

1989



FORESTRY COMMISSION

*70th Annual Report
and Accounts*

1989-1990



Forestry Commission

Forestry Commission
ARCHIVE

FORESTRY COMMISSION

*70th Annual Report
and Accounts
for the year ended
31 March 1990*

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*

*Ordered by The House of Commons to be printed
19 December 1990 (Accounts) and 23 January 1991 (Report)*

LONDON
HER MAJESTY'S STATIONERY OFFICE

Previous Reports

1988—89 HC22 (1989—90)

1987—88 HC69 (1988—89)

1986—87 HC171 (1987—88)

FORESTRY COMMISSION

231 Corstorphine Road
Edinburgh EH12 7AT

23 November 1990

To:

The Rt Hon MALCOLM RIFKIND QC, MP,
Secretary of State for Scotland

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

The Rt Hon DAVID HUNT MBE, MP,
Secretary of State for Wales

Gentlemen

In pursuance of Section 45 of the Forestry Act 1967, I have the honour to transmit the 70th Annual Report of the Forestry Commissioners which covers the year ended 31 March 1990.

I am, Gentlemen,
Your obedient Servant,

(Sgd) RAYMOND JOHNSTONE
Chairman

The Forestry Commissioners, Heads of Divisions and Conservators at 31 March 1990

Forestry Commissioners

Mr J. Raymond Johnstone CBE *Chairman*
Mr G. J. Francis CB *Deputy Chairman and Director General*
Mr R. T. Bradley
Mr I. D. Coutts CBE
Mr D. L. Foot
Mr R. P. Hancock
Mr T. S. Mallinson
Mr J. D. Pollock
Mr D. T. J. Rutherford
Mr F. M. Strang Steel
Mr C. R. Woosnam

Heads of Divisions

Secretary: Mr P. J. Clarke
Director, Research: Mr D. A. Burdekin
Director, Development: Mr D. S. Grundy
Director, Engineering: Mr R. M. Hay
Director, Estate Management: Mr R. P. Illingworth
Director, Harvesting and Marketing: Mr S. E. Quigley
Director, Private Forestry and Environment: Mr A. H. A. Scott
Director, Personnel: Mr C. W. Simmonds
Controller of Finance: Mr C. T. Spillane
Head of Silviculture: Mr J. Dewar
Head of Data Processing: Mr E. K. Arthurs
Head of Information: Mr J. F. Lindsay

Conservators

England

North: Mr S. A. Neustein
East: Mr N. Dannatt
West: Mr R. J. N. Busby

Scotland

North: Mr J. Atterson
Mid: Mr A. Morrison
South: Mr G. M. Cowie

Wales: Mr J. F. Morgan

Note: The addresses of the main Forestry Commission offices appear on the inside back cover.

Contents

Page

Names of Forestry Commissioners, Heads of Divisions and Conservators

5

Report for the Year Ended 31 March 1990:

General Review

The Year in Perspective	10
Finance	10
Grant in Aid	10
Financial Review 1987-90	10
Recreational Value of Forests	11
Wood Production and Wood Processing	11
State of the Wood Market	11
Developments in the Wood Processing Industries	11
Agriculture Committee Report	12
Other Parliamentary Committee Enquiries	14
House of Lords Science and Technology Committee	14
House of Lords European Communities Committee	14
Forestry Land Sales	15
Private Planting	15
Storm Damage	16
Broadleaves Policy Review	16
The New Forest	17
Forestry and the Environment	18
Forest Nature Reserves	18
Native Pinewoods	18
Compensation under SSSI Management Agreements	18
Forestry and Land Use	19
Indicative Forestry Strategies	19
Community Forests	19
Central Scotland Woodlands Initiative	20
13th Commonwealth Forestry Conference	20
EC Forestry Action Programme	20
Awards	21
Commission Appointments and Staffing	21
Chairman	21
Commissioners	22
Senior Staff	22
Employment	22
Employee Participation	22
Disabled Persons	22
Equal Opportunities	22
Forestry Enterprise	
Silvicultural Operations	24
Seed	24
Nurseries	24
New Planting and Restocking	24
Motorway Planting	24
Estate Management	25
Land Acquisitions	25
Sale of Plantations and Other Properties	25
Management of Property	25
Commerical Recreation	25
Harvesting and Marketing	25
Market Demand	25
Forestry Commission Operations	26
Conifer Sawlog Sales	26
Standing Sales	26
Conifer Small Roundwood Sales	26
Harvesting	27
Engineering	27
Mechanical Engineering	27
Civil Engineering	27
Health and Safety	28
Information Technology	28

	<i>Page</i>
Forestry Authority	
Legislation	30
Plant Health Controls	30
Private Planting	30
Forestry Research Coordination Committee	30
Research	30
Tree Health Surveys	31
Forestry and Water Quality	31
Plant Health	32
Pine Wood Nematode	32
The Single Market	32
Dendroctonus Micans	32
Dutch Elm Disease	33
Watermark Disease of Willow	33
Education and Training	33
Training Activity	33
Team Briefing Training	33
Information Technology	33
Public Relations	33
Press Briefing	33
Special Projects	34
Local Initiatives	34
Publications and Public Enquiries	34
Finance	
Forestry Fund Receipts and Payments	36
Forestry Authority Services	36
Forestry Enterprise	36
Net Operating Surplus	36
Grant-in-Aid	37
Accounts	37
First Triennial Financial Review	37
Revaluation	37
Measurement of Performance	37
Recalculation of Subsidies for the 1990-93 Triennium	38
Planting Subsidies	38
Forest Recreation and Amenity Subsidy	38
Recreational Value of Forests	38
Salient Facts	40
Financial Statements and Accounts 1989/90	41
Appendices	See separate index after page
Addresses of the Main Offices of the Forestry Commission	Inside back cover



GENERAL
REVIEW

GENERAL REVIEW

THE YEAR IN PERSPECTIVE

The House of Commons Agriculture Committee published the report of their enquiry into Land Use and Forestry in February 1990. This covered a wide range of topics, including forestry policy, forestry grants and the structure of the Forestry Commission, and provided a timely opportunity for the Government to give its views on a number of forestry issues. Although published outside the year covered by our report, we have included a commentary on the Government's response in view of its current importance. Another topic which held the attention of the forestry industry in the course of the year was the significant fall in new planting as woodland owners adjusted to the withdrawal of forestry tax reliefs following the 1988 Budget; the slow-down in the economy during the year also clearly had its effect. Applications to plant with the help of the new Woodland Grant Scheme have been coming in at a steady rate, however, and we are hopeful that there will be a rise in the level of planting as the economic situation shows signs of improvement. The forestry industry as a whole demonstrated its underlying resilience by maintaining and, in some sectors, increasing its share of the domestic wood market, despite a fall in demand. Once again the market was affected by storms, although these were not so severe as the October 1987 hurricane. The storms of late January and February 1990, which swept across southern England, Wales and the Midlands, caused widespread damage to trees and woodlands, and we expect that the restoration of these woodlands will be high on the agenda of the owners concerned. At the end of the year, we conducted a thorough review of the Commission's financial performance which we are pleased to say confirmed further improvements in the overall rate of return of the Forestry Enterprise. We have continued to give close attention to the environmental aspects of forestry and, among other things, were pleased to announce the location of 46 Forest Nature Reserves robust enough to stand up to visitor pressure, and the publication of guidelines for the management of semi-natural native pinewoods. We also reached conclusions on the review of the measures needed to safeguard the New Forest. These were announced in March 1990 and met with a largely favourable response. This ancient and well-loved Crown forest is a prime example of multi-purpose woodland management which we believe is an essential feature of good forestry practice and reflects the demands of society as we enter the last decade of the century.

FINANCE

Grant-in-Aid 2 In 1989-90, the Commission received a Grant-in-Aid of £61.0 million of which £58.2 million was spent leaving £2.8 million to be returned to the Exchequer. Expenditure on the Forestry Authority amounted to £28.6 million (£22.6 million in 1988-89). The Grant-in-Aid taken up for the Forestry Enterprise was £29.6 million (£30.9 million in 1988-89), including implied planting/restocking and forest recreation subsidies of £13.6 million (£12.6 million in 1988-89). Receipts generated by the Commission's disposals programme and surrendered to the Consolidated Fund amounted to £12.9 million (£12.4 million in 1988-89).

Financial Review 1987-90 3 Every three years we undertake a revaluation of our plantation and other assets and measure the Commission's financial performance over the period against a target rate of return of 3 per cent. 1989-90 was the final year of the 1987-90 triennium. The revaluation of the Commission's assets at 31 March 1990 increased the plantation valuation by £120.7 million to £2,271.2 million and the value of other assets by £29.7 million to £135.6 million. The valuation of the Forestry Commission Pension Scheme revealed an increased liability of £10.5 million.

4 The cumulative rate of return on plantations has improved to 3.2 per cent (with subsidies) and 2.9 per cent (without subsidies), compared with the 1987 rates of return of 3.1 per cent and 2.7 per cent. The real rate of return on campsites and cabins was 10 per cent.

5 For the 1990-93 triennium the overall rate of return on new planting and restocking is expected to rise to 2.9 per cent from the 2.5 per cent achieved in 1987-90. The total planting subsidies for 1990-93 will be £3.3 million (in £('90)) compared with £13.3 million for 1987-90. The implied subsidy for the Commission's conservation, amenity and recreation activities is £32.0 million (in £('90)) compared with £27.5 million for 1987-90.

- 6 In accordance with the Government's response* to the Public Accounts Committee's 1987 report on the Commission, work is progressing on quantifying the value of the non-commercial benefits of our activities. The work carried out so far suggests that the value of the Commission's estate as a recreational resource may be much greater than had previously been thought.
- 7 Further details of the Commission's finances and performance are included in the Finance section of this report at pages 36 to 39.

- 8 All sectors of the British wood market were affected to varying degrees by the slow-down in the economy during the year. In general, however, the ability of domestic producers to displace imports has been important in moderating the effects of the fall in demand.
- 9 Reduced activity in the housing and construction industry, in home improvements and in furniture-making affected the market for particleboard particularly badly. The downturn in consumption coincided with a general rise in processing capacity as a result of increased levels of investment by the wood-based panel sector over the previous two years, so that UK producers were in the difficult position of having to increase their share of a contracting domestic market. They were successful to the extent that their total share of the market increased from 44 per cent in 1988 to 49 per cent in 1989. This success was dampened, however, by their inability to exploit their increased processing capacity to the full and by downward pressures on their end-product prices.
- 10 UK producers in the pulp and paper sector also faced difficulties, mainly as a result of the growth of productive capacity in Europe outstripping demand, particularly for lightweight-coated papers and newsprint. In these sectors attempts by producers to increase product prices tended to exacerbate the problem. While the cartonboard market did not suffer from over capacity, significant price increases during 1989 led to consumers switching from the better-quality board to cheaper grades of packaging board. Caledonian Paper were nevertheless successful in entering the market for lightweight-coated paper with the commissioning of their new plant at Irvine, while Shotton Paper Company's installation of a second newsprint machine contributed to an increase in domestic newsprint production of 8 per cent to achieve a 28 per cent share of the total UK market.
- 11 There was a brighter picture in the sawn softwood sector. Despite a fall in new housing and construction projects, consumption of sawn timber fell only slightly. With currency exchange rates favouring domestic production, UK sawmillers were able to increase their share of the market marginally to 17 per cent. Sawn softwood produced from British-grown timber in 1989 was second only to that supplied from Canada in total consumption.
- 12 The total volume of wood harvested in Commission forests was 3,546,300 cubic metres. This was nearly 3 per cent down on the previous year. Full details are given in paragraphs 95 to 103.
- 13 Investments in new plant by the wood-processing industries over the past few years are continuing to make themselves felt in terms of increasing production capacity. The installation of a second newsprint machine at the Shotton Mill was completed ahead of schedule and came on stream in August 1989, and production of lightweight-coated paper at the Caledonian Paper Mill started up at the beginning of the year, enabling British-grown spruce to contribute to another paper product previously supplied entirely from imports. Additions to processing capacity in the wood-based panel sector, at Caberboard's

*Treasury minute on the 11th to 16th, 18th and 19th Reports from the Committee of Public Accounts: Session 1986-87, HC236, HMSO, £2.90 net.

factory at Cowie and Kronospan's plant at Chirk, were also a factor in the increased penetration of the UK particleboard market by domestic producers, as reported at paragraph 9. James Jones and Sons Ltd of Larbert began construction of a new sawmill at their premises at Aboyne in Aberdeenshire during the year. This was due to be commissioned in May 1990. In addition, many sawmilling companies have invested in improvements to their existing facilities, thereby adding value to British-grown sawn timber products.

- 14 These further investments demonstrate the confidence of the domestic wood-processing industries and consolidate their remarkable development which has been such an encouraging feature of the past decade.

AGRICULTURE COMMITTEE REPORT

- 15 The House of Commons Agriculture Committee continued their enquiry into Land Use and Forestry during the course of 1989. We were pleased to act as hosts when members of the Committee visited the Forest of Dean in May and our Headquarters in June. In October, Commission officials once more appeared before the Committee to give oral evidence, as did Forestry, Agriculture and Environment Ministers in November. The Committee's report was published on 1 February 1990*, and the Government's response was presented to the Committee on 5 April 1990 and published by them as a special report on 23 May 1990**. Although falling just outside the year under report, we feel that it would be helpful, in the interests of completeness, to cover this response.
- 16 The Committee's attention had been drawn to forestry principally because of the likelihood that, with changes in the application of the Common Agricultural Policy, significant areas of agricultural land would cease to be needed for food production, and forestry had been identified as an important alternative use for such land. The Committee's enquiry was set therefore in the context of a policy of expanding forestry in the United Kingdom, and its report was concerned with identifying the most effective means of achieving that expansion consistent with the concept of multi-purpose woodland management and with the needs of other countryside interests.
- 17 The Committee's report was comprehensive, with many conclusions and recommendations, and the Government's response was correspondingly wide-ranging. It is not possible in the context of this present report to summarise that response in any great detail, but we should like to draw attention to the following aspects which appear to us to be of particular importance.
- 18 *Forestry policy:* The Government took the view that forestry policy has evolved in recent years to reflect the increasingly diverse roles of forestry in the United Kingdom, and has thus already moved substantially in the directions favoured by the Committee. In the light of this, it did not accept that a general policy review would serve a useful purpose. The Government acknowledged, however, that existing policy is contained in a number of statements, and undertook to consider whether there would be benefit in drawing these together at an appropriate time into a single, composite statement.
- 19 *Multiple objectives:* The Government shared the Committee's view that there is no inherent difficulty in striking a balance between forestry for economic and for social and environmental reasons, and noted the welcome given by the Committee to the multiple objectives of the Woodland Grant Scheme. The Government did not, however, agree with the Committee that wood production has become a largely theoretical requirement. In the Government's view it represents an important contribution to national wealth, it provides the major income from managing woodlands, and the harvesting and processing of timber makes a vital contribution to rural development.

*Second Report of the House of Commons Agriculture Committee: Session 1989-90, HC16-1, HMSO, £7.40 net.

**Second Special Report of the House of Commons Agriculture Committee: Session 1989-90, HMSO, £3.70 net.

- 20 *Diversification of existing woodlands:* The Government was pleased to note that the Committee supported its commitment to diversifying existing plantations, and indicated that the Commission would be investigating ways of monitoring progress in this direction, including that made by the private sector.
- 21 *Ancient Semi-Natural Woodlands:* The Committee laid emphasis on the need for greater safeguards for ancient semi-natural woodlands. In its response the Government commented that such safeguards are already an integral part of the existing policy for broadleaved woodland; this policy was being reviewed and the Government confirmed that the Committee's views would be taken into account.*
- 22 *Planting targets:* The Committee recommended that clearer guidance should be introduced on the amounts of different types of woodlands proposed within annual and longer-term targets. The Government pointed out in its response that it already had annual programmes for new planting, both in relation to traditional afforestation and woodlands on farms, and would consider whether longer-term aims might be of some value.
- 23 *Control of afforestation:* The Committee did not favour bringing forestry within the planning system, but saw scope for improvement in the arrangements for approving forestry proposals. In particular, the Committee felt that the Forestry Commission's Regional Advisory Committees (RACs) should be made more representative and accountable. The Government confirmed that the consultation arrangements would be kept under review to see if any worthwhile improvements could be made. As far as the RACs were concerned, the Government restated its intention to increase the membership of these Committees when a suitable legislative opportunity arose in order to accommodate a wider span of interests. It had also asked the Commission to look again at the possibility of publishing an account of RAC meetings held to consider disputed cases and of the RAC's subsequent advice to the Commissioners, since it was anxious to ensure that the value of the work of the RACs was not in doubt.
- 24 *Grants structure:* In response to a number of recommendations made by the Committee, the Government undertook to consider if there was scope for the further targeting of grants and for differential incentives as, for example, through the supplement for planting on better land. The qualification was added that this would have to be against the background of the need for a scheme that was simple to understand and administer.
- 25 *Management grants:* The Committee came out strongly in favour of management grants and a one-off 'consultation grant'. The Government confirmed that these points were being considered as part of the broadleaves policy review.*
- 26 *The structure of the Forestry Commission:* The Committee stated their belief that the two functions of the Forestry Commission — as Forestry Enterprise and Forestry Authority — should be divided between separate Departments. They further recommended that separate Forestry Authorities should be established for England, Scotland and Wales. The Government rejected these recommendations, stating that it believed "that the present structure of the Commission provides an effective means of implementing the Government's forestry policies".
- 27 *Health and Safety:* The Committee expressed concern over the safety consciousness of many self-employed forestry sub-contractors. It was pointed out in reply that, in the Commission's own forests, its forest managers check on compliance with the Health and Safety at Work Act and with the *Forestry Safety Guides* published by the Forestry Safety Council, and that where contractors fail to observe these conditions their contracts may be terminated. The Government noted the concern of the Committee, however, and said that the Forestry Safety Council would be invited to consider the matter further. This we have arranged.
- 28 We very much welcomed the Agriculture Committee's report, since it enabled the Government to give further consideration to a wide range of current forestry issues and to set out its position on them.

*The Government's decisions arising from this review were announced on 23 July 1990 (see footnote to paragraph 44 of this report).

*House of Lords Science and
Technology Committee*

- 29 In April 1989 we gave written evidence to the House of Lords Select Committee on Science and Technology who were looking into the greenhouse effect. We were also invited to give oral evidence in June. The Committee's report*, published in October, made a number of recommendations on the need for continued scientific research on climate change such as that being undertaken by our scientists into the effect of enhanced CO₂ concentrations on trees and ecosystems. The Government's response**, published shortly after the end of the year under report, shared the Committee's views on the importance of research in this field and indicated a significant increase in the funds being made available for this purpose in 1990-91.

*House of Lords European
Communities Committee*

- 30 We also gave written evidence in April 1989 to the House of Lords European Communities Committee in connection with their enquiry into the EC's proposals for the protection of fresh, coastal and marine waters against nitrate pollution. In this we pointed to the minimal effect that forestry operations have on the release of nitrate. In the Committee's response⁰ published in July, they commented on the role which afforestation could play as an alternative use of farming land which they considered would be an effective means of reducing nitrate leaching while providing other environmental benefits for wildlife. The Government's response to the report was given in the course of a debate in the House of Lords on 31 October. Forestry did not feature in the debate.
- 31 In May, the European Communities Committee published its report⁰⁰ following an enquiry into the EC Commission's proposals for plant health controls in relation to the creation of the Single Market in 1992. In particular, the Committee looked at the arrangements intended to dismantle the existing system of frontier checks between Member States. The Committee's report, while welcoming the proposal to establish a Community plant health inspectorate, was opposed to the premature removal of import controls without an agreed, tried and tested method having been found to replace them. This reflects the view that we had expressed in written and oral evidence to the Committee. The Government's response to the Committee was awaited at the end of the year. We have commented further on this question at paragraph 131.
- 32 In January 1990, the European Communities Committee began an investigation into the EC's rural development policy based on the EC paper *The Future of Rural Society* (COM(88)371). We were invited to submit written evidence and did so in March with a memorandum explaining the background to the development of forestry in Great Britain, setting out the Government's forestry policy and its associated initiatives and incentives, and placing this in the context of the EC's rural development policies. The Committee's report had yet to be published at the end of the year under report.

*Sixth Report from the House of Lords Select Committee on Science and Technology: Session 1988-89, HL Paper 88-1, HMSO, £7.20 net.

**Government Response to the Sixth Report of the House of Lords Science and Technology Committee: Session 1988-89, Cm997, HMSO, £3.40 net.

⁰Sixteenth Report from the House of Lords Select Committee on the European Communities: Session 1988-89, HL Paper 73, HMSO, £18.60 net.

⁰⁰Ninth Report from the House of Lords Select Committee on the European Communities: Session 1988-89, HL Paper 47, HMSO, £13.00 net.

- 33 Our programme of forestry land and property sales which started in 1981 was reviewed by the Government in November 1984, when it was decided that it would be extended to 31 March 1989 and would have as its main purpose the rationalisation of the Commission's estate so as to improve the efficiency and commercial effectiveness of the Forestry Enterprise. In June 1989, the Secretary of State for Scotland, the Rt Hon Malcolm Rifkind QC MP, announced in a Parliamentary answer that the Commission had been asked to proceed with the further disposal of some 100,000 hectares of forest land and properties in the period up to the end of the century. The full text of Mr Rifkind's announcement is reproduced at Appendix VI to this report.
- 34 We are pleased to note the Government's acknowledgement in this announcement of the contribution that our rationalisation programme has had on the efficiency of the Forestry Enterprise over the past few years, of the important contribution which we have, at the same time, been able to make to new developments in the wood-processing industry, and of the benefits arising from the use of our forests for public access and recreation. We also welcome the Government's intention that we should be placed in a position to plan ahead without the uncertainty caused by frequent reviews of the sales programme.
- 35 We will continue to be responsible for the selection of properties for sale and in doing so will have regard to the selection guidelines which Forestry Ministers set in 1981 (these were reproduced in Appendix V of our 1981-82 Report). We have now completed our advance planning for the new programme, with the objective of consolidating and rationalising our forest estate in an orderly manner, and paying proper regard to our timber-supply commitments and to public recreation in our woodlands.
- 36 Mr Rifkind's announcement expressed the Government's concern that the general public should continue to enjoy access to those forests we sell in a way which is compatible with management for forestry and other purposes. In conjunction with other departments and agencies involved, we have been giving consideration to ways of achieving this objective.
- 37 In our 1984-85 report we published, at the request of the Public Accounts Committee, a statement of policy and practice on the disposal of properties under our management. We consider that it would be helpful to publish a revised statement of this kind to reflect the June 1989 announcement and other changes that have occurred since 1984. This is set out at Appendix IX.

PRIVATE PLANTING

- 38 The year under report brought the expected reduction in the level of private planting, as woodland owners adjusted to the effects of the removal of forestry tax reliefs in the March 1988 Budget. The amount of new planting in the private sector grant-aided under our schemes was 12,767 hectares, a fall of some 49 per cent compared with the 24,982 hectares grant-aided in 1988-89. Viewed, however, from the perspective of the overall new planting total of 19,487 hectares — including planting by the Commission and by farmers receiving planting grants from us under the Woodland Grant Scheme in association with annual payments under the Farm Woodland Scheme — the fall was 33 per cent from the previous year's comparable level of 29,213 hectares.
- 39 Much concern has been expressed throughout the forestry industry about the fall in planting and there are fears that, in the absence of fresh initiatives, this trend will continue. We acknowledge these concerns, particularly in relation to the short term, but we do not share the worst fears about future planting. The Government is committed to an expansion of forestry, and the case for such an expansion becomes more compelling with the need to find alternative uses for agricultural land and with the recognition that trees lock up carbon from CO₂ in the atmosphere that would otherwise contribute to the greenhouse effect. The Woodland Grant Scheme continues to attract applications for grant-aid for new planting, and the confidence of the industry has been greatly helped by the Government's announcement, which came after the close of the year under report, that woodland

management grants are to be introduced in 1992 (see paragraph 44 and the footnote thereto). We have no wish to appear over-sanguine, and we accept the possibility, given the long lead times in forestry, that the downturn in planting may not yet have bottomed-out. In the light of the factors we have described, however, we are hopeful that a steady rise in planting levels is in prospect, particularly once the general economic situation is more favourable.

STORM DAMAGE

- 40 Severe storms swept across southern England, Wales and the Midlands on 25 January 1990 causing widespread damage to trees and woodlands. The damage was aggravated by further storms in February. Although storms occurred during this period in other parts of Britain, the damage to woodlands in these areas was not of the same exceptional nature.
- 41 Immediately after the initial storm, we set up a Forest Windblow Action Committee based on the model of the successful committee we established after the storm in southern England in October 1987. The Action Committee were given the task of assessing the full scale of the damage to woodlands in those areas badly affected and of making recommendations on any practical measures of assistance which might be needed. In their report submitted to us on 30 March 1990, the Committee estimated that the volume of timber blown down in woodlands in the areas concerned was of the order of 1.3 million cubic metres. This compared with nearly 4 million cubic metres blown down in the October 1987 storm. Most of the damage (some 82 per cent by volume) was sustained in conifer woodlands, 55 per cent of which were in private ownership. The damage to broadleaved woodlands, over 90 per cent of which were privately owned, mainly affected mature and over-mature timber, particularly beech. The Action Committee recommended that special assistance towards replanting should be made available to the owners of storm-damaged woodlands in the form of supplements to the Commission's normal planting grants, on similar lines to the arrangements introduced after the October 1987 storm. This recommendation was still under consideration at the end of the year.*
- 42 We are pleased to record good progress during the year in the clearance of timber blown down in the 1987 storm. By 31 March 1990 the clearance operations in Commission woodlands had been virtually completed, making a total of nearly 1.1 million cubic metres harvested in just under 2½ years. It is estimated that at the same date the private sector had cleared over 2 million cubic metres. This represents about three-quarters of the original volume of blown timber in private woodlands. While some harvesting is continuing, much of the material remaining is either of low value, in small parcels or not easily accessible, and may not now find a market.
- 43 The response to the special replanting supplements made available after the 1987 storm has been excellent. By the expiry of the extended closing date of 30 June 1989, applications had been received covering some 12,000 hectares. At the end of March 1990, about 1,600 hectares had been replanted with the aid of the supplements, some 75 per cent of which was with broadleaves. To qualify for the supplements, planting has to be completed by 31 March 1993.

BROADLEAVES POLICY REVIEW

- 44 In our last report we referred to a review of broadleaves policy which we had begun in the autumn of 1988. This fulfilled an undertaking given in the Government's broadleaves policy statement of July 1985 that the operation and effectiveness of the new measures announced would be reviewed "after some three years". As a first step, we assembled statistical and survey data for broadleaved woodland for the three-year period before and after the new policy initiatives. This information was published in February 1989 in a consultative report entitled *Broadleaves Policy: Progress 1985-88* which attracted a large number of constructive responses. We had a series of bilateral meetings with the Nature

*The Minister of Agriculture, Fisheries and Food announced on 3 May 1990 that special supplements to the Commission's normal grants would be made available to assist with broadleaved replanting of storm-damaged woodlands in our East England, West England and Wales Conservancies. Full details will be reproduced in our next report.

Conservancy Council, the Countryside Commissions, Timber Growers UK, the Country Landowners Association, the Institute of Chartered Foresters, the National Farmers Union and Wildlife Link, followed by discussions with other Government Departments. By the end of the year under report we had submitted our conclusions to Ministers for consideration and their decisions were expected to be announced to Parliament before the Summer Recess*.

- 45 In 1986 we initiated a review to examine the measures which already exist to safeguard the New Forest and to identify whether further measures might be needed to maintain its unique character. The Review Group's report, containing some 120 individual recommendations, was submitted to us towards the end of 1988. After consulting at Departmental and Ministerial levels, we published our response *The Future for the New Forest* in March 1990.** This incorporated a letter from the Minister of Agriculture, Fisheries and Food, the Rt Hon John Gummer MP, setting out the conclusions reached by Ministers on those recommendations directed at central Government. A copy of Mr Gummer's letter is reproduced at Appendix VII. Our response was successfully launched at a reception held at Lyndhurst on 20 March 1990, when we were pleased to have as our principal guest Baroness Trumpington, Minister of State at the Ministry of Agriculture, who has responsibilities for forestry questions in England.
- 46 We were pleased to note the Review Group's conclusion that, by and large, the existing measures have been proving effective, and we consider that the Group's recommendations and the responses to them can serve as a sound basis for the continued successful management of the New Forest. In our view, the report succeeded in reaching a balance between the need to protect the New Forest's fabric and character, the well-being of those who live and work there and the interests of the many millions of visitors to the Forest each year.
- 47 One of the main recommendations was a proposal to establish a Heritage Area Committee to ensure close liaison between those authorities with statutory responsibilities for managing the Forest. The Government fully endorsed this proposal and we are looking forward to a long and fruitful association with the new Committee.
- 48 The Review Group indicated that recognition of the New Forest Heritage Area by Government as being of the highest national and international importance, ranking alongside the National Parks and the Broads, was their single most important recommendation. However, Ministers were unable to accept that all lands within the Heritage Area could be so described and took the view that the way forward would be for the new Heritage Area Committee to agree revised boundaries to incorporate essential grazing land as well as the best of the landscape. They felt that within such a Heritage Area there might reasonably be a case for applying similar land management policies to those that normally apply in a National Park, but they were not persuaded that there was a case for new mechanisms or controls. The Ministerial response stressed the need for flexibility in administering the New Forest and, given that most of the land within the perambulation is Crown land, agreed with the report's conclusion that National Park designation would be an over-bureaucratic and unnecessary approach.
- 49 One matter which remains unresolved and to which Ministers have asked us to give further consideration is the question of grazing in the New Forest, the continuation of which — as the Review Group rightly stressed — is of crucial importance to the maintenance of the

*A statement on the Government's conclusions arising from the broadleaves policy review was made by the Secretary of State for Scotland on 23 July 1990. This announced, *inter alia*, the Government's decision to introduce management grants under our Woodland Grant Scheme with effect from 1 April 1992, for both broadleaved and conifer woodlands. Higher rates of management grants will be made available for woodlands of special environmental value, including ancient semi-natural woodlands. A full commentary on this and the other measures announced by the Secretary of State will be given in our report for 1990-91.

** *The Future for the New Forest*, HMSO, £5.00 net.

character of the Forest. We have therefore set up a small working party, consisting of our Chief Land Agent and specialists from the Ministry of Agriculture, Fisheries and Food and the Department of the Environment, to discuss this issue with the relevant New Forest interests and make recommendations as soon as possible.

- 50 We should like to place on record our appreciation of the valuable work undertaken by all the members of the Review Group under the able chairmanship of the Deputy Surveyor, Mr David Perry, in carrying out this most thorough investigation. The number of recommendations produced by the Review Group serves to highlight the many distinct strands which together make up the unique heritage of the New Forest. We are most grateful for the remarks made by Mr Gummer at the end of his letter paying tribute to the Commission's stewardship of the New Forest. We shall endeavour to maintain our high standards in the future, building upon the outcome of this most recent review.

FORESTRY AND THE ENVIRONMENT

Forest Nature Reserves

- 51 We took the decision some two years ago to revive and extend our existing Forest Nature Reserves and to publicise those which are robust enough to withstand public access. After a careful review, we announced the location of 46 reserves in May 1989. These range from sites which represent particularly good examples of semi-natural woodland to those which contain important habitats such as forest wetlands. It is the intention that, while making proper safeguards for the conservation of such sites, the majority should be capable of being visited by reasonable numbers of people. A brief guide to the Forest Nature Reserves was published to coincide with the announcement and a more detailed guidebook is being prepared.

Native Pinewoods

- 52 The higher rates of grant for broadleaved planting under our Woodland Grant Scheme also apply to the planting and regeneration of native pinewoods. In December 1989, we published guidelines for the management of semi-natural native pinewoods. In compiling these guidelines, we were greatly assisted by a working group representing the Nature Conservancy Council, the Countryside Commission for Scotland, Timber Growers UK and the Royal Society for the Protection of Birds. The guidelines are designed to assist owners to manage their pinewoods in a way which will maintain and enhance their ecological and aesthetic value; extend their area; maintain the genetic integrity of the native pine population and, where practicable, maintain identifiable sub-populations; and produce utilisable timber. The guidelines also describe how new pinewoods can be created which will replicate the native pinewood ecosystem. We anticipated a considerable increase in the demand for native pine seed, and we set up a special register of native pinewood seed sources for the purpose of establishing new pinewoods of natural character. We were encouraged by the number of applications for registration, and 30 seed sources were registered by our forest geneticists during the year. It proved to be an above-average seed year for native pine with considerable seed-collecting activity. Twenty-four applications for the establishment of new native pinewoods, covering 3,151 hectares, had been received by the end of the year.

Compensation under SSSI Management Agreements

- 53 On 10 May 1989, the then Secretary of State for the Environment, the Rt Hon Nicholas Ridley MP, announced to Parliament the Government's decision to introduce new rules for compensating landowners who were refused grants for afforestation on nature conservation grounds. From that date, the Nature Conservancy Council were no longer to offer compensation for the refusal of afforestation grants on Sites of Special Scientific Interest if such refusal was solely on nature conservation grounds. Compensation would still be available for the profit forgone, excluding any grant element, in any case where planting would otherwise proceed. The Secretary of State indicated that this decision reflected the radical changes affecting forestry in the 1988 Budget and the subsequent increase in planting grant under the new Woodland Grant Scheme, which made the grant element a very significant factor in determining the profitability of afforestation proposals and, therefore, in the compensation paid under management agreements. This was in marked contrast to the position in agriculture, where recent changes in the grant arrangements meant that it would now seldom be the case that grants would form a

significant element in the profit forgone calculation of management agreements offered by the Nature Conservancy Council. The Secretary of State also made clear in his statement that, while there would normally be a presumption against giving grant for planting on Sites of Special Scientific Interest, each application would be considered on its merits.

- 54 It was subsequently decided that the new provisions would apply in respect of all relevant grant applications received by the Commission on or after the date of the announcement. The full text of Mr Ridley's announcement is reproduced at Appendix V to this report.

FORESTRY AND LAND USE

Indicative Forestry Strategies

- 55 In recognition of the importance to Scotland of the development of forestry, the Secretary of State announced in February 1989 that he would be encouraging Regional Councils to prepare indicative forestry strategies as part of their structure plans. In giving details of this announcement in our last report, we referred to the fact that, with the Scottish Development Department, we were reviewing the need for further detailed guidance from Government on the preparation of these strategies. Such guidance was issued in September 1989 in the form of a draft Scottish Development Department Circular drawn up in co-operation with ourselves and the Department of Agriculture and Fisheries for Scotland. The draft Circular, which was circulated widely for comment, outlined the functions of indicative forestry strategies and their relationship with structure plans. A technical appendix provided related advice on the preparation of strategies based on a synthesis of available forestry and other land use information and presented in the form of a strategy map to identify 'Preferred', 'Potential' and 'Sensitive' areas for new forestry planting. The advice placed emphasis on the need for local authorities to seek the co-operation of the major land use interests in order to assess the opportunities for, and constraints on, new planting. The draft Circular generated considerable interest and much constructive comment; a final version, incorporating many of the suggestions made by respondents, was being prepared at the end of the period covered by this report*.

- 56 The value of these strategies as a framework for future decision-making on forestry planting in Scotland was reinforced by the widespread support for the concept received from the forestry industry, conservation bodies and a range of other countryside interests. During the period of this report the first indicative forestry strategy prepared by Strathclyde Regional Council and submitted as part of their 1988 structure plan revision was approved by the Secretary of State. A number of other Regional Councils are actively preparing forestry strategies.

- 57 A national programme to create community forests on the outskirts of major cities and towns in England and Wales was launched jointly by the Countryside Commission and ourselves in July 1989. Each community forest could cover between 10,000 and 20,000 hectares managed for a wide variety of recreational, environmental and commercial uses. The long-term aim is to create a mixed woodland setting with open spaces and farmland. Community forests will help restore derelict and unkempt parts of the urban fringe and green belt, as well as providing new jobs in forestry, leisure and conservation.

Community Forests

- 58 We are arranging for a Forestry Commission forester to serve as a member of each of the project teams for the three community forests already approved by the Government in South Staffordshire, South Tyne and Wear and East London. In addition to providing grants for tree planting through the Woodland Grant Scheme, we shall be giving assistance in the form of training and research and specialist advice, for example on landscape design and forest recreation.

- 59 The emphasis in planning the community forests is to involve local communities, local authorities, local businesses, voluntary bodies and others in the design, establishment and long-term maintenance of the forests. As lead partners at a national level, the Forestry

*The guidance on the preparation of indicative forestry strategies was issued on 4 May 1990 as Scottish Development Department Circular No. 13/1990.

Commission and the Countryside Commission will steer the programme and provide grant aid. Local authorities will be key participants — contributing funds, expert advice and staffing — and it is hoped that the projects will also attract substantial sponsorship and practical support from local industry and commerce. Each forest will be co-ordinated by a project team, guided by a steering committee of representatives from the major partners and local authorities, and will prepare a community forest plan in consultation with the other interests. Project team members for the first three forests were expected to be appointed in the spring of 1990.

- 60) This is a bold and ambitious programme which will require the sustained effort of many different organisations and local communities. We shall do all we can to support and encourage it.

Central Scotland Woodlands Initiative

- 61) Last year we reported on this imaginative initiative which aims to achieve a major improvement in the landscape between Glasgow and Edinburgh by increasing the area of woodlands. During the period of the present report, Central Scotland Woodlands Limited, the company which has been set up to take the initiative forward and on which we are represented, has been working on the preparation of a detailed business plan to submit to the Secretary of State for Scotland. This has involved the assembly of a great deal of information and consideration of a range of possible mechanisms to achieve the aims of the project. This initiative will continue to receive our wholehearted backing and encouragement.

13TH
COMMONWEALTH
FORESTRY
CONFERENCE

- 62) The 13th Commonwealth Forestry Conference held in Rotorua, New Zealand, from 17-30 September 1989 was attended by more than 220 delegates from 28 countries and a number of international institutions. The Director General participated as Chairman of the Standing Committee on Commonwealth Forestry and led an 18-strong UK delegation drawn from the Forestry Commission, the timber trade, private forestry, universities and Commonwealth bodies. The Conference, which was based on the theme *Forestry: A Multiple-use Enterprise*, concentrated in particular on the valuation of forestry benefits, accountability and the implementation of the Tropical Forestry Action Plan, which received strong support from all delegates.
- 63) The recommendations passed by the Conference reflected growing concern about environmental degradation and stressed the positive role that forest restoration and afforestation, coupled with the encouragement of the greater use of wood products, can play in ameliorating global warming. The Conference decided that some of the recommendations were of sufficient importance and relevance to submit to the Commonwealth Heads of Government meeting in Kuala Lumpur in October 1989, and they were subsequently reflected in the Langkawi Declaration on the Environment. They were also endorsed by the Commonwealth Ministers of Agriculture meeting in Rome in November 1989.
- 64) The full texts of the Concluding Statement and Recommendations of the Conference are reproduced at Appendix VIII to this report.

EC FORESTRY
ACTION
PROGRAMME

- 65) We referred last year to negotiations which were taking place in an EC official Working Group, on which the Forestry Commission led the UK delegation, concerning proposals for an EC forestry strategy and action programme. These envisaged forestry playing a greater role in the context of the reform of the Common Agricultural Policy, the development of rural areas in the Community, environmental improvement, and social and structural policies. The proposals were based on the EC Commission's view that there is a need for the expansion of forestry within the Community, which is only some 50 per cent self-sufficient in wood.

- 66 The action programme was adopted in June 1989 in the form of seven Regulations and a Commission Decision. The measures cover the afforestation of agricultural land; the introduction of forestry into rural development plans (concentrated on areas designated by the Community as qualifying for special assistance); the primary processing and marketing of timber products (this excludes sawmilling and other industrial processing); and provisions designed to consolidate existing measures relating to the protection of forests against atmospheric pollution and fire. The action programme also includes provisions aimed at improving the exchange of information on Community forestry matters and the setting up in Brussels of a Standing Forestry Committee.
- 67 The two measures of most direct and immediate impact from the UK's point of view are those concerning the afforestation of former agricultural land and the establishment of the Standing Forestry Committee. Under the former, Community aid will be available to Member States to meet part of their grant aid for new planting. This will cover expenditure under the Woodland Grant Scheme and the Farm Woodland Scheme. Depending on the level of new planting carried out under those schemes, the UK stands to gain up to £6 million a year by way of reimbursement from the Community. We regard the establishment of the Standing Forestry Committee as an important development since it will, for the first time, provide a means for the forest services of Member States to scrutinise and influence proposals affecting forestry at the gestation stage.

AWARDS

- 68 We are pleased to record that the work of the Commission and its staff was recognised in terms of a number of awards during the year:
- a. The CB was awarded to the Director General, Mr Gwyn Francis. Mr Arnold Grayson, who retired as Director Research in April 1989, received the CBE, while Mr Michael Reaney, the Commission's former Land Reclamation Officer in Wales, received the OBE.
 - b. Mr Ronald Hoblyn, Recreation Forester at Thetford, was the top individual winner in last year's Birds and Countryside Awards scheme, organised by the Royal Society for the Protection of Birds and the Esso Petroleum Company, for his 20 years of work devoted to preserving rare bird species.
 - c. The Royal Forestry Society's Duke of Cornwall's Award for the management of commercial woodlands in conjunction with wildlife and landscape interests was won by the Commission's staff responsible for the management of Low Fell woods in Grizedale Forest; equal second was the Deepdale area of the Commission's Dalby Forest.
 - d. Staff at Kielder Forest won second prize in the Laurent-Perrier Champagne Award for Wild Game Conservation, in recognition of the work they are doing to re-design the forest by improving the habitat for wildlife and creating variety and diversity in the landscape, while maintaining a healthy and productive forest.
 - e. The John Kennedy Memorial Trophy for woodland management under the 1989 Scottish Woods and Forests Awards organised by the Royal Highland and Agricultural Society of Scotland was won by the Commission's Achray Forest. Our Dunnottar Woods, near Stonehaven, were also highly commended.
 - f. Our staff newspaper and our magazine *Forest Life* won awards in competitions organised by the British Association of Industrial Editors.
 - g. Our technical publication *British Softwoods – their Properties and Uses* was listed as one of the top ten pieces of literature by *What's New in Building* magazine.

COMMISSION APPOINTMENTS AND STAFFING

- 69 Sir David Montgomery retired on 31 August 1989 after 10 years' service as the Commission's Chairman. We should like to pay tribute to his dynamic and perceptive

Chairman

leadership during a period of great change for the forestry industry, which he has served with great distinction. In particular, his period of office saw a transformation in the fortunes of the British wood-processing industry and significant improvements in the Commission's operational efficiency and in forestry's sensitivity to environmental issues.

70 Sir David was succeeded by Mr Raymond Johnstone, Chairman of the Glasgow-based investment group Murray Johnstone Ltd. Among the many other positions Mr Johnstone holds, he is a member of the Scottish Economic Council and the Chairman of Scottish Financial Enterprise. He has also served as a member of the Nature Conservancy Council's Scottish Advisory Committee.

Commissioners 71 Mr Terence Mallinson was appointed as a part-time Commissioner on 1 October 1989 in succession to Mr Geordie Hutchison.

Senior Staff 72 Mr Arnold Grayson retired as Director Research on 17 April 1989. He was succeeded by Mr David Burdekin who was formerly Chief Research Officer (South).

73 Mr John Fletcher, Conservator West England, retired on 2 July 1989 and was succeeded by Mr Roger Busby, who was previously Assistant Conservator Operations in West England Conservancy.

74 Mr John Aldhous, Head of Silviculture Division, retired on 11 April 1989. He was succeeded by Mr James Dewar who had previously been the Commission's Chief Forest Survey Officer.

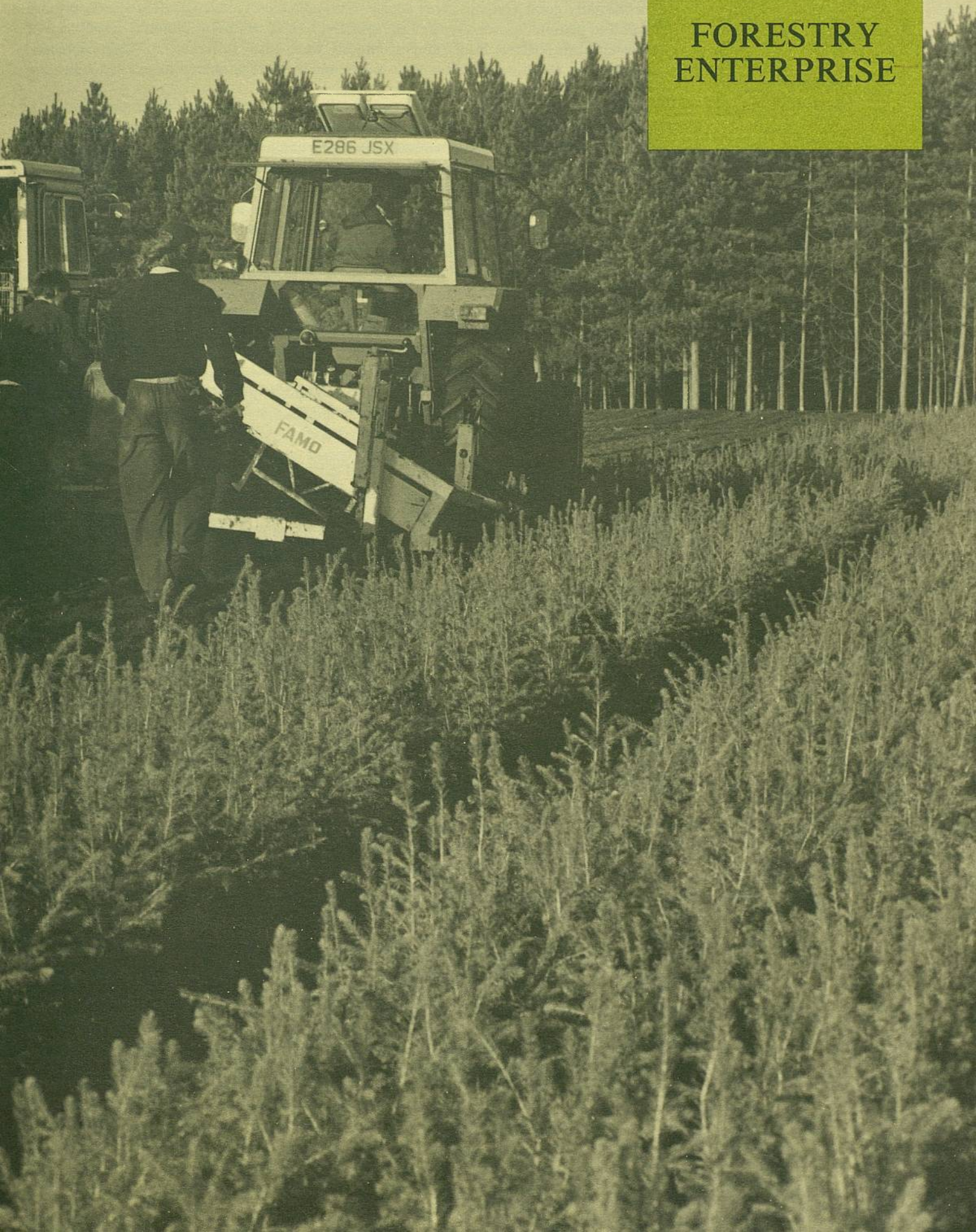
Employment 75 On 31 March 1990 the Commission employed 2,069 non-industrial staff compared with 2,086 the previous year. The number of industrial staff fell from 3,032 to 2,781 during the same period as the result of further improvements in efficiency and the greater employment of contractors whose numbers, including some 1,400 working in our woods for purchasers of standing timber, are now equivalent to about 2,700 jobs annually.

Employee Participation 76 The Commission has established arrangements to keep all employees informed on matters of concern to them, with information being disseminated at all levels. The usual system of Government Whitley Councils at national and regional levels is supplemented by meetings with the Trade Unions on specific issues as needed, to ensure that staff are given the opportunity to comment on and be involved in the decision-making process. A broadly similar arrangement for industrial employees is provided through the Commission's Industrial and Trade Council at national level and a network of Joint Consultative Committees at Conservancy and Forest District levels. Following the publication of a report reviewing the methods of communication between management and staff, a team briefing system was introduced for all Commission employees in February 1990.

Disabled Persons 77 Although the Disabled Persons (Employment) Act 1944 is not binding on the Crown, the Commission, along with other Government Departments, has undertaken to accept the same responsibility as other employers consistent with the principle of recruitment by fair and open competition. The basic policy followed is that disablement of itself is no bar to recruitment to, or advancement within, the Commission. The test applied is the ability to do the job. The physically-demanding nature of much of forestry work restricts the scope for employment of some disabled persons on forest operations, but within this limitation our policy is to provide equal opportunities for the disabled. In 1989 we employed 33 Registered Disabled Persons (0.6 per cent of our total staff) and targets have been set to increase this proportion.

Equal Opportunities 78 Like other Government Departments, the Commission has a policy which provides that all eligible people, regardless of their sex, marital status, race, colour, ethnic or national origin, shall have equality of opportunity for employment and advancement on the basis of their ability, qualifications and fitness for the work. In order to give maximum effect to this policy, we are developing an action plan to promote equal opportunity in a positive way within the Commission.

**FORESTRY
ENTERPRISE**



FORESTRY ENTERPRISE

SILVICULTURAL OPERATIONS

Seed 79 Most of the broadleaved species produced good seed crops in 1989. The acorn crop was exceptionally good and sufficient acorns were collected from registered stands of both sessile and pedunculate oak in the Forest of Dean to satisfy home demand. Seed crops of sweet chestnut, silver birch and sycamore were also sufficient to meet domestic requirements. Beech seeded poorly, however, and we were unable to collect or acquire any seeds from this country.

80 Of the conifer species, only Scots pine and noble fir produced significant quantities of seed for collection. The Scots pine collection was particularly important, as we managed to obtain sufficient seed from our best seed orchard to meet likely demands for at least the next two years. This orchard, at Ferndown near the New Forest, is based on progeny-tested clones which offer the prospect of an 8 per cent increase in yield over the best existing Scots pine stands, with no loss of tree form. Modest collections of seed were also made from lodgepole pine stands of various origins. The demand for other conifer species was met from existing seed stocks or from imports. The availability of hybrid larch seed was significantly below Commission and private sector requirements.

Nurseries 81 As reported last year, we decided in 1988 to concentrate the production of plants in our three larger nurseries at Delamere in Cheshire, Wykeham in North Yorkshire and Newton in Morayshire. As part of this rationalisation programme, Fleet and Bareagle Nurseries in South Scotland Conservancy were closed in March 1990. An integrated grading unit and cold store with a capacity for 3 million plants was built at Wykeham and brought into use towards the end of 1989.

82 The hot, dry summer of 1989 resulted in poor germination in seed beds and the numbers of seedlings produced were well below normal. Yields of older transplants and forestry stock were also less than usual, although the effects of the dry weather were ameliorated by the intensive use of irrigation facilities. The weather was well suited, however, for nursery growth of species such as sweet chestnut and Douglas fir.

New Planting and Restocking 83 Another mild winter enabled new planting to begin early and to proceed largely uninterrupted. Without some form of protection, young trees on restocking sites are vulnerable to attack by *Hylobius* and *Hylastes* beetles. These insects are a major pest, not only in Britain, but also in northern Europe and Scandinavia. The most effective form of protection is by treating stock before planting with small quantities of insecticide; as reported in paragraph 109, permethrin, a synthetic pyrethroid, was used exclusively for this purpose in the 1989-90 season.

84 The area of new planting completed during the year was 4,081 hectares which was similar to the year before, but the area of restocking at 7,865 hectares was down some 9 per cent. Approximately 9 per cent of all new planting and restocking was with broadleaved trees.

Motorway Planting 85 The Commission has since 1962 acted as a main agent for the Department of Transport and the Welsh Office for tree and shrub planting alongside motorways and trunk roads in England and Wales, a task we have shared with many of the local authorities. Over this period we have planted more than 30 million trees and shrubs on these inhospitable, man-made sites.

86 Much of the early motorway planting has now reached the stage of secondary maintenance and landscape management. This involves a regular cycle of operations such as pruning, thinning, coppicing and ultimately felling, which usually needs to be planned and specified in great detail on a group or individual tree basis. Special skills are also needed in the execution of the work to protect the safety of the public. We believe that the establishment of trees and shrubs on the motorway network has been one of the notable — if largely unsung — environmental achievements of the past few decades.

87 We acquired only 444 hectares of plantable land during the year. This was a most disappointing result, caused by the sharp reduction in the amount of suitable land coming on to the market. This, in turn, was largely a reflection of the reluctance of landowners to sell land for planting at the prices prevailing since the forestry tax changes in the 1988 Budget. The average price paid for planting land was £343 per hectare compared with last year's figure of £410. The bulk of the land acquired was again in Scotland.

Land Acquisitions

88 Our programme of forest land disposals continued during the year with sales being completed of 228 areas of woodland and plantable land totalling 4,985 hectares. Most of the areas sold were under 25 hectares. We also sold 203 houses and 2,866 hectares of other land surplus to our requirements. Receipts for all sales for the year were £13.0 million.

*Sale of Plantations and
Other Properties*

89 Details of the net area of land acquired and disposed of during the year are given at Table 7 of Appendix XI, while details of forest land sales during the year and average prices received are shown at Table 8.

90 A review of the Commission's disposals programme was completed in June 1989. We have commented fully on this at paragraphs 33 to 37.

91 We spent £2.7 million on the construction and improvement of buildings in the course of the year. A major laboratory extension to our Northern Research Station near Edinburgh was completed, and we carried out further works in connection with the nursery rationalisation programme including the provision of a new grading unit and plant cold store at Wykeham nursery (see paragraph 81).

Management of Property

92 We have continued with initiatives to exploit mineral resources on our land, particularly sand and gravel deposits in the south and east of England. Full working of the extensive deposits at Eversley Common in Bramshill Forest is now under way. The total income from mineral workings in the year was £678,900.

93 Our rental income for the year, including agricultural, sporting and other rents, was £2.7 million. The Commission's property holding is detailed in Table 13 of Appendix XI.

94 The term 'commercial recreation' encompasses our activities in managing forest cabins, holiday houses and caravan and campsites for letting to the general public. Our aims are to enhance visitor enjoyment of our forests through the provision of overnight accommodation and to achieve a commercial rate of return on capital employed. The upsurge in the domestic holiday market, coupled with our own vigorous marketing campaign, resulted in record occupancy levels at our 167 holiday cabins and seven cottages and houses — 72 per cent and 83 per cent respectively. Occupancy of our 32 campsites dropped slightly, however, despite the fine weather.

Commercial Recreation

HARVESTING AND
MARKETING

95 The demand for sawlogs remained firm during the year in most parts of the country. As the supply of timber from the 1987 storm diminished, sawlog prices in southern Britain had recovered by the autumn to their pre-1987 levels. The exchange rate helped the competitiveness of British sawn construction timber. Coupled with significant price increases for some imported material, notably palletwood from Portugal, this enabled British timber to take a larger share of the sawn softwood market.

Market Demand

96 High interest rates dampened consumer demand for wood panels and for paper and board, and by mid-summer 1989 most small roundwood processors had high timber stocks. With substantial quantities of wood residues available from the buoyant sawmilling sector, and the need for the pulp and particleboard mills to reduce stocks, there was a much lower demand for small roundwood which persisted throughout the year.

*Forestry Commission
Operations*

The table below sets out the results of our 1989-90 harvesting and marketing operations and those for the previous four years. These figures have been adjusted to take account of work in progress so that comparisons can be made with the Accounts of the Forestry Enterprise (Note 10(a) on page 56). The financial figures in the table are expressed on a common basis (£'90) to enable realistic comparisons to be made.

	<i>Unit</i>	<i>1985-86</i>	<i>1986-87</i>	<i>1987-88</i>	<i>1988-89</i>	<i>1989-90</i>
	Million cubic metres					
<i>Total Removals</i>		3.11	3.32	3.38	3.64	3.55
By sale standing	"	1.09	1.23	1.24	1.37	1.34
By Forestry Commission harvesting (adjusted for change in work in progress)	"	2.02	2.09	2.14	2.27	2.21
	£('90) million					
<i>Income</i>		69.91	78.02	81.14	78.79	77.15
Forest costs (expenditure, excluding administrative expenses)	"	33.87	32.19	33.37	33.38	32.31
Gross surplus	"	36.04	45.82	47.77	45.41	44.84
Administrative costs	"	13.75	14.02	13.11	12.38	12.47
Net surplus	"	22.29	31.80	34.66	33.04	32.37
<i>Income per cubic metre</i>	£('90)	22.48	23.50	24.01	21.65	21.73
Forest costs per cubic metre	"	10.89	9.70	9.87	9.17	9.10
Gross surplus per cubic metre	"	11.59	13.80	14.13	12.48	12.63
Administrative costs per cubic metre	"	4.42	4.22	3.88	3.40	3.51
Net surplus per cubic metre	"	7.17	9.58	10.25	9.08	9.12

The features of our operations in each of the main sectors are set out in more detail in the following paragraphs.

Conifer Sawlog Sales 98 The total volume of sawlogs despatched from our own harvesting operations was 1,107,000 cubic metres (measured overbark), nearly 2 per cent higher than last year. The Log Price Index, which is an indication of forward price trends, fell by 0.9 per cent from 242.6 at 31 March 1989 to 240.5 at 31 March 1990.

Standing Sales 99 The demand for standing timber dropped in the second half of the year as a result of the contracting market for small roundwood. This reduced the volume of standing timber sold by 2 per cent from 1,366,000 cubic metres last year to 1,337,000 cubic metres, representing 38 per cent of the wood harvested from Commission forests. At the end of the year, the Standing Sale Index stood at 613.7 compared with 614.7 at 31 March 1989.

Conifer Small Roundwood Sales 100 The total volume of direct sales of small roundwood from Commission harvesting operations increased by one per cent compared with 1988-89. However, that figure conceals some notable changes in individual sectors. Because of the depressed market for chipboard, sales of chipwood fell by 5 per cent. Increased sales of pulpwood to the new paper mill at Irvine were largely offset by the substantial reduction in exports of pulpwood,

notably from the south-east of England where the volume available from windblow clearance was much reduced. Pulpwood exports from both Commission and private woodlands in 1989, at 168,000 tonnes, were significantly below the 1988 total of 267,000 tonnes.

- 101 The volume of timber produced by our own harvesting operations was 2,209,000 cubic metres. This was made up of 432,000 cubic metres from thinnings and 1,777,000 cubic metres from clear felling, of which 198,000 cubic metres came from storm-damaged woodlands in south-east England. Mechanised harvesting accounted for 470,000 cubic metres, of which 250,000 cubic metres was completed by Commission-owned harvesters and processors and 220,000 cubic metres by contractors. *Harvesting*
- 102 The average tree size harvested increased slightly over the previous year from 0.20 cubic metre to 0.21 cubic metre. Labour productivity has improved by an average of almost 6.3 per cent per annum throughout the 1980s.
- 103 By the end of March 1989 we had virtually completed the clearance of trees blown down in our woods in south-east England by the October 1987 storm. Bearing in mind that over 75 per cent of the volume of timber blown down consisted of pine — which degrades more rapidly than other species — we are glad to report that the timber was salvaged successfully with little deterioration.

ENGINEERING

- 104 In last year's report, we commented on how the Scandinavian forestry industry have moved away from bed harvesters to grapple harvesters and how the greater availability of the latter was now being reflected in their use in British forests. They have the advantage of compactness and with the new range of felling heads are capable of far more accurate crosscutting than the previous generation of machines. However, purpose-built grapple harvesters are still extremely expensive, a typical middle-range machine now costing around £180,000. In an effort to reduce costs, we have been examining the mounting of the new grapple heads on 360° slew-tracked excavators, machines which are used extensively in the civil engineering industry. They do not have quite the manoeuvrability of the purpose-built machine and have slightly lower output, but their capital cost is much less — the units, complete with harvester head, being available for around £100,000. Following this development we have recently purchased an FMG 746 grapple-head mounted on a JCB 814 excavator; this was introduced successfully in Mid Scotland Conservancy in January 1990. Further purchases of this type of machine are planned. At the end of the year we had 18 Commission harvesters and processors in use and a similar number of machines working on direct contract. *Mechanical Engineering*
- 105 Our engineers constructed 148 kilometres of new road and upgraded 210 kilometres of existing road in the course of the year. The use of local materials is a very important element in the economy of road-building and we rely heavily on road stone quarried within our own forests. The characteristics of rock needed for this purpose are strength and durability coupled with ease of extraction. Much of the stone is acquired by ripping rock from superficial deposits using Caterpillar D7 and D8 bulldozers or their equivalents, but sometimes explosives have to be used. Extensive changes to the regulations on the use of explosives in quarries have been introduced by the Health and Safety Executive and we shall have to review our methods of obtaining road stone to ensure that the use of our own quarries continues to be economic. The Quarries (Explosives) Regulations 1988, which came into force on 1 January 1990, require all our staff who act as quarry managers to be examined to ensure that they are 'competent persons' in terms of the legislation. The examination is comprehensive and involves all aspects of shotfiring, blasting calculations, design, and the keeping of accurate records. *Civil Engineering*
- 106 Another important factor in reducing the costs of road-building is to ensure that the depth of metalling is sufficient to meet the requirements of 38 tonne lorries, without being excessive. To this end, we have introduced Dynamic Cone Penetrometers which measure the strength of a road sub-grade and also the depth of metalling. This enables our engineers to assess accurately the pavement thickness required to carry the heavy loads and the scale of the work needed to upgrade substandard roads.

- 107 A new low-cost steel and timber bridge, to be used particularly in new planting areas, has been designed to the Department of Transport's standards. This bridge costs approximately £1,800 per metre span, as opposed to a reinforced concrete bridge costing £2,800 per metre span. The standard width of our bridge decks has been increased from 3.2 metres to 3.5 metres to accommodate the large forwarders now in use.

HEALTH AND SAFETY

- 108 At 5.4 per 100 industrial employees, the incidence of reportable accidents (ie those causing incapacity for more than three days) compares favourably with that for the previous three years — 5.4 (1986-87), 6.2 (1987-88) and 6.0 (1988-89). Regrettably there was one fatal accident, sustained by a mechanic whilst repairing quarrying equipment.
- 109 Blood-sampling of Commission workers using lindane as a pre-planting dip for forest transplants has confirmed that, with the employment of proper safety precautions, large-scale dipping with lindane can be undertaken without risk to health. Permission for the use of lindane has, however, been suspended pending the outcome of a wider review of the substance by the Ministry of Agriculture, Fisheries and Food. Permethrin was used exclusively for plant protection during the 1989-90 planting season with a system of health monitoring being installed to identify any adverse effects.

INFORMATION TECHNOLOGY

- 110 A significant development in our work on computer systems was the completion during the year of a major review of the Commission's information systems strategy. Essentially, this strategy defines the business model for our dual roles of Forestry Enterprise and Forestry Authority, through which we pursue the overall objectives of forestry policy and against which we can validate the information needs of management. It forms, therefore, the basis for planning effective computer and manual information systems and the efficient integration of future developments.
- 111 The first fruits of the strategy review came towards the end of the year when we introduced a computer system to administer and provide information on the Woodland Grant Scheme. By the close of the year we had also advanced our plans for the extension of office information systems, following successful trials in our Public Information Division and Mid Scotland Conservancy, and for the introduction of a personnel management system throughout the Commission. To give effect to these developments, we adopted the Oracle relational database as a strategic tool and upgraded both our main computer installation in Edinburgh and our telecommunications network throughout Great Britain.
- 112 We also began trials at our Aberfoyle Forest District office of a prototype computer system designed to integrate existing manual and computer procedures and to eliminate multiple data entry. If this proves successful, we intend to implement the system in full when we carry out the planned replacement of microcomputer equipment in our Forest District offices during 1991-1992.

A scenic photograph of a forest clearing. In the foreground, a dirt path leads towards a wooden bench situated on a sandy bank. The bench is positioned in front of a calm lake that reflects the surrounding trees and sky. The forest is composed of tall, slender trees with dense foliage. The overall atmosphere is peaceful and natural. In the top right corner, there is a green rectangular box containing the text 'FORESTRY AUTHORITY' in a serif font.

FORESTRY
AUTHORITY

FORESTRY AUTHORITY

1989-90

Plant Health Controls

In May 1989 we made an Order* which revoked and superseded our Import and Export of Trees, Wood and Bark (Health) (Great Britain) Order 1980 and our Tree Pests (Great Britain) Order 1980. The new Order implements the revised EC Plant Health Directive on protective measures against the introduction into Member States of organisms harmful to forest trees.

- 111 We made a further Order** in October 1989 to amend our main plant health legislation, principally to introduce a requirement that coniferous wood imports from non-European countries must be free from the tree pest *Monochamus* spp and its bore holes. The background to this Order is explained in paragraphs 127 to 130.

1989-90

- 115 A total of 18,892 hectares of private planting was grant-aided under our schemes in 1989-90 (compared with 29,816 the previous year) of which 12,767 comprised new planting (24,982 hectares in 1988-89). The reduction in planting was confined to conifers, the area of broadleaves being 6,670 hectares, a significant increase over the previous year's figure of 4,818 hectares. In addition, 2,639 hectares of new planting were grant-aided in association with the Farm Woodland Scheme (2,002 hectares of broadleaves, 637 hectares of conifers) compared with 126 hectares the previous year. Fuller information on grant-aided planting is to be found at Table 2 of Appendix XI.

- 116 As expected, the above figures represent a significant reduction in the total area of new planting recorded during the year as private owners adjusted to the changes made to the forestry support arrangements in the March 1988 Budget. We have commented at greater length on this matter at paragraphs 38 and 39.

FORESTRY RESEARCH COORDINATION COMMITTEE

- 117 The Forestry Research Co-ordination Committee (FRCC) continued to give special attention to the promotion of research into farm forestry. A special programme on this topic administered by the Natural Environment Research Council awarded six grants and six studentships in environmental and socio-economic aspects of farm woodlands during the year.
- 118 Owing to the long life-cycle of trees and their ability to store carbon from CO₂ in the atmosphere, in the form of wood, the role of forests in reducing the greenhouse effect merits special consideration, as does the effect of increasing CO₂ concentrations and climatic change on the growth of trees. The FRCC therefore decided to set up an expert review group to examine research priorities for forestry in the context of global warming.
- 119 The FRCC has also set up two working groups to facilitate co-ordination of research amongst its members. The first, on forestry and conservation, comprises representatives of the Forestry Commission, the Natural Environment Research Council and the Nature Conservancy Council; the second, on poplars, brings together representatives of growers, users and researchers interested in the potential of this genus for increasing farm woodland yields.

RESEARCH

- 120 We publish a separate report on Forest Research each autumn which gives a full account of the work carried out or commissioned by our Research Division and other Divisions with responsibilities for research in their own fields. The paragraphs below are therefore restricted to two items which have attracted wider public interest over the past year.

*The Plant Health (Forestry) (Great Britain) Order 1989 (SI 1989/823) which came into force on 8 June 1989.

**The Plant Health (Forestry) (Great Britain) (Amendment) Order 1989 (SI 1989/1951) which came into force on 21 November 1989.

- 121 We conducted our two regular tree health surveys in 1989. The first, in which 1,800 trees of a wide variety of species were examined, was the grid survey required under the EC Regulation on atmospheric pollution which is intended to enable comparisons to be made with results from other European countries. The second was our main survey, which was a continuation of the monitoring programme we have been undertaking since 1984 into the health of key forest species in Britain. The main survey covers a total of 7,436 trees of five species: Sitka spruce, Norway spruce, Scots pine, oak and beech. Crown density and discolouration were assessed in both surveys. In the main survey 35 other parameters of tree health were also assessed which allows a comprehensive index of the condition of each tree to be obtained. Monitoring these indices enables trends from year to year to be identified.
- 122 The preliminary results of these surveys, which we published in November, revealed that the condition of forest trees had generally improved since the previous year, despite the drought that had been experienced over much of the country. This contrasted with the condition of many open-grown trees which suffered from drought stress during the summer of 1989. The improvement in the health of most forest trees is attributed to the recovery of many trees following damage in the October 1987 storm, an absence of winter damage and the benefits brought about by the mild, wet conditions of the summer of 1988. Some Sitka spruce stands had thinner crowns, however, as a result of defoliation by the green spruce aphid (*Elatobium abietinum*). The aphid was particularly prevalent in some areas this year because of the mild winter of 1988-89. Once again there was no evidence of the most important type of decline seen in spruce in continental Europe which is now believed to be caused by magnesium deficiency. The high levels of magnesium deposition found in Britain make it unlikely that this type of decline will occur here.
- 123 We also published in November our detailed analysis of the results of the 1988 surveys. This confirmed the presence of a most complicated set of interacting factors affecting tree condition, but did not reveal any straightforward relationships between air pollution and forest health. Similar conclusions are being reached in other countries, where research is tending to suggest that any interactions between forest health and air pollution are extremely complex. Marked regional trends in forest condition were identified, although none of these appeared to be directly related to air pollution.
- 124 There has been renewed debate over the role of conifer afforestation in surface water acidification following the publication of the UK Acid Waters Review Group's Second Report in 1989*. The executive summary of this report placed a misleading emphasis on the role of conifer afforestation as a source of surface water acidification. We have since reviewed the main research projects concerned with the effects of forestry on water quality and set out the results in a Forestry Commission Bulletin** published in January 1990.
- 125 The primary cause of acidification is atmospheric pollution. It is the clear view of most scientists engaged in research in this area that there is no evidence that trees themselves cause surface water acidification in the absence of atmospheric deposition. There is certainly no reason for concern, therefore, about the effects of forests in areas where atmospheric deposition is at a low level. Even in areas where such deposition is high, any increase in acidity as a result of trees filtering pollution from the atmosphere is effectively neutralised where the soil has an adequate calcium content. This possible filtering effect may arise because trees scavenge cloud water droplets containing pollutants more effectively than other forms of vegetation such as grass.
- 126 The magnitude and extent of any such filtering effect needs to be quantified so that its significance can be established for a range of vegetation types, and firm conclusions will have to be based on the various long-term studies which are currently being conducted. The results obtained so far from these studies do not, however, support the general thesis of a significantly enhanced acidification effect in forest areas. We will continue to ensure that any further results are published as soon as they become available.

*Second Report of the Acid Waters Review Group: *Acidity in United Kingdom Fresh Waters*, HMSO, £5.00 net.

**Forestry Commission Bulletin No 86: *Forests and Surface Water Acidification*, HMSO, £2.00 net.

- Pine Wood Nematode* 127 Concern has continued to be voiced within the Community about the risks to European forests from a microscopic eelworm known as the Pine Wood Nematode (*Bursaphelenchus xylophilus*). This nematode is endemic in North America but has not caused any deaths of trees there. It has, however, led to considerable losses of pine trees in Japan where it was introduced, it is believed, on timber imported from the USA. It has also been discovered in Korea and Taiwan. There is still much to be learned about the nematode, but it is well established that it can be transmitted from logs or sawnwood to standing trees by *Monochamus* spp, wood-boring longhorn beetles.
- 128 We have accordingly amended our plant health legislation (see paragraph 114) to add non-European species of *Monochamus* to the list of prohibited harmful organisms. As the requirement to land only bark-free coniferous wood is insufficient to eliminate the wood-boring beetle, we have also added the condition that all imports of coniferous wood from non-European countries must be free of bore holes caused by this vector.
- 129 Research is continuing on the nematode, and one of our scientists began a one-year project at the Pacific Forest Research Centre in Victoria, British Columbia in January 1990. EC research programmes were also planned to start in the middle of the year, in association with Canadian and US agencies in particular, to determine the time and temperature specifications needed to eliminate the risk by kiln-drying timber, which is currently an alternative to the requirement that timber should be free of bark and bore holes.
- 130 At the end of the year the EC's Standing Committee on Plant Health was considering proposals which would require Member States to enact national legislation to prohibit imports into the Community of all coniferous wood from countries containing the Pine Wood Nematode unless kiln-dried. A derogation to permit Member States to continue to import coniferous sawnwood from North America, under the alternative safeguards of freedom from bark and from bore holes, was also under consideration at the end of the year. The purpose of this derogation — which was expected to be limited to a period of 12 months — would be to allow the time and temperature specifications for kiln-drying to be agreed and to give the producing industries a reasonable period in which to instal the new kiln-drying facilities. Subject to proper safeguards being in place, we expect that the UK will avail itself of the derogation.
- The Single Market* 131 Negotiations continued in Brussels throughout the year on changes designed to secure the removal of barriers in intra-Community trade from 1 January 1993. Principal among these is the creation of a Community Plant Health Inspectorate, which will work closely with the plant protection organisations in the Member States to ensure that there is a common standard of control. The present system of inspection of controlled agricultural and forestry material in the country of origin, and the issue of a phytosanitary certificate before export, will continue in respect of such goods imported into the Community from third countries. It will no longer be used, however, for trade in agricultural and forestry products between Member States. Instead a system of 'plant passports' is envisaged which will enable movement of goods from one part of the Community to another. This system is intended to incorporate procedures to protect those parts of the Community, like Great Britain, which enjoy freedom from certain European pests because of their isolated situation. The way forward is far from clear, however, and we are concerned that any new procedures should be as effective as those presently in place.
- Dendroctonus micans* 132 Our campaign against *Dendroctonus micans* (the Great Spruce Bark Beetle) has continued. The research surveys we conducted during the year indicated that the maximum rate of spread of this pest has remained at about 3-5 kilometres a year; its population density has also shown a welcome decline. These factors are largely a result of the control measures we apply in the statutorily defined Scheduled Area in Wales and the neighbouring English counties. Besides strict controls over the movement of logs and timber from the Scheduled Area, these measures include the release of *Rhizophagus grandis*, a beetle which is a specific predator of *Dendroctonus micans* and which has proved an effective biological method of keeping the pest in check.

133 The *Dendroctonus Micans* Working Group, which comprises representatives of growers and processors in the private sector as well as the Forestry Commission, met in February. The Group concluded that there was no need to amend the boundary of the Scheduled Area since there is still an effective buffer zone beyond the limits of the infected woodlands.

134 The situation remains fairly static, with only a few local authorities now pursuing an active policy of surveying and felling infected trees. Towards the end of the year we began a review of the statutory control measures. Although it was decided that there was no immediate need to modify either the Dutch Elm Disease (Local Authorities) Order 1988 or the associated Dutch Elm Disease (Restriction on Movement) Order 1988, the schedules to the Orders are likely to be amended in the coming year to reduce further the number of local authority areas in which control measures are deemed to be worthwhile.

Dutch Elm Disease

135 Our Watermark Disease of Willow Order 1986 requires certain control measures to be taken against this disease in the counties of Norfolk, Suffolk, Hertfordshire, Bedfordshire and Essex. The latter county, acting on an agency basis for some of the other local authorities, undertakes inspections and surveys and provides advice to growers of cricket bat willow. The growers, concerned about diminishing stocks of the tree which suffered considerable losses in the October 1987 storm, have recently formed a Cricket Bat Willow Growers' Association and agreed to the introduction of a levy on each cleft produced to help finance research work into the disease at Leeds University. We welcome this initiative and are co-operating with the Group and the research team.

Watermark Disease of Willow

EDUCATION AND TRAINING

136 The amount of training carried out by or on behalf of the Commission continued at the high level of the previous year. Several new courses were developed, covering such subjects as the management of silvicultural operations, conservation principles, plant care, sawlog grading, and financial management. There was a big demand for courses from local authorities, and about 30 per cent of the training effort at our centres in the Forest of Dean and at Ae near Dumfries was devoted to meeting this. The extension of our machine operator training centre at Ae was completed in June and has already brought significant benefits both in terms of training capacity and of consequential reductions of unit costs in field operations.

Training Activity

137 A significant training need was created by the introduction of team briefing as a technique for improving communication between the Commission's staff at all levels (see paragraph 76). With assistance from the Industrial Society, the bulk of this need had been met by the end of the year.

Team Briefing Training

138 The continuing development and enhancement of information technology systems has created difficulties in ensuring that the contents of courses keep abreast of technological change. We have solved this problem by establishing a closer liaison between our training officers and systems designers in order that the development of courses and information technology systems go hand in hand.

Information Technology

PUBLIC RELATIONS

139 Media coverage of forestry continued to focus largely on environmental and land use matters, but there was welcome evidence that the debate is becoming considerably more balanced and informed. The deliberations of the House of Commons Agriculture Committee, culminating in their report on Land Use and Forestry published on 1 February 1990 (see paragraphs 15 to 28), produced some concerted lobbying towards the end of the year and this, together with speculation surrounding the Government's anticipated response, provoked considerable press coverage on policy issues. The growing interest in the part that trees play in ameliorating the greenhouse effect, and the widespread loss of trees as a result of the storms in October 1987 and in January and February 1990, have favourably influenced public perceptions of the role of woodlands in the environment. We issued a record 140 press releases during the year and considerably increased our press relations activities with media briefings, forest visits by national newspaper correspondents and major press launches on key issues. The introduction of guidelines for the management of native pinewoods in Scotland will be followed with more publicity for our efforts to conserve this important part of Scotland's natural heritage.

Press Briefing

Special Projects 140 We held a series of national and local press events to promote our list of 46 Forest Nature Reserves. The publicity for the reserves has drawn attention to the substantial conservation value of the Commission's woodlands and the large number of imaginative conservation projects being carried out by our forest managers in all parts of the country. We launched the first stage of a major public consultation exercise entitled *Great Britain, Great Forest*, aimed at promoting our forests for recreation and tourism and canvassing views on what developments visitors to the forests would like to see. We also began an exercise to brief tourist guides in England, Scotland and Wales on forest attractions and organised a photographic competition in conjunction with *Photo-Answers* magazine entitled *Forest Britain – the Natural Environment*, with Dr David Bellamy presenting the prizes.

Local Initiatives 141 Organised school visits were again a feature of our forest managers' efforts to raise awareness of the values of the forest, and many thousands of pupils enjoyed the unique field study experience we offer. A film broadcast by BBC2, and shot entirely in Haldon Forest, Exeter, described the wildlife sanctuary of this *Secret Forest*. A Prince of Wales award was given for the conservation development of the Llyn Parc Mawr wetland bird sanctuary near Angelsey, and a New Forest keeper, Mr John Gulliver, was one of five finalists in a Times/BBC conservation award scheme. In North Scotland Conservancy special hides were established for the public to view otters at Kylerhea, Isle of Skye, and at Strathrory 6,000 visitors in 25 days saw hen harriers nesting in a young spruce forest. A joint exhibition was mounted with the Royal Society for the Protection of Birds at Inverness Museum, and was opened by the Duke and Duchess of Kent. In our South Scotland Conservancy, army engineers on exercise in the Galloway Forest Park did good work on building and restoring children's play furniture, car parks and bridges.

Publications and Public Enquiries 142 Enquiries from the general public continued at a substantial level. A large proportion of these came from teachers and school children, with secondary pupils increasingly seeking to include forestry and land use in their project work. Our primary schools pack, the preparation and publication of which we described in last year's report, has been a considerable success and has had to be reprinted to meet demand. We produced further issues of our magazine *Forest Life*, improved its distribution and increased its circulation. We were delighted that it received awards for the second year in succession (see paragraph 68).

143 A number of free publications were issued during the year. A new booklet *Why Grow Trees?*, aimed at informing the public about modern multi-purpose forestry policies, was produced to coincide with the launch of our joint community forests initiative with the Countryside Commission and has continued to receive a wide distribution since; we also issued a leaflet *The Forestry Commission and Urban Forestry*, designed to inform potential partners in community forest projects of our role in the provision of technical advice, research and grants. In response to mounting public concern about the state of health of Britain's trees, we replaced our booklet on air pollution and forestry with a more comprehensive booklet for schools and the general public under the title *Environmental Threats to Forests*. Details of these and other new publications may be found at Appendix X.

A firefighter in full protective gear, including a helmet and heavy jacket, is kneeling in a forest. The firefighter is positioned in the lower-left quadrant of the frame, facing away from the camera and slightly to the right. The forest consists of many thin, vertical tree trunks, creating a dense, textured background. The ground is covered with dry leaves and twigs. The lighting is somewhat dim, suggesting an overcast day or a shaded forest. In the top right corner, there is a solid yellow rectangular area containing the word "FINANCE" in black, serif, all-caps font.

FINANCE

FINANCE

FORESTRY FUND RECEIPTS AND PAYMENTS

- 144 The Grant-in-Aid voted by Parliament forms the Commission's agreed cash limit. For 1989-90 the amount voted was £72.5 million of which £61.0 million was taken into the Forestry Fund, leaving £11.5 million to be handed back to the Exchequer. The Commission spent £58.2 million (£53.5 million in 1988-89), leaving a balance of £2.8 million in the Forestry Fund which will also be returned to the Exchequer.
- 145 Receipts from the Commission's activities amounted to £104.7 million, against £99.8 million in 1988-89. In addition, cash received from the disposal of land, buildings and plantations amounted to £13.0 million during the year which, together with £3.6 million brought forward from 1988-89, meant that a total of £16.6 million was due to be surrendered to the Consolidated Fund. Of this, £14.5 million had been paid by 31 March 1990, leaving a balance of £2.1 million to be surrendered during 1990-91.
- 146 Payments, excluding amounts paid or due to the Consolidated Fund, totalled £162.9 million. These were £9.7 million (6 per cent) above the 1988-89 total of £153.2 million. Payments in respect of staff remuneration, pensions, purchase of materials, land acquisitions and capital items rose by £5.7 million and those for private woodland and other grants by £4.3 million, while VAT remittances to Customs and Excise decreased by £0.3 million.
- 147 The statement of Forestry Fund Receipts and Payments, including notes thereon, appears on pages 44 and 45.
-

FORESTRY AUTHORITY SERVICES

- 148 Of the £58.2 million spent in 1989-90, £28.6 million was on Forestry Authority services compared with £22.6 million in 1988-89 — an increase of £6.0 million over the previous year. This rise in expenditure was mainly associated with grants paid to private woodland owners and increased consultation and management costs arising from the introduction of the new grant arrangements.
- 149 The statement of expenditure on Forestry Authority services, together with notes, appears on pages 62 and 63.
-

FORESTRY ENTERPRISE

- Net Operating Surplus* 150 A new Operating Account was introduced in 1987-88, at the start of the current triennium, to identify more clearly the annual surplus earned by the Commission including that arising from the increase in the value of the growing stock of plantations.
- 151 For the year ended 31 March 1990, the overall net operating surplus arising from plantations, forest recreation and amenity, and other activities was £66.0 million (£62.6 million in 1988-89).
- 152 For plantations, the increase in the value of the growing stock of £79.7 million, together with income (mainly from the sale of timber) of £78.6 million, exceeded expenditure (net of subsidies) of £90.6 million by £67.7 million. After taking into account a deficit of £2.5 million on the book value of properties sold, the net operating surplus from plantations was £65.2 million (£62.0 million in 1988-89).
- 153 Other commercial activities — campsites and cabins, agency work and the Lake Vyrnwy management scheme — had an income of £5.6 million. After deducting expenditure of £4.8 million, these earned a net operating surplus of £0.8 million (£0.6 million in 1988-89).

154 On forest recreation and amenity, the net expenditure was £9.3 million which was met from the subsidy for this activity (£8.1 million in 1988-89).

155 The Grant-in-Aid applied to the Forestry Enterprise in 1989-90 was £29.6 million (£30.9 million in 1988-89), including implied planting/restocking and forest recreation subsidies of £13.6 million (£12.6 million in 1988-89). Receipts obtained from the disposals programme and surrendered to the Consolidated Fund amounted to £12.9 million (£12.4 million in 1988-89).

Grant-in-Aid

156 The accounts of the Forestry Enterprise appear on pages 46 to 61.

Accounts

FIRST TRIENNIAL
FINANCIAL REVIEW

157 The accounts of the Forestry Enterprise were reconstructed from 1 April 1972 with the intention that the forest estate would be revalued at five-yearly intervals and performance measured in relation to target rates of return in real terms. The review period has since been shortened to three years. The results for the first triennium covering 1987-90 are summarised below.

158 The financial review has four main functions:—

- a. to revalue the assets and staff superannuation liability;
- b. to analyse performance over the triennium and assess the rate of return over the whole rotation;
- c. to provide the plantation standards against which the Commission's performance can be measured during the next triennium;
- d. to calculate for the next triennium the subsidies for new planting and restocking and forest recreation and amenity.

159 A complete revaluation of the Commission's assets was carried out at 31 March 1990. The overall effect has been to increase the value of plantations (timber, land and roads) by £120.7 million to £2,271.2 million, and the value of other land and buildings, machinery, plant and equipment by £29.7 million to £135.6 million. The actuarial valuation of the Forestry Commission Pension Scheme revealed increased liabilities of £10.5 million, and the provision for superannuation has been increased accordingly. Over the triennium the capital of the Forestry Enterprise has increased by £625.3 million to £2,108.8 million at 31 March 1990. This increase comprises Grant-in-Aid of £11.6 million; the revaluation reserve of £449.8 million; and the retained operating surplus for the triennium of £163.9 million.

Revaluation

Measurement of Performance

160 Although actual income received during the triennium was lower, expenditure was also below the standards, giving a net improvement of £12.9 million (in £('90)). Timber prices were lower than the standards but the effect was more than offset by savings in silviculture, harvesting and administration costs. At the end of the triennium revised assessments of future volumes of work, outputs, costs and prices resulted in a plantation valuation £120.7 million above book value. The cumulative return from the capital reconstruction in 1972 to the end of the rotation has consequently improved to 3.2 per cent (with subsidies) and 2.9 per cent (without subsidies), compared with returns calculated at the time of the 1987 valuation of 3.1 per cent and 2.7 per cent.

Plantations

161 Over the triennium our campsites and cabins achieved a total surplus of £1.7 million. The real rate of return on capital invested for the year ended 31 March 1990 was 10.7 per cent compared with the target rate of return of 6 per cent. The rate of return for the year ended 31 March 1989 was 11.2 per cent and for the year ended 31 March 1988 was 7.6 per cent, against the target rate of return of 5 per cent for those two years.

*Commercial Recreation
(Campsites and Forest Cabins)*

Other Commercial Activities 162 The accounts show a surplus in 1989-90 of £0.1 million for agency work and the joint management scheme at Lake Vyrnwy. Over the triennium the total surplus was £0.2 million.

RECALCULATION OF SUBSIDIES FOR THE 1990-1993 TRIENNium

Planting Subsidies 163 The overall rate of return on new planting and on restocking is expected to rise to 2.9 per cent. The rates of return in this area have improved progressively from 1.75 per cent in 1977-82, 2.25 per cent in 1982-87, and 2.5 per cent in 1987-90. This has largely been achieved through the introduction of improved methods and working practices, leading to lower expenditure.

164 The improvement in the forecast rates of return will reduce the total planting subsidies (that is, the notional subsidies we receive where new planting and restocking is projected to earn less than the target rate of return of 3 per cent in real terms) to some £3.3 million in the 1990-93 triennium. This compares with the total planting subsidies of £13.3 million (in £('90)) which were required for the 1987-90 triennium. The Conservancy subsidies, with implied real rates of return, are detailed in Note 12 to the Accounts at page 57. The lower returns in England reflect the higher proportion of broadleaved planting there.

Forest Recreation and Amenity Subsidy

165 The total subsidy claimed for the three years 1987-90 was £27.5 million (in £('90)) compared to the £25.3 million forecast. For the next triennium, the subsidy has been set at £32.0 million (in £('90)) for annual expenditure of some £10.6 million on conservation, amenity and the provision of recreation activities, for which there is a growing demand. The number of planned visits made to Commission forests is estimated to be some 50 million a year.

RECREATIONAL VALUE OF FORESTS

166 In their 1987 report on the Commission's objectives and achievements*, the Public Accounts Committee acknowledged the Commission's undoubted success in meeting its primary objectives of increasing the quantity of timber supplied to industry and enlarging Britain's forest area. They noted, however, that the Commission had other important objectives which inevitably increased the financial cost of achieving the primary objective, and expressed concern that these secondary objectives were not adequately quantified for the purposes of deciding priorities, setting targets and assessing performance. In its response to the report**, the Government agreed that the Commission should consider what further quantification of the non-commercial benefits would be practical.

167 One of the areas in which we have been undertaking such quantification relates to the value of informal recreation in our forests. Environmental consultants from the University of Newcastle were asked to calculate the apparent value of forests to day visitors. Market researchers were employed to estimate the number of visits to forests. By using sampling techniques it was possible to draw conclusions relating to the whole forest estate. These suggest that the value of the estate as a recreational resource may be much greater than previously thought. We plan to publish some of the new findings in due course.

*Twelfth Report from the Committee of Public Accounts: Session 1986-87, HC185, HMSO, £4.20 net.

**Treasury minute on the 11th to 16th, 18th and 19th Reports from the Committee of Public Accounts: Session 1986-87, HC236, HMSO, £2.90 net

168 A table of salient facts is provided on the following page. This gives details of key financial and physical achievements in the last five years, as well as a number of performance measurements.

J RAYMOND JOHNSTONE, *Chairman*

T R CUTLER, *Deputy Chairman and
Director General*

R T BRADLEY

I D COUTTS

D L FOOT

D S GRUNDY

R P HANCOCK

T S MALLINSON

J D POLLOCK

F M STRANG STEEL

C R WOOSNAM

P J CLARKE, *Secretary*
FORESTRY COMMISSION
231 Corstorphine Road
Edinburgh EH12 7AT

FORESTRY AUTHORITY AND FORESTRY ENTERPRISE

SALIENT FACTS

		Year ended 31 March				
		1986	1987	1988	1989	1990
Forestry Authority						
Grant-in-Aid	£('90) million	20.3	21.9	23.2	24.0	28.6
Area planted by private sector on which grants were paid						
New planting	thousands hectares	19.0	19.1	23.8	25.1	15.4
Restocking	thousands hectares	4.3	4.5	4.9	4.8	6.1
Private woodlands grants and administration costs	£('90) million	11.3	12.7	13.7	14.4	18.8
Area covered by grant schemes	thousands hectares	735	778	821	811	832
Consultation and administration costs of grant schemes	£('90) per hectare managed	4.3	5.0	4.2	4.8	5.6
Research	£('90) million	7.2	7.9	8.5	8.4	8.8
Forestry Enterprise						
Grant-in-Aid	£('90) million	43.0	39.7	31.7	32.9	29.6
Proceeds from sales of properties and plantations	£('90) million	21.0	17.7	15.3	13.4	13.0
Sales of timber	£('90) million	69.9	78.0	81.1	78.8	77.1
Sales of timber	Millions cubic metres	3.1	3.3	3.4	3.6	3.5
Gross surplus (income less direct costs) from sales of timber	£('90) per cubic metre	11.6	13.8	14.1	12.5	12.6
Net surplus (gross surplus less administration costs)	£('90) per cubic metre	7.2	9.6	10.2	9.1	9.1
Total area managed	thousands hectares	1166	1156	1149	1144	1140
Forest land	thousands hectares	928	926	919	915	914
New planting	thousands hectares	4.3	5.3	5.0	4.1	4.1
Forest cost	£('90) per hectare	906	1079	908	891	900
Restocking	thousands hectares	7.3	8.0	8.2	8.5	7.9
Forest cost	£('90) per hectare	1217	1032	1040	978	949
Forest recreation and amenity net expenditure	£('90) million	7.2	8.0	9.7	8.6	9.3
Commercial recreation (return on assets employed)	%	5.7	5.4	7.6	11.2	10.7
Forestry Authority and Forestry Enterprise						
Staff at 31 March	Numbers	5967	5798	5511	5118	4850

FINANCIAL
STATEMENTS
AND
ACCOUNTS
1989—90



Contents

	<i>Page</i>
FOREWORD	43
FORESTRY AUTHORITY AND FORESTRY ENTERPRISE	
Statement of Forestry Fund Receipts and Payments	44
Notes	45
FORESTRY ENTERPRISE	
Accounting Policies	46
Operating Account	49
Balance Sheet	50
Statement of Source and Application of Funds	51
Notes to the Accounts	52
FORESTRY AUTHORITY SERVICES	
Statement of Expenditure	62
Notes	63

FOREWORD

1. CONSTITUTIONAL STATUS

- (a) The Forestry Commission was established in 1919. Under legislation now consolidated mainly in the Forestry Act 1967 it is charged with the general duties of promoting the interests of forestry, the establishment and maintenance of adequate reserves of growing trees and the production and supply of timber. Since 1985, the Commission has also had a statutory duty to seek to achieve a reasonable balance, in carrying out its functions, between the needs of forestry and the environment.
- (b) The Commission has the legal status of and functions as a Government Department. It reports individually and collectively to Forestry Ministers, namely the Secretary of State for Scotland (who takes the lead role), the Minister of Agriculture, Fisheries and Food and the Secretary of State for Wales, to whom it is responsible for advice on forestry policy and for the implementation of that policy. It is, however, different from the usual Departments of State in that it has a Chairman and Board of Commissioners with statutorily prescribed duties and powers.

2. FUNCTIONS AND OBJECTIVES

The Forestry Commission fulfils two distinct roles:-

- (a) As the Forestry Authority it acts as adviser on Government forestry policy and undertakes functions such as research, technical advice, plant health, the control of tree felling and the administration of grant aid for the private sector.
- (b) As the Forestry Enterprise it acts as a trading body primarily responsible for the management of Commission forests but with other functions such as the protection and enhancement of the environment and the provision of recreational facilities.

3. ACCOUNTS

The Forestry Commission produces the following accounts and financial statement which are audited by the Comptroller and Auditor General:-

- (a) the Appropriation Account, which, in accordance with the Appropriation and Exchequer and Audit Department Acts, sets out the funds voted by Parliament for the Forestry Commission as a whole and the amounts withdrawn therefrom into the Forestry Fund;
- (b) Statement of Forestry Fund Receipts and Payments;
- (c) accounts for the Forestry Enterprise in a format approved by the Treasury.

Additionally, the Forestry Commission produces an unaudited statement detailing the net expenditure on Forestry Authority Services and the consequential amount of Grant-in-Aid appropriated for the Forestry Authority.

The Appropriation Account is published separately along with such accounts for other Government Departments. The other three accounts or statements are published in the Commission's Annual Report.

4. ACCOUNTING PRINCIPLES

The Appropriation Account and Statement of Forestry Fund Receipts and Payments are prepared on a cash basis. The Statement of Expenditure on Forestry Authority Services and the Forestry Enterprise Balance Sheet and Accounts are prepared on an accruals basis, modified in the latter to include the expectation value of cash flows from forest plantations.

The Accounting policies adopted in the Forestry Enterprise accounts in relation to the valuation of machinery, plant and equipment and stocks of consumable materials and supplies are also followed in completing the Statement of Expenditure on Forestry Authority Services.

5. MARKET VALUE OF PROPERTIES INCLUDING PLANTATIONS

Non-Afforested Land and Buildings

These properties were revalued as at 31 March 1990, generally on an open market value basis, and the valuation of £108.4 million has been brought into the Forestry Enterprise Accounts to replace the previously indexed figures.

Plantations

The Plantations (land, timber and roads) were revalued on an expectation value basis as at 31 March 1990. An assessment is also made of their market value at the end of each financial year.

The market value at 31 March 1990 is estimated to be £1,600 million. This is £671.2 million lower than the expectation value of £2,271.2 million shown in the Forestry Enterprise Accounts.

The market value assessment is carried out on the basis of the Forestry Estate being sold in an orderly manner as between a willing seller and a willing buyer in full accordance with public accountability and assuming its existing use. It is further assumed that no restraints exist, as they do in practice, from title, statute and environmental considerations. The assessment takes due account of prices realised in the Commission's woodland sales with such prices reflecting the financial and other criteria adopted by purchasers. The expectation value represents the future value of plantations in real terms, discounted at the Commission's target rate of return of 3 per cent to the present time. It is for this reason that the two values can be expected to differ.

FORESTRY AUTHORITY AND FORESTRY ENTERPRISE
STATEMENT OF FORESTRY FUND RECEIPTS AND PAYMENTS
 FOR THE YEAR ENDED 31 MARCH 1990

	£ thousand	<i>Previous Year</i> £ thousand
<i>Receipts</i>		
Sales of timber	87,749	84,308
Miscellaneous	16,934	15,204
Disposal of land, buildings and plantations - by exchanges	63	249
	104,746	99,761
 Grant-in-Aid		
Forestry Enterprise	32,451	33,942
Forestry Authority	28,549	22,558
	61,000	56,500
Disposal of land, buildings and plantations - cash received payable to the Consolidated Fund	12,955	12,410
	178,701	168,671
Balance brought forward at 1 April 1989	6,717	6,093
	185,418	174,764
 <i>Payments</i>		
Salaries, wages and related expenses	61,354	60,617
Pensions and gratuities to retired staff	18,275	16,659
Materials, contract services and general expenses	50,805	47,864
Acquisition of land, buildings and plantations and construction of buildings	3,226	3,023
Plant, machinery and equipment	8,161	7,930
Grants to private woodland owners (£14,024,610), universities, institutions etc	14,840	10,508
Remittances of VAT to Customs and Excise	6,271	6,586
	162,932	153,187
Payments to the Consolidated Fund		
— cash received from disposal of land, buildings and plantations, including £3,643,198 brought forward from 1988-89	14,509	11,644
— excess cash balance brought forward from 1988-89	3,074	3,216
	180,515	168,047
Balance carried forward at 31 March 1990 to be surrendered to the Consolidated Fund during 1990-91	4,903	6,717
	185,418	174,764

The notes attached form part of this statement.

T R Cutler
 Accounting Officer
 19 October 1990

I certify that I have examined the above financial statement in accordance with S44(3) of the Forestry Act 1967 and the National Audit Office auditing standards.

In my opinion the financial statement properly presents the receipts and payments of the Forestry Fund for the year ended 31 March 1990 and complies with S44(2) of the Forestry Act 1967.

I have no observations to make on this financial statement.

John Bourn
 Comptroller and Auditor General

11 December 1990
 National Audit Office

NOTES

1. General

Expenditure incurred by the Forestry Commissioners in the exercise of their powers and 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 in 1989-90 were paid into this Fund.

Receipts and payments are shown inclusive of VAT where applicable.

2. Grant-in-Aid

The Grant-in-Aid, which also forms the agreed cash limit, is determined for each year on the basis of Supply Estimates prepared in advance setting out the expected receipts and payments calculated at estimated outturn prices. Pursuant to Section 42(4) of the Forestry Act 1967, capital sums received from sales of land etc are paid into the Forestry Fund although they do not affect the calculation of the Grant-in-Aid. However such receipts are surrendered from the Forestry Fund to the Consolidated Fund as directed by Ministers under Section 41(4A) of the Forestry Act 1967 together with the excess cash balance held at the end of each financial year.

3. Receipts

The Grant-in-Aid of the Forestry Fund voted by Parliament for 1989-90 was £72,451,000 of which £61,000,000 was drawn into the Forestry Fund leaving £11,451,000 to be surrendered from the Vote to the Consolidated Fund.

Timber receipts were £3,441,000 higher than in 1988-89.

Miscellaneous receipts were £1,730,000 more than in 1988-89. This was mainly due to increases in Silviculture £342,000; Forest Recreation £370,000; Commercial Recreation £446,000; Agency £372,000; Administration and Miscellaneous £245,000 and Superannuation contributions of £109,000. These were partly offset by a reduction in Estate Receipts of £193,000.

4. Payments

Salaries, wages and related expenses were £737,000 (1 per cent) more than in 1988-89. Increased rates of pay and allowances were largely offset by reduced numbers of employees.

Pensions and gratuities to retired staff rose by £1,616,000 (10 per cent). This reflects the increasing numbers of pensioners, together with higher average pensions, redundancy lump sum payments and transfers by former employees of preserved awards to personal pension schemes.

Materials, contract services and general expenses increased by £2,941,000 (6 per cent) due mainly to price increases and greater use of contractors.

Overall payments for land acquisition and building construction were £203,000 higher than in 1988-89. Acquisition of new land for planting was down by £789,000 which continued to reflect the scarcity of land coming onto the market, whereas building construction was up by £992,000.

Payments for purchases of vehicles, plant, machinery and office equipment increased by £231,000 compared with 1988-89. Computer and office equipment purchases were £542,000 higher than in 1988-89, but this was partly offset by a reduction of £311,000 in payments for other items of capital.

Grants totalled £14,840,000 in 1989-90, £4,332,000 more than in 1988-89. This largely reflects an increase of £4,290,000 to £14,025,000 for grants paid to private woodland owners.

Remittances of VAT to HM Customs and Excise decreased by £315,000.

5. Balance Carried Forward at 31 March 1990

The balance amounting to £4,903,424 carried forward at 31 March 1990 will be paid into the Consolidated Fund in 1990-91 in accordance with the Ministerial direction given under Section 41(4A) of the Forestry Act 1967. It comprises £2,089,144 relating to the unremitted balance of disposal proceeds received in 1989-90 and £2,814,280 in respect of the excess cash balance remaining at 31 March 1990. Disposal receipts in 1989-90 from the sale of properties and plantations totalled £12,955,144 which together with £3,643,198 brought forward from 1988-89 were payable to the Consolidated Fund. As at 31 March 1990, £14,509,198 had been paid over leaving a balance of £2,089,144 to be surrendered.

FORESTRY ENTERPRISE ACCOUNTING POLICIES

1. General

The key factor in accounting for forestry is the determination of satisfactory performance indicators for a crop whose typical rotation cycle can span 50 years for coniferous trees and more than 100 years for broadleaved trees. Traditional measures of profitability can be established only when the Forestry Enterprise has a cycle of production which is financially self-sufficient. At that stage revenue would be sufficient to re-establish the area harvested, maintain the woodlands and provide a return on funds invested. Because of the relative immaturity of its plantations the Enterprise is unlikely to achieve self-sufficiency until beyond the turn of the century.

2. Form of Accounts

A form of accounts, based on the expectation value concept, has been in use since 1972 with five-yearly reviews of asset values, subsidies and performance. With effect from 1 April 1987, such reviews are to be carried out at three-yearly intervals (triennia) and a new form of Operating Account has been introduced which aims to identify more clearly the annual surplus earned through the increase in the value of plantations. The principal aims of the accounts are:-

- (a) to establish, at the start of each review period, an asset valuation capable of earning a rate of return equivalent to the maximum that could be earned in northern Europe on good sites close to markets;
- (b) to measure performance against the target rate of return in (a) above by comparison of changes in the value of the growing crop with actual expenditure and income incurred;
- (c) to compare actual expenditure and income incurred against standards;
- (d) to show subsidies on new investments and other expenditure not capable of achieving the target rate of return;
- (e) to show as the forestry subsidy the effect of the difference between the target rate of return and that set for other public sector bodies.

3. Target rate of return

The Forestry Commission is set a target rate of return of 3 per cent in real terms on its forest estate assets and any new investment therein. The target rate of return on its commercial recreation assets is 6 per cent, which is the required rate of return for low risk public sector trading activities.

4. Investment valuation

At the end of each review period plantations and other tangible fixed assets are revalued by professionally-qualified staff employed by the Forestry Commission. The commercial recreation assets are revalued by a specialist firm.

During each review period, the valuation of plantations and associated other tangible fixed assets is updated annually using a general price index since no industry index is available. The commercial recreation assets are updated by professionally-determined in-house indices. All such revaluation surpluses and deficits are taken to the Revaluation Reserve.

Apart from acquisitions and disposals, there are physical changes in the crop arising from growth and removal of timber. These changes, which currently enhance the value of the plantations, are reflected in the Operating Account by the entry termed 'Growth in Standard Value of Plantations', which is calculated from the alteration in the net present value of future standard cash flows as the crop moves one year nearer to maturity.

5. Subsidies

Subsidies are dealt with as follows:-

- (a) planting and restocking subsidies — the extent to which investment in both new planting and restocking is estimated to be incapable of earning the target rate of return;
- (b) forest recreation and amenity subsidy — the net cost of the provision of recreational facilities for which commercial objectives cannot be set;
- (c) forestry subsidy — the difference between the target rate of return and that set for public sector trading bodies is identified in a note to the accounts and is a measure of the opportunity cost of new investment in forestry.

6. Measurement of Performance

Plantations

The Commission's plantations are comparatively immature and its operations are thus not yet self-financing. However, the crop continues to grow in value, and financial performance is measured by comparing changes in the value of the crop against actual expenditure and income. Revaluations of the plantations are carried out on a three-year cycle and in order to provide interim measurements a standard value is assessed annually based on the reduction in the amounts and timings of future cash flows built into the opening valuation.

During the review period, the difference between the growth in standard value of plantations and the actual expenditure and income, which represents the net operating surplus in the Operating Account, is also analysed in a note to the accounts.

Commercial Recreation

Operational performance is measured by expressing the net operating surplus included in the Operating Account as a percentage return in real terms on assets employed, which is then compared with the target rate of return.

7. Accounting Concepts

Since the measurements of performance are against target rates of return in real terms, the accounting records of the Forestry Commission are maintained on a modified current cost basis. Income and expenditure is adjusted using the GDP price deflator, and the accounts are prepared accordingly. Gearing adjustments are not made because there is no external borrowing, and no adjustment is made to reflect the impact of price changes on the financing of monetary working capital since it is considered to be immaterial. Supplementary historical cost statements are not prepared because in the opinion of the Commissioners this would be an unnecessarily costly exercise.

Without limiting the information given, the accounts meet the requirements of the Companies Acts and of the Statements of Standard Accountancy Practice where relevant. The inclusion within the Growth in Standard Value of Plantations entry in the Operating Account of an element for unrealised surpluses, arising from the reduction in the period over which future income cash flows are discounted, is a departure from normal accounting conventions, but is in line with Section 226(5) of the Companies Act 1985 to enable the financial statements to give a true and fair view.

8. Depreciation

Depreciation is provided on all tangible fixed assets except plantations, freehold and leasehold land at rates calculated to write off the valuation, less estimated residual values, of each asset evenly over its expected useful life as follows:-

Freehold buildings	—	over 20 to 80 years
Leasehold buildings	—	over the lease term
Plant and machinery	—	over 3 to 16 years
Office equipment	—	over 2 to 20 years

9. Stocks

Finished goods and work in progress are valued as follows:-

- (a) timber at the cost of production;
- (b) seed at the lower of cost of collection or net realisable value;
- (c) plants and livestock at net realisable value;
- (d) consumable materials and supplies at current replacement cost.

Cost of production and collection comprises labour and attributable administrative expenses based on the normal level of activity. Net realisable value is based on estimated selling prices less further costs expected to be incurred to completion and disposal.

10. Provision for bad and doubtful debts

Specific provisions for bad and doubtful debts are set aside on the basis of a review at each year end.

11. Research

The research expenditure of the Forestry Commission is identified in total in the Forestry Authority accounts. The expenditure is subsequently attributed to the Forestry Authority and the Forestry Enterprise in the ratio of 50:50 on the basis of assessed workloads, with the Enterprise share being charged to the Plantations activity in the Operating Account as part of forest costs.

12. Government funding

Government funding to the Forestry Commission to meet its current excess of payments over retainable receipts is by means of an annual Grant-in-Aid. The Forestry Enterprise share of this funding is credited in the accounts as follows:-

Operating account	—	planting and restocking subsidies, being the extent to which new investment in planting and restocking is estimated to fall short of the target rate of return.
	—	forest recreation and amenity subsidy, being the net cost of the provision of recreational facilities for which commercial objectives cannot be set.
Grant-in-Aid account	—	the balance representing the funding of all other activities of the Forestry Enterprise.

Receipts from the disposal of land, buildings and plantations are not retained but surrendered to the Consolidated Fund. These receipts nevertheless represent a reduction in the call upon Government funding and appropriate adjustments are made to the Capital Account.

13. Superannuation scheme

Legislation relating to the superannuation of the Forestry Commissioners and Commission staff is to be found in Part II to Schedule 1 of the Forestry Act 1967 as amended by the Superannuation Act 1972. The superannuation benefits and contributions payable are identical to those of the Principal Civil Service Pension Scheme, except that such benefits are paid out of the Forestry Fund and not the Civil Service Superannuation Vote.

Accounting Policies (continued)

The provision for superannuation reflects the liabilities of the Forestry Commission and is revalued by the Government Actuary at the beginning of each triennium. During the triennium the provision is increased by:-

- (a) contributions received from employees;
- (b) notional employers' contributions determined on the basis of funding calculations made by the Government Actuary taking into account the revaluation of the provision for the scheme's liabilities at each actuarial investigation;
- (c) a revaluation adjustment based on a general price index;
- (d) notional return on assets of 3 per cent.

Superannuation benefits are met on a Pay As You Go basis and benefits paid in the year are charged against the provision. The provision is not specifically invested, but since part of the forestry assets is deemed to represent the investment of the scheme, the provision is credited with a notional return of 3 per cent on those assets by an appropriation out of the Net Operating Surplus for the year.

FORESTRY ENTERPRISE
OPERATING ACCOUNT
 FOR THE YEAR ENDED 31 MARCH 1990

	<i>Notes</i>	Plantations £ million	Forest Recreation and Amenity £ million	Other Activities £ million	Total £ million	<i>Previous Year £ million</i>
Income	10(a) & (b)	78.6	1.3	5.6	85.5	81.3
Expenditure						
Forest costs		68.8	5.9	3.8	78.5	76.0
Administrative expenses	14	26.1	4.7	1.0	31.8	29.4
		94.9	10.6	4.8	110.3	105.4
Less subsidies	12	4.3	9.3	—	13.6	12.6
		90.6	1.3	4.8	96.7	92.8
Surplus/(Deficit) of Income over Expenditure		(12.0)	—	0.8	(11.2)	(11.5)
Growth in standard value of plantations	10(a)	79.7	—	—	79.7	73.3
Surplus/(Deficit) on sale of properties	13	(2.5)	—	—	(2.5)	0.8
Net Operating Surplus for the Year	10(a) & (b)	65.2	—	0.8	66.0	62.6
Appropriated to						
Provision for Superannuation (Note 6) ...					8.7	8.0
Retained surplus for year (Note 9) ...					57.3	54.6

The statement of accounting policies and the notes form part of these accounts.

FORESTRY ENTERPRISE
BALANCE SHEET
AS AT 31 MARCH 1990

	<i>Notes</i>	£ million	<i>Previous Year £ million</i>
FIXED ASSETS			
Plantations ...	1(a)	2,271.2	1,955.4
Other tangible assets	1(c)	135.6	99.2
		2,406.8	2,054.6
CURRENT ASSETS			
Stocks	2	8.5	10.5
Debtors	3	12.7	12.4
Cash at banks and in hand	4	5.4	7.7
		26.6	30.6
CREDITORS — amounts falling due within one year	5	11.3	12.3
NET CURRENT ASSETS		15.3	18.3
TOTAL ASSETS LESS CURRENT LIABILITIES		2,422.1	2,072.9
PROVISION FOR SUPERANNUATION	6	313.3	283.0
CAPITAL AND RESERVES			
Capital at 31 March 1987		1,483.5	1,483.5
Cumulative movements in the triennium to 31 March 1990 transferred to Capital			
Grant-in-aid ...	7	11.6	8.5
Revaluation Reserve	8	449.8	191.3
Retained Surplus ...	9	163.9	106.6
		625.3	306.4
Capital at 31 March 1990		2,108.8	
		2,422.1	2,072.9

The statement of accounting policies and the notes form part of these accounts.

T R Cutler
Accounting Officer
19 October 1990

I certify that I have examined the financial statements on pages 46 to 61 in accordance with the provisions of the Exchequer and Audit Departments Act 1921 and the National Audit Office auditing standards.

In my opinion the financial statements give, under the principles embodied in the Statement of Accounting Policies, a true and fair view of the affairs of the Forestry Enterprise activities of the Forestry Commission at 31 March 1990 and of its results and source and application of funds for the year then ended and have been properly prepared in accordance with Section 5 of the Exchequer and Audit Departments Act 1921 and directions made thereunder.

I have no observations to make on these financial statements.

John Bourn
Comptroller and Auditor General

11 December 1990
National Audit Office

FORESTRY ENTERPRISE
STATEMENT OF SOURCE AND APPLICATION OF FUNDS
FOR THE YEAR ENDED 31 MARCH 1990

	<i>Notes</i>	£ million	<i>Previous year £ million</i>
SOURCE OF FUNDS			
Net operating surplus for the year		66.0	62.6
Adjustment for items not involving the movement of funds:-			
Depreciation	1(c)	8.5	7.3
Superannuation	6	9.9	9.7
Book value of land newly planted		1.7	2.1
Subsidies	12	(13.6)	(12.6)
Growth in standard value of plantations	10(a)	(79.7)	(73.3)
Deficit on sale of properties ...	13	0.7	(2.2)
Other items		0.2	0.1
		(72.3)	(68.9)
Total funds absorbed by operations		(6.3)	(6.3)
Funds from other sources:-			
Grant-in-Aid	7	32.4	33.9
Proceeds from sale of properties	13	13.0	12.6
Other items		1.8	1.9
		47.2	48.4
		40.9	42.1
APPLICATION OF FUNDS			
Purchase of fixed assets etc	1(c)	10.0	10.0
Monies surrenderable to Consolidated Fund	7	15.7	15.4
Superannuation payments	6	18.2	16.7
		43.9	42.1
DECREASE IN WORKING CAPITAL		(3.0)	
Components of increase/(decrease) in working capital			
Stocks	2	(2.0)	(0.7)
Debtors	3	0.3	0.1
Creditors	5	1.0	0.1
Cash at banks and in hand	4	(2.3)	0.5
		(3.0)	

The statement of accounting policies and the notes form part of these accounts.

**FORESTRY ENTERPRISE
NOTES TO THE ACCOUNTS**

1. FIXED ASSETS

	£ million	<i>Previous year £ million</i>
<i>a) Plantations (Land, Roads and Timber)</i>		
Valuation:		
At 1 April 1989 - 898, 224 hectares	1,955.4	1,756.1
Revaluation to current prices ...	126.5	133.1
	2,081.9	1,889.2
Acquisitions	—	
Disposals (at book value) ...	(11.1)	(7.1)
Growth in value for year (Note 10a)	79.7	73.3
Revaluation adjustment	120.7	
Revaluation at 31 March 1990 - 897,903 hectares	2,271.2	1,955.4

b) Valuation of Plantations

(i) Basis of Valuation

The Commission revalued its plantations at 31 March 1990 on an expectation value basis making assumptions about future expenditures and incomes and discounting these at the target rate of 3 per cent. The Commission has established, in consultation with the National Audit Office, a basis for the 1990 valuation of plantations that resolves the uncertainties that led the Comptroller and Auditor General to qualify his certificate to the Commission's 1986-87 Accounts.

(ii) Results of Valuation

The revaluation has increased the value of plantations by £120.7 million above the book value at 31 March 1990. An assessment of the reasons for the increase in the current valuation is provided below.

	Increase/ (decrease) in valuation £ million
Timber revenues	103.7
The price size curves in 1990 assume 60 per cent direct working and 40 per cent standing sales, whereas in 1987 revenue expectations were based on 100 per cent standing sales data. The lower value arising from the direct working adjustment is more than offset by a general improvement in expected prices in the 1990 price size curve. Additionally, the normal resurvey of recently established plantations has increased the anticipated timber yield over earlier projections.	
Forest costs — Silviculture and Roads	65.0
The improved operational practices achieved over the past three years are reflected in the 1990 valuation over the remainder of the rotation and result in a reduction in expected future costs as compared to 1987.	
Charges for use of land, roads and working capital	(97.0)
The market value of land is substantially lower (by some £113 per hectare) than was expected in 1987. Consequently the residual value of land as it is released from the existing estate has also fallen. The residual value of roads has also reduced as a result of the later introduction of roads in the existing plantations.	
Administrative Expenses	49.0
In 1990 the future costs expected over the rotation are lower than anticipated in 1987 reflecting improvements in administrative efficiency, though the saving is partially offset by a change in basis of apportioning these costs to plantation activities.	
Overall increase in plantation valuation	120.7

Notes to the Accounts (continued)

(c) Other Tangible Assets

	Land and Buildings £ million	Machinery Plant and Equipment £ million	Total £ million
Valuation:			
At 1 April 1989 ...	72.9	64.6	137.5
Additions	2.9	7.1	10.0
Disposals and transfers	(3.8)	(7.2)	(11.0)
Revaluation to current prices	4.5	4.2	8.7
Surplus/(Deficit) on revaluation	31.9	(2.2)	29.7
At 31 March 1990	108.4	66.5	174.9
Depreciation:			
At 1 April 1989 ...	—	38.3	38.3
Provided during year	2.2	6.3	8.5
Disposals and transfers	—	(6.3)	(6.3)
Revaluation to current prices	(2.2)	1.0	(1.2)
At 31 March 1990	—	39.3	39.3
Revaluation at 31 March 1990	108.4	27.2	135.6
Net book value at 31 March 1989	72.9	26.3	99.2

(d) The other tangible assets identified above were revalued at 31 March 1990 and the valuation of £135.6 million has been brought into the accounts in place of the previously indexed figures. The effect of the revaluation is to increase Land and Buildings by £31.9 million and to reduce Machinery, Plant and Equipment by £2.2 million.

(e) Analysis of Land and Buildings (Other Tangible Assets)

	£ million	<i>Previous year £ million</i>
Forest estate	70.3	52.9
Surplus estate	28.2	15.4
Forest Recreation and Amenity	3.1	
Commercial recreation ...	6.8	4.6
	108.4	72.9

(f) The basis of valuation of plantations and other tangible fixed assets and the method used to update these valuations to current prices during each triennium is described in the statement of Accounting Policies.

2. STOCKS

	£ million	<i>Previous Year £ million</i>
Timber	4.5	6.1
Plants and seed	1.9	2.1
Consumable materials, supplies and livestock	2.1	2.3
	8.5	10.5

3. DEBTORS

	£ million	<i>Previous Year £ million</i>
Trade debtors	11.4	10.6
Other debtors	1.3	1.8
	12.7	12.4

Other debtors include amounts falling due after more than one year of £1.1 million (£1.2 million at 31 March 1989)

Notes to the Accounts (continued)

4. CASH AT BANKS AND IN HAND

	£ million	<i>Previous Year £ million</i>
Balance of Forestry Fund with Paymaster General	5.1	7.5
Cash at commercial banks and in hand ...	0.3	0.2
	5.4	7.7

5. CREDITORS: amounts falling due within one year

	£ million	<i>Previous Year £ million</i>
Payments received on account ...	0.2	0.3
Trade creditors	3.7	2.8
Other creditors including taxation and social security costs	2.5	2.6
Consolidated Fund surrender:-		
Balance of proceeds from disposal of properties and plantations in 1989-90	2.1	3.6
Excess cash balance	2.8	3.0
	4.9	6.6
	11.3	12.3

6. PROVISION FOR SUPERANNUATION

	£ million	<i>Previous Year £ million</i>
Balance at 1 April 1989	283.0	261.2
Revaluation to current prices (Note 8)	18.4	19.9
	301.4	281.1
Contributions received from staff	1.0	0.9
Notional employers' contribution	9.9	9.7
Notional return on assets (Accounting Policy 13)	8.7	8.0
	321.0	299.7
Payments made during the year	18.2	16.7
	302.8	283.0
Increase in liability on Actuarial Valuation of the scheme at end of triennium	10.5	
Balance at 31 March 1990	313.3	283.0

The Forestry Commission operates a defined benefit pension scheme under which the superannuation benefits and contributions payable are identical to those of the Principal Civil Service Pension Scheme.

The scheme's liabilities were revalued by the Government Actuary at 31 March 1990 using the aggregate method.

The long-term financial assumptions which have the most significant effect on the results of the valuation are the differences between the investment yield and the rates of increase in salaries and prices. It was assumed that the investment yield, represented by the rate of interest credited to the account (including revaluation adjustments), would exceed salary increases by 1.5 per cent and exceed price increases by 3 per cent.

The notional employer's contribution rates will continue at the present levels of 19 per cent for industrials and 22 per cent for non-industrials.

The demographic assumptions used were generally those applied to the Principal Civil Service Pension Scheme, modified where appropriate to take account of sample statistical data provided by the Forestry Commission.

The deficiency of £10.5 million in the notional fund arising from the valuation has been met by a transfer from reserves at 31 March 1990.

Notes to the Accounts (continued)

7. GRANT-IN-AID

	Total for Triennium £ million	1990 £ million	1989 £ million	1988 £ million
<u>Grant-in-Aid for Triennium</u>				
Total Grant-in-Aid	168.8	61.0	56.5	51.3
less: Forestry Authority	71.5	28.6	22.6	20.3
	97.3	32.4	33.9	31.0
less: Excess cash balance to be surrendered	9.0	2.8	3.0	3.2
Grant-in-Aid for Forestry Enterprise	88.3	29.6	30.9	27.8
less: Disposal Receipts	38.4	12.9	12.4	13.1
Subsidies (Note 12)	38.3	13.6	12.6	12.1
	76.7	26.5	25.0	25.2
Forestry Enterprise Grant-in-Aid for triennium transferred to Capital	11.6	3.1	5.9	2.6

8. REVALUATION RESERVE

	Total for Triennium £ million	1990 £ million	1989 £ million	1988 £ million
<u>Revaluation surplus for Triennium</u>				
Plantations				
Revaluation to current prices	339.8	126.5	133.1	80.2
Revaluation adjustment	120.7	120.7	—	—
	460.5	247.2	133.1	80.2
Other tangible assets				
Revaluation to current prices	21.3	9.9	5.9	5.5
Revaluation adjustment ...	29.7	29.7	—	—
Adjustments arising from resurvey and reclassification of properties	(0.6)	0.6	(0.1)	(1.1)
	50.4	40.2	5.8	4.4
	510.9	287.4	138.9	84.6
less: Provision for Superannuation (Note 6)				
Revaluation to current prices	50.6	18.4	19.9	12.3
Revaluation adjustment	10.5	10.5	—	—
	61.1	28.9	19.9	12.3
Revaluation reserve in the triennium transferred to Capital	449.8	258.5	119.0	72.3

9. RETAINED SURPLUS

	£ million
Year ended 31 March 1988	52.0
Year ended 31 March 1989	54.6
Year ended 31 March 1990	57.3
Cumulative retained surplus in the triennium transferred to Capital	163.9

10. MEASUREMENT OF PERFORMANCE YEAR ENDING 31 MARCH 1990

(a) Plantations: Comparison of Actual Income and Expenditure Against Growth in Standard Values Year Ending 31 March 1990

	Notes	Growth in Standard Values £ million	Actual Income and Expenditure £ million	Net Operating Surplus £ million	Net Operating Surplus Previous Year £ million
Income					
Establishment and Maintenance		1.1	1.5	0.4	0.2
Harvesting and Marketing	(i)	81.4	77.1	(4.3)	(3.7)
		82.5	78.6	(3.9)	(3.5)
Forest costs and administrative expenses					
Establishment and Maintenance	(ii)	55.2	50.1	5.1	3.3
Harvesting and Marketing	(iii)	48.8	44.8	4.0	2.9
		104.0	94.9	9.1	6.2
less: Subsidies		4.3	4.3	—	—
		99.7	90.6	9.1	6.2
Surplus/(Deficit) of income over expenditure		(17.2)	(12.0)	5.2	2.7
Notional return on assets for the year	(iv)	(62.5)	—	62.5	58.5
Deficit on sale of properties	(v)	—	(2.5)	(2.5)	0.8
Net Totals Plantations		(79.7)	14.5	65.2	62.0
Notes		(vi)		(vii)	

(i) The decrease in actual income compared with standard is due to the fall in timber prices following the October 1987 storm in southern England.

(ii) Silvicultural costs have been reduced due to the increased efficiency of forest operations. Improved techniques in upgrading roads have also resulted in significant savings.

(iii) Improvements in Harvesting and Marketing costs are due to increased mechanisation and use of contractors, and administrative efficiencies.

(iv) The notional return on assets for the year represents the increase in the standard valuation of plantations which arises from the one year reduction in the period over which future cash flows are discounted at 3 per cent and is an unrealised surplus.

(v) The deficit on sale of properties entry represents the excess over book value and costs on the disposal of £13.7 million of plantations and associated forest estate properties (Note 13).

(vi) The 'standard' cash flow calculations are based on average unit costs and prices set at the start of the triennium and take account of improvements in productivity expected during the triennium. The underlying basis of these averages can vary because of changes in working methods or in programme mix. Although such changes to unit cost and prices will be reflected in the plantation revaluation at the end of each triennium, no adjustment is made to the standard values in the intervening years.

(vii) The net operating surplus is the difference between actual income and expenditure and the estimated 'standard' cash flows (updated for inflation) which were built into the plantation revaluation at the start of the triennium.

(b) Other Activities: Operating Surplus by Activity Year Ending 31 March 1990

	Campsites and Cabins £ million	Agency £ million	Lake Vyrnwy £ million	Total £ million	Previous Year £ million
Income	2.8	2.7	0.1	5.6	4.9
Expenditure	2.1	2.7	—	4.8	4.3
Operating surplus/(Deficit) for year	0.7	—	0.1	0.8	0.6
Notes	(viii)		(ix)		
Operating Surplus for previous year	0.6	(0.1)	0.1	0.6	

(viii) The real rate of return on capital invested in cabin and campsites was 10.7 per cent compared with a target rate in real terms of 6 per cent.

(ix) This represents the income received from the Severn Trent Water Authority in respect of the Commission's equal share in the surplus on the joint management scheme at Lake Vyrnwy in Wales.

Notes to the Accounts (continued)

(c) Expenditure in the Operating Account for the year ending 31 March 1990 includes

	£ million	<i>Previous Year</i> £ million
Hire of Plant and Equipment	1.0	0.9
Research	4.4	3.9

11. MEASUREMENT OF PERFORMANCE AGAINST TARGET RATE OF RETURN

The Forestry Commission is set a target rate of return of 3 per cent in real terms on its plantations and any new investment therein. This is equivalent to the maximum that could be earned in northern Europe on good sites close to markets. The target is reviewed at each valuation.

The target rate of return on the Commission's commercial recreation assets was 5 per cent for the first two years of the triennium and 6 per cent for the year ended 31 March 1990. These targets represent the required rate of return for public sector trading bodies.

Plantations

The rates of return are calculated from the capital reconstruction in 1972 to the end of the rotation (with and without the benefit of subsidies). The capital employed in 1972, plus movements in capital to 1990, all updated to current prices, provides a total investment value that can be compared with the plantation valuation at 31 March 1990.

the calculated rates of return are as follows:-

	From 1972 to end of rotation	
	After taking credit for subsidies	Before taking credit for subsidies
As per the 1987 revaluation	3.1	2.7
As per the 1990 revaluation	3.2	2.9

The forecast rates of return show that the Commission continues to exceed the 3 per cent target after taking account of subsidies, and is also showing an improving trend in the rate of return expected before planting subsidies.

The improvement since 1987 in the cumulative rates of return expected to be achieved over the whole rotation reflects

- the variances from standards arising within the triennium, which amount to £12.9 million (in £('90)), and
- the increase arising from the valuation at 31 March 1990 of £120.7 million which reflects the future benefit over the whole rotation of the changes that have occurred since 1987.

Other Commercial Activities

Commercial Recreation (Campsites and Cabins)

The real rate of return on capital invested in campsites and cabins for the year ended 31 March 1990 was 10.7 per cent compared with a target rate of return of 6 per cent. The rate of return for the year ended 31 March 1989 was 11.2 per cent and for the year ended 31 March 1988 was 7.6 per cent against a target rate of return of 5 per cent for these two years.

12. PLANTING, RESTOCKING AND FOREST RECREATION AND AMENITY SUBSIDIES

(a) Outturn for the year to 31 March 1990

	Planting				Restocking				Forest Recreation and Amenity	Total Subsidies
	Area Planted (hectares)	Subsidy per hectare	Subsidy	Implied Real Rate of Return	Area Planted (hectares)	Subsidy per hectare	Subsidy	Implied Real Rate of Return		
		£	£000	%		£	£000	%	£000	£000
ENGLAND										
<i>Conservancy</i>										
North	195	411	80	2.4	1,442	1,071	1,544	2.2	1,140	2,764
East	—	—	—	—	929	837	778	2.5	2,522	3,300
West	3	2,893	9	0.9	346	585	202	2.7	1,509	1,720
	198	448	89	2.0	2,717	929	2,524	2.4	5,171	7,784
WALES										
<i>Conservancy</i>										
Conservancy	96	86	8	2.6	1,364	70	96	2.9	1,325	1,429
SCOTLAND										
<i>Conservancy</i>										
North	1,848	497	919	2.4	1,508	(36)	(54)	3.0	870	1,735
Mid	966	89	86	2.9	1,312	(253)	(332)	3.2	1,045	799
South	973	366	356	2.3	964	639	616	2.2	838	1,810
	3,787	360	1,361	2.5	3,784	61	230	2.8	2,753	4,344
GREAT BRITAIN	4,081	357	1,458	2.5	7,865	362	2,850	2.7	9,249	13,557

(i) Planting and Restocking subsidies represent the capitalised extent to which new planting or restocking will not earn the target rate of return of 3 per cent, and they are brought into the accounts to maintain the Plantation valuation at a level which will earn the target rate. The subsidies are determined from individual models created in each Forest District for planned investments in the triennium 1987/88-1989/90 with the anticipated future expenditure and income being discounted at 3 per cent and the net sum expressed as the subsidy. The implied return on the investment is the interest rate at which the future expenditure and income when discounted nets to zero. The individual subsidies and implied rates of return are weighted to provide Conservancy averages for portrayal in the table above.

(ii) The bracketed entries under Restocking identify the capitalised surplus per hectare that is expected to be earned in excess of 3 per cent from investments in the Conservancies concerned. These surpluses are deducted from the subsidies claimed for investments which will fall below the target rate of return. The lower returns in England reflect the higher proportion of broadleaved planting there.

(iii) Forest recreation and amenity subsidy represents the net cost of the provision of recreational facilities for the public such as visitor centres, forest walks, nature trails, together with the conservation of wildlife and small-scale amenity planting from which no commercial rate of return can be expected.

(b) RECALCULATION OF SUBSIDIES

Planting subsidies

New levels of subsidy have been calculated for the planned investment in the next three years using the latest assumptions of future forest costs, administrative expenses and long-term average timber prices incorporated into the plantation revaluation. The Conservancy and Great Britain weighted subsidies per hectare in £('90) with the implied rates of return are set out below:

	New Planting		Restocking	
	Subsidy per hectare	Implied rate of return	Subsidy per hectare	Implied rate of return
ENGLAND	£	%	£	%
<i>Conservancy</i>				
North	162	2.9	405	2.6
East	—	—	947	2.4
West	386	2.8	1,231	2.3
WALES				
<i>Conservancy</i>	(55)	3.1	(264)	3.2
SCOTLAND				
<i>Conservancy</i>				
North	252	2.7	(473)	3.4
Mid	14	3.0	(598)	3.5
South	(3)	3.0	151	2.8
GREAT BRITAIN	122	2.9	79	2.9

There has been a continuing rise in the forecast overall Great Britain rate of return on new investments from about 1.75 per cent in the period of 1977-82 to 2.25 per cent for 1982-87, 2.5 per cent for 1987-90, and 2.9 per cent for 1990-93. This has been largely achieved through the introduction of improved methods, techniques and work practices, leading to lower expenditure.

The improvement in the forecast rates of return will reduce the total subsidies required for planting and restocking in the next review period to £3.3 million, compared with total planting subsidies of £13.3 million (in £('90)) which were required for the 1987-90 triennium.

Forest Recreation and Amenity Subsidy

The total subsidy claimed for the 3 years 1987-90 was £27.5 million (in £('90)) compared to £25.3 million forecast. For the next triennium the subsidy has been set at some £32 million (in £('90)) for annual expenditure of some £10.6 million.

Notes to the Accounts (continued)

13. SURPLUS/(DEFICIT) ON SALE OF PROPERTIES

	Plantations and associated properties £ million	<i>Previous Year £ million</i>
Proceeds ...	13.0	12.6
Less: Book value	13.7	10.4
	(0.7)	2.2
Less: Disposal costs		
External costs ...	0.8	0.6
Administrative expenses	1.0	0.8
	1.8	1.4
Surplus/(Deficit) on sale of properties	(2.5)	0.8

14. ADMINISTRATIVE EXPENSES

	£ million	<i>Previous Year £ million</i>
Salaries and national insurance	26.5	25.1
Travelling, subsistence and staff transfer expenses ...	5.1	5.0
Notional employers superannuation contributions ...	5.1	5.0
Accommodation and estate expenses	1.9	0.6
Office expenses	3.4	3.2
Other net expenses (including Auditors' remuneration of £102,000)	4.7	3.5
	46.7	42.4
Less: Attributed to Forestry Authority	9.8	8.6
Forestry Enterprise	36.9	33.8
Attributed to:		
Operating Account		
Plantations	26.1	24.6
Forest recreation and amenity	4.7	4.0
Other activities	1.0	0.8
Distributed activities included in forest costs	4.1	3.6
	35.9	33.0
Sale of properties (Note 13)	1.0	0.8
	36.9	33.8

Distributed activities consist of the internally-provided services of vehicles, machinery and equipment and plant supply, for which charges are made to forest operations throughout the year on the basis of utilisation. The charges made include the associated administrative expenses which are thus included in the Operating Account as forest costs. The administrative expenses element of these charges is identified here for notation and comparative purposes only.

The total administrative expenses of £46.7 million (£42.4 million in 1988-89) were incurred as follows:-

	£ million	<i>Previous Year £ million</i>
Forest Districts	22.3	21.4
Conservancy Offices	8.2	7.6
Headquarters	15.7	13.7
Net forest and surplus estate expenses	0.5	(0.3)
	46.7	42.4

The costs of non-industrial staff employed at Research institutions are not included in the above figures but form part of the net Research expenditure in the Forestry Authority Services Statement of Expenditure. An attribution of £4,380,000 which represents 50 per cent of Research expenditure is included in the Operating Account of the Forestry Enterprise as forest costs.

Notes to the Accounts (continued)

15. STAFF COSTS AND NUMBERS

As many of the Commission's staff divide their time between Forestry Enterprise and Forestry Authority duties, it is considered more appropriate to provide the statutory information on staff costs and numbers for the Commission as a whole.

(a) Total staff costs for the Forestry Enterprise and Forestry Authority comprise:-

	£ million	<i>Previous Year £ million</i>
Salaries	27.3	25.6
Wages	24.8	25.9
Social security costs	3.8	3.7
Superannuation costs	9.9	9.5
	<hr/>	<hr/>
Travel and subsistence	65.8 3.6	64.7 4.0
	<hr/>	<hr/>
	69.4	68.7

Approximately 81 per cent (previous year 82 per cent) of this total relates to Forestry Enterprise operations.

(b) The average number of employees during the year was as follows:-

	Average Number	<i>Previous Year Average Number</i>
Industrial Staff	2,905	3,199
Non-Industrial Staff	2,072	2,103
	<hr/>	<hr/>
	4,977	5,302

(c) Included in staff costs at (a) above is the remuneration of the Commissioners which comprises (excluding pension contributions):-

	£ thousands	<i>Previous Year £ thousands</i>
Chairman	27	26
Highest paid Commissioner	50	48
Other Commissioners ...	150	144
	<hr/>	<hr/>
Total emoluments of Commissioners	227	218
Travel and subsistence of Commissioners	43	47

The emoluments of the other Commissioners fell within the following ranges:-

	Number	<i>Previous Year Number</i>
£ nil to £5,000	—	6
£5,001 to £10,000	6	—
£35,001 to £40,000	3	3

The Commissioners remuneration is in accordance with Civil Service pay rates.

16. CAPITAL COMMITMENTS

Future capital expenditure on Other Tangible Fixed Assets in 1990-91 authorised by the Commission amounts to £12.1 million (£11.1 million for 1989-90).

17. CONTINGENT LIABILITIES

Contingent liabilities exist at 31 March 1990 for damages caused by the Commission to other persons' property and for compensation for personal injury to Commission employees amounting to an estimated sum of £0.4 million (£0.4 million at 31 March 1989).

Notes to the Accounts (continued)

18. FORESTRY SUBSIDY

The Forestry Subsidy represents the opportunity cost of providing timber and other non-marketable benefits of forestry. Since 1 April 1982 it has been presented as the capitalised sum on new investment, in a similar way to the planting and restocking subsidies. It is assessed as the difference between the net present values of income and expenditure, discounted on the one hand at the target rate of 3 per cent and on the other at the revised public sector discount rate of 6 per cent which came into force at 1 April 1989. Details are set out below.

	£ million
Planting and restocking subsidies to achieve the public sector discount rate of 6 per cent — estimated at	22.3
Planting and restocking subsidies to achieve the target rate of return of 3 per cent	4.3
	<hr/>
Forestry subsidy on new investment in 1989-90	18.0
	<hr/> <hr/>

Work is in progress to identify ways of quantifying the non-marketable benefits of forestry.

FORESTRY AUTHORITY SERVICES
STATEMENT OF EXPENDITURE
FOR THE YEAR ENDED 31 MARCH 1990

	£000	<i>Previous Year £000</i>
Grants and Advisory Services to Private Woodland Owners		
Current Schemes		
Woodland Grant Scheme	8,151	525
Woodland Grant Scheme in association with the Farm Woodland Scheme	2,054	104
Schemes closed to new applications		
Forestry Grant Scheme	1,818	5,862
Broadleaved Woodland Grant Scheme	656	1,809
Dedication Schemes (including legal expenses)	1,336	1,418
Other Grants	10	17
Total Grants to private woodland owners	14,025	9,735
Survey of Private Sector Costs	153	170
Administrative Expenses: Consultation	1,034	747
Other management costs	3,586	2,892
	18,798	13,544
Less: Sundry Income	34	70
	18,764	13,474
Special Services		
Licensing of Felling: Consultation	144	143
Other management costs	402	319
Illegal Felling (including legal and investigation expenses)	237	137
Information, Shows and Publications	1,674	1,913
General administration: Forestry training	87	58
Plant Health	663	623
Other management costs including EEC and other regulatory duties	1,915	1,947
	5,122	5,140
Research		
Silviculture	2,612	2,378
Arboreta	436	397
Genetics	1,180	914
Physiology	325	417
Seed Research	174	146
Site Studies	1,068	971
Wildlife and Conservation	577	584
Pathology	680	573
Entomology	725	636
Mensuration	308	315
Wood Utilisation	310	242
Statistics	107	71
Communications	258	222
Total	8,760	7,866
Less: Attribution to Forestry Enterprise Operating Account	4,380	3,933
	4,380	3,933
Change in assets		
Increase — Current Assets	178	(40)
Increase — Fixed Assets	105	51
Net increase	283	11
Amount of Grant-in-Aid appropriated for the Forestry Authority	28,549	22,558

NOTES

1. The above statement includes £9.8 million (1988-89 £8.6 million) of the Commission's total administrative expenses attributed to Forestry Authority Services. Details of the expenditure are shown in Note 14 of the Forestry Enterprise Accounts.

Grants and Advisory Services to Private Woodland Owners

2. The overall volume of new planting grant-aided in 1989-90 has fallen significantly compared with 1988-89. Planting under the schemes closed to new applications has declined more rapidly than expected, whereas the take up under the new Woodland Grant Scheme, though encouraging, is lower than expected. In particular planting grant-aided under that scheme in association with the Farm Woodlands Scheme is disappointing. In overall terms, grant payments have increased by £4,290,000 over the previous year. This is because the rates of grant payable under the current schemes are much higher than for the closed schemes, following the tax and grant changes introduced in the March 1988 Budget.

3. Administrative expenses of £4,620,000, which cover consultation and other management costs, are £981,000 (27 per cent) higher than in 1988-89. This is largely a consequence of the more detailed requirements of the current schemes.

Special Services

4. Expenditure on special services shows a fall of some £18,000 over 1988-89. A reduction of £239,000 on information, shows and publications is largely because the cost of the Glasgow Garden Festival was included in last year's expenditure. The cost of regulating felling increased by £184,000 (31 per cent) and general administration increased by £37,000 (one per cent) over 1988-89.

Research

5. For the triennium 50 per cent of the net cost of Research is charged to the Forestry Enterprise. This element is included in the Operating Account under forest costs (Plantations).

6. Total expenditure on Research in 1989-90 increased by £894,000 (11 per cent) over 1988-89.

7. This increase in research expenditure reflects a national salary increase of 8.5 per cent; an increase in grant payments to Universities and other Institutes during 1989-90 for research work on wood utilisation of home grown timber; work on tree improvements including specific research on timber properties of broadleaves; and the setting up of demonstration plots in connection with farm woodlands.

8. In addition, short-term contract work was carried out on a repayment basis for other Government departments and public bodies, whereas the cost of research work related to farm woodlands was shared equally with the Ministry of Agriculture, Fisheries and Food.

APPENDICES

	<i>Page</i>
I Statutory and other Committees appointed by the Forestry Commission	
National Committees	i
Regional Advisory Committees	i
Home Grown Timber Advisory Committee	ii
Technical Sub-Committee of the Home Grown Timber Advisory Committee	ii
Supply and Demand Sub-Committee of the Home Grown Timber Advisory Committee	ii
Advisory Committee on Forest Research	ii
Forestry Research Co-ordination Committee	iii
Forestry Training Council	iii
Forestry Safety Council	iii
II Home Grown Timber Advisory Committee: Annual Report for the year ended 31 March 1990	iv
III Forestry Training Council: Annual Report for the year ended 31 March 1990	vi
IV Forestry Safety Council: Annual Report for the year ended 31 March 1990	vii
V Compensation for Afforestation Grants Refused on Nature Conservation Grounds: Announcement made by the Secretary of State for the Environment on 10 May 1989	viii
VI Forestry Commission Disposals: Announcement made by the Secretary of State for Scotland on 16 June 1989	ix
VII Government's Conclusions on the Report of the New Forest Review Group: Letter from the Minister of Agriculture, Fisheries and Food dated 8 January 1990	x
VIII Concluding Statement and Recommendations of the Thirteenth Commonwealth Forestry Conference held in New Zealand in September 1989	xiii
IX Disposal of Property managed by the Forestry Commissioners: Revised Statement of Policy and Practice	xvi
X New Publications	xix
XI Statistical Tables	xx
<i>Forestry Authority</i>	
1 Forestry Commission Grant Schemes	xx
2 Area of Planting by Private Woodland Owners for which Grants were paid	xxi
3 Progress of Planting by Private Woodland Owners in Last Ten Years	xxii
4 Volume of Timber Licensed for Felling and Thinning on Private Land	xxii
5 Area Licensed for Clear Felling on Private Land	xxii
<i>Forestry Enterprise</i>	
6 Land Use	xxiii
7 Net Area of Land Acquired/Disposed of	xxiii
8 Forest Land Disposed of During the Year	xxiii
9 Planting During the Year	xxiv
10 Progress of Planting in Last Ten Years	xxiv
11 Areas of Plantations and Volumes of Timber Felled and Thinned	xxv
12 Sales of Timber	xxv
13 Properties Managed	xxvi
14 Public Recreational Facilities	xxvi
15 Land Use, Planting and Timber Production by Forest Districts — England	xxvii
16 Land Use, Planting and Timber Production by Forest Districts — Wales	xxviii
17 Land Use, Planting and Timber Production by Forest Districts — Scotland	xxix
XII Map of Forestry Commission Conservancies and Forest Districts at 31 March 1990	xxx

APPENDIX I

Statutory and Other Committees Appointed by the Forestry Commission: Membership at 31 March 1990

National Committees

England

Mr I.D. Coutts (*Chairman*), Mr R.T. Bradley, Professor G.R. Dickson, Mr R.P. Hancock, Mr W.E. Lane, Mr T. Mallinson, Mr I. Mercer. *Secretary to the Committee*: Miss M. O'Hare. The Committee had no meetings during the year.

Scotland

Mr F.M. Strang Steel (*Chairman*), Dr Jean Balfour, Mr R.T. Bradley, Mr F. Critchley, Mr J.D. Pollock, Mr H.A. Waterson. *Secretary to the Committee*: Mr B.D. Inglis. The Committee had no meetings during the year.

Wales

Mr C.R. Woosnam (*Chairman*), Mr R.T. Bradley, Mr M.A. McLaggan, Mr J.F. Morgan. *Secretary to the Committee*: Mr M. Wheeler. The Committee had no meetings during the year.

Regional Advisory Committees

ENGLAND

North Conservancy

Professor G.R. Dickson (*Chairman*), Mr T.R. Fetherstonhaugh, Professor B. Hackett, Mr T.N. Hammond, Lady Elizabeth Kirk, Mr W.W. Metcalfe, Mr R.E. Shapland, Mr P. Townson. *Secretary to the Committee*: Mr J. McGough. The Committee met in April, May and October 1989 and January 1990.

East Conservancy

Mr W.E. Lane (*Chairman*), Major G.K. Agnew, Mr T.R. Cook, Councillor P.G. Lewis, Mr P.H. Peck, Mr J.K. Royston, Mr C. Stratton, Mr J.T. Todd, Mr L. Woodham. *Secretary to the Committee*: Mr R.C. Herbert. The Committee met in October 1989 and March 1990.

West Conservancy

Mr I. Mercer (*Chairman*), Major D.J.C. Davenport, Mr C.A. Eade, Mr A. East, Mr A. Fooks, Mr D.W. Hildred, Mr W.A. Isaac, Mr R. Jarman, Mr J.H.B. Workman. *Secretary to the Committee*: Mr R.B. Urquhart. The Committee met in April and October 1989.

SCOTLAND

North Conservancy

Mr F. Critchley (*Chairman*), Mr E.J. Brodie, Mr B.E. Crabtree, Mr J. Evans, Mr A.D.M. Farquharson, Professor C. Gimingham, Councillor N.J.O. Graham, Mr M. Leslie, Mr M. Pottinger. *Secretary to the Committee*: Mr K. Roscoe. The Committee met in May and November 1989.

Mid Conservancy

Dr Jean Balfour (*Chairman*), Mr B.S. Brookes, Mr P.M. Fairweather, Mr J.D. Hutchison, Mr C.R. Langton, Mr J. McNaughton, Mr G. Morton, Mr P.S. Murray, Councillor T. Rae. *Secretary to the Committee*: Mr W.J. Anderson. The Committee met in May and November 1989.

South Conservancy

Mr H.A. Waterson (*Chairman*), Mr W.S. Brack, Mr D.B. Crawford, Mr T. Croft, Mr D.F. Hewitt, Mr D.I. Liddell-Grainger, Mr R.A. McClymont, Councillor D.R. Robinson, The Earl of Rosebery. *Secretary to the Committee*: Mr B.H. Atwell. The Committee met in October 1989 and February 1990.

WALES

Mr M.A. McLaggan (*Chairman*), Mr J.R. Lloyd Jones, Mr S.K. Neale, Colonel P.C. Ormrod, Mrs D.M. Raikes, Mrs R.A. Rooney, Councillor D.W.L. Rowlands, Mr J.W. Sutton, Mr W.R. Williams. *Secretary to the Committee*: Mr M. Wheeler. The Committee met in September 1989 and March 1990.

Home Grown Timber Advisory Committee

Mr J.D.W. Janes (*Chairman*)
Mr A.F. Bloomfield
Dr J. Brazier
The Hon James Bruce
Mr T.A. Bruce Jones
Mr N.F. Cairncross*
Mr A. Christie-Miller
Mr J.R. Cordiner
Mr W. Elliot*
Dr G.K. Elliott
Mr H.G. Fetherstonhaugh
The Hon James Galbraith

Lord Gibson-Watt
Professor C.H. Gimingham *
Mr R.D. Gordon
Mr B.W. Haycox
Mr J.H. Hose *
Mr O.H. Russell
Mr G.B. Little
Mr A.F. MacPherson *
Mr A.W. Mills *
Dr C.D. Pigott *
Mr C.W. Wardle
Mr G. Waugh

*Independent members

Secretary: Mr B.A. Robertson

With the exception of the independent members the membership was drawn from nominations received from the following bodies: Timber Growers United Kingdom, British Timber Merchants' Association (England and Wales), United Kingdom Softwood Sawmillers' Association, British Coal, Timber Trade Federation, UK and Ireland Particleboard Association, British Paper & Board Industry Federation, Timber Research and Development Association Ltd.

The Committee met in June, September and December 1989 and March 1990. The Annual Report of the Committee is at Appendix II.

Technical Sub-Committee of the Home Grown Timber Advisory Committee

Dr J.D. Brazier (*Chairman*)
Mr R.M. Fitter
Colonel P.C. Ormrod
Mr J.A. Kissock
Mr M.D. Oxnard
Mr A. East
Mr G.B. Little
Dr D.C. Wood
Dr G.K. Elliott
Mr S.K. Neale

}
}

Silviculture
Softwood sawmilling/harvesting
Hardwood sawmilling/harvesting
Wood pulping
Wood panel board manufacturing
Wood science
Health and safety

Secretary: Mr D. Elgy

The Sub-Committee met in April, July and November 1989 and January 1990.

Supply and Demand Sub-Committee of the Home Grown Timber Advisory Committee

Mr N.F. Cairncross (*Chairman*)
Mr D.B. Crawford
Mr W.A. Willis
Mr G. Waugh
Mr P.S. Murray
Mr A.F. Bloomfield
Mr P.T.G. Beadle
Mr P.J. Lambert

}

Timber Growers United Kingdom
British Timber Merchants' Association (England and Wales)
United Kingdom Softwood Sawmillers' Association
UK and Ireland Particleboard Association
Association of United Kingdom Wood Pulp Producers
British Coal

Secretary: Miss P.J. Clark

The Sub-Committee met in May and November 1989.

Advisory Committee on Forest Research

Dr J.P. Dempster (*Chairman*)
Professor E.C. Cocking
Professor R.M. Cormack
Dr M.P. Denne
Professor D. Henderson

Professor J.M. Hirst
Professor H.G. Miller
Dr W.E.S. Mutch
Dr M.B. Usher

Secretary: Dr J. Evans

The Committee met in November 1989.

Forestry Research Coordination Committee

Mr R. T. Bradley (*Chairman*)
Mr D. A. Burdekin
Dr T. W. Hegarty
Dr D. White
Mr J. M. Baker
Mr J. C. Peters
Dr O. W. Heal
Dr P. B. Tinker
Dr J. P. Dempster
Dr J. Blackwood
Professor H. G. Miller
Professor T. R. Swinburne
Dr G. K. Elliott
Mr A. Alsop

Forestry Commission
Forestry Commission
Agriculture Departments
Department of the Environment
Natural Environment Research Council
Forestry Commission Research Advisory Committee
Nature Conservancy Council
Forestry Universities
Agricultural and Food Research Council
Institute of Wood Science
Economic and Social Research Council

Secretary: Dr J. Evans

The Committee met in June, October and December 1989 and February 1990.

Forestry Training Council

Mr D. A. Mithen (*Chairman*)

Employer Members

Mr K. Ramsay
Mr D. A. Bardy
Mr A. G. Phillips

Timber Growers United Kingdom
Forestry Commission
Association of Professional Foresters

Employee Members

Mr A. W. Mills
Mr S. K. Neale
Mr T. E. Radford

Transport and General Workers' Union
National Union of Civil and Public Servants

Education and Training Members

Mr R. Shapland
Mr W. J. Hedley
Dr J. C. Hetherington

Craft/Diploma Courses (England and Wales)
Craft/Diploma Courses (Scotland)
Degree Level Courses

Forestry Society etc. Members

Mr G. Little
Mr R. Callander
Mr W. H. Gregory
Mr J. Brown
Mr E. H. M. Harris
Mr P. Collis

British Timber Merchants' Association (England and Wales)
United Kingdom Softwood Sawmillers' Association
Institute of Chartered Foresters
Royal Scottish Forestry Society
Royal Forestry Society of England, Wales and Northern Ireland
Standing Committee for Arboricultural Education

Technical Secretary: Mr G. Robertson

The Committee met in May and October 1989. The Annual Report of the Council is at Appendix III.

Forestry Safety Council

Mr J. W. L. Zehetmayr (*Chairman*)
Mr M. Crichton Maitland
Mr K. J. Ramsay
Mr G. Little
Mr R. Callander
Mr W. Brack
Mr B. Leathwood
Mr P. B. Munn
Mr G. Robertson
Mr C. W. Simmonds
Mr J. B. Teasdale

Timber Growers United Kingdom
British Timber Merchants' Association (England and Wales)
United Kingdom Softwood Sawmillers' Association
Transport and General Workers' Union
General, Municipal, Boilermakers and Allied Trades Union
Forestry Training Council
Forestry Commission
Forestry Commission Safety Officer

Secretary: Miss M. M. Lewis

The Council met in April and October 1989 and March 1990. The Annual Report of the Council is at Appendix IV.

APPENDIX II

Home Grown Timber Advisory Committee

Annual Report for the Year Ended 31 March 1990

The Committee held four meetings during the year, in June, September and December 1989 and March 1990. At the June meeting, the Committee conveyed to Sir David Montgomery — who was attending his last meeting with the Committee before relinquishing the Chairmanship of the Forestry Commission after 10 years in office — their appreciation for his contribution to the success of the forestry industry throughout that difficult period. In September, the Committee welcomed Mr Raymond Johnstone, following his appointment as the new Commission Chairman.

In the course of the year the Committee considered the progress of private forestry in the light of statistics supplied by the Commission in terms of the level of interest shown in the new Woodland Grant Scheme and the general trend in new planting. Committee members were concerned that, following the Budget decisions in 1988 to phase out the special tax reliefs for forestry and to place support for private forestry on a grants-only basis, there were indications of a considerable fall in new planting. The prospect of a decline in new planting was also addressed in a paper published by the Forestry Industry Committee of Great Britain (FICGB) *Options for British Forestry 1989-90* which the HGTAC considered at their December meeting. The recommendations made in the paper included calls for the introduction of management grants to compensate woodland owners for the loss of taxation reliefs for management expenditure, various adjustments to the Woodland Grant Scheme, the removal of the liability of woodland owners to inheritance tax and a proposal to provide the public at large with a financial interest in forestry through a 'unitised' system of investment. The Committee gave their unanimous backing to FICGB's proposals and commended them to the Chairman of the Forestry Commission for sympathetic consideration by Government.

The theme of more varied and targeted incentives to woodland owners was taken up by the House of Commons Agriculture Committee report on Land Use and Forestry published on 1 February 1990. This report, which followed a comprehensive enquiry in the course of which many of the constituent bodies of the HGTAC submitted evidence, contained a large number of recommendations which were fully discussed by the HGTAC at their March meeting. The view taken was that the report in general showed a positive attitude towards forestry which was to be welcomed. However, the report's proposal that the structure of the Forestry Commission should be changed so as to separate its Forestry Enterprise functions from its Forestry Authority role, which should then be undertaken by other, unspecified Government Departments, was strongly opposed by the Committee as unnecessary and detrimental to the interests of forestry in Great Britain as a whole. The Committee criticised the report for dealing at length with environmental issues relating to forestry but showing little recognition of the social and economic significance to the country of wood production and of the burgeoning wood-processing sector. This sector of the forestry industry accounted for some five-sixths of the value added by the industry as a whole; without the assurance of expanding supplies of home grown timber of the right species, the success of the wood processing sector could not be sustained. The view was also expressed that, while the recognition in the report of forestry as the prime substitute for agriculture was to be welcomed, the report concentrated too narrowly on tree planting on land surrendered from farming and overlooked agro-forestry — the integration of woodland on farm units — which could well be an area for significant woodland expansion. The Committee's Chairman conveyed these views to the Chairman of the Forestry Commission with the request that they be brought to the attention of Forestry Ministers when the response of the Government to the report was being prepared.

The Committee maintained their interest in the Government's broadleaves policy review and expressed the hope that, following its analysis of the responses to its consultation report of March 1989, the Forestry Commission would be able to make positive recommendations to Ministers with a view to an early Government announcement. Initiatives by the Forestry Commission to foster native pinewoods were welcomed and fully supported by the Committee in June. The Committee were pleased to note the content of the Commission's leaflet *Grants for New Native Pinewoods* which set out the eligible areas and the rates of grants. They also discussed the consultation paper on the *Guidelines for the Management of Existing Native Pinewoods*, with members being invited to send their written comments on the proposals to the Commission.

In their 1988-89 report, the Committee warmly welcomed the Government's encouragement to Regional Councils in Scotland to draw up Indicative Forestry Strategies for incorporation in their structure plans. In September, a full discussion was held on the contents of the consultation draft Circular on the subject, prepared jointly by the Scottish Development Department and the Forestry Commission. The Committee noted with approval the progress being made and stressed the importance of the Forestry Commission and the private sector being party to discussions when Regions were considering such strategies. The possible expansion of the system to England and Wales was discussed, but it was concluded that, as such strategies were costly and time-consuming, they would be worthwhile only where new planting was likely to take place on a significant scale.

The continuation of a programme of Forestry Commission land sales until the end of the century, as announced in the Government statement of 16 June 1989, led to a lively discussion at the September meeting. Concern was expressed by some members that if the State forests continued to diminish, the infrastructure of the forestry industry could suffer as could the survival of rural communities. Continuation of public access to areas sold by the Commission, with the practical and legal difficulties which this would pose, was also discussed. The Committee noted that the Commission was pursuing this question in discussion with other Government Departments with a view to making recommendations to Ministers.

At their March meeting, the Committee received a report from Mr Christie-Miller, who had agreed to be Chairman of the Forest Windblow Action Committee (FWAC) set up following the storm on 25 January 1990 and other storms in southern England, the Midlands and Wales over the ensuing weeks. Mr Christie-Miller gave the latest estimates of damage to woodlands from these storms. He acknowledged the great value of the information set out in Forestry Commission Bulletin 87 on the lessons learnt from the catastrophic storm of October 1987, and thanked the Commission for setting up the FWAC so promptly after the January storm. He also outlined the recommendation that had been made to the Commission by the FWAC that financial assistance in the form of a

replanting supplement, such as that paid after the 1987 storm, should be made available for the restoration of woodland areas damaged in the latest storms. At the end of the year under report, a Government decision on these recommendations was awaited.

Throughout the year, the Committee took a close interest in the claims made by the Welsh Water Authority (WWA) that afforestation was a prime cause of acidification of surface water in areas where there was significant conifer afforestation. The Committee encouraged and supported the Forestry Commission in its efforts to persuade WWA to release data from its 1984 study of some 140 catchment areas, so that a full analysis could be undertaken along with data collected by the Commission. The Committee were pleased to note at their September meeting that this information had been released and that the analysis was proceeding. The Committee welcomed the detailed findings of the Forestry Commission's 1988 tree health survey. As with previous annual surveys, this had provided no clear evidence of any correlation between the condition of trees and atmospheric pollution; deterioration in tree health was attributable to a combination of stresses such as climate, pests and atmospheric pollution. The preliminary results of the 1989 tree health survey were also considered and the Committee were pleased to note an improvement in the general condition of trees, despite a year of drought and severe aphid attacks on Sitka spruce as a result of mild weather the previous winter.

In March, the Committee discussed a paper on the current work of the Forestry Commission's Research Division. The recent significant shift in research priorities with a greater emphasis being accorded to studies of climatic change as it affected the growth of trees and of the effect of trees on climate was highlighted. Other topics discussed included developments in nursery practice, farm forestry, improved strains of poplar and oak, windthrow and a new hopper designed to trap grey squirrels without affecting other small mammals. The Committee expressed appreciation of the work being carried out and commented favourably on the flexibility of the research programme.

The Committee continued to monitor initiatives emanating from the European Community. A full discussion was held on the EC Forestry Action Programme which had been formally adopted by the Council of Agriculture Ministers in June 1989. The programme provided for Community contributions towards Member States' forestry grant expenditure and introduced measures covering the afforestation of agricultural land, the introduction of forestry into rural development plans, the primary processing of timber products and the protection of forests against atmospheric pollution and fire. There were also new initiatives to improve the exchange of information on Community forestry matters and the setting up in Brussels of a Standing Forestry Committee.

At their March meeting, members discussed possible changes to the Committee's composition and terms of reference. At the end of the year under report, the Forestry Commissioners were considering the Committee's views on this matter before deciding the membership of the Committee for the new term commencing 1 August 1990. As foreshadowed in the Committee's last report, the findings of the working group set up to examine the composition of the Technical Sub-Committee and the Supply and Demand Sub-Committee were considered by the main Committee at their June meeting. Proposals for change were endorsed and details of the Sub-Committees' new membership can be found at Appendix I of the Forestry Commission Annual Report of which this report forms a part.

In March, the Committee carried out their customary review of wood supply and demand for the previous year (1989) and looked at prospects for the coming year (1990) on the basis of a report received from the Supply and Demand Sub-Committee. Despite predictions of a general economic downturn, the outlook and market prospects for domestic timber were reasonably optimistic.

The newly restructured Technical Sub-Committee met for the first time in January 1990. At that meeting its role was extended to cover the subject of plant health. The Sub-Committee continued to monitor the collaborative studies between the Welsh Water Authority and the Forestry Commission on afforestation and surface water acidification and to discuss and advise upon work study, silvicultural and harvesting systems. The implications of Health and Safety Regulations were considered on two occasions. Proposals for research projects presented by the Timber Research Group were discussed and recommendations made for the ordering of resources. The Sub-Committee actively followed developments in the formulation of European standards for timber and made suggestions for an expansion of the range of species for testing and for more research to improve the quality of home-grown Sitka spruce in order to satisfy the higher strength classes.

The Committee values greatly the advice and assistance given by both Sub-Committees and wishes to record once more their appreciation for this support.

APPENDIX III

Forestry Training Council

Annual Report for the Year Ended 31 March 1990

Meetings of the Council took place on 4 May 1989 and 26 October 1989 and of the Management Committee on 22 September 1989 and 28 March 1990. In addition, the Training and Education Sub-Committee and the Grant Award Committee met at various times during the year.

The first edition of the Register of Approved Instructors was published containing details of some 200 Instructors who have been individually assessed according to the criteria laid down by the Council. They are employed as follows:—

Forestry Commission	17
Agricultural Colleges	56
Forestry Companies	18
Self Employed	45
Local Authorities	16
Forestry Training Groups	44
Employment Training Schemes	14
Northern Ireland Forest Service	8

Work on defining the competencies required at various levels within the framework laid down by the National Council for Vocational Qualifications (NCVQ) and the Scottish Vocational Education Council (SCOTVEC) has resulted in a submission for accreditation for a Foundation Level I Award to NCVQ with equivalent qualifications for Scotland. This award consists of nine mandatory units covering a range of basic forest operations. Each unit can be awarded following assessment of competence in the workplace by qualified assessors. Work on defining competencies for the more advanced forest operations will be grouped into a Level II Award during 1990/91.

The Youth Training Scheme for Forestry had 309 trainees at various stages of training at the end of the year under review, and it is hoped that the creation of Training Enterprise Councils (TECs) in England and Wales and Local Enterprise Companies (LECs) in Scotland will ensure that future training of young people will continue at about this level.

The further development of a Youth Training Scheme in Mechanical Engineering (Forestry) has seen definition of competencies for this type of employment in conjunction with the Forestry Commission, the Training Agency and the Machinery Department of Cumbria College of Agriculture and Forestry.

There is a significant number of Agricultural Colleges now offering courses in forestry and woodland skills, and the Council is maintaining close contact with these in order to ensure the standard of training is maintained at a uniformly high level.

The Council continues to be represented on the Forestry Safety Council, the Scottish Vocational Education Council, the Arboriculture Safety Council, the National Examinations Board and the Forestry Advisory Committee of Inverness College and liaises with a considerable number of other organisations involved in forestry, woodland and countryside training. The Council greatly appreciates the help and co-operation it has received from the many individuals and organisations from whom it has sought assistance.

Signed for the Forestry Training Council

D.A. Mithen, *Chairman*

G.K. Robertson, *Technical Secretary*

APPENDIX IV

Forestry Safety Council

Annual Report for the Year Ended 31 March 1990

The Council met three times at Forestry Commission Headquarters during the year, on 12 April and 10 October 1989 and on 20 March 1990. The Safety Guides Sub-Committee met twice on 23 August 1989 and 21 February 1990.

While the Council reviews and discusses many subjects over the year, its main task is to assess the need for, produce and update as necessary, the series of Forestry Safety Guides — a task largely assigned to the Sub-Committee.

During the year a major revision of guides was brought to the point where, by 1991 few will be more than three years old. While many changes are occasioned by the development of machinery and equipment over the years, others are due to important initiatives by the Health and Safety Commission, notably by the issue of Regulations covering the Control of Pesticides, the Control of Substances Hazardous to Health (COSHH) and on Noise at Work.

The combined effect has necessitated complete rewriting of some existing guides and the preparation of new ones. The old FSC guide No 24 on *Processors* has now become a much wider guide on *Mechanical Harvesting*, while three guides on individual equipment (old Nos 2-4) have been combined into a single guide (No 5) on *Hand Held Applicators* which recognises the need for certification of operators under the Control of Pesticide Regulations. Two new guides have been published on the subjects of *Dipping Plants in Insecticide* and *Pre-Planting Spraying of Containerised Seedlings*. There were also revisions to eight other guides particularly Nos 11, 32 and 33.

An example of a lesser, but nevertheless significant, change is the additions made to the guide on *Chain Saw Felling* (No 11) to recognise that exhaust fumes and the use of urea fall within the COSHH Regulations and must be drawn to the attention of users.

The Council wish to acknowledge contributions from the practical users in the forest and those who interpret these complex regulations, enabling their Sub-Committee to distil knowledge on safe working methods into concise readable guides.

A new list of the guides, in leaflet form, incorporating the note on the status of the guides which was set out in last year's report, was also prepared for publication. Arrangements have also been made for improved presentation of the guides at the most important forestry venues in 1990.

The following items were among those discussed or reviewed during the year.

- *Protective Clothing for use in Restocking Operations*. This concerned the use of plants which have been treated with insecticide, and where the approval for use of the insecticide specifies the protective clothing required.
- *Protective Clothing for Chain Saw Operators*. Views were made known to members involved in drafting a European Standard for both clothing specification and its testing.
- *Exhaust Emission from Chain Saws*. Earlier work by the Forestry Commission on carbon monoxide (CO) had been extended by Health and Safety Executive trials to other pollutants, notably lead and particulates. Only in the case of CO, and only under conditions of extreme shelter, does the concentration approach the Occupational Exposure Level.
- *Use of lindane and synthetic pyrethroids*. At the year's end renewed provisional approval for the use of the latter has enabled development of safe working methods to continue.
- *Lyme Disease*. Guidance on this relatively rare condition resulting from tick bites is now available to workers both as to prevention and treatment.
- *Health Risk from Bracken*. The provisional advice of the Health and Safety Executive concerning this work, especially when cutting bracken with a clearing saw, was noted.
- *Safety Policy Statement for Forest Estates*. A draft development over the year is to be matched with Health and Safety Executive guidelines.
- *Chain Saw Users Certificate of Competence*. After consideration of various approaches to this subject, the Council welcomed the principle and considered that widespread certification could be achieved in various ways — in conjunction with formal training (particularly for new comers and the young entrant) but also by assessment of existing operators on the job.

Whilst being fully aware of its own responsibility for recommending safe working methods for the wide range of subjects discussed, the Council recognises the important part played by training and management in achieving the desired ends.

J.W.L. Zehetmayr, *Chairman*
Miss M.M. Lewis, *Secretary*

APPENDIX V

Compensation for Afforestation Grants Refused on Nature Conservation Grounds

Announcement made by the Secretary of State for the Environment on 10 May 1989.

The Rt. Hon. Nicholas Ridley MP, then Secretary of State for the Environment, made the following announcement in a Written Answer to a Parliamentary Question about compensation for afforestation grants refused on grounds of nature conservation.

“Following consultations with my Right Hon Friends the Secretary of State for Scotland, the Secretary of State for Wales, the Minister of Agriculture, Fisheries and Food and the Chief Secretary to the Treasury, I have agreed with the Nature Conservancy Council that it should no longer offer compensation for the refusal of afforestation grant where it is refused solely on nature conservation grounds.

Compensation will still be available for the profit forgone, excluding any grant element, in any case where planting would otherwise proceed.

In considering applications for grant for afforestation, the Forestry Commission will continue to pay full regard to nature conservation interest, and in particular to designations of Sites of Special Scientific Interest made by the NCC. While there will normally be a presumption against giving grants for afforestation in Sites of Special Scientific Interest, it must remain the case that each application will be considered on its merits.

This decision reflects the recent radical changes in support for forestry introduced in the 1988 Budget and the subsequent increases in planting grant under the new Woodland Grant Scheme. These changes have made the grant element a very significant factor in determining the profitability of afforestation proposals and therefore in the compensation paid under management agreements. This is in marked contrast with the position in agriculture, where recent changes in the grant arrangements mean that it will now seldom be the case that these grants will form a significant element in the profit forgone calculation of management agreements offered by the NCC.

The withdrawal of compensation in these cases will be consistent with the developing policies of locational guidance for forestry illustrated by the indicative land use strategies under consideration by some local authorities in Scotland. My Right Hon Friend the Secretary of State for Scotland is currently considering the nature and scope of any advice he might offer to local authorities in preparing indicative forestry strategies. I shall be considering with my Right Hon Friend the Secretary of State for Wales the guidance to be offered to English and Welsh authorities on the form that locational guidance should take in appropriate cases. The Forestry Commission and the NCC stand ready to assist local authorities in this task.

I am satisfied that, taking all these factors into account, it is in the public interest that the NCC's policy should be changed. The forestry industry can take confidence in their long term investment considerations from knowing at a very early stage the areas of land with potential for afforestation.

A revision of the financial guidelines will be issued as soon as possible.”

APPENDIX VI

Forestry Commission Disposals

Announcement made by the Secretary of State for Scotland on 16 June 1989.

The Rt. Hon. Malcolm Rifkind QC MP, Secretary of State for Scotland, made the following announcement in a Written Answer to a Parliamentary Question about the Government's future plans for the disposal of Forestry Commission land.

"In answer to a question from the Hon Member for Suffolk Central on 8 November 1984 (Official Report, Cols 6 and 7), my Right Hon Friend the Member for Ayr announced that the Forestry Commission's disposals programme would be extended to 31 March 1989, and that its main purpose would be to rationalise the forestry estate thereby improving the Commission's efficiency and the commercial effectiveness of the Forestry Enterprise.

We welcome the important contribution that the rationalisation of the forestry estate has made to the increased efficiency of the Forestry Enterprise over the past few years. The Commission has been able to dispose of a large number of plantations in a way which has assisted the streamlining of its management structure and enabled it to achieve significant improvements in its operational efficiency. The annual net call on Exchequer funds for the Enterprise has been greatly reduced. At the same time the Commission has been able to make an important contribution to the major new developments which have taken place in the wood-processing industry in recent years. The market for timber is now buoyant, to the great benefit of both public and private sector timber-growers.

My Right Hon Friends and I have considered the future extent and purpose of the Commission's disposal programme. We have had regard to the needs of the wood-processing industry for a steady and secure source of supply; to the effect of the programme on the use of the Commission's forests for public access and recreation; and to environmental considerations. We also accept that the Commission must be able to plan ahead without the uncertainty caused by frequent reviews, and that it will continue to make a small but effective contribution towards the fulfilment of our targets for new planting.

We consider that the rationalisation policy has been successful and that there is scope for it to continue to be pursued with vigour. In accordance with the general policy of this Government, we also wish to see some further transfer of forests out of the public sector. This will have the important effect of strengthening and enhancing the role of the private sector, whose proportion of the nation's woodland estate has already risen to over 60%. We also see it as a valuable opportunity to widen interest and participation in British forestry.

We have therefore asked the Forestry Commissioners to proceed with the further disposal of some 100,000 hectares of forestry land and properties in the period up to the end of the century, of which they should seek to dispose of some 50,000 hectares in the first half of the period. The Commissioners will continue to be responsible for selecting properties for sale, and in doing so they will have regard to the selection guidelines which Forestry Ministers set them in 1981. In particular I have referred to the use of the Commission's forests for public access and recreation, which my Right Hon Friends and I warmly support and encourage. Forests have a major part to play in the enjoyment and understanding of the countryside and the Commission will continue to have an important role in this.

We are concerned, however, that the general public should also continue to enjoy access to those forests to be disposed of by the Commission in a way which is compatible with management for forestry and other purposes. We are therefore giving careful consideration to ways of achieving this objective.

It is estimated that, subject to market factors, the programme which we have now asked the Commissioners to carry out should realise up to £150 million over the period. By settling this issue for a decade, we intend to put the Commissioners in a position to implement the programme so as to consolidate their forestry estate in a rational and orderly manner."

APPENDIX VII

Government's Conclusions on the Report of the New Forest Review Group

Letter dated 8 January 1990 from the Rt Hon John Gummer MP, Minister of Agriculture, Fisheries and Food, to the Chairman of the Forestry Commission.

1. I am grateful to your predecessor for drawing my attention to the New Forest Review Group Report. The Commissioners are to be congratulated on having had the foresight to initiate this comprehensive review of the aims and effectiveness of the present measures for safeguarding the New Forest, and to consider whether these need to be changed or fresh initiatives taken to maintain the Forest's character. The Review Group under the chairmanship of the Deputy Surveyor have conducted a most thorough investigation. I appreciate the considerable efforts that have clearly gone into producing the consultation document and to ensure that the many organisations and individuals concerned were not only aware of the review and its interim conclusions, but also had an opportunity to put forward their comments before the Group reached their final conclusions.

2. Along with Christopher Patten and Cecil Parkinson, I have now had an opportunity to study the Review Group's final Report and I am writing to let you know our conclusions.

3. Let me say first of all that the review has been undertaken at a most appropriate time. Pressures on the countryside to fulfil a great variety of economic and social needs have never been greater, and the Review Group have rightly identified the maintenance of the character of the New Forest as being the major element towards ensuring its continued survival. My colleagues and I agree wholeheartedly with the Group's statement that this must not be approached with the aim of turning the New Forest into a museum. That would be to run counter to the dynamic forces which have shaped it over the centuries and are at work in the countryside today. Rather, it is a case of adaptation and of modification to ensure that any change is evolutionary, rather than revolutionary, and does not run counter to the conservation of this unique area.

4. Not all the recommendations put forward in the Report are directed at central Government. We have not, therefore, commented on those which call for local discussion and initiative. These we leave the Commission to pursue along with other bodies and agencies, as appropriate.

The Heritage Area and its Status

5. The Review Group considered its most important single recommendation to be that of obtaining a recognised national status for the New Forest Heritage Area as designated by the New Forest District Council for planning purposes, in order that it may be afforded special protection in keeping with its national and international importance. We agree that the maintenance of the character of the New Forest itself does depend to a large degree on safeguarding certain of the surrounding lands — particularly the grazing land which supports commoning — and we recognise the value of co-ordinating action over that wider area described as the Heritage Area. We therefore endorse the establishment of a Heritage Area Committee, with the terms of reference proposed, to formalise liaison between the various interested parties. We also agree that it would be helpful at the same time to reconstitute the present New Forest Consultative Panel to represent the whole Heritage Area.

6. We cannot accept, however, that all the lands within the Heritage Area can be described as being of the highest national and international importance, and we take the view that the way forward would be for the new Heritage Area Committee to agree revised boundaries to incorporate essential grazing land as well as the best of the landscape around the Forest's perambulation in consultation with the Countryside Commission as appropriate. Within such a Heritage Area there might reasonably be a case for applying similar land management policies as those which normally apply in a National Park, but this parallel drawn with National Parks should not be interpreted as a sign that the Government is persuaded of the need for new mechanisms or controls. We would stress the importance of adopting a flexible approach towards the administration of the New Forest and, given that most of the area within the perambulation is Crown land, we agree with the Report's conclusions that National Park designation would be an over-bureaucratic and unnecessary approach.

7. We have also taken careful note of the recommendation that the area should be considered for nomination as a World Heritage Site. We will bear this suggestion in mind, although we are not persuaded of the case for taking it forward at the present time since it would almost certainly encounter the same difficulties as the Lake District nomination did in 1987, which are still not resolved.

Grazing

8. As the Report rightly stresses, the key to the maintenance of the character of the New Forest hinges very largely on the continued grazing of the Open Forest heaths and grassland. The Report highlights the problems associated with commoning today. Commoning has survived as a way of life in the Forest for centuries and the Report argues cogently for it to be further encouraged as the least expensive and most effective way of maintaining the open forest. There is little doubt that the continued de-pasturing of livestock on the commons prevents the existing vegetation of the Forest being overrun by bracken and scrub.

9. It must nevertheless be acknowledged that commoning as a way of life is on the decline in the New Forest. It is not difficult to understand why this should be so, given the present social and economic pressures. Having considered the arguments set out in the Report, the solution to this problem is not, however, immediately apparent.

10. The Verderers have a statutory responsibility for commoning, but we recognise that it is doubtful, under the existing arrangements, whether they could generate sufficient income to help subsidise grazing. We have noted the suggestion made in the Report that incentives may be necessary in order to maintain and encourage the grazing of animals. We are, however, of the view, which I know is shared by the Commissioners, that it will be necessary before further consideration is given to this proposal for careful

account to be taken of the relationship between grazing intensity and the ecological effects, as well as an accurate assessment made of the nature and cost of any measures that it is thought may be required to maintain or increase grazing stock to recommended levels. More consideration will also need to be given to the administrative and legal arrangements that would be required to give effect to any such measures. We therefore endorse your proposal that the Forestry Commission should take these matters forward, in consultation as necessary with other Government Departments and agencies, and with others with a direct interest, and report back to us with agreed conclusions as soon as practical. This need not hold up implementation of those other recommendations in the Report which fall outside the scope of the grazing issue.

Woodland Management

11. As well as the maintenance of the Open Forest areas, the management of the woodlands naturally plays a vital part in helping to preserve the character of the New Forest. As the Government Department responsible for the administration of the Forest, it lies with the Forestry Commission to decide how to pursue the recommendations on woodland management contained in the Report, bearing in mind its responsibility to manage the timber Inclosures in a manner which is compatible with ecological and landscape principles. The positive management of the Inclosures for timber production purposes, within the terms of the Mandate given to the Commissioners by my predecessor in 1982, should clearly continue. We note that there was some support for the Review Group's proposals to return to open forest some of the former heaths now planted with conifers and to throw open former lawns and pasture woodland now within the Inclosures. On the other hand, we wonder about the logic of extending the area available for commoners' grazings at the very time when that activity is proving uneconomic and difficult to sustain. We would agree with the Review Group that this matter requires more detailed study, as does the proposal to convert some mixtures to pure broadleaves, and we consider that the ecological and financial implications should, as a first step, be assessed by the Forestry Commission in conjunction with the Nature Conservancy Council. We also commend the Review Group's recommendation that the Commission and the Council should agree a programme of regeneration measures for the Ancient and Ornamental Woodlands.

Landscape

12. We concur with the Review Group's remarks that, in general terms, land and property management should reflect and enhance the special landscape quality of the New Forest. In following its normal management practices, the Forestry Commission, as manager of the Crown land, will take account of the recommendations aimed at enhancing the quality of the landscape. In landscaping, as in other sensitive issues, a balance must be reached with other interests however, and this is particularly important when considering the wider Heritage Area which includes much agricultural and horticultural land where the economic interests of owners and occupiers of land should not be overlooked.

Nature Conservation

13. The high conservation value of the New Forest, the adjacent commons and the manorial wastes is recognised by its notification as a Site of Special Scientific Interest. The Forestry Commission and the Nature Conservancy Council also recognise that the Forest has equivalent standing to a National Nature Reserve. We welcome and endorse the broad objectives put forward in the Report which reflect the need for balance between the various interests.

Day Visitors

14. Bearing in mind that there are estimated to be some 10 million day visitors to the Forest each year, we consider that the Report, in its consideration and conclusions regarding the intense pressures brought about by recreation, has achieved a good balance between the needs of the public for access and those of conservation. While there is clearly a limit to the capacity of the Forest to absorb recreational pressures, we are pleased to note that the measures implemented as a result of the 1970 Report seem to have already achieved the right balance and that no significant changes are thought to be necessary at the present time. The present Report has nevertheless put forward a number of recommendations designed to ease and to cater for visitor pressures — such as possible adjustments in the location and capacity of some car parks, the increased provision of toilet facilities (a recommendation which is also directed at the New Forest District Council) and the need for Forest Wardens. These are matters which must be left for local management to consider in the light of their relative priority.

Group Events and Specialist Interest

15. We are aware that a great deal of public interest was aroused by the proposals on group events and specialist interest recreation contained in the Review Group's earlier consultation document. Two areas in particular were the subject of considerable attention, namely orienteering and model aircraft flying. Those who pursue such activities are naturally concerned to ensure that their pursuits are not unduly curtailed. Orienteering is a popular sport and while this and other similar activities may place stressful demands on the forest environment, a sensible balance has to be struck. Consideration of restrictions should therefore be the subject of discussion involving the Forestry Commission, the Nature Conservancy Council, the Sports Council and the British Orienteering Federation.

16. As far as model aircraft flying is concerned, we note that the Review Group have accepted that it should remain at Beaulieu Heath for the time being. We endorse this recommendation, which I am sure will have come as a relief to the many who have made representations on this topic. As far as the other detailed recommendations are concerned, we feel it is more appropriate to leave consideration on whether or not to implement them in the hands of local management.

Camping

17. The subject of camping in the Forest is an emotive one and our attention has been drawn to the considerable response from organisations and individuals to the recommendations contained in the Report, and especially to the concerns expressed over the proposal to reduce the use of Aldridge Hill campsite. However, we take the view that the arguments in favour of the proposed measures are sound and that they should be implemented. We have, in particular, had regard to the views expressed that some of the existing sites

are in conflict with the natural fabric and landscape of the Forest. While there will be those who will be disappointed by our endorsement of these recommendations, we consider that the remaining campsites will continue to provide the broad range of forest experience which has proved so attractive to campers in the past and that the overall effect on capacity will not be significant.

Charging

18. We feel that the possibility of charging the general public for informal recreation in the Forest should be considered wherever this is practical, although we realise that the opportunities will be limited. On the other hand, it is already the Forestry Commission's general practice to charge for specialist recreation and we would expect this to apply to the majority of group and special events in the Forest, including the use of the Forest by commercial horse-riding establishments.

Horse-Riding

19. We accept the Report's conclusion that recreational horse-riding is damaging the fabric of the Forest and that the greatest damage is being caused by strings of horses from commercial establishments repeatedly following the same path. Clearly some form of controls are necessary if the damage is to be contained. We would therefore ask the Forestry Commission and other bodies concerned to pursue the recommendations regarding horse-riding contained in the Report with a view to achieving improvements, preferably by voluntary co-operation.

Hunting

20. We know that hunting in the New Forest has aroused considerable controversy and opposition from certain quarters. Equally, it has its supporters who rightly observe that it is a legal activity and one which has been pursued on Crown land in the Forest since its inception. Nowadays hunting on the Crown land is carried out and controlled under permissions granted by the Forestry Commission and we agree with the Report that there are no grounds for any change of policy, except perhaps in seeking to achieve a more even distribution of hunting.

Planning

21. Although we consider that recognition of the New Forest Heritage Area — subject to the modifications I suggested earlier — is a welcome and constructive procedure, we feel that it is unrealistic to suggest that there should be a general presumption against developments in or near the Heritage Area. Significant constraints are already imposed in that part of the South Hampshire Coast AONB lying in the New Forest and particularly within green belts in south-east Dorset and south-west Hampshire, with the latter covering most of the area within the perambulation of the Forest. As far as development outside the green belts is concerned, the protection of the Forest will certainly be a factor to be taken into account in considering future growth in the surrounding area.

Public Road and Traffic Management

22. We share the concern of many over the needless killing and maiming of commoners' animals and wildlife by road traffic, and we agree with the broad principles contained in the Report that the roads policy should be in tune with the area. For the most part the matters addressed are ones for the local highway authority to consider. However, we are content with the proposal that through traffic should, as far as practical, be diverted onto the major fenced routes such as the A31 trunk road and that there should be enforced speed limits on other roads.

23. Finally, I should like to take the opportunity to record my appreciation of the way in which the Forestry Commission is undertaking its stewardship of the New Forest. The fact that the Forest attracts such a large number of visitors each year, while at the same time continues to be a valued wildlife haven, an area of great landscape beauty and a productive timber resource, is testimony to the skilled way in which you have struck a balance between potentially conflicting interests.

24. I am copying this letter to Christopher Patten and Cecil Parkinson.”

APPENDIX VIII

Concluding Statement and Recommendations of the Thirteenth Commonwealth Forestry Conference held in New Zealand in September 1989

Concluding Statement

The Conference met against the background of an increasing rate of forest destruction in the tropics and widespread concern over the implications of this for the habitat, plant and animal species and immediate as well as long-term effects on the climate arising from global warming. In developed countries, rising demand for recreation, wildlife conservation and other benefits comes at a time of rapid innovation in methods of growing and regenerating forests.

Global warming has potential dangers for mankind. It stems from the effects of rising carbon dioxide concentration. Afforestation with fast-growing species and conversion of wood to long-life products, for example sawnwood, contributes toward carbon storage. The substitution of wood for other materials which require high fossil fuel, and hence carbon, input would also make a valuable contribution. It is not a question of new planting offsetting the total man-made contribution of carbon to the atmosphere but of it making a significant and acceptable contribution to this goal along with other steps such as energy conservation. Foresters, by such measures as afforestation and reforestation, are in a uniquely advantageous position to help meet this challenge by increasing the growing stock of wood thereby increasing the storage of carbon.

The rapid growth of population in many countries is accompanied by increasing demands for agricultural land, for grazing, and for fuelwood. Rather than commercial logging, it is these demands that are the most significant and major cause of forest depletion which is occurring at an increasing rate. The depletion of forest cover has major adverse social, economic, and environmental effects that transcend national boundaries.

There are vast areas of land that are suitable for tree growing and not needed for agriculture which can be rehabilitated by afforestation to ensure their sustained use. Of equal importance is the sustained yield management of existing natural forest where in many areas a balance can be achieved between timber production and environmental requirements without the need for complete preservation, except where this is necessary for ecological reasons.

In planning forestry projects, whether for afforestation or the management of existing forests, community involvement is not only desirable but often essential to their successful implementation. In many countries agroforestry can play a key role in securing the participation of the people in forestry. In many countries the attitudes of urban populations are increasingly important.

The rapid developments which have taken place over the last five years, particularly in tree improvement and remote sensing, hold out considerable promise for the contributions which can be expected of these technologies in the future. The application of such sophisticated innovations should not ignore the need for training and the opportunity to use traditional techniques as well as those which are simple and socially acceptable. There is, too, a continuing requirement to ensure that research is matched to real needs and to ensure that there is effective transfer of innovations in technology.

Positive communication is vital to achieve public understanding of the strategic, economic, and social advantages of sustainable, multiple-use forest management. The challenge is to adopt modern and effective means of communication and public relations.

In countries faced with the needs of rising populations and in countries faced with increasing public awareness and expectations concerning the quality of the environment, it is essential that forests are managed in an integrated way under policies that take full advantage of the concept of multiple-use and the range of benefits that forests can provide. Public investment in forestry should not be based entirely on calculations of monetary returns, but should take into account social and environmental benefits which contribute to the welfare of communities.

It is obviously desirable to evaluate all the benefits of trees and forests in money terms, but in certain fields, such as wildlife conservation and other non-wood products, reliable quantitative information is often not available. More exploration is also necessary of methods for assessing such values.

Forests, above all other land uses, generate a great variety of benefits and are frequently managed with multiple-use objectives. In terms of accountability the issue is whether one, or more than one, such use is to be accounted for. In certain well defined circumstances, forests managed solely for market products may be separated from those set aside to meet environmental concerns. However, this is not generally appropriate. The concept of multiple-use forestry does not necessarily imply that wood should be a dominant or even an acceptable use. It is becoming increasingly important to develop and apply financial systems and accounting procedures which provide for accountability in multiple-use forestry.

Estimates based on satellite imagery suggest that the rate of deforestation in most tropical countries is still increasing and is more serious than had previously been predicted. The reasons for tropical deforestation are complex and not exclusively forestry related. Great concern was expressed that bans on the import of tropical timber by consuming countries could in fact lead to increased deforestation in tropical forests. In order to achieve both the conservation and sustainable use of forests, a balance is required between timber production and environmental aspects.

It is important that the interests of environmental groups and timber producers are considered and that timber royalties are set at levels which reflect the true value and scarcity of the resource. The Tropical Forestry Action Plan (TFAP) initiative addresses these and many other related issues.

Encouraging progress has been made in some Commonwealth countries in taking forward the TFAP initiative. All Commonwealth countries should play an important role in supporting the TFAP initiative by increasing and strengthening the resources and skilled personnel available for project preparation and implementation. At the same time there is scope for refining the targeting of TFAPs, the priorities given to projects and the means of quantifying their success. Much greater collaboration with non-government organisations is considered essential and there needs to be a closer working relationship between foresters and environmentalists, especially in gaining political support for increased development assistance funding. The developing countries expressed a particular desire for improved 'grass roots' consultation.

Improved performance of new breeds of radiata pine in New Zealand and temperate eucalypt species in Australia provide the best opportunity to meet the increasing demands being made for plantation investments to be competitive. Improved logging practices in Australia and a shift to contract work in both countries have also contributed to major increases in efficiency. In New Zealand the real rates of return from radiata pine projects can now compete strongly with alternative commercial investment opportunities.

The location of plantations on more productive sites close to markets can substantially improve forest profitability. However, in Australia increases in land prices and the growing opposition of rural communities are hindering such development.

During the Conference delegates reviewed the purpose and structure of Commonwealth Forestry Conferences and agreed to a number of changes. They defined its purpose as being to promote the well-being, growth, and character of Commonwealth forestry as a major contributor to sustainable development.

Recommendations

A. Tropical and Global Forestry

1. That the Conference recommends to the Commonwealth Heads of Government meeting that they urge member countries to institute programmes and incentives to promote both forest restoration and afforestation, and to encourage the greater use of wood products to ameliorate global warming.
2. That the Conference strongly supports the Tropical Forestry Action Plan (TFAP) initiative while recognising that there is scope for more collaboration with non-Government organisations, and a closer working relation between foresters and environmentalists, and for refining targeting to ensure its effectiveness.
3. That the Commonwealth Heads of Government meeting be urged to establish a special Commonwealth TFAP support fund to enable Commonwealth countries to play their full part in implementing the TFAP by increasing and strengthening the resources available for project preparation and implementation and for promoting regional activities, particularly those which promote the reconciliation of environmental interests and sustainable forest management.
4. That, to promote TFAP, Regional Working Groups be formed to encompass interests concerned with the environment, timber production, timber trade, forestry, agriculture, finance and economic development to carry out an immediate review of possible options for reconciling the objectives of conservation of biological diversity and protection of local peoples' interests on the one hand, and the continuation of sustainably managed timber production on the other.
5. That there should be an intensification of national and international efforts, including the provision of long-term funding, to identify, research and manage representative protected core areas of natural forest and woodland.
6. That these protected core areas be managed, as far as is possible, within a matrix of forests or woodland managed for the sustainable production of forest products for the benefit of local populations.
7. That, wherever the opportunity arises to do so, Forest Departments should actively support debt-for-nature swap initiatives.

B. Training and Research

8. That Oxford Forestry Institute take the initiative and consult with other countries to develop comprehensive and compatible forestry databases, including species that are suitable for multi-purpose uses, to avoid duplication of research and encourage full utilisation of existing knowledge.
9. That donor agencies fund exchange visits between developing countries in situations where there could be a useful exchange of technology; and that these agencies fund the training and the provision of training aids to practising managers in basic interpretation of remote sensing imagery, ecological surveys in tropical forests and other relevant technical innovations, with an emphasis on techniques of immediate relevance.
10. That Commonwealth forestry research organisations increase the resources devoted to studying the effects of climate change on forests; carrying out inventories of plant and animal species; studying the scale of preservation needed to maintain diversity; elucidating methods of propagation and culture; and undertaking the valuation of conservation benefits.

C. Promotion of Forestry

11. That forestry bodies promote the strategic, economic and social advantages of balanced forest management and forestry's role in mitigating deleterious impacts of climate change, adopting professional public relations techniques.

12. That Governments ensure the existence of an effective, unified institutional framework for forestry.
13. That forestry authorities review their forest management policies and laws to encompass all forest values including non-commercial, environmental and social benefits as well as timber values; establish the training, data collection, operational techniques and planning systems required to achieve these objectives; and ensure active participation by the public and especially local communities in discussion of the implementation of policy.
14. That the Conference supports the review of timber pricing and concession policy project now underway in West Africa and that, depending on experience gained, similar regional approaches should be organised to encourage harmonisation of timber pricing and concession policies in the rest of Africa, South East Asia and Latin America.
15. That Commonwealth donor agencies undertake an early review of experimental land tenure schemes that permit private or community forestry on government-owned land and of their potential for wider application in other countries.

D. Valuation of Resources

16. That Commonwealth countries introduce a system, at levels of sophistication appropriate to member countries, of regular revaluation of timber resources to meet the need to capture the change in value of the asset as a measure of stewardship.
17. That the Albury workshop convenors co-ordinate the preparation of:-
 - a. guidelines for forest financial and management accounting, including minimum financial accounting standards and a glossary of accounting terminology;
 - b. a compendium on valuation/revaluation methods;
 - c. guidelines on ways of assessing non-commercial benefits on a basis comparable with those available for timber resources;

and report in the form agreed to at the workshop by 31 December 1990.

E. Profitability of Forest Production

18. That other Commonwealth countries study approaches such as those adopted in New Zealand to the development of integrated modelling which provides the means to identify and quantify those improvements in practice which will have the greatest impact on profitability.
19. That afforestation projects should locate plantations on high quality and easy terrain areas, near markets, and use genetically improved growing stock as these factors can substantially improve plantation profitability.

APPENDIX IX

Disposal of Property Managed by the Forestry Commissioners

Revised Statement of Policy and Practice*

Legal Position

1. Land acquired under the Forestry Act 1967 is vested in the Forestry Ministers and normally placed by them at the disposal of the Forestry Commissioners.
2. The powers of the Forestry Ministers to dispose of land are contained in Section 39 of the Forestry Act 1967, as amended by the Forestry Act 1981. These powers enable them to dispose of land acquired under the Act for any purpose. More restricted powers apply to the Forest of Dean and there is separate legislation applicable to the New Forest.
3. Certain nominated officials of the Forestry Commission are authorised to act on behalf of Forestry Ministers in the acquisition and disposal of land.

Policy

4. Property is sold by the Commission in the following circumstances:
 - a. in pursuance of its policy to limit its non-forest estate to that required for the fulfilment of the present and clearly foreseeable future needs of its Forestry Enterprise functions - property not so required is termed "surplus property";
 - b. in pursuance of Government policy that the Forestry Commissioners should dispose of some 100,000 hectares of forestry land and properties by the end of the century.

There are other circumstances, of less overall significance, where land may be sold: eg for housing or mineral development; to meet the requirements of other public bodies having powers of compulsory purchase (albeit not exercisable against the Commission because of Crown exemption); to effect boundary adjustment; in exchange for other land; or where necessitated under the terms of the title under which the Forestry Minister holds the land.

5. In meeting the objectives set out in paragraph 4.b., the Commission is responsible for selecting properties for disposal and for deciding the method of sale.
6. The main considerations which the Commission are required to take into account in selecting forest areas for sale have been set out in the form of guidelines by Forestry Ministers. These are contained in a letter from the Secretary of State for Scotland dated 28 May 1981 which was reproduced at Appendix V to the Commission's 1981-82 Annual Report.
7. In common with other Government Departments, the Commission ensures that disposals are carried out in a publicly acceptable manner and in accordance with public accountability.

Financial

8. It is estimated that up to £150 million will be released from disposals from 1 April 1989 to the end of the century.

Practice

The Selection of Properties for Sale

9. The Commission's holding of houses, buildings and land is kept under continuing review and assets not required for the achievement of the objectives of the Forestry Enterprise are identified as surplus estate to be sold.
10. Plantations and plantable land are sold under the policy referred to in paragraph 4.b. The disposal programme is being implemented so as to consolidate and rationalise the Commission's forestry estate in an orderly manner, taking account of wood supply commitments and the use of its forests for public access and recreation. All woods are selected in accordance with the considerations set out in the Ministerial guidelines referred to in paragraph 6, which have been expanded by the Commission in internal instructions to ensure that no aspect goes by default.
11. Boundary adjustments and exchanges of land are identified as part and parcel of efforts to rationalise the estate and in the interests of acquiring suitable land for planting with trees. Disposals can also arise as a result of "compulsory purchase" by other authorities; the exercise of resumption powers in the Commission's title in favour of other parties; or where development opportunities are present. The Commissioners will also consider the sale of land for purposes which bring major economic and job-creation benefits provided that this will not materially prejudice the achievement of their objectives.

*This statement first appeared as Appendix VI to the Annual Report and Accounts 1983-84 at the request of the Public Accounts Committee. An amended version, taking account of the Committee's comments, was included as Appendix VI to the 1984-85 Annual Report and Accounts. The revised statement above takes account of the statement on Forestry Commission disposals which the Secretary of State for Scotland made on 16 June 1989, as reproduced at Appendix VI to this report, together with other relatively minor changes which have been made in recent years.

Offer-Back Procedure

12. The Commission operates the offer-back procedure applicable to disposals by Government Departments. This applies to land acquired by or under the threat of compulsion, including sales made voluntarily if compulsory purchase power (albeit not used) were held by the acquiring department, unless in each case the land was publicly or privately offered for sale immediately before negotiations commenced.

13. In essence, this procedure gives former owners and their successors in title other than by purchase the first opportunity to repurchase land previously in their ownership, provided that it has not materially changed in character since acquisition (in a Forestry Commission context, the planting of bare land with trees is such a material change). The procedure applies to agricultural land acquired after 1 January 1935 and other property acquired 25 years or less before the disposal. There are certain exemptions requiring Ministerial authority, a de minimus provision for small areas and certain caveats concerning fragmentation of development land. Tenants of house property, however, are given a prior opportunity to buy.

14. The procedure described above applies only to freehold land (or land owned outright in Scotland). However, the Commission holds a significant proportion of its estate on lease and, as lessors often have much closer links with the property than former freeholders, the procedure has been extended to leasehold land in accordance with the wishes of the Forestry Ministers, as expressed in the letter referred to in paragraph 6. The provisions mentioned in paragraph 13 have been varied in three respects to reflect the continuing interest of lessors — by extending the qualifying period, by disregarding any material change in character and by giving the lessor a prior opportunity over house tenants.

Estate Gazette Notification and Sponsorship

15. It was recognised at an early stage in the disposals programme that many public and private bodies have a genuine interest in acquiring particular areas of Commission woodland. In order to draw attention, at the earliest stage, to such areas being considered for disposal, notices are placed in the Estates Gazette in respect of all woods larger than five hectares and all other land having a known conservation, recreation or amenity interest.

16. In the event of a body expressing firm interest in acquiring such an area, the Commission will consider giving it preference of opportunity to purchase if it can obtain sponsorship from the Government Department or agency responsible for the specific interest concerned. Sponsorship amounts to an unequivocal statement from the Department or agency that the acquisition of a named property by the body concerned to the exclusion of the public at large would be particularly in the public interest. Where the Commission accepts such sponsorship, it negotiates the terms of sale with the body involved, while the purchase price is assessed by the District Valuer on an open market value basis; this must, however, at least equal the Commission's reserve price (see paragraph 25) in the case of plantations being disposed of. A handout detailing these arrangements is available from the Commission's Chief Land Agent in Edinburgh.

17. The Commission also applies the sponsorship arrangements to non-forest assets which are judged to have a conservation, recreation or amenity interest but otherwise follows the practice of other Government Departments in not affording other public bodies a preferential opportunity to purchase.

Methods of Disposal

18. a. Open Market Sales

It is the Commission's aim to ensure that all potential purchasers are given a proper opportunity to express an interest and that the maximum price is obtained. To accomplish this the most appropriate method of sale is adopted, whether this be formal tender, informal tender, private treaty or auction. Properties are advertised appropriately and agents are instructed in most cases. Other than in exceptional circumstances, the highest offer above the reserve price is accepted.

b. Negotiated Disposals

Subject to obtaining the best price, sales are carried out by negotiation to sitting tenants of residential property (a discount scheme analogous to that under the Housing Act 1980 and its Scottish equivalent is available to tenants of surplus houses); to sitting agricultural tenants; under offer-back and sponsorship schemes; on rational land use grounds; to effect exchanges or boundary adjustments; where the title requires it or inhibits an open-market sale; in "compulsory purchase" cases; under the Leasehold Reform Act 1967 or the Crofting Acts; or in other exceptional circumstances where a negotiated sale is considered justified having full regard to public accountability.

Conditions of Sale

19. It is the Commission's practice not to impose conditions relating to the future use of the property, other than those which already exist in its title or are necessary for the proper management of land to be retained. Matters such as a change of land use and the felling of timber are governed by statute and regulations and the Commissioners do not consider that it is appropriate to pre-empt the future use of land which the Commission no longer manages.

20. The Ministerial statement of June 1989, reproduced at Appendix VI to this report, expressed the Government's concern that the general public should continue to enjoy access to those forests to be disposed of by the Commission in a way which is compatible with management for forestry and other purposes. Ways of achieving this objective were actively being considered at the end of the year under report.

Planning Considerations

21. The Commission ensures that the potential for a more valuable land use is investigated before sale. The Town and Country Planning Act 1984 enables the Commission and authorised outside interests to apply for and obtain statutory planning consent in respect of properties being disposed of.

Professional Advice and Implementation

22. Disposals are undertaken by Chartered Surveyors, who draw on the professional services of their forestry, engineering and other colleagues, the District Valuer, the Mineral Valuer and private firms of agents, mining engineers etc. as appropriate.

23. The services of the District Valuer are used when selling to other Government Departments under “compulsory purchase”; in sponsorship and offer-back cases; and in negotiated sales to serving or retired Commission staff. His advice may be sought in other instances.

Internal Responsibilities

24. The Commission’s Conservators are responsible for the preparation and execution of disposals under the overall direction and control of the Forestry Commissioners.

Reserve Prices

25. The reserve price is normally the assessment of open market value. The major exceptions are as follows:

- a. surplus tenanted houses, where the sale price is vacant possession value reduced by a percentage dependent upon the length of qualifying occupation and subject to clawback in the event of early resale;
- b. in sales to sitting agricultural tenants, a price near to vacant possession value is sought with a minimum of the open market value subject to the tenancy;
- c. where statutory provisions have to be followed as, for example, under the Crofting Acts, the Leasehold Reform Acts or the Land Compensation Acts;
- d. where the title prescribes the method — for example, resumptions;
- e. for the larger plantations, a floor price is assessed based on the Net Present Value of immature tree crops plus the value of land, roads, mature timber, sportings, buildings and any development value etc. The reserve price in these cases is the highest of the floor price or open market value.

Legal Processing

26. In England and Wales, the legal work on disposals is undertaken by the Treasury Solicitor, and in Scotland by the private firm of law agents who act for the Commission.

Land acquired under the Forestry (Transfer of Woods) Act 1923

27. Land in this category was transferred to the Commission by the Crown Estate Commissioners. No purchase price was paid but the Commission was obliged by statute to pay the net proceeds of sale to the Crown Estate. The Commission’s contingent liability for the original value of the property transferred has now been fully discharged.

APPENDIX X

New Publications

Reports

- 69th Annual Report and Accounts of the Forestry Commission 1988-89 (£10.80).
Report on Forest Research 1989 (£9.95).

Bulletins

- No. 81 Goshawks: their Status, Requirements and Management, by S.J. Petty (£3.00).
No. 82 A Systems Approach to Forest Operations Planning and Control, edited by M.A. Pritchard (£12.00).
No. 84 Taxation of Woodlands (£2.50).
No. 85 *Dendroctonus micans* in Britain: its Biology and Control, by C.J. King and N.J. Fielding (£3.00).
No. 86 Forests and Surface Water Acidification, by T.R. Nisbet (£2.00).
No. 87 The 1987 Storm: Impacts and Responses, edited by A.J. Grayson (£4.00).
No. 88 Monitoring of Forest Condition in the United Kingdom 1988, by J.L. Innes and R.C. Boswell (£8.80).

Field Books

- No. 3 Land Capability for Forestry: Northern Scotland (map £6.00 explanatory booklet £2.50).
No. 4 Land Capability for Forestry: Western Scotland (map £6.00 explanatory booklet £2.50).
No. 5 Land Capability for Forestry: Eastern Scotland (map £6.00 explanatory booklet £2.50).
No. 6 Land Capability for Forestry: South-west Scotland (map £6.00 explanatory booklet £2.50).
No. 7 Land Capability for Forestry: South-east Scotland (map £6.00 explanatory booklet £2.50).
No. 8 The Use of Herbicides in the Forest (3rd edition), by D.R. Williamson and P.B. Lane (£4.00).
No. 9 Classification and Presentation of Softwood Sawlogs (£2.00).

Guidelines

- Forest Landscape Design Guidelines (£3.00).

Handbooks

- No. 4 Lichens in Southern Woodlands, by K. Broad (£4.00).
No. 5 Urban Forestry Practice, edited by B.G. Hibberd (£11.50).

Occasional Papers

- No. 20 Nursery Stock Root Systems and Tree Establishment: a Literature Review, by J.J. White (£4.50).
No. 21 Provisional Code of Practice for the use of Pesticides in Forestry (£2.00).
No. 22 Forest Nursery Herbicides, by D.R. Williamson and W.L. Mason (£1.50).
No. 23 Trends in Forestry Research 1982-1988, by D.A. Burdekin (£1.50).
No. 24 Mechanical Characteristics of Sitka Spruce, by B.A. Gardiner (£1.50).

Miscellaneous

- Marketing for Small Woodlands: County Lists of Mills, Merchants and Contractors (£2.00).
Afforestation Consultations in Scotland (£3.00).
The Future for the New Forest — the Commissioners' response to the New Forest Review Group (incorporating Ministers' conclusions on those recommendations affecting central Government) (£5.00).

In addition, the following free publications were produced:

- Forestry Review (a popular version of the Annual Report).
New Forest Future (a summary of "The Future for the New Forest").
Forest Life (Issues 6 and 7).
Why Grow Trees? (an outline of multi-purpose forestry policy).
Forest Nature Reserves (a promotional leaflet/map).
The Forestry Commission and Urban Forestry.
Environmental Threats to Forests.
Native Pinewood Grants and Guidelines.
Handle Plants With Care.
Forestry Facts and Figures 1988-89.
The Recognition of Hazardous Trees.
Farm Woodlands Poster.

APPENDIX XI

Statistical Tables

Forestry Authority

AREA OF LAND MANAGED UNDER FORESTRY COMMISSION GRANT SCHEMES POSITION AT 31 MARCH 1990

Table 1

Area in hectares

	England		Wales		Scotland		Great Britain	
	Num- ber	Area	Num- ber	Area	Num- ber	Area	Num- ber	Area
Basis I and II Dedication Schemes	1,518	140,380	322	21,696	867	179,403	2,707	341,479
Basis III Dedication Schemes	255	12,863	53	5,258	402	66,135	710	84,256
Forestry Grant Schemes	2,190	40,306	291	8,079	1,944	155,100	4,425	203,485
Broadleaved Woodland Grant Schemes	5,026	37,161	677	2,609	1,209	6,191	6,912	45,961
Woodland Grant Schemes	4,972	71,974	610	5,583	1,908	71,429	7,490	148,986
Woodland Grant Schemes associated with the Farm Woodland Scheme	949	5,489	28	210	226	2,062	1,203	7,761

- Notes:
1. The areas shown are the gross areas managed under the schemes as at 31 March 1990 and include existing woodlands, areas awaiting planting and areas to be left unplanted.
 2. The Basis I and II Dedication Schemes were closed to new applications in June 1972 and the Basis III Dedication Scheme in July 1981. The Forestry Grant Scheme and the Broadleaved Woodland Grant Scheme were closed to new applications from 15 March 1988 and have been superseded by the Woodland Grant Scheme which was opened to applications on 21 June 1988.
 3. The Farm Woodland Scheme was introduced on 1 October 1988. It is administered by the Agriculture Departments, but eligibility for entry to the Scheme depends on planting proposals being approved by the Forestry Commission for grant-aid under the Woodland Grant Scheme. Such cases are distinguished from other Woodland Grant Schemes in this table.

AREA OF PLANTING BY PRIVATE WOODLAND OWNERS FOR WHICH GRANTS
WERE PAID IN THE YEAR ENDED 31 MARCH 1990

Table 2

Hectares

Country	England			Wales			Scotland			Great Britain		
	New Planting	Re-stocking	Total	New Planting	Re-stocking	Total	New Planting	Re-stocking	Total	New Planting	Re-stocking	Total
In Dedication Schemes												
Conifer	52	342	394	0	13	13	194	416	610	246	771	1,017
Broadleaved	22	233	255	0	9	9	9	42	51	31	284	315
Total	74	575	649	0	22	22	203	458	661	277	1,055	1,332
In Forestry Grant Scheme												
Conifer	117	329	446	147	42	189	3,236	222	3,458	3,500	593	4,093
Broadleaved	70	220	290	28	13	41	199	39	238	297	272	569
Total	187	549	736	175	55	230	3,435	261	3,696	3,797	865	4,662
In Broadleaved Woodland Grant Scheme												
Conifer	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaved	153	495	648	17	20	37	138	86	224	308	601	909
Total	153	495	648	17	20	37	138	86	224	308	601	909
In Woodland Grant Scheme												
Conifer	261	668	929	147	54	201	5,488	494	5,982	5,896	1,216	7,112
Broadleaved	938	1,584	2,522	120	119	239	1,431	685	2,116	2,489	2,388	4,877
Total	1,199	2,252	3,451	267	173	440	6,919	1,179	8,098	8,385	3,604	11,989
Total												
Conifer	430	1,339	1,769	294	109	403	8,918	1,132	10,050	9,642	2,580	12,222
Broadleaved	1,183	2,532	3,715	165	161	326	1,777	852	2,629	3,125	3,545	6,670
Total	1,613	3,871	5,484	459	270	729	10,695	1,984	12,679	12,767	6,125	18,892

In addition, the following areas of new planting were grant-aided under the Woodland Grant Scheme in association with the Farm Woodland Scheme.

Conifer	325	—	325	26	—	26	286	—	286	637	—	637
Broadleaved	1,428	—	1,428	67	—	67	507	—	507	2,002	—	2,002
Total	1,753	—	1,753	93	—	93	793	—	793	2,639	—	2,639

Notes: 1. Restocking includes new natural regeneration.

2. It is estimated that the following areas were planted without grant aid:

	<i>New Planting</i>	<i>Restocking</i>
England	185	129
Wales	4	1
Scotland	2	0
Great Britain	191	130

These figures were compiled from a large number of local estimates of small areas of planting.

**AREA OF PLANTING BY PRIVATE WOODLAND OWNERS FOR WHICH GRANTS WERE PAID IN
THE 10-YEAR PERIOD 1 APRIL 1980 TO 31 MARCH 1990**

Table 3

Hectares

Year ended 31 March	England			Wales			Scotland			Great Britain		
	New Planting	Re-stocking	Total	New Planting	Re-stocking	Total	New Planting	Re-stocking	Total	New Planting	Re-stocking	Total
1981	905	1,930	2,835	561	142	703	6,934	927	7,861	8,400	2,999	11,399
1982	795	1,888	2,683	1,004	223	1,227	10,663	1,339	12,002	12,462	3,450	15,912
1983	1,514	1,994	3,508	911	156	1,067	10,086	968	11,054	12,511	3,118	15,629
1984	1,480	1,935	3,415	1,064	113	1,177	14,129	1,019	15,148	16,673	3,067	19,740
1985	976	1,767	2,743	918	122	1,040	14,135	1,177	15,312	16,029	3,066	19,095
1986	984	2,346	3,330	743	434	1,177	17,292	1,559	18,851	19,019	4,339	23,358
1987	1,219	2,644	3,863	708	280	988	17,220	1,547	18,767	19,147	4,471	23,618
1988	1,679	2,718	4,397	945	476	1,421	21,197	1,660	22,857	23,821	4,854	28,675
1989	1,638	2,330	3,968	923	256	1,179	22,421	2,248	24,669	24,982	4,834	29,816
1990	1,613	3,871	5,484	459	270	729	10,695	1,984	12,679	12,767	6,125	18,892

Note: This table does not include planting done without Forestry Commission grants or planting grant-aided in association with the Farm Woodland Scheme.

**VOLUME OF TIMBER LICENSED FOR FELLING AND THINNING
ON PRIVATE LAND IN THE YEAR ENDED 31 MARCH 1990**

Table 4

Volume in thousands of cubic metres

	England	Wales	Scotland	Great Britain
Conifer	117	64	183	364
Broadleaved	77	7	10	94
Total volume	194	71	193	458
Number of licences issued	1,029	193	373	1,595

Note: Excludes felling and thinning covered by an approved plan of operations under one of the Forestry Commission's grant schemes, for which no licence is required.

**AREA LICENSED FOR CLEAR FELLING ON PRIVATE LAND
IN THE YEAR ENDED 31 MARCH 1990**

Table 5

Hectares

	England	Wales	Scotland	Great Britain
Conditional licences	340	162	475	977
Unconditional licences	308	9	55	372
Total	648	171	530	1,349

Note: Conditional licences require the restocking of the land concerned.

Forestry Enterprise

LAND USE AT 31 MARCH 1990

Table 6

Hectares

	England	Wales	Scotland	Great Britain
Forest Land				
Under plantations	219,731	127,079	516,730	863,540
Other woodland	15,344	2,925	16,094	34,363
To be planted	282	520	10,439	11,241
Total	235,357	130,524	543,263	909,144
Other Land				
Agricultural and grazing	9,975	4,352	49,313	63,640
Unplantable and miscellaneous (includes nursery land)	29,306	6,614	130,921	166,841
Total	39,281	10,966	180,234	230,481
Total area	274,638	141,490	723,497	1,139,625

Notes: 1. Other woodland is woodland managed chiefly for amenity purposes. Some 25,000 hectares of forest land have been reclassified as other woodland following a comprehensive redefinition of woodland types in 1989-90.

2. Agricultural and grazing land includes forest workers' holdings and tenanted land held against the Commission's long-term plantable reserve.

NET AREA OF LAND ACQUIRED/DISPOSED OF DURING THE YEAR ENDED 31 MARCH 1990

Table 7

Hectares

	England	Wales	Scotland	Great Britain
Plantations acquired	0	0	1	1
Plantations disposed of	1,593	1,038	1,878	4,509
Planting land acquired	0	19	425	444
Planting land disposed of	15	0	461	476
Other land acquired	14	0	46	60
Other land disposed of	381	204	2,281	2,866
Net area of land acquired/disposed of	(1,975)	(1,223)	(4,148)	(7,346)

FOREST LAND DISPOSED OF IN THE YEAR ENDED 31 MARCH 1990

Table 8

Conservancy	Forest Areas (hectares)		Plantable Land (hectares)	Total Area (hectares)	Receipts (£000)	Average £/hectare for Land Under Trees and Plantable Land
	Under Trees	Associated Land				
England						
North	743	174	15	932	868	1,145
East	509	30	0	539	996	1,957
West	341	12	0	353	920	2,698
Total	1,593	216	15	1,824	2,784	1,731
Wales	1,038	64	0	1,102	1,786	1,721
Scotland						
North	550	128	34	712	678	1,161
Mid	715	150	407	1,272	1,074	957
South	613	16	20	649	650	1,027
Total	1,878	294	461	2,633	2,402	1,027
Great Britain	4,509	574	476	5,559	6,972	1,399

PLANTING IN THE YEAR ENDED 31 MARCH 1990

Table 9

Hectares

	New Planting	Restocking*	Total
England			
Conifer	171	2,284	2,455
Broadleaved	27	433	460
Total	198	2,717	2,915
Wales			
Conifer	86	1,273	1,359
Broadleaved	10	91	101
Total	96	1,364	1,460
Scotland			
Conifer	3,563	3,486	7,049
Broadleaved	224	298	522
Total	3,787	3,784	7,571
Great Britain			
Conifer	3,820	7,043	10,863
Broadleaved	261	822	1,083
Total	4,081	7,865	11,946

* Restocking includes new natural regeneration.

AREA PLANTED ANNUALLY BY THE COMMISSION IN
THE 10-YEAR PERIOD 1 APRIL 1980 TO 31 MARCH 1990

Table 10

Hectares

Year ended 31 March	England			Wales			Scotland			Great Britain		
	New Planting	Re-stocking	Total	New Planting	Re-stocking	Total	New Planting	Re-stocking	Total	New Planting	Re-stocking	Total
1981	470	1,902	2,372	683	1,116	1,799	10,481	1,996	12,477	11,634	5,014	16,648
1982	558	1,949	2,507	326	1,524	1,850	10,094	2,037	12,131	10,978	5,510	16,488
1983	429	2,027	2,456	436	1,482	1,918	8,021	2,289	10,310	8,886	5,798	14,684
1984	397	2,567	2,964	275	1,539	1,814	7,710	2,647	10,357	8,382	6,753	15,135
1985	167	2,171	2,338	161	1,300	1,461	4,777	2,445	7,222	5,105	5,916	11,021
1986	246	2,156	2,402	49	1,778	1,827	4,038	3,363	7,401	4,333	7,297	11,630
1987	138	2,784	2,922	138	1,935	2,073	5,066	3,319	8,385	5,342	8,038	13,380
1988	178	2,609	2,787	157	2,041	2,198	4,617	3,527	8,144	4,952	8,177	13,129
1989	130	2,895	3,025	61	1,736	1,797	3,914	3,844	7,758	4,105	8,475	12,580
1990	198	2,717	2,915	96	1,364	1,460	3,787	3,784	7,571	4,081	7,865	11,946

**AREAS OF PLANTATIONS AND VOLUMES OF TIMBER FELLED
AND THINNED IN THE YEAR ENDED 31 MARCH 1990**

Table 11 Area in hectares
Standing volume in thousands of cubic metres overbark

	Felled		Thinned		Total Volume Felled and Thinned
	Area	Volume	Area	Volume	
England					
North	1,368	436	1,400	86	522
East	1,856	444	2,989	144	588
West	523	151	2,290	146	297
Total	3,747	1,031	6,679	376	1,407
Wales	1,412	379	4,354	310	689
Scotland					
North	1,997	424	2,721	163	587
Mid	1,072	370	1,391	72	442
South	1,235	355	926	66	421
Total	4,304	1,149	5,038	301	1,450
Great Britain	9,463	2,559	16,071	987	3,546

Note: Up to 1988 timber volumes were expressed as volume extracted. This was changed in 1989 to standing volume.

SALES OF TIMBER IN THE YEAR ENDED 31 MARCH 1990

Table 12 Standing volume in thousands of cubic metres overbark

Description	England	Wales	Scotland	Great Britain
Trees sold standing	595	261	481	1,337
Converted				
Round timber and saw logs	465	243	512	1,220
Telegraph and other selected poles	5	0	1	6
Mining timber	0	1	0	1
Posts and stakes	7	14	5	26
Pulpwood and boardmill material	308	170	449	927
Firewood	11	2	10	23
Miscellaneous	11	1	0	12
Total	807	431	977	2,215

See note to Table 11, which also applies to this table.

**PROPERTIES MANAGED BY THE COMMISSION
AT 31 MARCH 1990**

Table 13

Number

Type of Property	England	Wales	Scotland	Great Britain
Forest properties				
Foresters' houses	21	8	45	74
Forest workers' houses	212	22	229	463
Forest workers' holdings	9	7	36	52
Miscellaneous*	539	246	498	1,283
Total	781	283	808	1,872
Other properties				
Farms and other agricultural subjects	402	151	410	963
Residential and other lettings	557	69	346	972
Other lettings	224	270	500	994
Total	1,183	490	1,256	2,929
Sporting lettings	471	104	976	1,551

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

**PUBLIC RECREATIONAL FACILITIES
AT 31 MARCH 1990**

Table 14

Number

	England	Wales	Scotland	Great Britain
Camping and caravan sites *	22	1	9	32
Picnic places	342	90	189	621
Forest walks and forest nature trails	281	101	259	641
Visitor centres	10	4	8	22
Arboreta and forest gardens	15	5	2	22
Forest drives	5	3	2	10
Forest cabins and holiday houses	107	0	67	174

* In addition to the campsites listed above, the Commission provides:-

- (i) 5 sites leased to the Caravan Club;
- (ii) 55 sites set aside for youth camping;
- (iii) facilities for caravan rallies.

LAND USE, PLANTING AND TIMBER PRODUCTION BY FOREST DISTRICTS
— ENGLAND

Table 15

Conservancy	Land use at 31 March 1990 (hectares)					During Year 1989-90		
	Total Area of Forest	Under Planta- tions	Other Wood- land	To be Planted	Other Land	Planting (hectares)		Pro- duction (000 cu m)
						New Planting	Re- stocking	
NORTH ENGLAND								
Cheshire	938	779	39	0	120	0	1	9
Durham	5,161	4,715	135	17	294	0	65	41
Kielder	61,901	49,345	651	50	11,855	100	898	257
North Lakes	8,379	5,645	146	3	2,585	5	116	45
North York Moors	22,002	18,564	480	0	2,958	35	109	68
Rothbury	10,972	9,297	109	158	1,408	53	44	19
South Lakes	7,922	6,548	602	0	772	0	201	56
York	4,283	3,810	314	0	159	2	8	10
TOTAL	121,558	98,703	2,476	228	20,151	195	1,442	505
EAST ENGLAND								
Chilterns	3,507	3,055	385	2	65	0	10	5
New	26,839	7,502	6,919	0	12,418	0	28	45
Northants	7,361	6,813	414	0	134	0	40	20
North Lincs	4,254	3,805	350	2	97	0	0	21
Sherwood	8,696	7,107	383	4	1,202	0	15	35
South Downs	8,096	7,406	442	0	248	0	146	48
Suffolk	4,291	3,940	246	0	105	0	192	153
Thetford	21,045	20,127	378	4	536	0	230	139
Weald	7,421	6,749	245	1	426	0	228	82
West Downs	5,952	5,294	304	0	354	0	40	31
TOTAL	97,462	71,798	10,066	13	15,585	0	929	579
WEST ENGLAND								
Cornwall and North Devon	7,693	7,153	269	1	270	0	92	44
Dean and Three Counties	12,423	10,693	424	1	1,305	0	61	67
Dorset	7,512	6,575	236	1	700	0	30	25
Marches	7,275	6,542	428	36	269	0	33	34
Midlands	5,476	4,985	367	2	122	0	49	35
Somerset and South Devon	9,684	8,418	555	0	711	3	47	74
Wiltshire and Avon	5,555	4,864	523	0	168	0	34	15
TOTAL	55,618	49,230	2,802	41	3,545	3	346	295

LAND USE, PLANTING AND TIMBER PRODUCTION BY FOREST DISTRICTS
— WALES

Table 16

Conservancy	Land use at 31 March 1990 (hectares)					During Year 1989-90		
	Total Area of Forest	Under Plantations	Other Woodland	To be Planted	Other Land	Planting (hectares)		Production (000 cu m)
						New Planting	Re-stocking	
WALES								
Ceredigion	18,726	16,544	136	240	1,806	0	169	56
Clwyd	9,907	9,244	59	19	585	0	136	77
Dolgellau	19,057	17,577	183	7	1,290	3	133	108
Llandoverly	22,803	21,321	661	0	821	0	172	141
Llanrwst	12,463	9,906	198	4	2,355	0	322	57
Morgannwg	29,860	25,611	851	233	3,165	80	297	91
Newtown	14,473	14,155	86	0	232	0	97	87
SE Wales	14,201	12,721	751	17	712	13	38	69
TOTAL	141,490	127,079	2,925	520	10,966	96	1,364	686

Note: This table takes account of the re-organisation of Wales Conservancy as shown in Appendix XIII to the 1988-89 Annual Report.

LAND USE, PLANTING AND TIMBER PRODUCTION BY FOREST DISTRICTS
— SCOTLAND

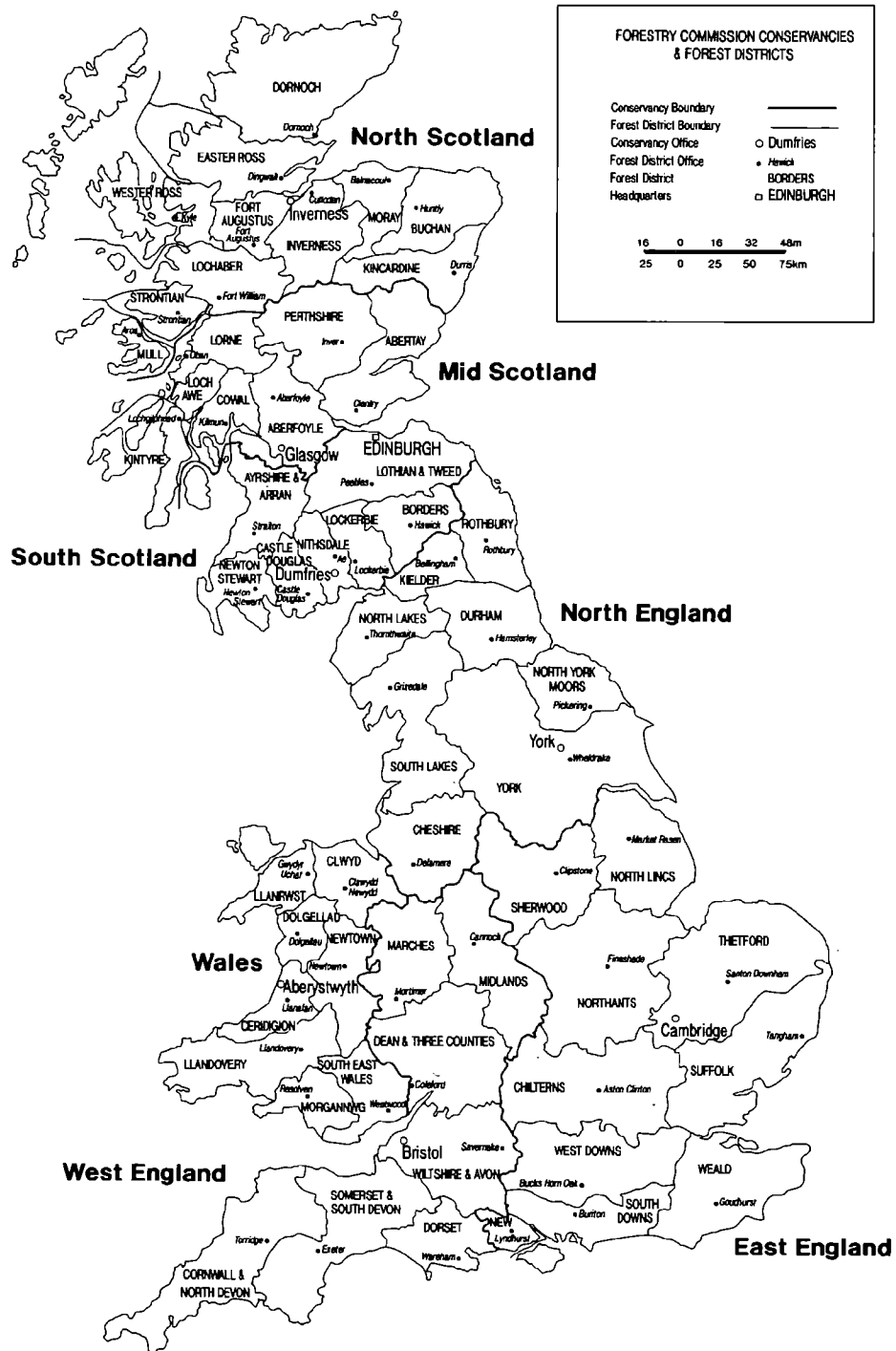
Table 17

Conservancy	Land use at 31 March 1990 (hectares)					During Year 1989-90		
	Total Area of Forest	Under Plantations	Other Woodland	To be Planted	Other Land	Planting (hectares)		Production (000 cu m)
						New Planting	Re-stocking	
NORTH SCOTLAND								
Buchan	24,363	21,178	198	28	2,959	25	142	108
Dornoch	56,615	36,421	236	2,254	17,704	593	346	7
Easter Ross	30,583	23,717	399	626	5,841	182	143	130
Fort Augustus	39,609	17,564	3,222	673	18,150	245	86	60
Inverness	20,173	15,722	581	335	3,535	90	39	32
Kincardine	14,843	13,635	185	9	1,014	32	166	61
Lochaber	36,647	19,122	1,077	138	16,310	112	98	44
Moray	24,508	22,160	314	187	1,847	115	88	78
Mull	15,508	10,819	242	399	4,048	102	152	14
Strontian	20,688	11,512	823	727	7,626	99	118	21
Wester Ross	31,053	16,145	410	736	13,762	253	130	29
TOTAL	314,590	207,995	7,687	6,112	92,796	1,848	1,508	584
MID SCOTLAND								
Aberfoyle	30,917	22,898	1,133	24	6,862	57	290	69
Abertay	13,821	12,155	143	46	1,477	46	182	44
Cowal	39,582	24,800	1,500	261	13,021	157	212	86
Kintyre	33,705	26,417	1,143	659	5,486	288	302	63
Loch Awe	33,384	25,179	738	98	7,369	85	129	76
Lorne	31,799	19,975	1,114	219	9,491	125	100	38
Perthshire	31,726	24,615	1,110	1,176	4,825	208	97	56
TOTAL	213,934	156,039	6,881	2,483	48,531	966	1,312	432
SOUTH SCOTLAND								
Ayrshire & Arran	44,146	29,567	346	477	13,756	210	81	38
Borders	18,548	16,315	116	130	1,987	292	2	53
Castle Douglas	33,175	27,127	125	0	5,923	0	273	102
Lockerbie	17,420	15,419	104	0	1,897	0	199	70
Lothian & Tweed	14,212	13,408	99	1	704	0	111	36
Newton Stewart	49,103	34,532	431	1,033	13,107	349	123	40
Nithsdale	18,369	16,328	305	203	1,533	122	175	75
TOTAL	194,973	152,696	1,526	1,844	38,907	973	964	414

Notes: *North Scotland.* Moray Forest District comprises the former Moray and Speyside Forest Districts.

APPENDIX XII

Map showing the boundaries of the Commission's Conservancies and Forest Districts at 31 March 1990



ADDRESSES OF THE MAIN OFFICES OF THE FORESTRY COMMISSION

Headquarters of the Forestry Commission:

231 Corstorphine Road, Edinburgh EH12 7AT (031 334 0303)

Telex: 727879 (FORCOM G) Fax No: 031 334 3047

Director Research:

Alice Holt Lodge, Wrecclesham, Farnham, Surrey GU10 4LH (0420 22255)

Northern Research Station, Roslin, Midlothian EH25 9SY (031 445 2176)

Conservancy Offices

England:

North: 1A Grosvenor Terrace, York YO3 7BD (0904 620221)

East: Great Eastern House, Tenison Road, Cambridge CB1 2DU (0223 314546)

West: Avon Fields House, Somerdale, Keynsham, Bristol BS18 2BD (0272 869481)

Scotland:

North: 21 Church Street, Inverness IV1 1EL (0463 232811)

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

South: Greystone Park, 55/57 Moffat Road, Dumfries DG1 1NP (0387 69171)

Wales:

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



Forestry Commission

231 Corstorphine Road
Edinburgh
EH12 7AT
Telephone: 031-334 0303

HMSO publications are available from:

HMSO Bookshops

71 Lothian Road, Edinburgh, EH3 9AZ 031-228 4181
49 High Holborn, London, WC1V 6HB 071-873 0011 (Counter service only)
258 Broad Street, Birmingham, B1 2HE 021-643 3740
Southey House, 33 Wine Street, Bristol BS1 2BQ (0272) 264306
9-21 Princess Street, Manchester, M60 8AS 061-834 7201
80 Chichester Street, Belfast BT1 4JY (0232) 238451

HMSO Publications Centre


(Mail and telephone orders only)
PO Box 276, London, SW8 5DT
Telephone orders 071-873 9090
General enquiries 071-873 0011
(queuing system in operation for both numbers)

HMSO's Accredited Agents

(see Yellow Pages)

And through good booksellers

ISBN 0 10 207591 3

 **£12.00 nett**