wheelchairs; one of these, in Gwydyr Forest in north Wales, also caters for blind visitors with descriptive texts in braille.

42 During the year we have continued to increase the number of camping and caravan sites, visitor centres, forest trails and picnic places available to the public (Plate 8). A summary is given in Table 13 of Appendix VII. The reaction from the general public has been very encouraging.

Visitor Centres

43 Three new visitor centres were opened during the year. Our Chairman performed the ceremony at Whinlatter in Thornthwaite Forest in the Lake District, and the centre at Alice Holt Forest in Surrey was opened by Mr Michael Mates MP. The design of the interpretive display at both centres was the responsibility of our Design Branch in Headquarters. A locally designed centre was opened at Bwlch Nant yr Arian in north Wales by Baroness White and was subsequently awarded a Certificate of Commendation by the British Tourist Authority in their "Come to Britain" Trophy Competition 1977.

Forest Design

44 The importance of landscape design in all forest operations is now well recognised by our staff. During the year our consultant landscape adviser, Mr Clifford Tandy, visited no fewer than seven Conservancies to give advice on planting, felling and recreational facilities. Our own landscape architect was involved in a wide variety of tasks, including the design of an important planting scheme at Beinn Ghuilean in South Kintyre which was featured in the *Sunday Times* colour magazine. He also prepared felling and replanting plans for highly sensitive areas in the Lake District and in Snowdonia and gave training courses in landscape design for forest staff.

45 Work was also done on the design and siting of recreational facilities and in the preparation of landscape plans for a number of major building projects. These included a new engineering workshop at Bellingham in the Northumberland National Park, a forest depot at Ae near Dumfries, and proposed forest cabin developments in north Wales and at Dalavich in Argyll.

Estate Management

Disposals

46 Within the limits set by Ministers, we continued to dispose of land and buildings which were either surplus to our needs or were required by local authorities and other public bodies for statutory purposes. The properties sold consisted mainly of farms and agricultural land, and houses of varying ages and conditions. The income from disposals amounted to £1.8 million.

Management of Property

47 During the year we spent £1.7 million on the construction, improvement and acquisition of buildings. Special emphasis continued to be placed on the modernisation and improvement of the Commission's houses. The extension and improvement of the South Scotland Conservancy Office at Dumfries was completed, and the purchase of the freehold reversion of the North Wales Conservancy office at Aberystwyth will enable long-awaited improvements to be made there too. The historic building in Lyndhurst known as The Queen's House, which has been used as offices for the Conservator South East England and the Deputy Surveyor New Forest, was vacated recently on being found to have developed serious structural weaknesses. The future use of this "listed" building will depend upon the nature and cost of the restoration work found to be necessary following a more detailed survey commissioned from a firm of consultant structural engineers.

48 The principal lease at Sherwood Forest has been successfully renegotiated. The former resumption clauses in favour of the lessor have been changed and the door opened to increased use of the area for public recreation.

49 Our rental income during the year was £0.8 million. Except for the rents of houses occupied by Foresters, which are still under review, the phased increase in the rents of our residential properties to levels compatible with “fair rents” under the Rent Acts (at 1972 values) was finally completed. House rents will shortly be revalued with a view to introducing revised figures towards the end of 1978.

50 Details of the number of properties managed by the Commission are given in Table 12 of Appendix VII.

Harvesting and Marketing

Future Wood Production

51 Our estimates of future wood production, which cover a period of 20 years ahead, are reviewed and extended every five years. We carried out such a review in 1977–78, the results of which are shown at Diagram 2 below.

WOOD PRODUCTION 1977–1996

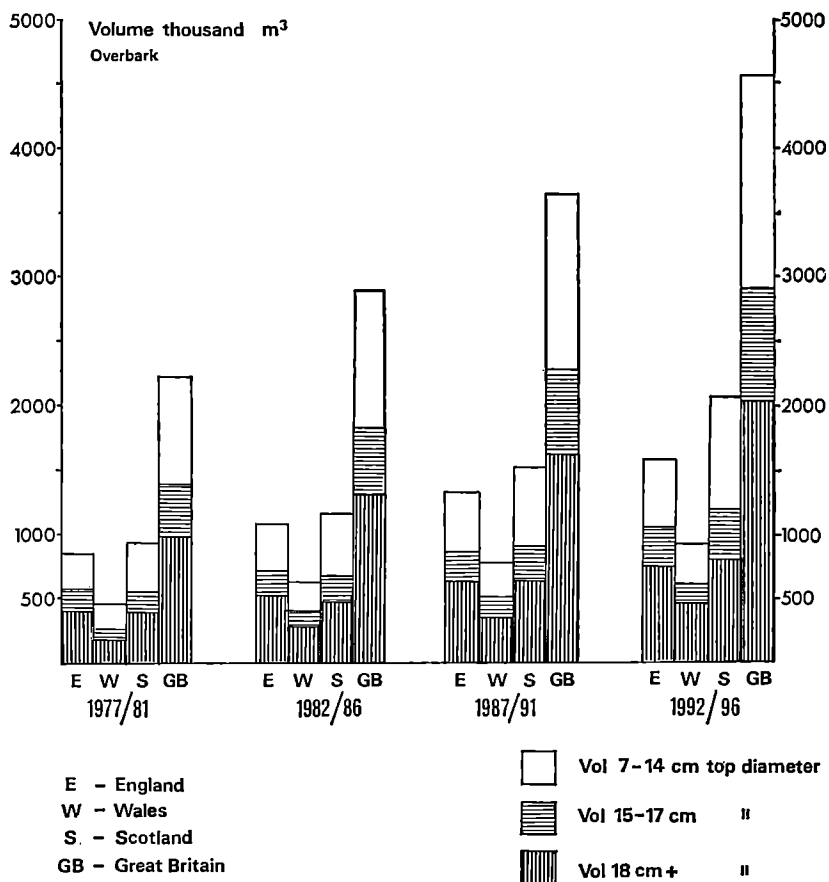


DIAGRAM 2. These estimates of the Commission’s wood production refer to conifers only. The volume shown is the average annual production for each of the five year periods defined. Modifications to standard management practices have been incorporated into the estimates to take account of such factors as crop stability in relation to risk of windthrow, the timing of road construction, recreation and landscaping. Such factors, which generally, but not invariably, have the effect of deferring yield, have in turn been modified where necessary to take account of marketing obligations.

52 Over the last two years annual production has averaged 2 million cubic metres (Plate 4). For the future, wood production from the Commission's own forests is expected to reach 4.6 million cubic metres by the mid-1990's, an increase of 2.3 times the present production. This increase will be most marked in Wales and Scotland where production is expected to be respectively 2.4 and 2.9 times the current levels. The increase in future wood production will create opportunities for the expansion of the existing wood processing industries and, particularly from the late 1980s onwards, the development of new industry.

1977-78 Survey

Demand

53 The dominant factor last year was the drop in demand for small diameter wood used in the manufacture of pulp and particle board. This setback was counterbalanced, however, by an increase in sawlog sales, and the total volume of wood harvested (1,965,000 cubic metres) was only 4 per cent lower than the full potential available and only 2½ per cent less than the volume harvested last year.

Prices

54 While prices for timber at forest roadside decreased in all categories, the average value of receipts per cubic metre increased because there was a higher proportion of sawlogs in the total volume harvested.

55 The main features of our operations in the year, with comparable figures for previous years, are summarised below:

	Unit	1974-75	1975-76	1976-77	1977-78
	Million				
<i>Total Removals</i>	cubic metres	1.61	1.56	2.02	1.97
By Sale Standing	„	0.63	0.55	0.83	0.75
By Forestry Commission harvesting ..	„	0.98	1.01	1.19	1.22
	£ million				
<i>Gross Receipts</i>		17.95	16.69	23.36	25.91
Expenditure (including oncosts but excluding overheads)	„	6.04	7.51	9.23	12.31
Net Receipts	„	11.91	9.18	14.13	13.60
	£				
<i>Receipts per cubic metre</i>		11.15	10.70	11.56	13.15
Expenditure per cubic metre	„	3.75	4.81	4.57	6.25
Net Receipts per cubic metre	„	7.40	5.89	6.99	6.90

Conifer Sawlog Sales

56 The high prices and strong demand experienced toward the end of last year were maintained in the early part of the year under review. Subsequently, log prices eased under the influence of lower prices for imported sawn softwoods, which was partly due to a continuing low demand and partly to a strengthening of sterling. By the end of the year prices were about 15 per cent lower than at the start. The Commission's Log Price Index fell from 149.9 at 31 March 1977 to 127.4 at 31 March 1978. In spite of the difficult trading conditions experienced by many sawmillers, the volume of logs supplied from our own harvesting operations continued the upward trend of recent years and was 11 per cent above that in 1976-77.

Conifer Small Roundwood Sales

57 The demand for pulpwood was affected by an explosion at Bowaters'

Mersey Mill which caused serious damage and resulted in the suspension of wood deliveries for almost three months. A number of other pulp mills experienced periods of closure as a result of industrial disputes and technical problems. The demand for most grades of paper and board remained subdued and most mills continued to work below capacity. As a consequence of these events, pulpwood deliveries fell significantly and were 13 per cent below the quantity supplied last year. Prices for pulpwood were affected by the sudden weakening of imported pulp prices in the autumn of 1977 and fell during the winter and early spring.

58 The volume of wood supplied to the particle board industry was seriously affected by a reduction in demand for British-made particle board in the face of intense competition from overseas manufacturers. The closure, in September 1977, of the mill owned by Scottish Timber Products Ltd at Cowie was a further setback. The mill passed into new ownership, Caberboard Ltd, in February 1978 and production started again during March. The depressed level of activity in particle board manufacture has also had an adverse effect on the demand for wood residues from sawmills. As a result of these factors deliveries of roundwood for particle board manufacture were 15 per cent lower than last year.

59 The quantity of round pitwood supplied increased by 8 per cent compared with last year, mainly as a result of increases in supplies to pits previously dependent on imported wood.

Sales of Standing Trees

60 Removals of timber under standing sales contracts totalled 750,000 cubic metres, as against 832,000 cubic metres in 1976-77. The lower level of activity was due in part to the completion of contracts for windblown timber, but more especially to the poor market for small diameter roundwood. Over the year as a whole average prices for all standing sales increased by about 4 per cent, but prices eased from late winter onwards. The Great Britain Price Index for small standing conifers rose from 312.0 at the start of the year to 324.8 mid-year and then fell to 320.6 by the end of the year.

Other Developments

61 Plans were announced for the installation of major new additions to existing pulp production capacity at Workington, by Thames Board Mills Ltd, and at Bristol by St Annes' Board Mill Ltd. These developments will lead to an increased requirement for pulpwood from 1979-80 onwards.

Harvesting

62 We have purchased a number of debranching machines (Plate 3) for operational use. These and similar machines are likely to have an important role in mechanising harvesting operations in early thinnings. During the year we also made a survey of harvesting equipment and systems for mountainous terrain. Although our present methods are well adapted for harvesting smaller tree sizes, the survey established the need for developing equipment and systems to deal with larger trees.

Engineering

63 Prolonged wet weather in the autumn and severe weather in the winter in most parts of the country delayed work on civil engineering projects, but programmes as a whole were substantially completed.

64 In a number of Conservancies it was possible to undertake a certain amount of agency work without detriment to our own requirements, to the mutual benefit of the Commission and the other public bodies concerned. A large part of our normal agency work is concerned with the reclamation of tips. Another example last winter was the use of Commission plant and operators for snow clearance in remote areas where no other suitable plant was available and the weather made normal civil engineering work impossible. Other outside work undertaken is the building of roads for joint use, which although not strictly of an agency nature benefits both the Commission and other landowners; with the aid of a contribution from the other party, roads can be constructed which would not be economically justified for the Commission alone.

65 The total length of our forest road system is now 15,711 kilometres (9,757 miles). During the year 243 kilometres (151 miles) were completed to full standard for road haulage vehicles and 45 kilometres (28 miles) were built to lower standards for the use of forwarders or for light traffic.

66 On the mechanical engineering side there has been a welcome improvement in the time-lag for the delivery of new items and in spares supply, although this is often marred by machines and vehicles, foreign as well as British, requiring rectification either before or soon after being put to use.

67 The radio network continues to be extended and is a most valuable tool of general forest management, as well as fulfilling an essential role in fire-fighting. Some 1,000 radios are now in general service in the Commission. Progress has also been made in developing and fitting radio controls for harvesting operations, to the benefit of both safety and output, and useful work has also been done in the installation and servicing of audio-visual equipment in visitor centres.

Forest Workers' Pay

68 Revised rates of pay for forest worker grades, operative from 23 January 1978, were negotiated within the Government's pay guidelines. The main features were the consolidation of the 1976 and 1977 pay supplements, adjustments in the piecework incentive levels, an increase of £4 a week in the basic forest worker rate, the maintenance of the 10 per cent lead over the basic rate for forest craftsmen and an agreement to pay adult rates at age 18 instead of 20. The new rates for unskilled forest workers and forest craftsmen are now £43.50 and £47.85 a week respectively.

69 The average weekly earnings of forest workers, based on a sample of one full week's work by all grades in each quarter, were £61.74.

Safety

70 The accident rate per 100 employees rose slightly from 7.6 to 8.0. The total number of accidents reported also rose from 437 to 464, representing an increase of about 6 per cent compared with the previous year. These figures are disappointing but are better than in 1974 and 1975. Regrettably, one of the accidents proved fatal (the first since 1974). There has been a welcome reduction in the accident rate for juvenile employees, which fell sharply during the year from 14.5 to 10.1.

71 Research into personal safety equipment continued throughout the year. Field trials of a new herbicide spraying suit have given promising results, and further trials will be monitored by the Plant Pathology Laboratory at Harpenden

during the forthcoming weeding season. Some worthwhile improvements have been incorporated into the present mid-calf safety boot to make it more rigid and robust. Recent trials indicate that the continuing search for a completely waterproof boot with sufficient protection for chainsaw work may soon succeed.

Finance

Revaluation and Changes in the Accounts

72 The adjustments to the opening capital at 1 April 1977 consequent upon the revaluation reported in our 1976-77 Report are set out in Note 2 to the accounts. The opportunity was taken with the start of the new quinquennium to make certain accounting adjustments and alter the form of accounts to improve the quality of reporting. The principal changes were:

- (a) The introduction of the general concepts of current cost accounting, whereby assets are revalued yearly, generally by means of indices, to record their current value to the Commission and to adjust the value of the capital employed accordingly.
- (b) An annual revision of the standards used in the measurement of performance on the plantations and harvesting accounts to reflect the changing value of the pound.
- (c) The provision of a more detailed analysis of standards to provide improved explanations in the accounts.
- (d) A reclassification of estate subjects between those being retained for use by the Enterprise and those which are surplus.
- (e) The introduction of a charge to the Forestry Enterprise for a proportion (currently 45 per cent) of the cost of research and development.
- (f) The separation of labour oncost from overheads together with a simplification of the Headquarters, overhead allocations and of the presentation of the overhead statement.

73 The accounts of the Forestry Enterprise, including general notes and explanations, together with the Comptroller and Auditor General's Report thereon, appear after page 75.

Forestry Authority

Legislation

Forest Reproductive Material

74 The Forest Reproductive Material Regulations 1977 (SI 1977/891), which came into force on 1 July 1977, revoked and re-enacted with amendments the 1973 Regulations of the same title. The amendments arose from the need to implement the terms of Directive 75/445/EEC, the main provision of which is for the marketing of a superior, 'tested' category of seeds and young plants.

Importation of Wood and Bark

75 The Importation of Wood and Bark (Prohibition) (Great Britain) Order 1977 (SI 1977/901), which came into operation on 11 July 1977, revoked the 1974 Order and re-enacted its provisions with modifications imposing new and more stringent conditions for the permitted landing of wood of the genera *Castanea* (Sweet chestnut) and *Quercus* (oak), and of *Picea* (spruce) and other coniferous genera. Controls were also introduced for the first time prohibiting imports of isolated bark of those genera and of *Ulmus* (elm), except under licence.

Dutch Elm Disease

76 The 1975 and 1976 Movement Orders were revoked and re-enacted, with additional provisions adjusting the scheduled areas from which the movement of elm is restricted, by the Dutch Elm Disease (Restriction of Movement of Elms) Order 1977 (SI 1977/1075). This came into force on 2 August 1977. Similarly, the 1974 Local Authorities Order and subsequent amending Orders were revoked and re-enacted with minor modifications by the Dutch Elm Disease (Local Authorities) Order 1977 (SI 1977/1074), from the same date. The Forestry (Exception from Restriction of Felling) (Amendment) Regulations 1977 (SI 1977/1954), which came into force on 28 December 1977, extended to Scotland the exemption from felling licensing in respect of dead elm trees.

Rent (Agriculture) Act 1976

77 We mentioned in our Report last year that the application of this Act to forestry workers was being postponed pending consideration of the Tavistock Institute's report on tied housing in forestry. The report in fact revealed no overriding reasons for treating tied houses in forestry differently from those in agriculture, and an Order was accordingly made by the Minister of Agriculture, Fisheries and Food (SI 1977/1268) extending the operation of the Act to whole-time forestry workers in England and Wales (the Act does not apply in Scotland) from 1 October 1977. Although the Act does not bind the Crown, we shall be following its provisions by administrative arrangement.

Legislation in Preparation

78 Work has been started on the preparation of three new Statutory Instruments. These are:—

- (a) *Plant Health Order* – this Order is designed to implement the EEC Plant Health Directive, which relates to wood as well as to plants. We have already commented on this in paragraphs 18–20.
- (b) *Destructive Pests and Diseases (Forestry) Order* – consideration is being given to the introduction of a new Order under this title to complement the Plant Health Order, designed to provide improved measures of control against non-indigenous pests and diseases which, despite import controls, may gain a foothold in Britain.
- (c) *Forestry Commission Byelaws* – we are currently reviewing the 1971 Byelaws with a view to updating them. At the same time we are taking the opportunity to review the separate Byelaws relating to the Forest of Dean, the New Forest, Westonbirt Arboretum and Bedgebury Pinetum with the aim of preparing a composite set of Commission Byelaws covering all the areas concerned.

Forest of Dean

Grazing of Sheep

79 The grazing of animals in the Forest of Dean has been a controversial issue for centuries. Over recent years, however, we have managed to secure reasonable control through our Byelaws with the notable exception of sheep which are a hazard on the open roads through the Forest and damage villagers' gardens.

80 A recent Opinion by Counsel endorses the view that no legal rights to graze sheep in the Forest exist. We are therefore proposing minor changes to our Byelaws to prohibit grazing without the Commission's consent and to require sheep allowed to graze under licence to be properly marked. Such a control scheme will involve the registration of the graziers, their markings and particulars of the numbers of sheep grazed. We hope that a zoning arrangement suitably dividing the Open Forest can provide additional control which will go a long way to reducing the nuisance of sheep in the villages. Consultations on these proposals are now taking place with local interests, including the Commoners' Association.

Opencast Coal Mining

81 Applications by Woorgreens High Delf Ltd, a subsidiary of Northern Strip Mining Ltd, to lease the area known as Woorgreens Gale for opencast coal mining – a use for which the Company was granted planning permission by the local authority as far back as 1955 – have been rejected by Ministers over recent years on the grounds that to grant a lease for this purpose would be incompatible with their obligations under Section 11 of the Countryside Act 1968 to “have regard to the desirability of conserving the natural beauty and amenity of the countryside”. However, the severe storms in January 1976 devastated this area of the Forest with the result that a large part of Woorgreens Gale was either blown down or had to be cleared of trees.

82 These changed environmental conditions led to a careful review of the situation by the Minister of Agriculture, Fisheries and Food, in his capacity as Forestry Minister for England, as a result of which he gave his consent in

September 1977 to a lease being granted to Woorgreens High Delf Ltd subject to the negotiation of terms and conditions satisfactory to the Forestry Commission. Over the following six months our Conservator for South West England consulted widely with local interests, following which conditions were incorporated in the lease to cover specific points of concern, particularly with regard to possible disturbance caused by the mining operations and the need to ensure that proper restoration of the site is carried out. Consequently, we were able to give our consent to a lease which as far as possible satisfied local opinion. Mining operations will begin in the summer of 1978 and the site is expected to be handed back to the Commission for replanting well within the four-year term of the lease.

Private Forestry

83 We are sorry to have to report a further drop in new planting by private woodland owners. In 1977-78 only 8,299 hectares of planting were grant-aided under the Commission's schemes, of which 6,322 hectares were new planting (Table 3 of Appendix VII). We have commented at length in paragraphs 4-8 on the measures introduced by the Government during the year to arrest this decline in planting and on the evidence that a measure of confidence is now returning to the private sector. We hope that our next report will confirm this trend.

Forestry in the EEC

Afforestation Directive

84 Since 1974 there has been a proposal for an Afforestation Directive which, in broad terms, would require Member States to establish schemes to encourage forestry measures for the purpose of improving agricultural structures. Notwithstanding reservations by several countries, including the United Kingdom, on various points, discussions took place in 1977 on some detailed aspects of the proposal, in particular the definition of eligible land. A final decision by the Council of Ministers on this Directive, which is one of four draft Directives relating to agricultural structure questions, is still awaited.

Forestry Policy in the Member States

85 In contrast to agriculture, the EEC has no common forestry policy because forestry is not covered by the Treaty of Rome. Proposals have been in hand for some time, however, for the preparation by the EEC Commission of a "Forestry Policy Aims" paper (since retitled "Forestry Policy in the EEC"). The intention is that this paper will be presented to the Council of Ministers with the recommendation that the objectives and principles outlined should represent a major element in the national forestry policies of all the Member States.

The Plochmann Report

86 A draft summary of a lengthy report prepared by Professor Plochmann and his team, under the auspices of the EEC Forestry Division, was circulated to Member States in April 1977. It involves three separate studies of the forestry policies of the Member States relating to:—

- (a) public access to forests and their use for recreation;
- (b) state aid for financing forestry measures in forests not owned by the state;
- (c) the mechanisation of plantation establishment and timber harvesting operations and the implications for the environment.

87 Expert officials are currently examining the practicalities of the many recommendations, but it is already clear that the follow-up studies proposed would be lengthy and costly while the amount of harmonisation that could, in the end, be achieved might be extremely limited.

Overseas Visits

88 The Commission maintains a close liaison with forestry interests overseas. The Director General attended meetings of the EEC College of Directors' General held in Verona in June 1977 and Brussels in November 1977. He was also present at the FAO European Forestry Commission meeting held in Rome in September 1977. Preparations are being made for the Director General and two senior officers to participate in the 8th World Forestry Congress, due to be held in Jakarta, Indonesia, in October 1978.

Research and Development

89 The Commission's Annual Report on Research and Development is published each autumn and gives a comprehensive account of the full range of work being carried out in this field. The paragraphs below represent a small selection of items of general interest.

Damage by Defoliating Insects

90 The Research and Development Annual Report published in October 1977 gives a full account of the damage caused by defoliating insects, and we have referred in paragraph 17 of this present Report to the infestation of Pine beauty moth, *Panolis flammea*. Also of interest are continuing studies on the control of the European spruce sawfly, *Gilpinia hercyniae*, and the web-spinning larch sawfly *Cephalcia lariciphila*, which for some years have been defoliating spruce and larch crops in Wales. The possibilities of biological control by parasites and predators are being examined. At the same time, in related investigations, staff of the Unit of Invertebrate Virology of the Natural Environment Research Council are studying insect viruses that might be used to control these infestations. In a joint study with the Commission they are also examining a virus that destroys the Fox-coloured pine sawfly, *Neodiprion sertifer*.

Solar Energy

91 The Energy Technical Support Unit of the Department of Energy is investigating biological methods of tapping solar energy. As part of the project, a one-year contract has begun at our Alice Holt Research Station to evaluate the possible use of coppice crops for this purpose; this will cover poplar and other species on very short rotations as well as orthodox coppice crops.

Coal Tips and Other Difficult Sites

92 A one-year contract to examine the problems of growing trees on deep colliery spoil in England was completed for the Department of the Environment and this has now been followed up with a further contract involving field trials with various species. We shall be publishing the results of these studies and those of an earlier project involving coal tips and other derelict land in south Wales.

Dutch Elm Disease

Progress of the Epidemic

93 The disease continued its spread northwards and into Wales. We estimated last autumn that about 11 million elms have now been killed out of an original

population of 23 million in the southern part of Britain. This represents an increase of 2 million since last year. In the northern part of the country there was a significant increase overall with some serious outbreaks.

94 At the end of the active beetle season in Scotland it was estimated that the previous year's count of 500 infected trees had risen to several thousands. The most seriously affected area was the Borders Region, where the non-aggressive strain of the disease and its associated beetle population have been present for many years. The presence of this endemic beetle population is likely to have had a significant effect on the spread of the aggressive strain within the Region. Serious outbreaks were also reported from Strathclyde, Central, Fife and Tayside Regions.

Future Action

95 In November we outlined to local authorities in the lightly affected areas the strategy recommended for the coming year. This was based on evidence that sanitation felling campaigns, if vigorously pursued in lightly affected areas, can slow down the development of the disease. The campaign in East Sussex is a notable example, and similar campaigns in parts of northern England and Scotland, which have been in operation for only one or two years, have proved relatively effective. Local authorities in the lightly affected areas have been encouraged to continue with such campaigns, although we have recommended that expenditure of money and effort in control operations should be concentrated in urban or other specifically defined areas where the elm population is geographically isolated and the disease is at a low level. We have provided advice on the selection of such areas in consultation with the local authorities concerned, as well as on recommended replacement species.

96 Although it is impractical to do any sanitation felling in the heavily affected areas, the removal of dangerous trees and trees which are a particular eyesore is of importance. This is facilitated by the freedom of movement of elm timber allowed within those areas. It is however illegal for elm with bark attached to be moved out of the heavily affected areas, and within the lightly affected areas movement is only permitted under licence. We are applying these rules very strictly and will take proceedings against offenders whenever necessary.

97 There is no known method of eradicating the disease, but evidence in Britain and in the United States indicates that sanitation felling can have the important effect of slowing down its rate of progress. This has a number of advantages:—

- (a) the mature elm population can, in part, be conserved for upwards of 20 years;
- (b) the number of dead trees within an area at any one time is limited; this facilitates the marketing of the timber and visual amenity is less affected;
- (c) although likely to be similar whether incurred in a sanitation felling programme or not, the total cost of felling and disposal can be evenly spread over a longer period;
- (d) replanting programmes can be planned and new trees established before the elm population is markedly reduced.

In urban areas, at least, most of the dead elms must be felled for safety and aesthetic reasons, whether they die in the immediate future or over an extended period.

Elm Marketing Group

98 This Group, which we set up in January 1976, has continued its efforts to promote new markets for elm wood. Its reports indicate that while there is a continuing demand for good quality elm, prices have varied over the country depending on the accessibility of markets. The problem of felling and clearing small unmarketable and long dead trees is expected to remain for some time. Increased sales of wood burning stoves have been noted, although the Group points out that in the longrun supplies of elm for this purpose will obviously become limited. A survey conducted by the Group showed that County Councils in England and Wales were generally active in removing elms in public places wherever they were a danger.

99 The Group will continue to maintain a watching brief over the development of the disease. We are grateful to the Group, to which members of the Trade have contributed a great deal of their valuable time on a voluntary basis over the past two years, for the stimulus it has given to the marketing of elm timber.

Education and Training

100 Our Education and Training Branch organised 475 courses for both industrial and non-industrial Forestry Commission staff during the year. Training was also provided, on request, to the private forestry sector and other organisations. Some Commission staff attended specialised courses conducted by external training bodies.

101 A course was held for local authority planning officers and it is intended to hold more. Courses continued to be provided for students preparing for the examinations of the Royal Institution of Chartered Surveyors and were well attended. The requirements of the Health and Safety at Work, etc., Act 1974, together with the incidence of Dutch elm disease, brought heavy demands from local authorities and public bodies for chainsaw training, and this was provided as far as possible (Plate 6). Work proceeded on instructors' training manuals for which there continued to be a demand from organisations at home and abroad. Forestry Commission training establishments were visited by various parties from overseas.

102 Research into the application of job-related aptitude tests was undertaken in co-operation with the Industrial Training Research Unit of London University. There have been encouraging results which should help in the selection of operators to train in the use of chainsaws and modern harvesting machinery. Co-operation continued during the year with colleges and establishments concerned with forestry education and training and with the training groups operating under the auspices of the Forestry Training Council. Discussions were begun with appropriate authorities which are expected to lead to the provision of an OND (Forestry) qualification in Scotland to supplement that currently provided by the Cumbria College of Agriculture and Forestry.

Public Relations

103 The first of the Commission's stated objectives, acting as Forestry Authority, is "to advance knowledge and understanding of forestry and trees in the countryside". In meeting this objective we employ all the conventional publicity media and facilities. These include newspapers, journals, radio, television, films, exhibitions, lectures and talks, publicity publications and leaflets and the supply of photographs to the press and the public. Besides information officers at our Headquarters' Office in Edinburgh, we also have a press officer in our London Office and one in Cardiff who is Welsh speaking.

104 Our free publicity literature, which is in addition to our normal publications programme, now comprises 15 titles. These include annual leaflets giving details of our camp sites, holiday cabins and houses, and information material for schools forestry projects. A completely redesigned series of *See Your Forests* leaflets has been produced to coincide with a national "See Your Forests Week" from 20–27 May 1978. Each of these regional leaflets incorporates guide maps and detailed gazetteer information relating to picnic places, forest walks, visitor centres, forest drives, camp sites, observation hides, wildlife parks, fishings, etc. Another new free leaflet, *Forestry Facts and Figures 1976–77*, was produced to coincide with the publication of our last Report. It is the intention to publish this annually in future to provide a simple, pocket-sized reference to forestry statistics.

105 During the three summer months, we sent out two touring show units which visited 22 major agricultural shows. During the winter, the show units attended eight major city-based shows where the work of the Commission, in particular its recreational facilities, were highlighted. In the year under report we also sponsored a film "Woodland Harvest" which has enjoyed considerable success, winning two major awards at film festivals in New York and Warsaw.

106 Several major public relations exercises were conducted during the year. A typical example was a successful press tour which was arranged to explain the necessity for the aerial application of an insecticide to Scots pine at Tentsmuir Forest. Our information officers contacted several newspaper editors in the area to seek their co-operation in reassuring the public. In addition to such press conferences and tours called to explain our future actions, the news media were several times invited to forests to be shown recent developments. These included the new forest cabins at Keldy Castle, in Cropton Forest in the North Yorkshire Moors (Plate 7), and the wildlife conservation project set up at Greystoke Forest in Cumbria to mark the Queen's Jubilee which took the form of the creation of two large and five smaller wildlife ponds. These are but a few examples of the many special invitations given to the press to view the Commission's work which have led to a more sympathetic and appreciative understanding of our efforts by the media.

Finance

107 The statement of expenditure on Forestry Authority services, together with notes and explanations, appears at Table 2 of Appendix VI.

J. MACKIE, *Chairman*

G. D. HOLMES,

Deputy Chairman and Director General

D. S. BOWSER

A. M. DONNET

J. D. GIBSON-WATT

J. M. HUNTER

C. G. A. LATHAM

D. A. MITHEN

G. G. STEWART

R. B. VERNEY

P. J. CLARKE, *Secretary*

FORESTRY COMMISSION,

231 Corstorphine Road,

Edinburgh EH12 7AT

Appendix I

Committees

National Committees

The membership of these Committees at 31 March 1978 was as follows:—

England

Sir Ralph Verney, Bt. (*Chairman*), Mr J. L. Benson, Major D. J. C. Davenport, Mr P. H. L. Hills, Mr C. G. A. Latham, Mr G. G. Stewart. *Secretary to the Committee*: Miss B. A. Landimore. The Committee met in June and November 1977.

Scotland

Capt. D. S. Bowser (*Chairman*), Lt.-Col. A. E. Cameron, Mr A. M. Donnet, Mr D. A. Mithen, Mr William Wolfe, Capt. J. M. A. Yerburgh. *Secretary to the Committee*: Mr D. C. Fisher. The Committee met in June and November 1977.

Wales

The Rt. Hon. J. D. Gibson-Watt (*Chairman*), Mr B. Davies, Mr D. Davies, Mr J. M. Hunter, Mr T. O. Lewis, Mr J. W. L. Zehetmayr. *Secretary to the Committee*: Mr E. G. Owen. The Committee met in July and October 1977 and March 1978.

Regional Advisory Committees

The membership of the Committees at 31 March 1978 was as follows:—

ENGLAND

North-West Conservancy

Mr J. L. Benson (*Chairman*), Mr G. Price Bowring, Mr J. E. Croasdale, Rt. Hon. The Lord Forester, Mr E. M. Hart, Mr F. G. Humphreys, The Earl of Lonsdale, Mr A. H. Unsworth, Mr R. Ward. *Secretary to the Committee*: Mr D. P. Pringle. The Committee met in May and December 1977.

North-East Conservancy

Mr J. Brocklebank (*Chairman*), Mr F. M. Berthele, Mr M. J. M. Bliss, Mr P. O. R. Bridgeman, Mr J. M. Coatsworth, Mr M. L. Richardson, Mr G. F. Stevenson, Mr J. C. R. Trevelyan, Major P. B. Walker. *Secretary to the Committee*: Mr D. L. Hendry. The Committee met in June 1977 and February 1978.

East Conservancy

Mr W. E. Lane (*Chairman*), Major G. K. Agnew, Mr J. R. Boddy, Mr R. W. R. Browning, Mr W. H. Darling, Major A. G. N. Hadden-Paton, Mr F. J. Massey, Mr J. K. Royston, Mr R. C. Steele. *Secretary to the Committee*: Mr W. O. Wittering. The Committee met in April and September 1977 and March 1978.

South-East Conservancy

Mr P. H. L. Hills (*Chairman*), Mr T. J. Daniel, Viscount Falmouth, Dr W. P. K. Findlay, Mr D. T. Hodson, Mr H. Mackworth-Praed, Mr A. G. Porter, Mr J. H. Stenning, Mr B. T. Tompsett. *Secretary to the Committee*: Mr B. Tipping. The Committee met in October 1977.

South-West Conservancy

Major D. J. C. Davenport (*Chairman*), Mr W. H. Denniss, Mr L. S. W. Howard, Mr R. M. Moody, Mr M. Roper, Mr R. F. Worgan, Mr J. H. B. Workman, Dr T. W. Wright, Mr G. C. Wyndham. *Secretary to the Committee*: Mr J. E. Taylor. The Committee met in April and October 1977.

SCOTLAND

North Conservancy

Lt.-Col. A. E. Cameron (*Chairman*), Mr J. Evans, Mr A. N. S. Kinnear, Mr G. G. Lyon, Major A. McCall, Mr H. D. Skinner, Capt. R. W. K. Stirling, Mr A. F. F. Williamson. *Secretary to the Committee*: Mr T. S. B. Macbeath. The Committee met in May and October 1977.

East Conservancy

Dr Jean Balfour (*Chairman*), The Viscount of Arbuthnott, Mr G. W. Christie, Mr N. Gordon-Smith, Mr T. Bruce Jones, Mr D. F. Ogilvie, Major R. N. Jardine Paterson, Mr J. G. Scalley, Professor K. Walton. *Secretary to the Committee*: Mr E. G. Roberts. The Committee met in May and November 1977.

South Conservancy

Capt. J. M. A. Yerburgh (*Chairman*), Mr J. Hunter Blair, Mr D. Bridges, Mr H. Crawford, Mr J. A. Crichton, Mr T. Y. Gibson, Admiral Sir Nigel Henderson, Mr R. A. McClymont, Capt. J. G. Milne-Home. *Secretary to the Committee*: Mr R. B. Stewart. The Committee met in April and September 1977.

West Conservancy

Mr William Wolfe (*Chairman*), Mr D. Brierton, Mr T. Doyle, Mr G. Farquharson, Mr A. Fleming, Capt. W. F. E. Forbes, Capt. P. L. Mackie-Campbell, Mr S. A. J. Oldham, Mr P. Tennant. *Secretary to the Committee*: Mr F. S. Henderson. The Committee met in June and October 1977.

WALES

North Conservancy

Mr T. H. Owen (*Chairman*), Mr F. C. Best, Mr N. H. Gore, Mr J. M. Harrop, Mr R. ap Simon Jones, Mr D. R. L. Keogh, Mr V. Lloyd, Capt. D. Y. F. Myddelton, Major P. C. Ormrod. *Secretary to the Committee*: Mr G. H. Bowers. The Committee met in May and October 1977.

South Conservancy

Mr H. L. Knight (*Chairman*), Mr E. Bartlett, Mr C. J. S. Burd, Mr A. J. Llewellyn, Mr M. A. McLaggan, Mrs K. Neale, Mr R. G. Thomas, Mrs D. Walmsley, Mr R. H. Wheelock. *Secretary to the Committee*: Mr R. R. Davies. The Committee met in May and October 1977 and March 1978.

Home Grown Timber Advisory Committee

The membership of the Committee at 31 March 1978 was as follows:—

Sir Goronwy Hopkin Daniel (<i>Chairman</i>)	*Mr M. M. Ord Johnstone
Mr W. J. Alsford	Mr H. J. Keys
Mr A. J. Brownlie	The Earl of Lonsdale
The Hon. James Bruce	Mr G. G. Lyon
Mr E. A. Burn	Mr J. E. MacDonald
Mr J. G. M. Dawson	Mr F. A. Megginson
Lord Dulverton	Mr J. J. Morris
*Mr P. Evans	*Mr R. Pierson
Mr A. B. L. Munro Ferguson	Mr H. Richardson
Capt. W. F. E. Forbes	Mr R. N. J. Watson
Mr R. M. Harley	Mr C. R. Woosnam
*Independent Members	<i>Secretary</i> : Mr G. T. S. Campbell

With the exception of the independent members the membership was drawn from nominations received from the following bodies: Timber Growers' Organisation Ltd, Scottish Woodland Owners Association Ltd, Home Timber Merchants' Association of England and Wales, Home Timber Merchants' Association of Scotland, National Coal Board, Timber Trade Federation of the United Kingdom, British Wood Chipboard Manufacturers' Association, Association of United Kingdom Wood Pulp Producers, Timber Research and Development Ltd.

The Committee met in April, July and October 1977 and January and March 1978. The Annual Report of the Committee is at Appendix II, page 34.

The Chairman of the Commission, the Director General and the three full-time Commissioners were present during meetings of the Committee. Part-time Commissioners, the Director of the Princes Risborough Laboratory, Department of the Environment, and a senior officer of the Department of Industry also attended one or more meetings of the Committee.

Technical Sub-Committee of the Home Grown Timber Advisory Committee

The membership of the Committee at 31 March 1978 was as follows:—

Mr H. Richardson	Timber Research and Development Association Ltd. (<i>Chairman of the Sub-Committee</i>)
Mr A. E. Aitkins	} Timber Growers' Organisation Ltd.
Major P. C. Ormrod	
Mr D. B. Crawford	Scottish Woodland Owners Association Ltd.
Mr R. J. Tilley	Home Timber Merchants' Association of England and Wales
Mr T. S. Smith	} Home Timber Merchants' Association of Scotland
Mr J. E. McDonald	
Mr J. Henderson	Institute of Foresters of Great Britain
Mr A. W. Camburn	Association of United Kingdom Wood Pulp Producers
Col. D. A. Campbell	Royal Institution of Chartered Surveyors
Mr T. D. Stitt	National Coal Board

Secretary: Mr J. R. Aaron

The Sub-Committee met in June and September 1977 and January 1978.

The Annual Progress Report of the Sub-Committee is at Appendix II, page 35.

Advisory Committee on Forest Research

At 31 March 1978 the membership of the Committee was as follows:—

Professor P. F. Wareing (<i>Chairman</i>)	Professor J. D. Matthews
Professor J. P. M. Brenan	Professor L. Roche
Professor J. L. Harley	Professor A. J. Rutter
Professor J. P. Hudson	Professor T. S. West
Dr L. F. Levy	

Secretary: Mr N. E. Stutter

The Committee met in November 1977.

Appendix II

Home Grown Timber Advisory Committee: Annual Report for the year ended 31st March 1978

The case advanced by the industry for Investment Grants for harvesting machinery was referred back for further information through the Interdepartmental Working Group looking into the matter. A Sub-Committee of the HGTAC was therefore formed and met on a number of occasions to examine the problem. Subsequently a questionnaire was circulated seeking relevant data to justify the case, the answers to which remain to be collated and analysed.

The Secretary of State for Scotland replied to the Committee setting out the Government's view on the proposed devolution of forestry. Despite assurances that, because of its already devolved nature and organisational structure, the Forestry Commission was already well placed to cope with devolution, the Committee remained convinced that the devolution of forestry was unjustified.

On EEC matters the Committee's views on the draft Forestry Policy Aims paper (since re-titled Forestry Policy in the EEC) were taken into account by Brussels and largely incorporated into subsequent revisions of the paper, on which there has been no further development. Consideration was also given to the EEC draft Afforestation Directive, while in connection with the EEC Plant Health Directive the Committee welcomed the proposals which strengthened Community plant health control. Concern was expressed about the possible importation of oak wilt to the UK from America. It was accepted, however, that present British regulations and those planned under the Directive would prevent the importation of oak wood with bark attached.

Regular reports on the measures against Dutch elm disease and on the marketing of elm were given throughout the year. Problems which gave rise to most deliberation were the sale and disposal of lower quality elm, the enforcement of the legislation generally and the prevention of illegal movement. Changes were also considered to the Dutch elm disease Orders. The Committee agreed to the Forestry Commission's future policy for combating Dutch elm disease by concentrating effort in urban or rural 'defendable' areas largely free of the disease and with natural geographical barriers.

During the year the Committee gave consideration to the future role of the HGTAC to take account of the need felt by the Forestry Commission for advice over a wider range of issues than the Committee had hitherto been able to give. The Committee accepted the principle of revised terms of reference and enlarged membership to include representatives from the four additional fields of land use/agriculture, the environment, nature conservation and professional forestry interests.

The Supply and Demand Committee and the Technical Sub-Committee made regular reports during the year. A report of the work of the latter is summarised below. A major consideration was to draw attention to the state of the chipboard industry in respect of the unfair trading competition from abroad. On the Committee's recommendation, the Forestry Commission approached Forestry Ministers urging support for measures against this practice following representations made to the Department of Industry. The measures subsequently taken have helped the short-term problem but the situation will have to be watched for the future.

A Forestry Commission Working Party report on "The Wood Production Outlook in Britain" was presented to the Committee to study and discuss. At the same time the Centre for Agricultural Strategy asked the Committee to provide information for a study which they were undertaking entitled "A Forestry Strategy for the UK". Both these are due to be debated later in 1978.

Annual Progress Report of the Technical Sub-Committee of the Home Grown Timber Advisory Committee for the Year ended 31st March 1978

Working Party on Future Markets for Hardwoods

1 This Working Party was set up during the year under the chairmanship of Major P. C. Ormrod and it was convened three times. Invitations for the submission of written evidence were widely distributed.

Working Party on Sawmilling Research

2 Revised recommendations of this Working Party (which had been reconvened in January 1977) were considered and accepted. It was, however, decided to give greater flexibility to those involved in sawmilling research by deleting the prescribed priorities.

The Impact of Harvesting on the Environment

3 Papers giving the views of the Forestry Commission and the Home Timber Merchants' Association of Scotland were discussed. It was agreed that a document covering "Guidelines on Environmental Considerations in Harvesting Operations" should be prepared.

The Fire Resistance of Wood

4 A synopsis of an EEC seminar held at Oxford during March 1977, on the Behaviour of Wood Products in Fire, was studied.

5 The results of charring tests on a number of British softwoods were monitored. It was noted with satisfaction that none of the woods tested exceeded the notional charring rates proposed in the draft British Standard on fire resistance.

Safety

6 Concern was expressed at proposed regulations under the Health and Safety at Work Act dealing with the standardisation and checking of lifting equipment.

Utilisation

7 Papers were discussed on recent technical developments in wood chipboard, the use of forest products for feedstuffs, and the use of bark. It was observed that most accumulations of bark exceeding 2,000 tonnes per annum in England and Wales were now finding uses. It was also noted that an Agrément Board Certificate had been granted to a company manufacturing building blocks from bark and cement. The findings of a Department of Industry report on pallets were noted.

Research

8 Proposals for the next year's work under the joint Building Research Establishment/Forestry Commission programme of research were reviewed in the light of the recommendations of the Working Party on Sawmilling Research.

Harvesting Operations

9 Trials by the Commission's Work Study Branch with the Salev/Sifer processor, the Stripper II delimber attached to a 60 BHP agricultural tractor, the Husqvarna SP26 delimber, the Hydrallogger, the Cundey Autolift debarker, the Massey-Ferguson 1200 tractor, the TGT hydrostatic forwarder, and the Ahlstrom Karhula 312S chipper were monitored. The performances of a further seven chainsaws under continuing review by the Branch were noted.

Forest Management Matters

10 A situation report by the Work Study Branch was received. It covered trials with the Vibrating Sock plough, the 6 x 6 Hydrostatic ploughing tractor, the Alpha Accord lining-out machine, the Huntly granule applicator for herbicides, and the Quickwood planter.

European Economic Community

11 The implications of the EEC traffic regulations concerning drivers' hours for the forestry and timber industries were considered. It was observed that their implementation would require a second driver for journeys exceeding 450 kilometres, but no insurmountable difficulties were envisaged.

Dissemination of Information

12 The report of the Working Party on the Future of Harvesting was serialised over five issues in *Forestry and British Timber*. The same journal published an article on the Work Study Branch's method of assessing vibration and noise in chainsaws.

Appendix III

Forestry Training Council

Annual Report for the year ended 31st March 1978

This was the sixth full year of the Council's work. Meetings were held at the Forestry Commission Management Training Centre, Forest of Ae, Dumfriesshire on 2 June 1977 and at the headquarters of the Forestry Commission in Edinburgh on 6 October 1977 and 9 March 1978. There were seven changes in membership. Mr J. M. Marshall replaced Mr D. Brent as the representative of the Standing Committee on Arboricultural Education and Mr R. S. Carlaw replaced Mr D. K. Fraser for the Royal Scottish Forestry Society. Mr A. I. McNab took the place of Mr R. Macdonald as one of the representatives of forestry education in Scotland. Two founder members of the Council retired, the first being Mr F. H. Peachey who was replaced by Mr S. Neale of the National Union of Agricultural and Allied Workers; the second was Mr I. Edwards replaced by Mr D. Keogh of the Transport and General Workers' Union. The members of Council were saddened by the death of Mr W. Steele on 6 November 1977; Mr R. M. Boothroyd attended meetings in his place as a representative of forestry education in England and Wales. One other change was that Mrs M. E. Granshaw replaced Mr G. Dickson as an assessor from the Department of Education and Science.

Statistics were assembled on the quantity of training activity during 1976-77 and 1977-78. There were ten courses leading to nationally recognised craft qualifications and total attendance fell from 198 to 158 (Table 1). The number of courses leading to nationally recognised supervisory and managerial qualifications was five and total attendance on these rose from 100 to 128 (Table 1).

Table 1
*Attendance on Courses for Recognised Craft, Supervisory and
Managerial Qualifications in 1976-77 and 1977-78*

Courses	Grade and Duration	1976-77		1977-78	
		Number of Courses/Students	Number of Courses/Students	Number of Courses/Students	Number of Courses/Students
City and Guilds 012 Stage 1	Craft (young workers) Block Release	9	150	7	114
General Forestry Craft and Education	Craft (young workers) 2-year residential	1	7	—	—
City and Guilds 012 Stage 2	Craft (adult workers) Block Release	2	37	3	44
Forest Nursery Course	Craft Day and Block Release ..	1	4	—	—
Total for Craft Courses	.. .. .	13	198	10	158
Ordinary National Diploma	Supervisory 3-year sandwich	1	79	1	84
*RFS Foresters Certificate	Supervisory Block Release	1	13	—	—
City and Guilds 012 Stage 3	Supervisory Block Release	—	—	2	28
National Diploma in Forestry	Managerial Residential ..	1	8	2	16
Total for Supervisory and Managerial Courses	..	3	100	5	128

*Royal Forestry Society of England, Wales and Northern Ireland.

The English and Welsh Forestry Training Group was formed in April 1977 and the Scottish Forestry Training Group completed 2½ years of work. They arranged short courses for the private sector, and the Forestry Commission continued to provide short courses for their work force. The total number of trainee course days for forest workers rose from 9,175 in 1976-77 to 11,682 in 1977-78 (Table 2). Attendance of forest workers in the private sector rose for the sixth consecutive year and the number of trainee course days was almost double that of 1971-72 when the Forestry Training Council was formed.

The total number of trainee course days for supervisory and managerial staff fell from 4,356 in 1976-77 to 3,006 in 1977-78 (Table 2). Attendance on short courses of forest supervisors and managers in the private sector has increased five-fold since 1971-72.

Table 2
Attendance on Short Courses for Forest Workers, Supervisors and Managers during 1976-77 and 1977-78

Level	Source of Participants		1976-77 Trainee Course Days	1977-78 Trainee Course Days
Craft	Private Forestry . . . .	..	2,073	2,520
	Forestry Commission . . . .	..	7,102	9,162
	Total . . . .	..	9,175	11,682
Supervisory and Managerial	Private Forestry . . . .	..	1,361	1,163
	Forestry Commission . . . .	..	2,995	1,843
	Total . . . .	..	4,356	3,006

The courses and instructors for the private sector were provided by the Forest Industry Centre at Inverness, Cumbria College of Agriculture and Forestry, the Forestry Commission, Merrist Wood Agricultural College, Fountain Forestry Ltd, the Agricultural Training Board, West of Scotland College of Agriculture, Scottish Woodland Owners Association (Commercial) Ltd, Lanark Fire Brigade, Tayside Fire Brigade and Shell Chemicals. In addition, the Furniture and Timber Industry Training Board again provided short courses for people in the employment of companies within the scope of that Board.

As in earlier years, the content of short courses for forest workers took account of the grade and knowledge of the participants and the regional variations in the industry. The most numerous on the establishment and tending side dealt with spring steel fencing and control of weeds by chemical and mechanical means. On the production and marketing side, marking and measuring thinnings, use and maintenance of chainsaws, extraction by winch, skidder and forwarder, tractor operation and maintenance and mechanical loading all received attention. Courses for supervisors and managers in the private sector during 1977-78 dealt with terrain classification, windthrow hazard classification, shelter-belt planning and planting, training needs and methods, fire-fighting and prevention, tariffing and thinning. Health and safety at work continued to be the subject of many short courses for forest workers, supervisors and managers.

The Scottish Forestry Training Group, under the guidance of Mr Nelson Steward, the Group Training Development Manager, continued to make good progress and at the end of March 1978, there were 260 trainees on 91 registered training units. The Group could call on 100 registered instructors. In March 1978, the English and Welsh Forestry Training Group had completed almost one year of work under the guidance of Mr D. G. Whieldon as Group Training Development Manager. He concentrated on the formation of sub-groups called "Forestry Training Associations" in different parts of the country and he also began negotiations with the Hereford College of Agriculture to provide College based training in forestry for new entrants. During the year, the Management Committee of the Forestry Training Council was reconstituted with five members so that it can closely supervise the work of the two training groups and provide liaison for planning purposes between the Council and the Training Services Division of the Manpower Services Commission.

The Manpower Services Commission provided grant aid under their Special Measures Scheme for training certain additional harvesting workers and for upgrading the skills of existing forest workers who faced redundancy but were willing to be trained in harvesting skills. The two training groups placed on private estates unemployed young people between

16 and 18 years of age under the Work Experience Programme of the Manpower Services Commission. Negotiations were continued in Scotland for a short industrial course in forestry to enable young people to make a considered judgement about their suitability for a career in forestry. The Highlands and Islands Development Board agreed to give financial help to trainees attending forestry training courses; this should greatly stimulate training in the Highlands of Scotland.

The Forestry Training Council continued to make grants to assist those who wished to complete City and Guilds courses but were unable to obtain financial support from local education authorities or employers. During the year the Grant Award Committee under the Chairmanship of Professor C. J. Taylor made 11 awards.

The Working Group formed under the Chairmanship of Professor Taylor to examine forestry qualifications below the level of University degrees held discussions on behalf of the Forestry Training Council with the Scottish Technical Education Council and reported about the probable demand for forestry supervisors in state and private forestry in Britain.

The Working Group under the Chairmanship of Mr P. J. D. Donnelly made recommendations which the Forestry Training Council accepted on the grading of craftsmen and others in forestry combined with arrangements for proficiency testing. Approaches will be made to the Agricultural Wages Boards about grading and related matters.

The Forestry Training Council continued to work closely with the City and Guilds of London Institute, the National Examination Board for Supervisory Studies, the Training Services Division of the Manpower Services Commission, and the Forestry Safety Council. The Council again records with pleasure the willing co-operation of many people and organisations and particularly that of the Colleges providing courses in forestry, the Forestry Commission and the private sector of forestry. The Council also acknowledges with thanks the help given by the Furniture and Timber Industry Training Board and the Assessors.

Signed for the
Forestry Training Council

J. D. MATTHEWS
Chairman

J. McRITCHIE
Secretary to the Council

Members of the Forestry Training Council at 31st March 1978

Chairman

Professor J. D. Matthews

Employer Members

Mr A. F. F. Williamson	}	Scottish Woodland Owners Association Ltd.
Mr R. G. Sangster		
Lord Norton	}	Timber Growers' Organisation Ltd.
Mr P. J. D. Donnelly		
Mr M. P. Shapcott	}	Forestry Commission
Mr J. F. Goodwin		
Mr A. G. Phillips		Association of Professional Foresters

Employee Members

Mr H. Crawford	}	Transport and General Workers' Union
Mr A. Mills		
Mr D. Keogh		
Mr J. H. Hose	}	National Union of Agricultural and Allied Workers
Mr S. Neale		
Mr R. Pierson		
Mr R. G. Braine			Civil Service Union

Education and Training Members

Mr A. I. McNab	}	Forestry Education, Scotland
Mr A. P. B. Hamilton		
Mr A. G. Pyman		Forestry Education, England and Wales
Mr J Saddle		Furniture and Timber Industry Training Board

Forestry Society, etc., Members

Professor C. J. Taylor	Institute of Foresters of Great Britain
Mr R. S. Carlaw	Royal Scottish Forestry Society
Mr R. Rowland	Royal Forestry Society of England, Wales and Northern Ireland
Mr J. M. Marshall	Standing Committee for Arboricultural Education

Assessors

Mr R. H. Nelson	}	Scottish Education Department
Mr R. Naylor		
Dr T. W. Martin	}	Department of Education and Science
Mrs M. E. Granshaw		
Mr P. R. Wells		Manpower Services Commission

Secretary

Mr J. McRitchie Forestry Commission

Grant Award Committee

Professor C. J. Taylor (*Chairman*)
Mr R. G. Sangster
Mr J. McRitchie

Working Group on Forestry Qualifications

Professor C. J. Taylor (*Chairman*)
Mr J. F. Goodwin
Mr R. H. Nelson
Dr T. W. Martin
Mr A. I. McNab
Mr R. G. Braine
Mr A. G. Pyman

Working Group on Grading of Craftsmen and Others in Forestry

Mr P. J. D. Donnelly
Mr R. G. Sangster
Mr J. F. Goodwin
Mr J. H. Hose
Mr R. G. Braine

Appendix IV

Forestry Safety Council

Annual Report for the year ended 31st March 1978

This was the fourth full year of the work of the Council. Meetings were held on 8 September 1977 and 9 February 1978, both in Edinburgh.

Eight Forest Industry Safety Guides were published during the year. Five of these relate to Chainsaws while the other three deal with Forest Tractors, the Mobile Saw Bench and the Mobile Peeling Machine. A further six guides will be available very shortly and it is expected that up to ten more may be ready before the end of March 1979. The revision of two earlier guides, concerned with Noise and Hearing Conservation and with the Clearing Saw, is in hand.

The Council reached agreement on the contents of a small personal first-aid kit and of a larger "on site" kit, and negotiations are in progress with a firm who are prepared to modify the contents of their kits to meet the requirements of the Council. It is intended that a technical guide on the subject should be issued simultaneously with the kits.

Health and Safety Executive consultative documents relating to the Notification of Accidents and Dangerous Occurrences, Lifting Gear (Testing and Use) Regulations and Pressurised Systems Regulations were considered by the Council, but it was left to individual organisations represented on the Council to submit their comments, if any, direct to the Health and Safety Executive. The Council, however, expressed the hope that the arrangements for processing information about accidents under the proposed new system would make provision for statistics to be produced in respect of forestry as a separate industry.

At the request of the Health and Safety Executive the Council reviewed the draft of an Agricultural Safety leaflet on "Tree Felling, Hauling and Scrubland Clearance". Various amendments were proposed by the Council, which was particularly concerned that farmers should not attempt to deal with large trees without obtaining professional assistance.

During the year the Agriculture Industry Advisory Committee was set up by the Health and Safety Executive to advise on relevant topics, including those with a forestry interest. The Committee, of which the Chairman of the Council is a member, provides an important consultative link between the Council and the Health and Safety authorities. As a first step it has been agreed that the Council should from time to time submit papers to the Committee. An initial paper will deal with the impending introduction in the Nordic countries of new legal standards for chainsaws.

It remains the policy of the Council to encourage employers who will be governed by the Regulations on Safety Representatives and Safety Committees to implement these Regulations in advance of the operative date of 1 October 1978. The Council also takes the view that employers who do not recognise independent Trade Unions should set up Safety Committees on lines similar to those provided for in the Regulations.

Members of the Forestry Safety Council at 31st March 1978

Col. D. A. Campbell	<i>Chairman</i>
Mr D. G. Whieldon	Timber Growers' Organisation
Mr K. J. Ramsay	Scottish Woodland Owners Association
Mr D. J. Cooper	Home Timber Merchants' Association of England and Wales
Mr J. E. McDonald	Home Timber Merchants' Association of Scotland
Mr J. H. Hose	National Union of Agricultural and Allied Workers
Mr A. Mills	Transport and General Workers' Union
Mr R. Neale	General and Municipal Workers' Union
Prof. J. D. Matthews	Forestry Training Council
Mr M. P. Shapcott	Forestry Commission
Mr D. A. Bardy	Forestry Commission Safety Officer
Mr R. J. Bell	<i>Secretary</i>

Appendix V

New Publications

Eleven new priced publications were issued through Her Majesty's Stationery Office.

Reports

Fifty-seventh Annual Report of the Forestry Commissioners, 1976-77 (£2.25).
Report on Forest Research for year ended 31 March 1977 (£1.90).

Bulletin

No. 57. The Safety of the Herbicides 2, 4-D and 2, 4, 5-T by D. J. Turner (£1.20).

Forest Records

- No. 111. Some Important Foreign Diseases of Broadleaved Trees by D. A. Burdekin and D. H. Phillips (40p).
No. 112. Monitoring Day Visitor Use of Recreational Areas by P. S. Collings and A. J. Grayson (65p).
No. 113. Free Growth of Oak by J. Jobling and M. L. Pearce (50p).
No. 114. Terrain Classification by A. A. Rowan (70p).
No. 115. Dutch Elm Disease by J. N. Gibbs, D. A. Burdekin and C. M. Brasier (50p).

Leaflet

No. 69. Starling Roost Dispersal from Woodlands by F. A. Currie, D. Elgy and S. J. Petty (30p).

Arboricultural Leaflet (produced in conjunction with the Department of the Environment)

No. 1. External Signs of Decay in Trees by C. W. T. Young (40p).

Guide

Forests of North-East Scotland (£1.35).

Research and Development Papers (published by the Forestry Commission)

- No. 117. Tied Houses in British Forestry by B. L. Irving and E. L. Hilgendorf (60p).
No. 118. Population Aggregation of *Scolytus scolytus* by J. H. Borden and C. J. King (20p).

A further four in the series of wall charts, "Forest Trees in Britain", were produced; these and the R & D papers are available from the Publications Officer, Forest Research Station, Alice Holt Lodge.

In addition three publications were revised and one reprinted to meet continuing demand.

Appendix VI

Financial Tables

- 1. Forestry Fund Receipts and Payments**
- 2. Expenditure on Forestry Authority Services**

Table 1

STATEMENT OF FORESTRY FUND RECEIPTS AND PAYMENTS

in the year ended 31 March 1978

<i>Previous Year £000</i>	<i>Receipts</i>	<i>£000</i>
27,000	Grant-in-Aid	24,700
22,713	Sales of Timber	27,574
1,713	Disposals of surplus assets	1,766
5,213	Miscellaneous	6,520
<hr/>		<hr/>
56,639		60,560
(707)	Decrease in working balance	457
<hr/>		<hr/>
55,932		61,017
	<i>Payments</i>	
29,966	Salaries, wages and related expenses	32,902
3,546	Pensions and gratuities to retired staff	4,055
12,626	Materials, contract services and general expenses	14,324
	Acquisition of land, buildings and plantations, and construction of	
4,211	buildings	2,494
3,377	Machinery and equipment	4,813
	Grants to private woodland owners (£1,300(000)), universities,	
1,377	institutions etc	1,356
829	Remittances of VAT to Customs and Excise	1,073
<hr/>		<hr/>
55,932		61,017

NOTES ON TABLE 1

General

1. Expenditure incurred by the Forestry Commissioners in the exercise of their powers in the performance of their duties is financed from the Forestry Fund which was constituted under Section 8 of the Forestry Act 1919. All sums received by the Commissioners are paid into this Fund.

2. Receipts and payments are shown inclusive of VAT where applicable.

Receipts

3. The Grant-in-Aid of the Forestry Fund voted by Parliament for 1977/78 was £28,415(000) of which £24,700(000) was drawn into the Forestry Fund. The remaining balance of £3,715(000) will be surrendered to the Consolidated Fund.

4. Receipts from sale of timber rose by £4,861(000) as a result of higher prices.

5. There was a small increase of £53(000) in receipts from the disposal of surplus assets with higher prices being paid.

6. Miscellaneous receipts rose by £1,307(000) due to an increased deer cull and improved prices received from venison (£204(000)), increased charges for campsites and holiday houses and greater usage as more holiday homes became available (also two Easter holiday breaks occurred in the year) (£301(000)), increased estate income from higher rents and royalties and other charges (£197(000)), higher prices were obtained from sales of surplus VME (£162(000)), an increased programme combined with higher costs were recovered for motorway planting and work for Northumberland Water Authority at Kielder Reservoir (£171(000)), and other income for salaries of seconded staff, research work, transfer payments, cash discounts etc increased due to higher prices being charged and greater activity (£272(000)).

Payments

7. Payments of salaries, wages and related expenses rose by some 9% mainly due to increased rates of pay.

8. Payments of pensions and gratuities to retired staff rose by £509(000) due to the award of higher superannuation benefits and an increase in the number of pensioners.

9. The cost of materials, contract services and general expenses rose by 13% due to the continuing impact of inflation on costs and increased activity in certain of our main activities – harvesting, maintenance of VME, recreation and roads.

Notes on Table 1 (*continued*)

10. Expenditure on acquisitions and construction of buildings fell by £1,717(000) due to a reduction in acquisition funds caused by public expenditure cuts. The area of plantable land acquired fell to 6,865 hectares (17,700 hectares previous year) and the average price paid per hectare increased to £164 per hectare (£149 per hectare 1976/77).

11. Expenditure on machinery and equipment rose by £1,436(000) due to increased costs and a larger purchasing programme.

12. Remittances of net VAT to Customs and Excise increased by £244(000). Greater sales resulted in a higher level of output tax which more than offset the rise in recoverable input tax from higher costs.

Table 2

EXPENDITURE ON FORESTRY AUTHORITY SERVICES
in the year ended 31 March 1978

Previous Year £000		£000
	Services to Private Woodland Owners	
	Grants under Dedication Schemes	
21	Basis I	27
238	Basis II: Planting Grants	192
695	Management Grants	719
216	Basis III: Basic Grant	223
63	Broadleaf Supplement	41
27	Approved Woodlands Planting Grants	27
14	Small Woods Planting Grants	38
2	Other Grants	—
26	Miscellaneous	30
954	Overhead Expenses	849*
2,256		2,146
46	Less Miscellaneous Income	69
2,210		2,077
	Special Services	
225	Licensing of Felling	236*
221	Information and Shows	599*
543	General administration (EEC, fiscal and regulatory duties and including £722,(000)* overheads)	729
989		1,564
	Research and Development	
847	Silviculture	983
250	Genetics	288
64	Physiology	70
20	Seed Research	32
120	Site Studies	146
343	Protection	411
161	Statistics	183
180	Communications	127
109	Westonbirt and Bedgebury Arboreta	143
41	Experimental Workshops	52
67	Grants to Universities	69
—	Work Study	507
—	Field Surveys	591
304	Overhead Expenses (Headquarters)	—
2,506	Total (including £177(000)* overheads)	3,602
—	Less allocation to Forestry Enterprise (Statement 1 on page 77)	1,621
2,506		1,981
5,705	Net total expenditure in year	5,622
4	Notional sickness and injury benefit	4
5,709		5,626
	Change in Assets	
	Increase – Current	£000 9
(29)	Decrease – Fixed	104
(29)	Net Decrease	95
5,738	Amount of Grant-in-Aid appropriated for the Forest Authority (Note 3 in Forestry Enterprise Accounts, page 86)	5,531

* Statement 7 of Forestry Enterprise Accounts, page 84, £2,583(000)

NOTES ON TABLE 2

1. The Forestry Authority share of the Grant-in-Aid amounted to £5,531(000) compared with £5,738(000) last year.

Services to Private Woodland Owners

2. A reduction in overheads following a revision of the method of allocation mainly accounts for the decrease of £133(000) in total net expenditure.

Special Services

3. Changes in the method of allocation of overheads again primarily accounts for the substantial rise in the cost of information, shows and general administration.

Research and Development

4. The current year's net total expenditure of £3,602(000) includes £1,098(000) spent on Work Study and Field Surveys which were previously treated as part of Headquarters overheads and shown in the Forestry Enterprise accounts. In addition that part of Headquarters overheads allocated to Research has now been apportioned to individual activities whilst previously it was shown as a separate entry. After making appropriate adjustments for these changes there is virtually no alteration from the previous year's total cost of Research and Development. In the quinquennium 1977/78 - 1981/82, 45% of the net cost of Research and Development will be charged to the Forestry Enterprise and shown in Statement 1 Plantations Account. This allocation amounts to £1,621(000) in 1977/78 reducing the cost of Research and Development chargeable to the Forestry Authority to £1,981(000).

Appendix VII

Statistical Tables

Measurements in the Statistical Tables in the following pages are in metric values. Their imperial equivalents are listed below.

1 hectare=2.471 acres

1 kilometre=0.621 miles

1 acre=0.4047 hectares

1 mile=1.609 kilometres

Forestry Authority

DEDICATION SCHEMES FOR PRIVATE ESTATES POSITION AT 31ST MARCH 1978

Table 1

	Great Britain		England		Scotland		Wales	
	Num-ber	Area (hec-tares)	Num-ber	Area (hec-tares)	Num-ber	Area (hec-tares)	Num-ber	Area (hec-tares)
<i>Basis I and II</i> Dedications in existence	4,097	487,104	2,463	213,889	1,131	241,969	503	31,246
<i>Basis I and II</i> Dedications in prepara-tion	4	801	3	173	1	466	—	162
Total	4,101	487,905	2,466	214,062	1,132	242,435	503	31,408
<i>Basis III</i> Dedications in existence	26	1,266	10	322	5	441	11	503
<i>Basis III</i> Dedications in prepara-tion	676	56,983	244	7,794	380	45,942	52	3,247
Total	702	58,249	254	8,116	385	46,383	63	3,750

Notes:

- (i) A dedication exists when the Deed of Covenant or Agreement has been completed.
(ii) In the interests of greater accuracy, dedications in preparation now exclude applications which are not yet approved; this accounts for the apparent drop in the total of Basis III schemes compared with the previous year. The Basis III figures have also been reduced through transfers of smaller areas to the new Small Woods Scheme.

THE APPROVED WOODLANDS SCHEME FOR PRIVATE ESTATES POSITION AT 31ST MARCH 1978

Table 2

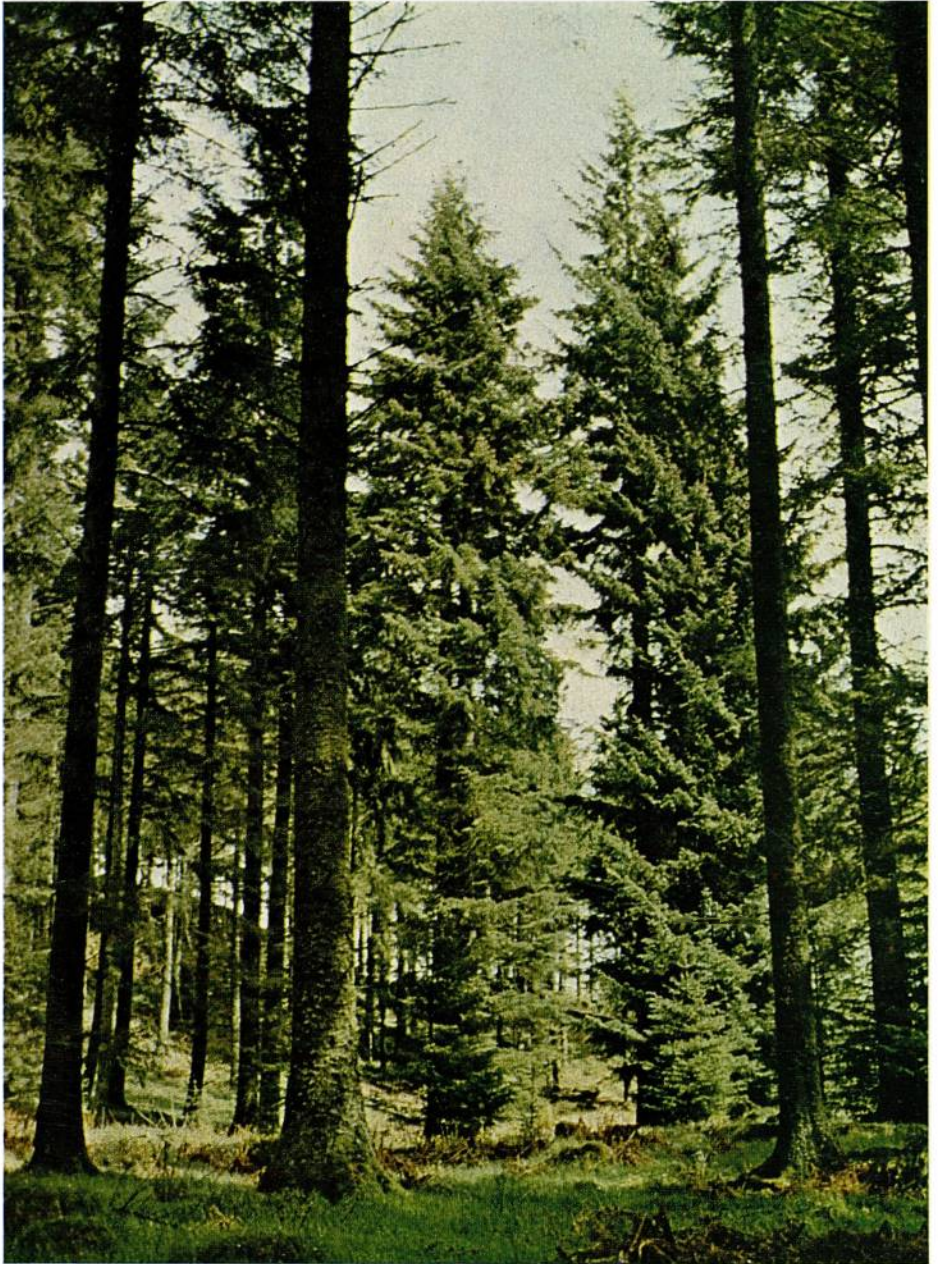
	Great Britain		England		Scotland		Wales	
	Num-ber	Area (hec-tares)	Num-ber	Area (hec-tares)	Num-ber	Area (hec-tares)	Num-ber	Area (hec-tares)
Plans of Operations in existence at the start of the year	470	48,097	366	33,177	85	13,355	19	1,565
Terminations during the year	89	6,886	73	5,742	13	931	3	213
Plans remaining ..	381	41,211	293	27,435	72	12,424	16	1,352

Note: The Approved Woodlands Scheme was closed to new applications in June 1972 but existing participants were allowed to continue in the Scheme until their current plan of operations expired.



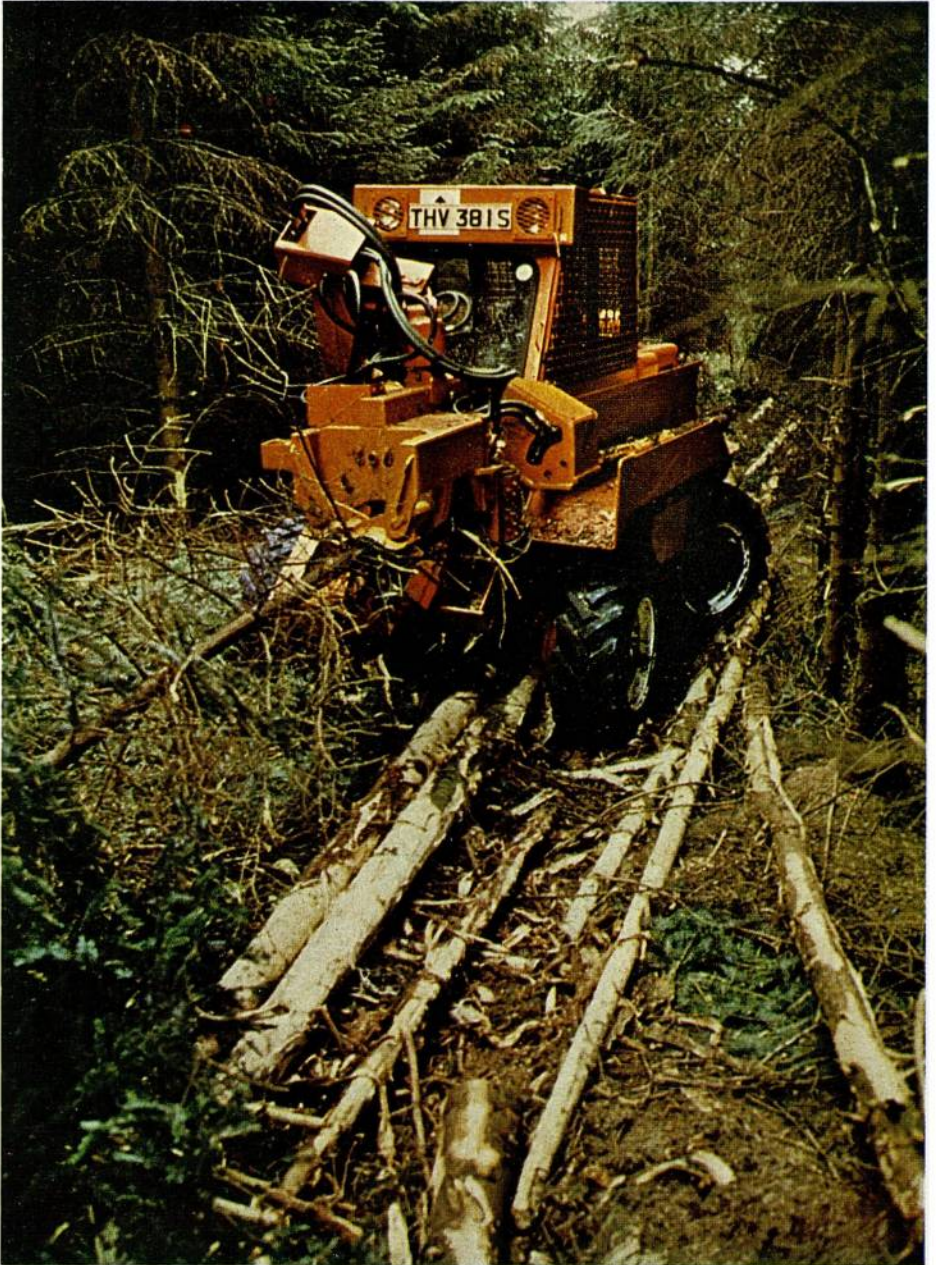
ED780

PLATE 1
After opening The Queen's Way on 27 July 1977,
HRH Princess Anne signs the visitors' book in
the Galloway Deer Museum, Clatteringshaws
Forest



E4590

PLATE 2
Sixty-year old Sitka spruce in McKenzie's Grove,
Inverliever Forest



E4589

PLATE 3
A debranching machine at work in the Forest of Ae

PLATE 4

A forwarder extracting produce from a well-planned clearfelling site in the Forest of Dean

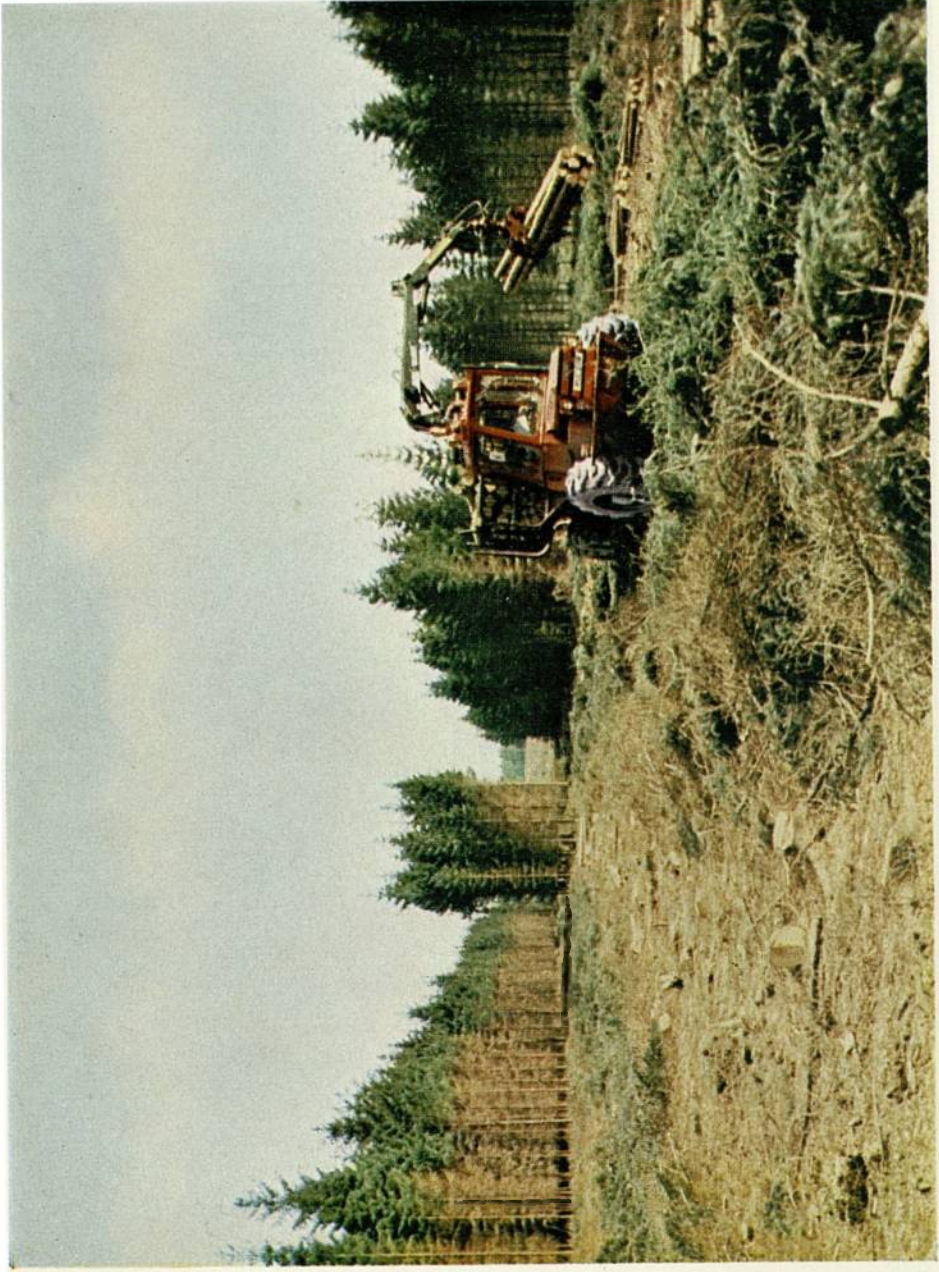
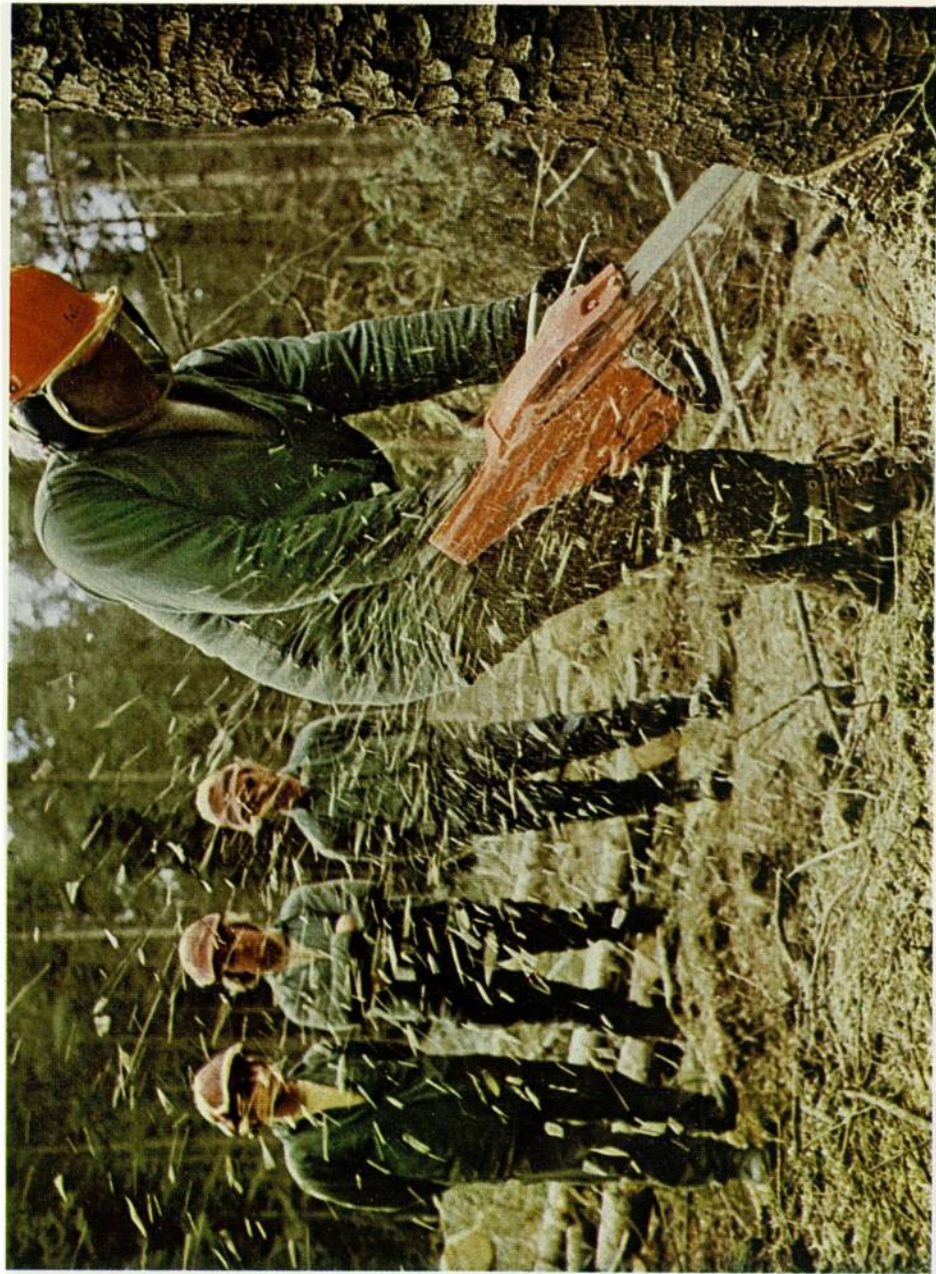




PLATE 5
 (Left) Pine beauty moth
 (Right) Pine beauty moth larvae
 feeding on young shoots of Lodgepole
 pine
 (Below) Eggs of Pine beauty moth on a
 Lodgepole pine needle



PLATE 6
An instructor demonstrates the
correct and safe use of a
chainsaw to trainee forest
workers



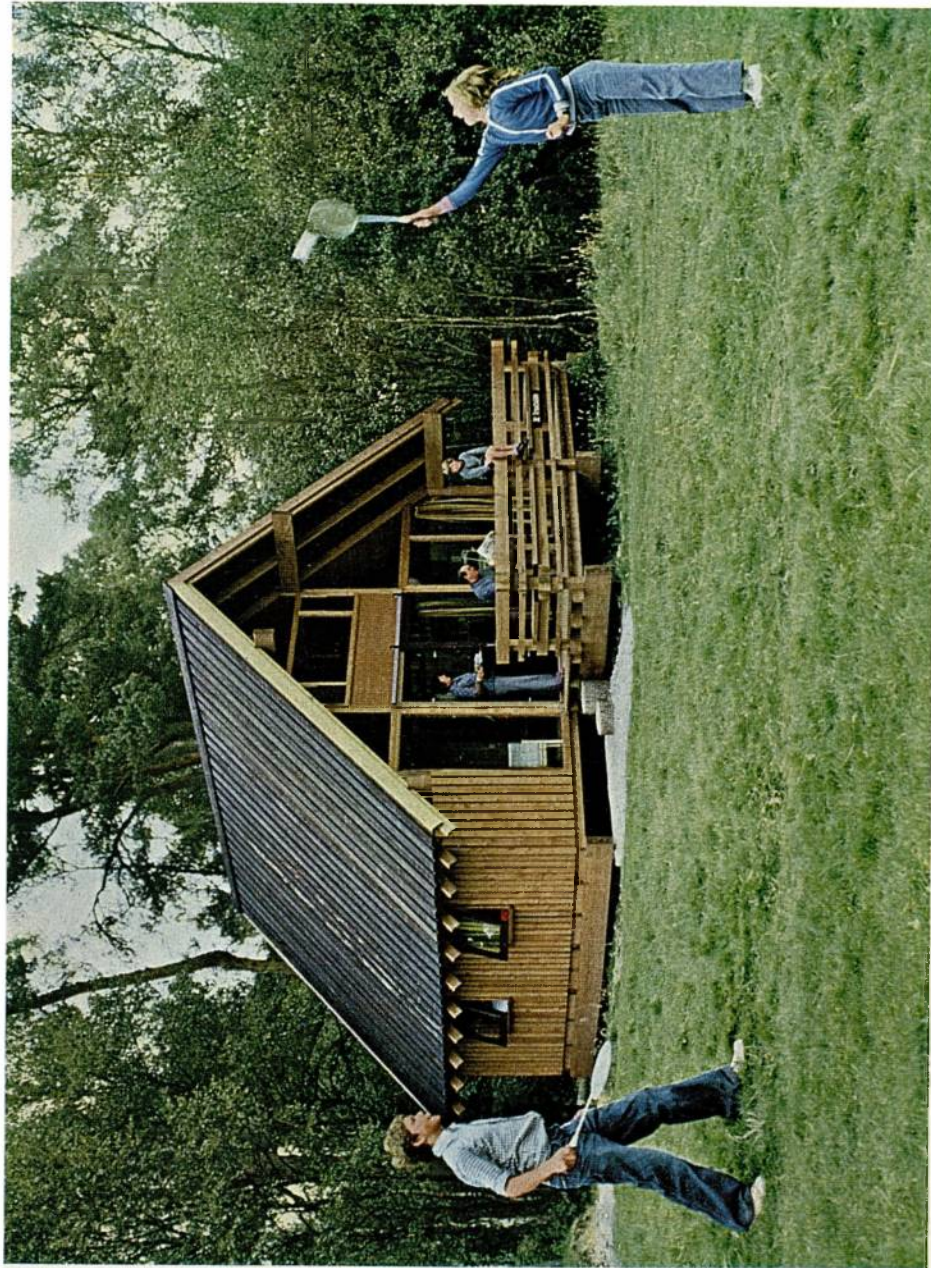
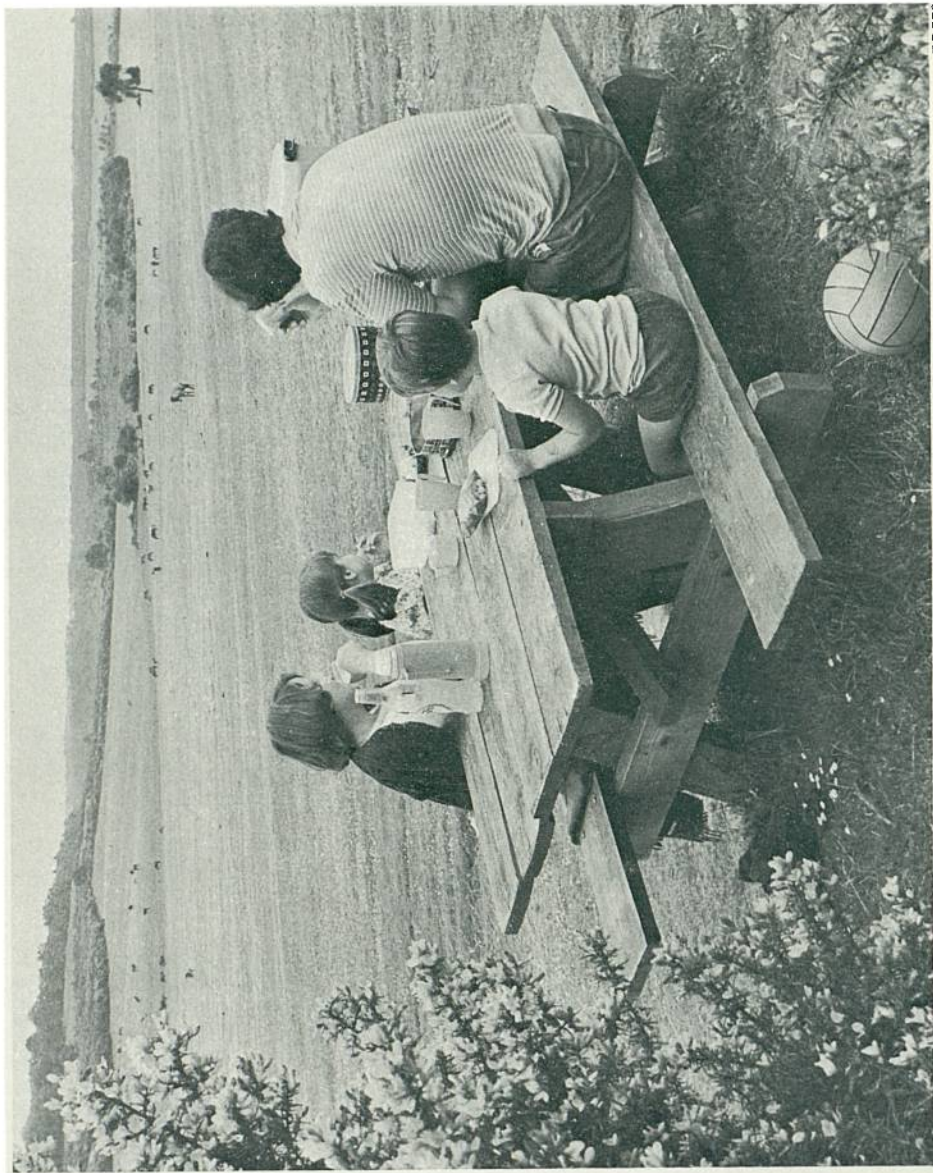


PLATE 7
Forest cabins at Keldy Castle,
Cropton Forest

PLATE 8
Picnicking at Longslade Bottom
in the New Forest. Ponies graze
undisturbed in the car-free zone



AREA OF PLANTING BY PRIVATE WOODLAND OWNERS FOR WHICH GRANTS
WERE PAID IN THE YEAR ENDED 31ST MARCH 1978

Country	Hectares														
	Total			In Dedicated Woodlands Basis I and II			In Dedicated Woodlands Basis III			In Approved Woodlands		In Small Woods Schemes			
	All Planting	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total	New Planting	Re- stocking			
GREAT BRITAIN	8,299	6,322	1,977	3,197	1,614	1,583	4,795	4,590	205	157	40	117	150	78	72
Total ..	7,680	6,136	1,544	2,916	1,580	1,336	4,585	4,483	102	107	37	70	72	36	36
Conifer ..	619	186	433	281	34	247	210	107	103	50	3	47	78	42	36
Broadleaved ..															
ENGLAND	1,839	831	1,008	1,027	259	768	602	498	104	114	17	97	96	57	39
Total ..	1,385	721	664	800	241	559	480	442	38	65	14	51	40	24	16
Conifer ..	454	110	344	227	18	209	122	56	66	49	3	46	56	33	23
Broadleaved ..															
SCOTLAND	5,833	4,900	933	2,089	1,296	793	3,657	3,560	97	33	23	10	54	21	33
Total ..	5,681	4,826	855	2,042	1,280	762	3,574	3,511	63	33	23	10	32	12	20
Conifer ..	152	74	78	47	16	31	83	49	34	—	—	—	22	9	13
Broadleaved ..															
WALES	627	591	36	81	59	22	536	532	4	10	—	10	—	—	—
Total ..	614	589	25	74	59	15	531	530	1	9	—	9	—	—	—
Conifer ..	13	2	11	7	—	7	5	2	3	1	—	1	—	—	—
Broadleaved ..															

In addition it is estimated that 382 hectares were planted without the aid of grants (England 274, Scotland 86, Wales 22).

VOLUME OF TIMBER LICENSED FOR FELLING AND THINNING
ON PRIVATE ESTATES IN THE YEAR ENDED 31ST MARCH 1978

Table 4

	Great Britain	England	Scotland	Wales
Total volume (thousand cubic metres) ..	453	292	140	21
Conifer	253	134	109	10
Broadleaved	200	158	31	11
Number of licences issued	1,910	1,405	397	108

Note: Excludes felling and thinning on dedicated estates for which no licence is required.

AREA LICENSED FOR CLEAR FELLING ON PRIVATE ESTATES
IN THE YEAR ENDED 31ST MARCH 1978

Table 5

Hectares

	Great Britain	England	Scotland	Wales
Total	1,841	1,300	481	60
Conditional licences*	1,337	955	333	49
Unconditional licences	504	345	148	11

* Conditional licences require the restocking of the land concerned.

Forestry Enterprise

LAND USE
AT 31ST MARCH 1978

Table 6

Thousands of hectares

	Great Britain	England	Scotland	Wales
Total area	1253.2	303.4	789.0	160.8
Forest Land: Total	945.9	258.8	546.4	140.7
Under plantations	855.7	249.0	472.1	134.6
Retained scrub	6.8	1.8	3.4	1.6
To be planted	83.4	8.0	70.9	4.5
Other Land: Total	307.3	44.6	242.6	20.1
Agricultural and grazing	132.8	12.9	108.5	11.4
Forest Workers Holdings	4.8	0.7	3.3	0.8
Unplantable and miscellaneous (includes nursery land)	169.7	31.0	130.8	7.9

NET AREA OF FOREST LAND ACQUIRED IN THE YEAR ENDED 31ST MARCH 1978

Table 7

Thousands of hectares

	Great Britain	England	Scotland	Wales
Total area	6.0	—	6.0	—
Standing Woods	-0.2	-0.1	-0.1	—
Land for new planting	6.2	0.1	6.1	—

Note: This table represents the area of forest land acquired after deducting disposals.

PLANTING IN THE YEAR ENDED 31ST MARCH 1978

Table 8

Hectares

	Total	New planting	Restocking
Great Britain	17,192	14,123	3,069
Conifer	16,978	13,976	3,002
Broadleaved	214	147	67
England	2,312	1,148	1,164
Conifer	2,214	1,111	1,103
Broadleaved	98	37	61
Scotland	13,174	12,206	968
Conifer	13,071	12,105	966
Broadleaved	103	101	2
Wales	1,706	769	937
Conifer	1,693	760	933
Broadleaved	13	9	4

PROGRESS OF PLANTING FROM 1ST APRIL 1969 TO 31ST MARCH 1978

Table 9

Hectares

Period				Great Britain	England	Scotland	Wales
1970	..	..	..	22,492	4,329	15,585	2,578
1971	..	..	..	28,526	5,427	19,751	3,348
1972	..	..	..	26,235	4,174	19,642	2,419
1973	..	..	..	23,158	3,154	17,764	2,240
1974	..	..	..	21,723	2,900	16,644	2,179
1975	..	..	..	23,155	2,623	18,471	2,061
1976	..	..	..	20,511	2,530	16,374	1,607
1977	..	..	..	18,703	2,472	14,342	1,889
1978	..	..	..	17,192	2,312	13,174	1,706

AREAS OF PLANTATIONS AND VOLUMES OF TIMBER THINNED
AND FELLED IN THE YEAR ENDED 31ST MARCH 1978

Table 10

	Felled		Thinned		Total Volume Felled and Thinned (Thousand cubic metres)
	Area (hectares)	Volume (Thousand cubic metres)	Area (hectares)	Volume (Thousand cubic metres)	
Great Britain ..	4,156	957	21,782	1,008	1,965
England, Total ..	2,358	434	10,308	422	856
<i>Conservancy:</i>					
North-West ..	609	116	1,717	93	209
North-East ..	361	93	1,525	59	152
East ..	1,000	125	3,900	130	255
New Forest and South-East ..	114	29	1,569	54	83
South-West and Dean	274	71	1,597	86	157
Scotland, Total ..	1,067	294	7,848	409	703
<i>Conservancy:</i>					
North	331	112	739	49	161
East	251	55	2,562	114	169
South	285	65	2,759	141	206
West	200	62	1,788	105	167
Wales, Total ..	731	229	3,626	177	406
<i>Conservancy:</i>					
North	350	131	1,808	87	218
South	381	98	1,818	90	188

SALES OF TIMBER IN THE YEAR ENDED 31ST MARCH 1978

Table 11

Thousand cubic metres

Description	Great Britain	England	Scotland	Wales
Trees sold standing	750.3	272.7	269.6	208.0
Converted*	989.4	466.0	361.5	161.9
Round timber and saw logs	454.7	215.3	167.0	72.4
Telegraph and other selected poles ..	5.5	1.7	3.2	0.6
Mining timber	61.1	40.2	1.5	19.4
Posts and stakes	20.4	11.3	1.9	7.2
Pulpwood and boardmill material ..	402.8	162.9	180.3	59.6
Firewood	15.3	12.1	2.1	1.1
Miscellaneous	19.3	18.6	0.7	—
Poles sold in length (other than selected) ..	10.3	3.9	4.8	1.6

* In addition 5.0 thousand cubic metres were converted and used internally for forest and estate purposes (England 2.1, Scotland 1.6, Wales 1.3).

PROPERTIES MANAGED BY THE COMMISSION
AT 31ST MARCH 1978

Table 12

Number

	Great Britain	England	Scotland	Wales
Forest properties	5,586	2,583	2,058	945
Foresters houses	661	241	298	122
Forest Workers houses	1,723	660	876	187
Forest Workers holdings	315	74	177	64
Miscellaneous*	2,887	1,608	707	572
Other properties†	6,107	2,078	2,620	1,409
Farms and other agricultural subjects ..	1,989	560	908	521
Residential and other lettings	4,118	1,518	1,712	888

* Miscellaneous covers hostels, bothies, offices, repair workshops and other buildings not normally let.

† In addition there are 2,458 sporting lettings.

PUBLIC RECREATIONAL FACILITIES
AT 31ST MARCH 1978

Table 13

Number

	Great Britain	England	Scotland	Wales
Camp sites*	35	25	9	1
Picnic places	570	341	108	121
Forest walks (way marked)	429	157	183	89
Forest (nature) trails	142	89	28	25
Visitor centres	28	13	10	5
Arboreta	25	10	5	10
Forest drives	7	4	2	1
Forest cabins (and holiday houses)	119	61	55	3

* In addition to these camp sites, the Commission provides the following:

- i. two informal camping areas in the New Forest;
- ii. four sites leased to the Caravan Club and two sites to the Camping Club of Great Britain and Northern Ireland;
- iii. 44 sites set aside for youth camping;
- iv. facilities for caravan rallies.

LAND USE, PLANTING AND TIMBER PRODUCTION BY FORESTS—ENGLAND

Table 14

	Land use at 31 March 1978 (hectares)					During Year 1977-78		
	Total	Under planta- tions	Retained Scrub	To be planted	Agri- cultural and other land	Planting (hectares)		Pro- duction (000 cu. m.)
						New planting	Re- stocking	
NORTH-WEST ENGLAND CONSERVANCY: TOTAL	53,896	44,225	112	2,307	7,252	322	315	209
Arden, Hereford and Worcester, West Midlands, Warwick and Leics	1,080	951	—	120	9	11	3	1
Bagot, Staffs	1,026	956	—	62	8	7	—	1
Blengdale, Cumbria	1,255	1,035	11	40	169	—	1	3
Bowland, Lancs	1,836	1,716	8	6	106	—	—	6
Cannock, Staffs	2,696	2,621	—	10	65	—	40	17
Dalton, Cumbria and Lancs	1,654	1,378	5	—	271	—	—	—
Delamere, Cheshire	969	937	—	—	32	—	12	8
Dunnerdale, Cumbria	951	805	22	—	124	—	—	3
Ennerdale, Cumbria	3,762	1,613	11	50	2,088	6	—	4
Greystoke, Cumbria	1,270	1,161	3	—	106	—	7	5
Grizedale, Cumbria	3,503	3,018	—	25	460	9	—	8
Inglewood, Cumbria	995	949	—	20	26	—	—	1
Kershope, Cumbria	5,734	5,261	—	28	445	—	40	22
Kinver, West Mid- lands and Staffs	299	280	—	—	19	—	—	1
Launde, Derby, Notts and Leics	893	803	—	85	5	—	—	—
Long, Salop	639	593	—	44	2	—	2	—
Matlock, Derby and Cheshire	3,139	1,691	—	279	1,169	38	—	—
Mortimer, Salop, Hereford and Wor- cester	4,156	4,011	—	—	145	—	55	34
Sherwood, Notts	6,482	6,080	30	115	257	—	141	75
Shropshire Hills, Salop	1,299	924	—	107	268	—	12	1
Spadeadam, Cumbria and Northumber- land	6,583	4,274	22	1,286	1,001	250	—	1
Swynnerton, Salop and Staffs	1,019	975	—	30	14	1	2	2
Thorntwaite, Cum- bria	2,656	2,193	—	—	463	—	—	16

Table 14—continued

	Land use at 31 March 1978 (hectares)					During Year 1977-78		
	Total	Under planta- tions	Retained Scrub	To be planted	Agri- cultural and other land	Planting (hectares)		Pro- duction (000 cu. m.)
						New planting	Re- stocking	
NORTH-EAST ENGLAND CONSERVANCY:								
TOTAL	100,362	80,472	196	4,214	15,480	747	232	153
Ampleforth, North Yorks	2,250	2,028	34	58	130	15	2	3
Chillingham, North- umberland	1,940	1,545	—	179	216	58	1	2
Chopwell, Durham, Tyne and Wear	875	795	2	12	66	—	4	3
Cleveland, North Yorks and Cleve- land	1,697	1,481	77	74	65	19	—	1
Cropton, North Yorks	4,575	3,864	32	113	566	—	5	10
Dalby, North Yorks	4,778	3,772	—	11	995	60	31	29
Don, South, West and North Yorks	2,893	1,639	32	841	381	29	6	3
Falstone, Northum- berland	14,965	13,264	—	14	1,687	—	37	11
Hamsterley, Durham	3,729	2,807	—	733	189	—	—	7
Harwood, Northum- berland	3,871	3,578	—	48	245	67	26	6
Jervaulx, North Yorks and Durham	1,523	1,370	—	95	58	8	2	2
Kidland, Northumber- land	3,458	2,335	—	542	581	105	—	1
Kielder, Northumber- land	16,390	10,042	—	177	6,171	123	4	21
Knaresborough, North and West Yorks	1,276	1,194	—	36	46	—	5	1
Langdale, North Yorks	5,008	4,046	—	148	814	—	—	4
Osmotherley, North Yorks	1,592	1,493	—	14	85	19	6	—
Redesdale, Northum- berland	5,697	5,009	—	—	688	—	23	12
Rievaulx, North Yorks	2,213	1,762	—	128	323	19	1	—
Rothbury, Northum- berland	2,253	1,958	—	103	192	64	3	9
Slaley, Northumber- land and Durham	1,189	1,085	8	55	41	5	—	2
Wark, Northumber- land	13,745	11,429	—	690	1,626	146	48	13
Wykeham, North Yorks	1,905	1,622	—	34	249	—	21	12
Wynyard, Cleveland	593	561	—	31	1	8	5	—
York, North Yorks and Humberside ..	1,947	1,793	11	78	65	2	2	1

Table 14—continued

	Land use at 31 March 1978 (hectares)					During Year 1977-78		
	Total	Under planta- tions	Retained Scrub	To be planted	Agri- cultural and other land	Planting (hectares)		Pro- duction (000 cu. m.)
						New planting	Re- stocking	
EAST ENGLAND CONSERVANCY:								
TOTAL	46,211	43,323	537	466	1,885	40	211	255
Aldwood, Suffolk ..	3,624	3,468	—	27	129	—	—	27
Amphill, Beds ..	821	661	80	40	40	5	5	—
Bardney, Lincs ..	3,041	2,924	17	6	94	—	1	4
Bernwood, Bucks and Oxon	888	697	191	—	—	—	—	—
Bramfield, Herts ..	639	601	12	16	10	—	4	—
Chiltern, Bucks, Oxon, Beds, and Herts ..	2,490	2,303	—	143	44	1	1	1
Hazelborough, Northants and Bucks	1,158	1,085	28	33	12	—	5	3
Kesteven, Lincs ..	2,076	1,985	2	14	75	—	1	3
Lavenham, Suffolk ..	816	810	—	1	5	—	—	—
Lynn, Norfolk ..	996	930	—	20	46	—	—	3
North Lindsey, Lincs Rockingham, Northants and Cambs	2,098	1,949	3	2	144	—	—	20
Thetford, Norfolk and Suffolk	2,864	2,618	85	50	111	—	—	4
Walden, Essex, Cambs and Herts	20,280	19,057	43	108	1,072	23	169	176
Wensum, Norfolk ..	705	647	42	6	10	—	—	—
Wymersley, Beds, Northants and Bucks	2,196	2,131	1	—	64	11	20	13
	1,519	1,457	33	—	29	—	5	1

Table 14—continued

	Land use at 31 March 1978 (hectares)					During Year 1977-78		
	Total	Under planta- tions	Retained Scrub	To be planted	Agri- cultural and other land	Planting (hectares)		Pro- duction (000 cu. m.)
						New planting	Re- stocking	
NEW FOREST AND SOUTH-EAST ENGLAND CONSERVANCY: TOTAL	56,922	39,684	480	102	16,656	1	89	82
Alice Holt, Hamp- shire, West Sussex and Surrey .. .	3,189	2,903	16	16	254	—	12	7
Arundel, West Sussex	3,436	3,253	60	3	120	—	—	4
Bedgebury, Kent and East Sussex .. .	3,963	3,642	—	—	321	—	12	11
Bramshill, Hampshire and Berks	2,490	2,357	49	24	60	—	9	8
Challock, Kent .. .	2,579	2,559	2	—	18	—	7	4
Micheldever, Berks and Hampshire .. .	2,461	2,321	31	4	105	—	—	4
New Forest, Hamp- shire	26,779	11,723	138	—	14,918	—	14	31
Queen Elizabeth Forest, West Sussex and Hampshire .. .	4,268	4,045	88	7	128	—	14	1
Ringwood, Dorset .. .	2,998	2,602	32	—	364	—	12	7
St. Leonards, East Sussex and West Sussex	1,748	1,554	10	—	184	—	—	1
Shipbourne, Kent and Sussex	1,127	1,023	34	48	22	1	2	1
Wight, Isle of Wight	1,884	1,702	20	—	162	—	7	3

Table 14—continued

	Land use at 31 March 1978 (hectares)					During Year 1977-78		
	Total	Under planta- tions	Retained Scrub	To be planted	Agri- cultural and other land	Planting (hectares)		Pro- duction (000 cu. m.)
						New planting	Re- stocking	
SOUTH-WEST ENGLAND AND DEAN CONSERVANCY:								
TOTAL	46,037	41,314	504	892	3,327	38	317	158
Brendon, Somerset and Devon ..	1,545	1,375	9	28	133	9	14	6
Dartmoor, Devon ..	2,399	2,111	—	27	261	—	10	17
Dean Forest, Glouces- ter, Hereford and Worcester and Gwent	10,782	9,573	—	147	1,062	3	48	38
Eggesford, Devon ..	1,157	1,106	18	13	20	—	9	6
Exeter, Devon ..	2,733	2,424	—	213	96	15	46	14
Hereford, Gloucester, Hereford and Worcester	2,356	2,043	—	304	9	4	9	4
Kernow, Cornwall ..	3,486	3,230	94	44	118	—	26	8
Mendip, Avon, Somerset and Wilts	1,411	1,353	12	1	45	—	10	3
Neroche, Somerset and Devon ..	2,065	1,698	—	10	357	—	27	1
Powerstock, Dorset	1,596	1,487	9	9	91	—	3	1
Quantock, Somerset	1,311	1,095	10	3	203	—	19	8
Savernake, Wiltshire, Hampshire and Berks	5,043	4,758	115	47	123	—	2	17
Torrige, Devon ..	3,682	3,373	77	20	212	—	26	17
Wareham, Dorset ..	4,834	4,180	101	26	527	7	41	14
Westonbirt, Gloucester	100	—	59	—	41	—	—	—
Wyre, Salop, Here- ford and Worcester	1,537	1,508	—	—	29	—	27	4

Note: Part of Cranborne Chase has been added to Savernake and part to Wareham.

LAND USE, PLANTING AND TIMBER PRODUCTION BY FORESTS—SCOTLAND

Table 15

	Land use at 31 March 1978 (hectares)					During Year 1977-78		
	Total	Under planta- tions	Retained Scrub	To be planted	Agri- cultural and other land	Planting (hectares)		Pro- duction (000 cu. m.)
						New planting	Re- stocking	
NORTH SCOTLAND CONSERVANCY: TOTAL	282,674	1 29,250	535	25,711	127,178	3,111	334	161
Achnashellach, High- land	4,680	2,736	24	356	1,564	41	4	6
Affric, Highland .. .	28,515	6,774	—	818	20,923	120	—	2
Ardross, Highland .. .	9,420	6,915	88	1,492	925	46	21	7
Black Isle, Highland	5,895	5,531	—	7	357	—	11	11
Culloden, Highland	7,009	5,780	—	75	1,154	—	10	8
Dornoch, Highland .. .	1,215	1,109	—	1	105	—	—	—
Farigaig, Highland .. .	4,398	3,291	100	72	935	50	5	2
Fiunary, Highland .. .	6,771	4,651	—	346	1,774	96	7	7
Glengarry, Highland	17,080	6,127	10	580	10,363	133	18	10
Glenrigh, Highland .. .	2,359	1,334	—	261	764	46	12	11
Glenurquhart, High- land	10,716	4,980	107	95	5,534	25	7	11
Helmsdale, Highland	1,469	860	—	315	294	64	—	—
Hoy Experiments Orkney Islands .. .	13	13	—	—	—	—	—	—
Inchnacardoch, High- land	9,604	6,000	81	357	3,166	36	40	17
Inshriach, Highland	4,302	3,270	10	209	813	28	5	1
Leanachan, Highland	17,306	8,195	—	1,013	8,098	232	—	13
Mull, Strathclyde .. .	16,819	7,996	—	4,178	4,645	355	2	9
Naver, Highland .. .	12,535	5,954	—	1,884	4,697	194	—	—
The Queen's Forest, Highland	2,644	1,535	—	—	1,109	—	—	1
Ratagan, Highland .. .	5,013	2,660	—	82	2,271	58	21	15
Rumster, Highland .. .	7,469	2,554	—	4,178	737	208	—	—
Shin, Highland .. .	34,489	14,270	—	4,884	15,335	709	51	3
Skye, Highland and Western Isles .. .	21,142	6,976	90	3,001	11,075	382	11	4
South Strome, High- land	2,998	1,928	19	95	956	9	14	3
Strathmashie, High- land	18,650	4,416	—	18	14,216	2	81	3
Sunart, Highland .. .	13,565	5,089	—	1,171	7,305	180	10	11
Torrachilty, Highland	16,598	8,306	6	223	8,063	97	4	6

Table 15—continued

	Land use at 31 March 1978 (hectares)					During Year 1977-78		
	Total	Under planta- tions	Retained Scrub	To be planted	Agri- cultural and other land	Planting (hectares)		Pro- duction (000 cu. m.)
						New planting	Re- stocking	
EAST SCOTLAND CONSERVANCY:								
TOTAL	117,016	92,134	379	7,249	17,254	1,014	225	169
Alltcailleach, Gram- pian	1,804	1,670	—	8	126	6	1	4
Banchory, Grampian	5,517	5,287	4	—	226	10	—	13
Bennachie, Grampian	7,065	5,144	3	737	1,181	125	10	9
Blairadam, Fife	4,912	4,280	7	286	339	41	21	12
Braes of Angus, Tay- side	4,951	3,541	5	282	1,123	6	16	—
Craigellachie, Gram- pian	5,182	4,352	—	555	275	69	25	2
Devilla, Fife and Central	1,527	1,313	20	—	194	—	—	1
Drummond Hill, Tay- side	3,584	2,546	41	509	488	80	21	8
Dunkeld, Tayside	5,235	3,865	66	983	321	—	4	20
Forest of Deer, Gram- pian	2,849	2,570	1	135	143	—	16	11
Glenlivet, Grampian	4,634	4,296	7	—	331	—	—	4
Huntly, Grampian	10,153	8,671	—	79	1,403	17	2	18
Kirkhill, Grampian	1,199	1,166	—	1	32	—	10	1
Laigh of Moray, Grampian and Highland	6,934	6,481	39	32	382	—	15	27
Mearns, Grampian	6,988	5,832	10	110	1,036	102	—	8
Montreathmont, Grampian and Tayside	1,854	1,817	7	—	30	—	21	9
Rannoch, Tayside	14,182	6,880	59	1,919	5,324	258	—	1
Speymouth, Grampian	10,569	9,572	3	502	492	73	15	8
Strathardle, Tayside	3,411	2,989	—	140	282	40	—	3
Tentsmuir, Fife	1,595	1,485	7	—	103	—	22	7
Tornashean, Gram- pian	4,421	3,130	—	300	991	99	26	—
Tummel, Tayside	8,450	5,247	100	671	2,432	88	—	3

Table 15—continued

	Land use at 31 March 1978 (hectares)					During Year 1977-78		
	Total	Under plantations	Retained Scrub	To be planted	Agri- cultural and other land	Planting (hectares)		Pro- duction (000 cu. m.)
						New planting	Re- stocking	
SOUTH SCOTLAND CONSERVANCY:								
TOTAL	176,696	131,845	176	12,151	32,524	3,876	231	206
Ae, Dumfries and Galloway	6,928	5,897	—	929	102	155	11	21
Arcleoch, Strathclyde Bareagle, Dumfries and Galloway	4,368	3,492	—	823	53	261	—	—
Bennan, Dumfries and Galloway	4,876	4,381	170	187	138	—	—	2
Carrick, Dumfries and Galloway	6,872	6,264	—	151	457	—	26	17
Clatteringshaws, Dum- fries and Galloway	17,142	8,049	—	1,764	7,329	300	2	7
Castle O'er, Dumfries and Galloway and Borders	5,497	5,367	—	57	73	—	46	21
Clatteringshaws, Dum- fries and Galloway	12,819	7,758	—	997	4,064	313	—	3
Clydesdale, Strath- clyde and Lothian	3,896	3,283	—	131	482	31	51	—
Craik, Borders	6,054	4,856	—	780	418	169	4	6
Dalmacallan, Dumfries and Galloway	4,057	2,847	—	733	477	250	—	9
Douglas, Strathclyde Dundeugh, Dumfries and Galloway	2,024	1,280	4	608	132	358	5	—
Elibank, Borders	3,706	3,037	—	203	466	1	—	6
Fleet, Dumfries and Galloway	5,118	3,878	—	755	485	130	1	5
Glentress, Borders and Lothian	6,809	6,341	—	44	424	—	—	7
Glentree, Dumfries and Lothian	4,403	3,885	—	201	317	158	10	13
Glentree, Dumfries and Galloway and Strathclyde	22,914	12,857	2	270	9,785	118	—	5
Kirroughtree, Dum- fries and Galloway	6,344	4,249	—	9	2,086	—	—	10
Kyle, Strathclyde	5,823	4,304	—	1,053	466	179	—	—
Lammermuir, Borders Moffat, Dumfries and Galloway and Borders	1,468	1,451	—	—	17	—	5	7
Newcastleton, Dum- fries and Galloway and Borders	13,280	10,331	—	1,286	1,663	510	—	3
Penninghame, Dum- fries and Galloway	3,846	3,759	—	9	78	37	55	16
Solway, Dumfries and Galloway	6,914	6,143	—	218	553	323	1	4
Stenton, Borders and Lothian	6,969	6,224	—	121	624	197	12	23
Upper Nithsdale, Dumfries and Galloway and Strathclyde	1,407	1,271	—	50	86	1	2	2
Wauchope, Borders Bush Nursery, Lothian Whittinghame Seed Orchard, Lothian	3,769	2,786	—	417	566	151	—	—
	9,375	7,855	—	355	1,165	234	—	19
	6	—	—	—	6	—	—	—
	12	—	—	—	12	—	—	—

Table 15—continued

	Land use at 31 March 1978 (hectares)					During Year 1977-78		
	Total	Under planta- tions	Retained Scrub	To be planted	Agri- cultural and other land	Planting (hectares)		Pro- duction (000 cu. m.)
						New planting	Re- stocking	
WEST SCOTLAND CONSERVANCY: TOTAL	212,605	118,939	2,259	25,791	65,616	4,205	178	167
Achaglachgach, Strathclyde ..	9,612	4,122	160	2,938	2,392	143	—	6
Achray, Central ..	5,561	3,752	106	212	1,491	19	—	4
Ardgartan, Strath- clyde	13,150	5,119	212	40	7,779	43	15	9
Arran, Strathclyde ..	10,955	5,285	—	2,347	3,323	310	—	—
Barcaldine, Strath- clyde	7,871	4,544	251	245	2,831	38	—	8
Benmore, Strathclyde	10,966	5,583	147	487	4,749	141	23	14
Buchanan, Strathclyde and Central ..	6,474	3,273	186	236	2,779	86	2	2
Carradale, Strathclyde	6,484	2,832	41	2,541	1,070	190	—	2
Carron Valley, Strath- clyde and Central	4,708	4,012	—	289	407	60	42	6
Eredine, Strathclyde	6,956	4,267	32	902	1,755	142	—	4
Fearnoch, Strathclyde	2,040	1,724	100	49	167	20	1	2
Garelochhead, Strath- clyde	2,589	1,714	65	104	706	74	—	—
Glenaray, Strathclyde	7,686	3,720	76	2,195	1,695	176	—	—
Glenbranter, Strath- clyde	6,960	4,369	78	62	2,451	17	20	19
Glencoe, Strathclyde and Highland ..	8,665	4,511	51	74	4,029	44	—	4
Glendaruel, Strath- clyde	9,627	5,188	164	1,713	2,562	384	—	1
Glenorchy, Strath- clyde and Central	15,333	6,998	63	807	7,465	322	—	—
Inverliever, Strath- clyde	13,253	8,299	36	693	4,225	196	20	17
Kilmichael, Strath- clyde	11,497	8,437	17	364	2,679	—	13	16
Knapdale, Strathclyde	7,237	4,598	185	921	1,533	130	19	16
Loch Ard, Central ..	11,281	7,254	193	1,133	2,701	114	23	16
Raera, Strathclyde ..	3,937	2,538	49	860	490	245	—	—
South Kintyre, Strath- clyde	11,855	8,161	47	2,010	1,637	621	—	2
Strathyre, Central and Tayside	9,232	5,038	—	1,442	2,752	290	—	19
Whitelee, Strathclyde	8,674	3,601	—	3,127	1,946	400	—	—
Chapelhall Depot, Strathclyde ..	2	—	—	—	2	—	—	—

LAND USE, PLANTING AND TIMBER PRODUCTION BY FORESTS—WALES

Table 16

	Land use at 31 March 1978 (hectares)					During Year 1977-78		
	Total	Under planta- tions	Retained Scrub	To be planted	Agri- cultural and other land	Planting (hectares)		Pro- duction (000 cu. m.)
						New planting	Re- stocking	
NORTH WALES								
CONSERVANCY:								
TOTAL	78,880	65,112	292	1,829	11,647	390	253	218
Aeron, Dyfed ..	2,391	2,290	20	18	63	—	—	2
Beddgelert, Gwynedd	3,937	3,167	32	44	694	1	12	8
Ceiriog, Clwyd ..	1,808	1,750	—	3	55	—	7	1
Ceri, Powys	1,865	1,850	2	—	13	—	6	32
Clocaenog, Clwyd ..	7,122	5,732	—	31	1,359	—	16	20
Clwyd, Clwyd ..	2,090	1,905	7	57	121	—	—	1
Coed Sarnau, Powys	3,104	2,985	29	39	51	4	23	10
Coed-y-Brenin, Gwynedd	9,207	6,354	52	478	2,323	91	2	21
Cynwyd, Gwynedd and Clwyd ..	785	721	—	—	64	—	7	5
Dyfi, Gwynedd and Powys	7,343	6,439	24	51	829	3	30	19
Dyfnant, Powys ..	3,295	2,559	—	158	578	1	2	5
Gwydyr, Gwynedd and Clwyd ..	8,085	5,887	53	28	2,117	—	47	24
Hafren, Powys ..	5,035	4,546	—	17	472	—	—	6
Mathrafal, Powys and Clwyd	1,578	1,493	5	—	80	1	2	7
Newborough, Gwynedd	1,791	1,485	9	1	296	—	1	2
Penllyn, Gwynedd ..	4,375	3,538	—	458	379	156	—	3
Radnor, Powys ..	2,526	2,424	5	2	95	82	26	28
Rheidol, Dyfed ..	5,457	4,231	34	195	997	23	5	2
Ystwyth, Dyfed and Powys	7,086	5,756	20	249	1,061	28	67	22

Table 16—continued

	Land use at 31 March 1978 (hectares)					During Year 1977-78		
	Total	Under planta- tions	Retained Scrub	To be planted	Agricultural and other land	Planting (hectares)		Pro- duction (000 cu. m.)
						New planting	Re- stocking	
SOUTH WALES								
CONSERVANCY:								
TOTAL	81,938	69,444	1,341	2,625	8,528	379	684	188
Brechfa, Dyfed ..	6,814	6,200	88	4	522	—	34	28
Brycheiniog, Powys ..	1,617	1,505	—	1	111	—	23	15
Caeo, Dyfed	2,129	1,898	43	12	176	7	—	11
Coed Abertawe, West Glam.	868	808	32	4	24	—	3	1
Coed Deufor, Dyfed ..	1,991	1,897	52	13	29	—	—	1
Coed Morgannwg: Crynant, West Glam.	3,250	2,232	53	575	390	—	—	5
Cymer, West Glam. and Mid Glam. ..	5,536	4,666	30	102	738	—	5	2
Margam, West Glam. and Mid. Glam.	4,739	4,251	86	24	378	1	28	10
Rheola, West Glam. and Mid Glam. ..	5,264	4,298	87	9	870	—	32	16
Coed Taf, Powys and Mid Glam.	2,570	2,071	21	79	399	1	15	2
Coed-y-Rhaiadr, Powys	2,527	1,641	232	330	324	—	236	2
Crychan, Powys and Dyfed	4,763	4,518	83	19	143	—	81	27
Ebbw, Gwent	5,166	4,429	127	24	586	1	26	8
Glasfynydd, Powys and Dyfed	1,449	1,420	—	1	28	6	28	18
Irfon, Powys and Dyfed	2,720	2,301	8	150	261	2	—	4
Mynydd Du, Powys and Gwent	1,468	1,304	—	22	142	4	—	5
Pembrey, Dyfed	1,978	1,268	17	—	693	—	5	2
Preseli, Dyfed	1,346	1,097	187	—	62	—	—	—
Rhondda, Mid Glam. Slebech, Dyfed ..	4,617	3,004	—	753	860	77	78	—
St. Gwynno, Mid. Glam.	829	768	14	—	47	—	4	1
3,936	3,243	—	130	563	101	37	6	
Tair Onen, Mid and South Glam.	1,396	1,181	73	—	142	—	6	4
Talybont, Powys	1,601	1,505	15	—	81	—	4	5
Tintern, Gwent	3,899	3,803	29	2	65	—	32	13
Tywi, Powys and Dyfed	8,390	7,128	10	371	881	179	—	—
Wentwood, Gwent ..	1,075	1,008	54	—	13	—	7	2




Appendix VIII

Maps

- 1. Forestry in Great Britain**
- 2. Forestry Commission Forests**

**Map 1 – Forestry in Great Britain
showing all Forestry Commission land and
those Private Woodlands managed under
Dedication and Approved Woodlands schemes**

FORESTRY IN GREAT BRITAIN

- Conservancy Boundary ———
- Local Authority Boundary - - - - -
- Conservancy Names North Wales
- Forestry Commission Land (including unplanted land) 
- Private Woodlands: Dedicated 
- Private Woodlands: Approved 
- Scale 1:1875 000



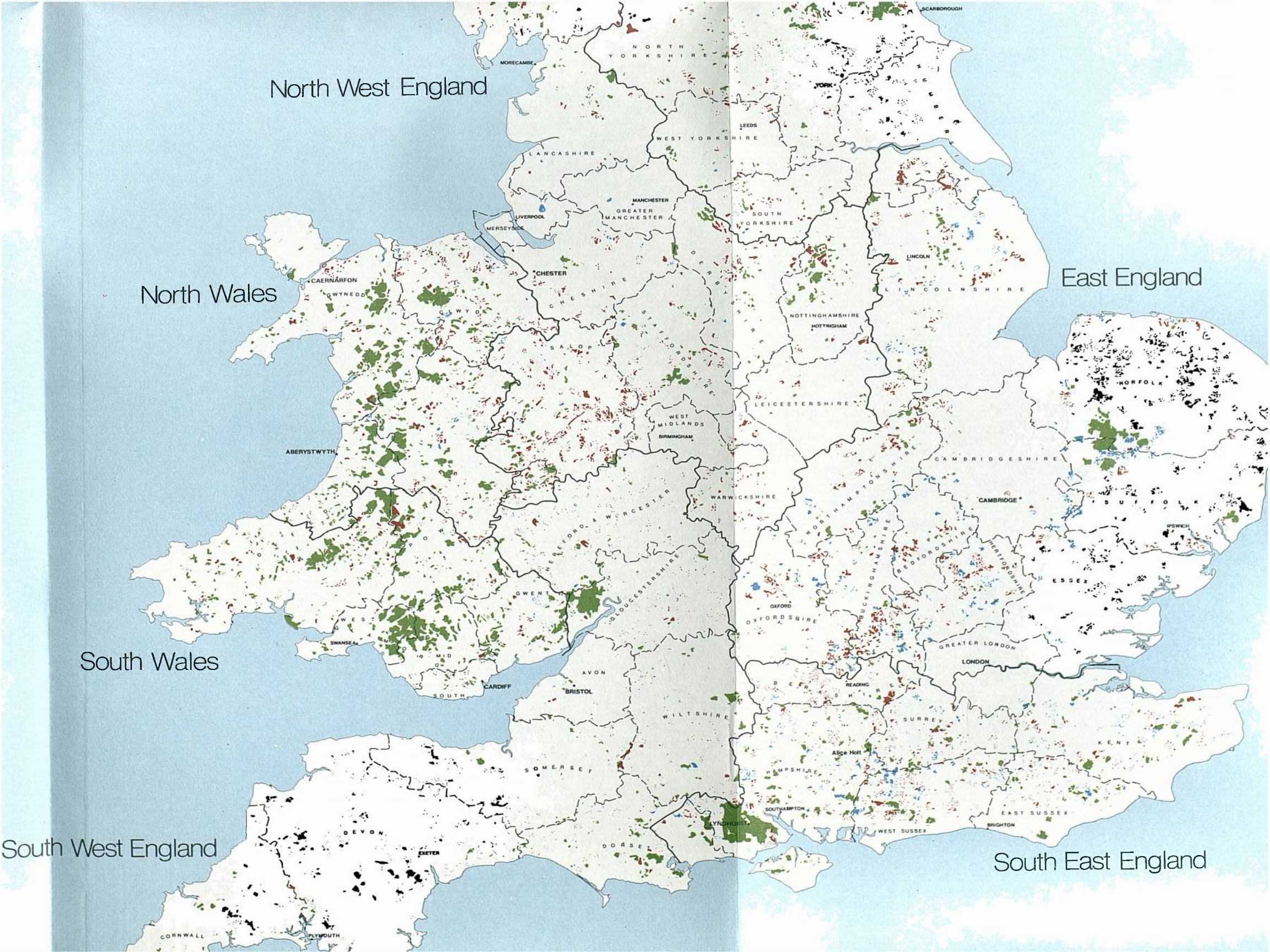
North Scotland

East Scotland

West Scotland

South Scotland

North East England



North West England

North Wales

East England

South Wales

South West England

South East England

**Map 2 – Forestry Commission Forests
showing name and location at 31st March 1978**

FORESTRY COMMISSION FORESTS

Conservancy Boundary ———

Local Authority Boundary - - - - -

Conservancy Names

North Wales

Forest Names

Grizedale

Scale 1:1875 000





North West England

East England

North Wales

South Wales

South West England

South East England

• Dalton

• Osmotherly

• Rievaulx

• Dalby

• Ampleforth

• Bowland

• Knaresborough

• York

• Don

• Matlock

• North Lindsey

• Bardney

• Newborough

• Clwyd

• Delamere

• Gwydyr

• Clocaenog

• Swynnerton

• Beddgelert

• Penllyn

• Cynwyd

• Ceiriog

• Bagot

• Coed-y-Brenin

• Dyfi

• Dyfnant

• Long

• Shropshire Hills

• Cannock

• Launde

• Kesteven

• Lynn

• Wensum

• Rheidol

• Hafren

• Ceri

• Kinver

• Ystwyth

• Mortimer

• Wyre

• Arden

• Rockingham

• Thetford

• Aeron

• Tywi

• Irfon

• Radnor

• Wymersley

• Aldewood

• Preseli

• Brechfa

• Crychan

• Brycheiniog

• Glasfynydd

• Mynydd Du

• Hereford

• Hazelborough

• Ampthill

• Walden

• Lavenham

• Slebech

• Coed Deufor

• Coed-y-Rhaiadr

• Coed Taf

• Dean

• Bernwood

• Bramfield

• Pembrey

• Crynant

• Rheola

• St Gwynno

• Tintern

• Westonbirt

• Chilterns

• Shipbourne

• Coed Abertawe

• Margam

• Cymer

• Rhondda

• Ebbw

• Wentwood

• Westonbirt

• Bramshill

• Challock

• Mendip

• Savernake

• Micheldever

• Alice Holt

• Brendon

• Quantock

• Neroche

• Ringwood

• Queen Elizabeth

• St Leonards

• Bedgebury

• Torridge

• Eggesford

• Powerstock

• Wareham

• Wight

• Dartmoor

• Exeter

• Kernow

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North: 21 Church Street, Inverness, IV1 1EL (0463 32811)

East: 6 Queen's Gate, Aberdeen, AB9 2NQ (0224 33361)

South: Greystone Park, 55/57 Moffat Road, Dumfries, DG1 1NP (0387 2425)

West: Portcullis House, 21 India Street, Glasgow, G2 4PL (041 248 3931)

Wales:

North: Victoria House, Victoria Terrace, Aberystwyth, Dyfed, SY23 2DQ
(0970 612367)

South: Churchill House, Churchill Way, Cardiff, CF1 4TU (0222 40661)

ACCOUNTS 1977-78

BALANCE SHEET of the Forestry Commission Forestry Enterprise as at 31st March 1978, and **ACCOUNTS** for the year ended 31st March 1978, together with the Report of the Comptroller and Auditor General thereon.

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FORESTRY COMMISSION
ACCOUNTS OF THE FORESTRY ENTERPRISE FOR THE YEAR
ENDED 31 MARCH 1978
BALANCE SHEET AS AT 31 MARCH 1978

<i>As at</i> 31 March 1977 £000		<i>See Notes/ Statements</i>	£000	£000
	Source of Funds			
	CAPITAL			
183,213	Balance at 1 April 1977	Note 2	423,943	
18,399	Additions during year	Note 3	17,845	
201,612	Balance at 31 March 1978			441,788
	BALANCES on accounts being accumulated to end of quinquennium (1982)			
	<i>Surpluses</i>			
	Plantations Variance	Statement 1 and Note 12	299	
	Miscellaneous Trading Accounts	Statement 4	226	
			525	
	<i>Deficit</i>			
	Harvesting Trading Account	Statement 3	788	
(6,029)	Net deficit			(263)
	REVALUATION RESERVE	Note 7	57,944	
31,274	NOTIONAL SUPERANNUATION FUND	Note 8	81,684	
226,857				581,153
	Employment of Funds			
31,702	FIXED ASSETS	Note 9		87,942
	NET CURRENT ASSETS			
5,524	Stocks and work in progress	Note 10	6,447	
7,868	Debtors and sundry debit balances		6,916	
878	Cash at bank and in hand	Note 11	909	
14,270			14,272	
4,348	Creditors and accrued expenses		3,746	
9,922				10,526
185,233	PLANTATIONS at standard cost	Statement 1		482,685
226,857				581,153

The Notes on pages 85 to 94 form part of these Accounts.

G. D. Holmes
Accounting Officer
27 November 1978

I have examined the above Balance Sheet and the annexed Statements 1 to 7, in accordance with the provisions of the Exchequer and Audit Departments Act 1921. I have obtained all the information and explanations that I have required, and I certify, as the result of my audit, that in my opinion this Balance Sheet and the Statements 1 to 7 are properly drawn up so as to exhibit a true and fair view of the state of affairs and transactions of the services to which they relate. I have no observations to make on them.

January 1979
Exchequer and Audit Department.

D. O. Henley
Comptroller and Auditor General

FORESTRY COMMISSION
PLANTATIONS ACCOUNT FOR THE YEAR ENDED 31 MARCH 1978

<i>Previous Year £000</i>	<i>See Notes/ Statements</i>	<i>£000</i>	<i>£000</i>
173,949	At 1 April 1977: 848,021 hectares valued at standard (1976/77) cost		405,241
EXPENDITURE			
34	Plantations acquired	—	
1,013	Land acquired and planted Note 9	2,939	
2,586	Formation	3,215	
2,172	Protection	2,236	
1,897	Crop improvement	1,713	
—	Lease rents, supplies and miscellaneous ..	438	
1,576	Road construction	2,133	
947	Road maintenance	1,289	
—	Research and development	1,621	
12,645	{ Labour oncost Statement 6	5,634	
6,597	{ Overhead expenses Statement 7	7,297	
	Interest Note 5	14,504	
29,467		43,019	
203,416		448,260	
INCOME			
586	Disposal of plantations	236	
—	Surplus on sale of Forest Estate properties Statement 5	5	
579	Sundry income	502	
1,165		743	
202,251	NET EXPENDITURE ..		447,517
SUBSIDIES AND TRANSFERS			
3,271	Planting and restocking subsidies Notes 3(ii) and (iii)	5,263	
3,301	Transfer charge to Harvesting Trading Account for thinnings and fellings removed Statement 3 and Note 13	8,497	
6,572		13,760	
195,679	Revaluation adjustment Note 7	433,757	
195,679	NET TOTAL	482,386	
185,232	At 31 March 1978: 862,553 hectares valued at standard (1977/78) cost		482,685
(10,447)	Variance from standard Surplus Note 12	299	
(16,429)	Variance from previous year	—	
(26,876)	Variance to date Surplus	299	

FORESTRY COMMISSION
FOREST RECREATION AND AMENITY ACCOUNT FOR THE YEAR
ENDED 31 MARCH 1978

<i>Previous Year £000</i>		<i>See Notes/ Statements</i>	<i>£000</i>
1,187	Direct expenditure	..	1,358
1,809	{ Labour oncost ..	.. Statement 6	551
	{ Overhead expenses	.. Statement 7	1,544
31	Interest .. ..	.. Note 5	152
<u>3,027</u>			<u>3,605</u>
—	Less increase in stock ..		40
<u>3,027</u>			<u>3,565</u>
318	Income .. .. .	..	326
<u>2,709</u>	Recreation and Amenity subsidy	Notes 3(ii) and (iv)	<u>3,239</u>

FORESTRY COMMISSION

HARVESTING TRADING ACCOUNT FOR THE YEAR ENDED 31 MARCH 1978

<i>Previous Year £000</i>	<i>See Notes/ Statements</i>	<i>£000</i>	<i>£000</i>
INCOME			
22,221	Sale of produce	25,069	
160	Value of produce used in Commission's forests	200	
<hr/>		<hr/>	
22,381			25,269
VARIATION IN STOCK AND WORK IN PROGRESS			
879	Increase		636
<hr/>			<hr/>
23,260			25,905
EXPENDITURE			
5,690	Marking, measuring, harvesting, extraction and conversion	7,384	
1,401	Carriage and other expenses	1,575	
<hr/>		<hr/>	
7,091			8,959
<hr/>			<hr/>
16,169	NET HARVESTING REVENUE ..		16,946
7,150	{ <i>Deduct</i> Labour oncost	3,355	
	Overhead expenses	5,153	
134	Interest	729	
<hr/>		<hr/>	
7,284			9,237
<hr/>			<hr/>
8,885	BALANCE		7,709
	<i>Deduct</i> Transfer charge from Plantations Account for value (at standard 1977/78 stumpage) of thinnings and fellings removed		
3,301			8,497
<hr/>			<hr/>
(5,584)	BALANCE		788
(11,480)	Balance from previous year		—
<hr/>			<hr/>
(17,064)	Balance to date		788
<hr/>			<hr/>

FORESTRY COMMISSION
MISCELLANEOUS TRADING ACCOUNTS FOR THE YEAR
ENDED 31 MARCH 1978

<i>Previous Year £000</i>		<i>See Notes/ Statements</i>	<i>£000</i>	<i>£000</i>	<i>£000</i>
	SURPLUS ESTATE (Farms, Houses, etc)				
	Operational Account				
511	Direct expenditure .. .. .	..	143		
664	{ Labour oncost .. .. .	.. Statement 6	17		
	{ Overhead Expenses .. .. .	.. Statement 7	171		
11	Interest .. .. .	.. Note 5	8		
<hr/>					
1,186				339	
598	Rents and other income			161	
<hr/>					
588	Balance .. .. .	.. Deficit		178	
142	Interest on capital employed .. ..	.. Note 5		513	
<hr/>					
730	Balance in year after interest ..	.. Deficit	Note 14a	691	
	Capital adjustments				
—	Surplus on revaluation of land and buildings .. .. .	.. Note 7	1,026		
—	Less Deficit arising on sale of properties	.. Statement 5	77		
<hr/>					
				949	
(730)	Balance in year .. .. .	.. Surplus			258
(1,692)	Balance from previous year				—
<hr/>					
(2,422)	Balance to date .. .. .	.. Surplus			258
<hr/>					
	COMMERCIAL RECREATION (Camp sites, forest cabins, etc, shoot- ing and fishing)				
	(A) Campsites, forest cabins				
281	Direct expenditure .. .. .	..	414		
20	Initial non-capital expenditure ..	..	70		
220	{ Labour oncost .. .. .	.. Statement 6	70		
	{ Overhead expenses .. .. .	.. Statement 7	181		
4	Interest .. .. .	.. Note 5	19		
<hr/>					
525				684	
—	Less increase in stock			3	
<hr/>					
525				681	
580	Income			781	
<hr/>					
	Balance .. .. .	.. Surplus	Note 14(b)	100	
55	(Standard Surplus £151,000)				
24	Interest on capital employed .. ..	.. Note 5		101	
<hr/>					
(31)	Balance in year after interest ..	.. Deficit		1	
214	Balance from previous year			—	
<hr/>					
183	Balance to date .. .. .	.. Deficit		1	
<hr/>					

Statement 4 (continued)

Previous Year £000		See Notes/ Statements	Statement 4 (continued)		
			£000	£000	£000
	(B) Shooting and Fishing				
51	Direct expenditure		64		
80	{ Labour oncost	Statement 6	30		
	{ Overhead expenses	Statement 7	205		
1	Interest	Note 5	15		
<u>132</u>				314	
245	Income			303	
(113)	Balance in year	Deficit		11	
(272)	Balance from previous year	Note 14(b)		—	
<u>(385)</u>	Balance to date	Deficit		11	
(202)	(A) and (B) Balance to date	Deficit			12
	AGENCY SERVICES AND LOAN OF LABOUR				
803	Direct expenditure		845		
457	{ Labour oncost	Statement 6	352		
	{ Overhead expenses	Statement 7	272		
10	Interest	Note 5	53		
<u>1,270</u>				1,522	
1,304	Income			1,448	
(34)	Balance in year	Deficit		74	
—	Balance from previous year	Note 14(c)		—	
<u>(34)</u>	Balance to date	Deficit			74
	MISCELLANEOUS				
	(Joint Management Scheme)	Note 14(d)			
(24)	Income			54	
87	Balance from previous year			—	
<u>63</u>	Balance to date	Surplus			54
(2,123)	BALANCE to date on Miscellaneous Trading Accounts	Surplus			226

FORESTRY COMMISSION
SALE OF LAND AND BUILDINGS ACCOUNT
FOR THE YEAR ENDED 31 MARCH 1978

<i>Previous Year £000</i>	<i>See Notes/ Statements</i>	<i>£000</i>	<i>£000</i>
1,234	Sale price		1,461
154	<i>Deduct</i> Current valuation ..	1,119	
—	Disposal expenses ..	166	
438	{ Labour oncost	1	Statement 6
	{ Overhead expenses	237	Statement 7
5	Interest	10	Note 5
<hr/> 597		<hr/>	1,533
<hr/> (637)	Balance in year		<hr/> 72
	<i>Analysed to</i>		<i>Transferred to</i>
	Surplus Estate	£000 77	Miscellaneous Trading Account—Surplus Estate (Statement 4)
	Forest Estate	5	Plantations Account (Statement 1)

FORESTRY COMMISSION
STATEMENT OF LABOUR ONCOST FOR THE YEAR
ENDED 31 MARCH 1978

<i>Previous Year £000</i>		<i>£000</i>
2,914	National insurance, holidays and sick pay	3,563
1,030	Wet time	1,109
2,173	Transport of workers and travelling and subsistence	2,490
187	Training	259
9	Miscellaneous	180
2,231	Provision for pensions and gratuities	2,466
<hr/>		<hr/>
8,544		10,067
52	Less Miscellaneous income	52
<hr/>		<hr/>
8,492		10,015
	Distribution	
	Plantations	5,634
	Harvesting	3,355
		<hr/>
	Sub-Total (Standard £8,423(000))	8,989
	Forest Recreation and Amenity	551
	Surplus Estate	17
	Commercial Recreation: Campsites etc	70
	Shooting and fishing	30
	Agency	352
	Sale of land and buildings	1
	Debtors	5
		<hr/>
		10,015
		<hr/>

FORESTRY COMMISSION
STATEMENT OF OVERHEAD AND FOREST ESTATE EXPENSES
FOR THE YEAR ENDED 31 MARCH 1978

<i>Previous Year £000</i>		<i>See Note</i>	<i>£000</i>
9,720	Salaries and national insurance		9,645
1,679	Travelling, subsistence and staff transfer expenses		1,403
1,424	Office expenses		1,390
131	Losses, compensation and bad debts		297
440	Legal expenses		144
159	Depreciation on equipment		400
669	Miscellaneous expenses		1,115
1,805	Provision for pensions and gratuities		1,814
1,378	Accommodation and estate expenses	Note 16	1,567
<hr/>			<hr/>
17,405			17,775
178	Less Miscellaneous Income ..		128
<hr/>			<hr/>
17,227			17,647
	Distribution		
	Plantations		7,297
	Forest Recreation and Amenity		1,544
	Harvesting		5,153
	Surplus Estate		171
	Commercial Recreation: Campsites etc		181
	Shooting and fishing		205
	Agency		272
	Sale of land and buildings		237
	Debtors		4
			<hr/>
	Total Forestry Enterprise ..		15,064
	Forestry Authority		2,583
			<hr/>
			17,647
			<hr/>
	Standard		18,865

FORESTRY COMMISSION
FORESTRY ENTERPRISE
NOTES ON THE ACCOUNTS

1. ACCOUNTING POLICIES

(a) Reconstruction and Revaluation

The accounts were reconstructed at 1 April 1972 and the first quinquennial revaluation was carried out at 1 April 1977.

(b) Target Rate of Return

The Commission has been set a target rate of return of 3% in real terms on assets employed which were revalued at 1 April 1977. Plantations, the main asset, were revalued on the basis of the sum of net incomes expected in the future discounted at the target rate. Subsidies were introduced into the accounts to record:

- (i) The Forestry subsidy, being the difference between the target of 3% and the rate (currently 5%) set for public sector trading bodies. Details are given in Note 4 to the Accounts.
- (ii) The extent to which new planting and restocking, undertaken principally for social reasons, cannot earn 3%. Details are given in Note 3.
- (iii) The net cost of the provision of recreation, amenity and nature conservation for which commercial objectives cannot be set. Details are given in Statement 2 and Note 3.

(c) Measurement of Performance

Performance against the target rate of return can only be effectively measured after a complete revaluation of the plantations and other assets which is undertaken every five years, the results being reported in special notes to the accounts together with a review of the level of subsidies for the next quinquennium. To monitor progress during the years between valuations an annual comparison is made of the actual costs incurred and income realised from sales with the standards assumed in the revaluation and suitably adjusted for inflation. The variances between these standards and actual results are accumulated in the Balance Sheet and explained in the notes on the accounts.

(d) Inflation Accounting

The general concepts of current cost accounting have been adopted. Asset values are adjusted annually, generally by indices, and an appropriate adjustment made to the capital employed. Charges to activities for use of these assets are based on the adjusted values. Standards set for measurement of performance in the Plantations and Harvesting accounts are adjusted to reflect the changing value of the pound.

(e) Figures in the accounts and notes thereto are expressed in £000. Prior year amounts are provided for comparison but without adjustments for the changing value of the £.

(f) The accounting policies adopted for other items are explained under appropriate headings in the notes below.

2. ADJUSTMENTS TO CAPITAL ON REVALUATION OF 1 APRIL 1977

A revaluation of the assets and the notional superannuation fund was carried out at 1 April 1977 as reported in the 1976-77 Annual Report (Special Note 1 on pages 94 to 96). Subsequently it was found necessary to make some adjustments mainly relating to the assessment of oncost and overheads which have the effect of reducing the valuation by £3,092 (000) and altering the 1977-82 planting and restocking subsidies to a small extent.

		£000	£000
	Capital at 31 March 1977		201,612
<i>add</i>	balances on accounts being accumulated to end of quinquennium (1977)		<u>20,847</u>
			222,459
<i>add</i>	increase in asset values on revaluation	244,702	
<i>less</i>	amount attributable to Notional Superannuation Fund on revised actuarial valuation	<u>40,126</u>	
			<u>204,576</u>
	per Special Note 1 to 1976/77 Accounts		427,035
<i>deduct</i>	adjustments made subsequently to asset values		<u>3,092</u>
			<u>423,943</u>
	Revised Capital at 1 April 1977		423,943

Notes on the Accounts (*continued*)

3. ADDITIONS TO CAPITAL DURING THE YEAR

(i) Previous Year £000		£000	£000
27,000	Grant-in-Aid of the Forestry Fund for 1977/78 ..		24,700
5,738	Less Appropriated for the Forestry Authority ..		5,531
<hr/>			
21,262	Grant-in-Aid of the Forestry Enterprise		19,169
2,759	Deduct Planting subsidy (Notes (ii) and (iii) below) ..	3,766	
512	Restocking subsidy (Notes (ii) and (iii) below) ..	1,497	
	Forest recreation and amenity subsidy (Statement 2 and Note (iv) below)	3,239	
2,709	Notional sick and injury benefit	82	
58	Decrease in liability for properties acquired without payment	62	
(5)			
<hr/>			
6,033			8,646
<hr/>			
15,229	Balance of Grant-in-Aid to be added to capital ..		10,523
3,170	Add Notional interest on capital (Note 5 below) ..		7,322
<hr/>			
18,399	Addition to capital		17,845
<hr/>			

(ii) Details of subsidies (*see p. 87*)

(iii) The planting and restocking subsidies per hectare for each Conservancy are derived from the weighted average of the net discounted revenues at 3% of the various soil type models representing the reserve of the plantable land at 1 April 1977. The total subsidies for each Conservancy are calculated by multiplying the total area planted and restocked in the year by the average subsidy per hectare converted into current £ by application of the index based on the GDP implicit price deflator.

(iv) Forest Recreation and Amenity covers visitor centres, car parks, forest walks, nature trails, conservation of wildlife etc and small scale amenity planting from which no commercial rate of return can be expected, together with motor sports and other specialist activities. Expenditure on these facilities *less* related income is met by a subsidy which amounts to £3,239(000) in 1977/78 (compared to £2,709(000) in 1976/77).

4. FORESTRY SUBSIDY

This subsidy measures the extent to which the target rate of return set at 3% in real terms for forestry falls short of the required rate of return (currently 5%) set for public sector trading bodies calculated as follows:—

	£000
Interest at 5% in real terms being the required rate of return (RRR) set for public sector trading bodies calculated on the average value of assets employed at the beginning and end of the year	26,431
Interest charge in real terms made in the accounts (<i>see Note 5 below</i>) based on the average value of assets employed at the beginning and end of the year	16,104
Difference being Forestry Subsidy	10,327
	<hr/>

5. INTEREST CHARGE

The target rate of return set for forestry is 3% in real terms except for investment in Commercial Recreation and Surplus Estate where the required rate is that set for public sector trading bodies, currently 5%. The interest charged in the accounts is based on the average value of assets employed at the beginning and end of year and is calculated as follows:—

(ii) Details of subsidies (see p. 86)

	Planting			Restocking			Forest Recreation and Amenity £000
	Area Planted (hectares)	Subsidy per hectare	Subsidy £77/78(000)	Area Planted (hectares)	Subsidy per hectare	Subsidy £77/78(000)	
Great Britain	14,123	£ 267	3,766	3,069	£ 488	1,497	3,239
ENGLAND							
Total	1,148	330	379	1,164	774	901	1,667
Conservancy:							
North West	322	513	165	315	800	252	220
North East	747	230	172	232	477	111	256
East	40	400	16	211	520	110	337
New Forest and South East	1	1,046	1	89	1,264	112	536
South West and Dean	38	645	25	317	996	316	318
SCOTLAND							
Total	12,206	238	2,910	968	(48)	(47)	1,059
Conservancy:							
North	3,111	447	1,391	334	74	25	281
East	1,014	239	242	225	(24)	(6)	193
South	3,876	119	461	231	(150)	(35)	286
West	4,205	194	816	178	(176)	(31)	299
WALES							
Total	769	621	478	937	686	643	513
Conservancy:							
North	390	514	201	253	760	192	287
South	379	731	277	684	659	451	226

Further analysis of Great Britain Forest Recreation and Amenity Subsidy is shown on Statement 2.

Notes on the Accounts (*continued*)

	<i>£000</i>
5% on Surplus Estate assets	513
5% on Commercial Recreation assets	101
3% on all other assets	15,490
	16,104

The total interest of £16,104 has been distributed within the accounts as follows:—

	<i>See Notes/Statements</i>	<i>£000</i>
Additions to Capital	Note 3	7,322
Superannuation Fund	Note 8	8,782
		16,104
		<i>£000</i>
Plantations	Statement 1	14,504
Forest Recreation and Amenity	Statement 2	152
Harvesting and Marketing	Statement 3	729
Surplus Estate	Statement 4	521*
Commercial Recreation: Camp sites and cabins	Statement 4	120*
Shooting and fishing	Statement 4	15
Agency	Statement 4	53
Sale of Land and Buildings	Statement 5	10
		16,104

* Includes interest on the use of other assets (eg VME and administrative buildings) which were not specifically acquired for the activities concerned. Such interest charges are identified separately under operational expenditure in the accounts.

6. THE CAPITAL AT 31 MARCH 1978 INCLUDES

- (a) A contingent liability to the Crown Estate Commissioners of £1,371(000) (previous year £1,433(000)) under the Forestry (Transfer of Woods) Orders 1924-61.
- (b) Gifts to the value of £152(000) (No change from previous year).

7. REVALUATION RESERVE

	<i>£000</i>	<i>£000</i>
Revaluation Reserve at 1 April 1977		—
Adjustments arising from revaluation of assets at 31 March 1978		
Standard value of plantations	48,942	
Land and buildings—Forest Estate	6,940	
Vehicles, machinery and equipment	1,853	
Furniture and equipment	110	
Stocks and work in progress	99	
	57,944	
Revaluation Reserve at 31 March 1978		57,944

The Revaluation Reserve represents increases (or decreases) arising from the annual revaluation of assets within the quinquennium except that the adjustment arising from the revaluation of surplus properties is credited (or debited) to the Surplus Estate Trading Account (Statement 4).

The standard value of plantations is annually reassessed by application of an index based on the GDP implicit price deflator. Other assets are revalued as described in notes 9 and 10 below.

The difference between the increase in the standard values of plantations and the Forest Estate land and buildings and the respective revaluation entries on Statement 1 and Note 9 represents adjustments made on the reclassification of certain properties after revaluation at 1 April 1977.

Notes on the Accounts (*continued*)

8. NOTIONAL SUPERANNUATION FUND

<i>Previous Year £000</i>		<i>£000</i>
25,955	Balance at 1 April 1977	71,400
3,789	Interest at 12.3% on opening balance	8,782
4,252	Provision made during year (including £179(000) charged to Forestry Authority)	4,607
875	Contributions received during the year	947
<hr/>		<hr/>
34,871		85,736
3,597	<i>Less</i> Payments made during the year	4,052
<hr/>		<hr/>
31,274	Balance at 31 March 1978 . .	81,684

The Notional Superannuation Fund was revalued by the Government Actuary at 1 April 1977 to £71,400(000). The balance of the Fund represents the Commission's liability for payment of pension rights to existing and retired staff. It is not specifically invested but is, in effect, a first charge on the assets employed by the Commission. Included in the payments are annuities totalling £47(000) paid to the National Debt Office in respect of commuted compensation allowances totalling £317(000) which were paid to forester grades who retired prematurely.

Notes on the Accounts (*continued*)

9. FIXED ASSETS

Freehold and Leasehold Land and Buildings

	<i>Forest Estate £000</i>	<i>Surplus Estate £000</i>	<i>Total £000</i>
At 1 April 1977	58,690	10,192	68,882
Additions	3,672	22	3,694
Disposals at book value	3,284	926	4,210
Depreciation charge for year	1,140	—	1,140
Revaluation adjustment	6,317	1,026	7,343
	<hr/>	<hr/>	<hr/>
At 31 March 1978	64,255	10,314	74,569

Plant and Equipment

	<i>Vehicles, Machines and Equipment £000</i>	<i>Furniture and Equipment £000</i>	<i>Total £000</i>
Gross current replacement cost			
At 1 April 1977	26,263	1,242	27,505
Additions during year at cost	4,192	67	4,259
Disposals and transfers at book value	2,974	6	2,980
Revaluation adjustment	4,439	169	4,608
	<hr/>	<hr/>	<hr/>
At 31 March 1978	31,920	1,472	33,392
Depreciation			
At 1 April 1977	16,177	462	16,639
Provision for year	3,552	124	3,676
Eliminated on disposals and transfers	2,939	3	2,942
Backlog depreciation on revaluation	2,586	60	2,646
	<hr/>	<hr/>	<hr/>
At 31 March 1978	19,376	643	20,019
Net current replacement cost			
At 31 March 1978	12,544	829	13,373
At 1 April 1977	10,086	780	10,866

Total Fixed Assets

At 31 March 1978	—	—	87,942
At 1 April 1977	—	—	79,748

Land and Buildings

- (i) Land under plantations is included in the Plantations Account.
- (ii) Freehold and leasehold land and buildings were valued by professionally qualified staff at 1 April 1977 generally on the basis of open market value with acquisition costs added for forest estate properties and disposal expenses deducted from surplus properties. Specialist buildings were, however, valued at net replacement cost. Forest recreation and amenity facilities are included at a nominal value of £1 per item.
- (iii) A further professional valuation will be carried out at the end of March 1982 and in the interim period the end of year valuations have been assessed by taking into account general variations in market prices.
- (iv) Freehold and leasehold buildings classified as Forest Estate are depreciated by equal annual instalments over their estimated economic useful life or, in the case of leasehold buildings, over the remaining period of the lease, whichever is the shorter. Buildings classified as surplus are not depreciated.
- (v) Disposals and transfers include land afforested in the year.
- (vi) The land in the above table comprises 83,337 hectares of plantable land and 307,347 hectares of agricultural and other land.

Plant, Machinery and Equipment

- (i) These assets have been valued at gross current replacement cost calculated by reference to a mixture of internal and also external asset type indices issued by the Central Statistical Office, less aggregate depreciation on the basis stated below to reflect the expired proportion of the assets working lives.

Notes on the Accounts (*continued*)

(ii) Plant, machinery and equipment are depreciated by equal annual instalments over their estimated working lives.

10. STOCKS AND WORK IN PROGRESS

<i>Previous Year £000</i>		<i>£000</i>
3,261	Timber	4,084
738	Plants and Seed	640
94	Livestock	127
1,431	Consumable materials and supplies	1,596
5,524		6,447

The bases for valuation are as follows:—

- Timber, plants and seed – at net realisable value
- Livestock – at the lower of historic cost and net realisable value.
- Consumable materials and supplies – at current replacement cost assessed either by last paid price or by application of index thereto.

11. CASH AT BANKS AND IN HAND

<i>Previous Year £000</i>		<i>£000</i>
51	Balance of Forestry Fund with Paymaster General ..	270
530	Balance in banks	310
297	Cash in transit and in hand	329
878		909

12. VARIANCE ON PLANTATIONS ACCOUNT

The increase in the valuation of plantations during the year (at 1977/78 standard costs and prices) is £28,815(000) while actual net expenditure and transfer values amounted to £28,516(000), a favourable variance of £299(000) which arose as follows:—

	<i>Standard at 1977/78 costs and prices £000</i>	<i>Actual £000</i>	<i>Variances £000</i>
Land acquired and planted	2,935	2,939	(4)
Formation	2,968	3,215	(247)
Protection	2,411	2,236	175
Crop improvement	1,561	1,713	(152)
Lease rents, supplies and miscellaneous	504	438	66
Road construction	2,098	2,133	(35)
Road maintenance	1,325	1,289	36
	13,802	13,963	(161)
Sundry income	371	502	131
Net operational expenditure	13,431	13,461	(30)
Labour oncost	5,041	5,634	(593)
Overhead expenses	7,868	7,297	571
Research and Development	1,972	1,621	351
Total	28,312	28,013	299

In general there was a saving on wages since the standards assumed a 12% rise whilst actual wages rose by a smaller amount. There were other contributory reasons for the variances and these are detailed below where considered significant.

Notes on the Accounts (*continued*)

- (a) The excess cost of £247(000) on formation is principally due to the higher cost of restocking, and making good areas burnt and failed during the drought of 1976.
- (b) Wet weather during the normal fire season reduced fire danger and contributed to a saving in protection costs.
- (c) The excess cost of £152(000) in Crop Improvement is due mainly to an advancement in the programme of aerial fertilisation to arrest the check in the growth of young plantations.
- (d) The saving of £66(000) on lease rents, supplies and miscellaneous is principally due to lower legal costs on the purchase of land.
- (e) The £131(000) excess of income over standard is due to a larger deer cull and higher prices paid for the venison.
- (f) The excess cost of £593(000) on Labour Oncost was principally due to a considerable rise in employer's national insurance charges and to arrears of pay following a backdated pay award to industrial staff.
- (g) The reduction in overhead expenses is linked again with the fact that the standard allows for a 12% rise in inflation whilst salaries and associated costs, which form the bulk of overhead expenses, rose by a smaller margin.
- (h) Research and Development charges to the Enterprise were £351(000) less than anticipated partly due to savings in staff costs, together with a programme reduction in work study and completion of new publications.

13. HARVESTING TRADING ACCOUNT

There was a deficit of £788(000) in the year on the Harvesting Trading Account after charging £8,497(000) for the value of fellings and thinnings consumed at current standard values. A nil balance would have indicated for the trees harvested no deviation from the 3% target. This deficit arose as follows:—

	<i>Standard at 1977/78 costs and prices £000</i>	<i>Actual £000</i>	<i>Variances £000</i>
Income	27,617	25,684	(1,933)
Expenditure	9,467	8,738	729
Net Harvesting Revenue ..	18,150	16,946	(1,204)
Oncost	3,382	3,355	27
Surplus	14,768	13,591	(1,177)
Overheads and Interest ..	6,271	5,882	389
Balance	8,497	7,709	(788)

The standards were based on actual volumes handled and programme changes are therefore not a contributory reason for the variance.

The adverse variance of £1,933(000) in income is principally caused by prices having fallen short of inflationary rise of 12% allowed for in the standard. To an extent this has been offset by a higher proportion of sawlogs in the mix of sales due to the depression in the small roundwood market.

Expenditure was also £729(000) less than the standard due to lower costs in handling larger tree sizes, a smaller rise in wages than allowed for in the standard and greater efficiency. The reduction of £389(000) in overheads is explained principally by the fact that increases in salaries and associated staff costs have been at a lower level than the general rise in inflation.

14. MISCELLANEOUS TRADING ACCOUNTS

(a) Surplus Estate comprises those properties which are not required for the operation of the Forestry Enterprise and which are destined to be sold at the earliest opportunity. The account shows an operational deficit on letting the properties of £691(000) after charging interest on capital employed at 5%. In addition a deficit arose on sales in the year (see Statement 5 for details). The combined deficit has, however, been more than offset by the increase arising from the annual revaluation, by indices, of the assessed market values of the remaining properties resulting in a surplus on the account of £258(000).

Notes on the Accounts (*continued*)

(b) The Commercial Recreation account covers both the provision of tourist accommodation in the form of camping and caravan sites, forest cabins, etc for overnight visitors and the letting of shooting and fishing rights belonging to the Commission.

Campsites and cabins show a surplus in the year of £100(000) before interest on capital employed. This surplus is equivalent to a return on capital of 4.95% against a standard based on a yield of 7½% of £151(000). However, the account includes expenditure and interest on projects under construction which were not in use and thus not generating income in the year. Disregarding this expenditure and interest the return on campsites and cabins in operation during the year was 7.4%.

Shooting and fishing show a deficit of £11(000) after charging interest for the use of vehicles and forest estate buildings. No separate standard has been set for this activity but it should at least break even. A revised allocation of overheads and exceptional expenditure on the creation of ponds has resulted in an under recovery of expenditure and charges are being reviewed in the light of this.

(c) Agency services covers the provision of staff and machinery to carry out motorway and trunk road planting on behalf of the Department of the Environment, forestry operations for private estates generally where there is no other contractual service available and the occasional loan of labour to adjoining landowners. The account should be in balance with income equalling expenditure. Due however to a failure to make full allowance for the effects of current cost accounting when fixing charge rates, there was a deficit of £74(000). Charges have since been adjusted to recover fully the costs of future agency work and also the current deficit.

(d) Miscellaneous income comprises a receipt from the Severn Trent Water Authority representing an equal share in the surplus on the joint management afforestation scheme at Lake Vyrnwy in North Wales.

15. LABOUR ONCOST

Labour Oncost covers those expenses incurred on the employment of industrial labour which cannot be allocated directly to activities eg employers national insurance, wet time, provisions for superannuation rights. Most of the expenditure varies in relation to the number of men employed and the total cost is distributed annually to activities on a time basis.

Standards are only set for the Plantations and Harvesting and Marketing accounts and the respective variances are set out in Notes 12 and 13. The variances are principally related to increases in National insurance rates above the general rise in inflation, and also to arrears of pay following backdated pay awards.

16. OVERHEADS AND FOREST ESTATE EXPENSES

The actual cost of overheads and estate expenses amounted to £17,647(000) compared to a standard of £18,865(000) giving a favourable variance of £1,218(000). The standard, initially set in 76/77, was updated by 12% to take account of the movement in the GDP implicit price deflator in the year whereas the rise in salaries and associated costs, which account for much of the overhead expenditure, was at a lower level.

Accommodation and estate expenses detailed in Statement 7 comprises the net direct cost of properties (other than recreation) required for the purposes of the Forestry Enterprise. The properties include houses let to Forest Workers, Foresters and outside parties, administrative buildings and agricultural subjects temporarily let pending planting. The total net cost in the year amounts to £1,567(000) and is analysed as follows:—

	<i>Expenditure</i>	<i>Income</i>	<i>Net</i>
	<i>£000</i>	<i>£000</i>	<i>£000</i>
Forest workers' houses and holdings	825	195	630
Foresters' houses	310	136	174
Administrative buildings	1,118	141	977
Agricultural properties and other residential accommodation	524	738	(214)
	<u>2,777</u>	<u>1,210</u>	<u>1,567</u>

17. FUTURE CAPITAL EXPENDITURE

Future capital expenditure on Fixed Assets in 1978/79 authorised by the Commissioners amounts to £9,996(000) (£6,855(000) for 1977/78).

Notes on the Accounts (*continued*)

18. CONTINGENT LIABILITIES

Contingent liabilities exist at 31 March 1978 for damages caused by the Commission to other persons' property and for compensation for personal injury to Commission employees amounting in all to an estimated sum of £74(000) (£73(000) at 31 March 1977).

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