

Front cover: Mature European larch in the Forest of Dean.

Sixty-Second Annual Report and Accounts of the Forestry Commission for the year ended 31 March 1982

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 13th May, 1983

LONDON
HER MAJESTY'S STATIONERY OFFICE
£8.00 net

Previous Reports

1980-81 HC 136 (1981-82)

1979–80 HC 14 (1980–81)

1978–79 HC 358 (1979–80)

FORESTRY COMMISSION

231 Corstorphine Road Edinburgh EH12 7AT 25 March 1983

To:

The Rt Hon Peter Walker MBE, MP, Minister of Agriculture, Fisheries and Food

The Rt Hon George Younger MP, Secretary of State for Scotland

The Rt Hon Nicholas Edwards MP, Secretary of State for Wales

Gentlemen

In pursuance of Section 45 of the Forestry Act 1967, I have the honour to transmit the 62nd Annual Report of the Forestry Commissioners which covers the year ended 31 March 1982.

I should explain that the presentation of the Report was delayed in order that the Commissioners could complete and report upon the second quinquennial revaluation following the reconstruction of their Accounts in 1972.

I am, Gentlemen, Your obedient Servant, (Sgd) DAVID MONTGOMERY Chairman

The Forestry Commissioners and Senior Staff at 31 March 1982

Forestry Commissioners

Sir David Montgomery Bt, JP, DL, Chairman

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

Captain D. S. Bowser JP

Lord Gibson-Watt PC, MC, DL

Mr G. O. Hutchison

Mr J. N. Kennedy

Mr D. A. Mithen

Mr G. S. Murray

Mr J. D. Pollock

Mrs L. J. Whetstone

Senior Staff

Secretary: Mr P. J. Clarke

Senior Officer for Wales: Mr R. T. Bradley

Director, Research and Development: Mr A. J. Grayson

Director, Private Forestry and Land Use Planning: Mr A. Morrison

Director, Estate Management: Mr J. M. Gwynn

Director, Harvesting and Marketing: Mr G. J. Francis

Controller of Finance: Mr C. F. Turquand FCA

Deputy Establishment Officer: Mr C. W. Simmonds

Territorial Conservators

England

North West: Mr A. A. Rowan
North East: Mr J. A. Spencer
East: Mr R. M. Hewitt
New Forest and South East: Mr C. D. Begley
South West and Dean Forest: Mr L. C. Troup

Scotland

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

Wales

North: Mr R. T. Bradley

South: Mr A. Rix

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

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General Review

Forestry Policy

1. There were a number of important forestry policy items noted in our Report last year which were still in the process of discussion and formulation, such as the Forestry Bill providing for wider powers to dispose of Commission land and plantations, the changes proposed by a Rayner study into the administration of forestry grants and felling controls, and a House of Lords Select Committee Report on forestry research. During the year covered by our present Report, the Forestry Bill passed into law as the Forestry Act 1981. The Government also announced their conclusions with regard to the future pattern of forestry grants and gave their response to the Select Committee Report on forestry research.

Forestry Act 1981

- 2. In our last Report we outlined the main purposes of the Forestry Bill, then before Parliament, as being to widen the powers of Ministers to dispose of Commission land and plantations in order to reduce our dependence on public funds for the management of the Forestry Enterprise; to allow transfers from the Forestry Fund to the Consolidated Fund of sums specified by Forestry Ministers with the approval of the Treasury; and to provide for the appointment of an additional Commissioner. After passing unamended through the House of Commons, the Bill received its first reading in the House of Lords on 7 April 1981.
- 3. As the Bill progressed through the House of Lords, the controversy that had begun in the House of Commons over the unrestricted nature of the disposal powers continued and a number of amendments were put down attempting to limit them. Concern for the future of the Forestry Enterprise, and the possible implications of disposals on public access and recreation, conservation, the wood-using industries and employment, were reflected in amendments similar to those that had been unsuccessfully tabled in the Commons. Others were proposed designed to ensure that land disposed of remained in forestry and that the proceeds of the disposals programme were used for forestry purposes. Altogether, the passage of the Bill through both Houses of Parliament attracted more than 80 amendments and took up some 75 hours of debate. Three amendments, tabled in the House of Lords by the Government, were eventually included in the Bill. These were:
 - (i) to exempt forestry land in the Forest of Dean from disposal unless in the opinion of the Minister it was not needed, or ought not to be used, for afforestation or any purpose connected with forestry;
 - (ii) to remove land held inalienably by the National Trust and the National Trust for Scotland from the scope of the compulsory purchase powers in section 40 of the Forestry Act 1967; and
 - (iii) to require that Ministers, in performing their functions under that Act, shall have regard to the national interest in maintaining and expanding the forestry resources of Great Britain.
- 4. During the course of the Bill it was announced that the Government anticipated raising some £10 million from the wider disposals programme in

the first year and £15 million in each of the next two years. The selection of areas for disposal would be left to the Forestry Commission, but in a letter to the Commission Chairman, copies of which were placed in the libraries of both Houses of Parliament, Forestry Ministers set out the main considerations to be taken into account in the selection process. This letter is reproduced in full at Appendix V to this Report.

5. The Bill, as amended, received the Royal Assent on 27 July 1981 and the first plantations selected for sale under the new powers were placed on the market early in September. Further details of our approach to the new disposals programme and the market response are given at paragraphs 61 to 64.

Forestry Grant Scheme

- 6. The Government's forestry policy statement of 10 December 1980 outlined the main proposals arising from a study into the administration of our grant-aid schemes and felling controls which had been carried out under the auspices of Lord (then Sir Derek) Rayner. Fuller details were contained in a consultative paper *The Administration of Felling Control and Grant Aid* which we issued at the same time. After evaluating the many comments received on the consultative paper from organisations and individuals both within the forestry industry and outside, the Government's conclusions on the future pattern of grant aid were given by the Rt Hon George Younger, Secretary of State for Scotland, in a statement to the House of Commons on 28 July 1981.
- 7. In his statement, Mr Younger announced the introduction of a new Forestry Grant Scheme to replace the Dedication Basis III and Small Woods Schemes, which were closed to new applications from 1 July 1981. The new scheme, which started on 1 October 1981, is designed to retain the practical advantages of the earlier grant arrangements while reducing costs by simplifying the administrative and legal procedures. Existing contracts under the Dedication and Small Woods Schemes will continue, and Mr Younger announced that the grants paid under them would be increased from 1 October 1980. A full copy of the statement and the table of grant rates accompanying it are reproduced as Appendix VI to this Report.
- 8. We are pleased to record that the Forestry Grant Scheme has got off to an encouraging start and has been well received by the majority of private foresters. Its administration is proving far more straightforward than that of the previous grant schemes, and we are hopeful that it will eventually lead to significant manpower and cost savings. Further details on the response to the new scheme are given in paragraphs 108 and 109.

Felling Controls

9. In his statement on the new grant arrangements, the Secretary of State for Scotland indicated that the Government's decisions on the changes to the felling control system proposed in our consultative paper would be the subject of a later announcement. This matter was still under consideration by Ministers at the end of the year under report.

Select Committee Report on Forestry Research

- 10. The Government's response to the House of Lords Select Committee on Science and Technology report on the scientific aspects of forestry* was given by the Earl of Mansfield, Minister of State at the Scottish Office, on 4 February 1982. The full text is reproduced at Appendix VII to this Report. The Select Committee published the Government's statement on 15 February 1982 inviting observations from those who had contributed to their original inquiry and indicating that after deliberation they might take further oral evidence. The outcome was still awaited at the end of the period covered by this Report.
- 11. In their statement, the Government accepted the Select Committee's view that research to support the forestry industry required a more coherent approach and agreed that the solution lay in the Forestry Commission assuming responsibility for co-ordinating the broad strategy of forestry research in Great Britain. This would be pursued through the establishment of a Forestry Research Co-ordination Committee to act as a forum to identify research requirements and opportunities and to encourage the co-ordination of research programmes in forestry. The Government had given careful consideration to the Select Committee's recommendation that the Commission should appoint a Chief Scientist, but had concluded that this would not be justified in the present period of economic stringency; many of the functions envisaged for the Chief Scientist would, however, be fulfilled by the new Co-ordination Committee.
- 12. The Select Committee's proposal that the Commission should assume responsibility for applied research into the end uses of wood and forest products, through the establishment of a Forest Products Research Laboratory, was not accepted on the grounds that the present arrangements under which wood research is carried out by the Department of the Environment's Building Research Establishment were working satisfactorily. The Committee's views on the need for a long-term policy for broadleaved woodlands were noted by the Government, who indicated that the Commission was looking into the question.
- 13. We welcome the responsibility we have been asked to assume in coordinating research strategy through the new Forestry Research Co-ordination Committee. By the end of the year under report we had reached agreement on the composition of the Committee with the other interests concerned and were planning to have a first meeting at an early date. In addition to the membership referred to in the Government's statement, it has been decided to include representatives from the Institute of Terrestrial Ecology and the Forestry Universities.
- 14. We also welcome the Government's endorsement of the Commission's leading role in the consideration of a long-term policy for the country's broadleaved woodlands. As an important next step in this process, we decided to sponsor and organise a symposium on the theme of *Broadleaves in Britain*

^{*} Second Report of the House of Lords Select Committee on Science and Technology: Session 1979–80, Cmnd 381, HMSO, £3·60 net.

at Loughborough University in July 1982, in conjunction with the Institute of Chartered Foresters, aimed at assembling information on research results and successful management practices with the object of improving and sustaining our broadleaved woodlands. There had already been a good deal of debate about the future of these woodlands, in part stimulated by the Select Committee's observations, and it was hoped that the symposium would effectively draw the strands together so that positive consideration could be given to objectives and to the efficacy of present practices and incentives in meeting them.

The Commission's Finances

Second Quinquennial Revaluation

In reporting on the outcome of this latest revaluation of our estate, we feel that it would be helpful to explain the system of accounting under which the Forestry Commission has operated over the past ten years. Until 1972, it had been the practice to charge interest in the Commission's accounts at the current Government lending rate, irrespective of the earning power of the industry. Over the greater part of the Commission's existence, however. investments had been made for what were regarded as strategic and social reasons, without an expectation that a return at the current lending rate would be achieved. Against this background, and with most of the expenditure on the existing semi-mature forest estate having by then been incurred and the concept of a strategic reserve of timber for wartime use having ceased to have the same relevance, it was decided by the Government in 1972 that it would be opportune to restructure the Commission's accounts and to require in future that the Forestry Enterprise should aim at a target rate of return of 3 per cent in real terms. Such a return was regarded as the maximum that might be earned from investment in afforestation in Northern Europe on the best sites close to markets. A new valuation of the Commission's plantations was determined by reference to an estimate of future net revenue discounted at the 3 per cent rate, resulting in a substantial reduction in the figure taken as the value of capital employed at that time.

- 16. It was also decided that the accounts should show:
 - (i) the difference between 3 per cent and the rate of return generally required on Government trading accounts (currently 5 per cent);
 - (ii) the extent to which new planting and restocking could not earn the target rate of return;
 - (iii) the cost of providing for recreation, amenity and nature conservation for which no commercial objectives could be set.

The purpose of identifying these elements as subsidies is three-fold. First, in order to show the subsidy to forestry arising from the Government's decision to set the target rate of return at 3 per cent rather than the 5 per cent generally required on commercial activities in the public sector; second, so that a periodic assessment can be made of progress in the achievement of the 3 per cent target rate of return, as measured by the current valuation of the Commission's assets; and third, to show the costs attributable to certain non-commercial social objectives laid upon the Commission by successive Governments.

- 17. Planting and restocking subsidies are calculated as the capital sum required to bring the expected internal rate of return on a new plantation up to the 3 per cent target. The forestry subsidy, on the other hand, is calculated as the difference between the annual return of 3 per cent on the value of the forest estate as compared with a return of 5 per cent on that value. The forestry subsidy on a new or restocked plantation is therefore recorded as a note to the accounts and is spread over the whole length of the rotation rather than as a lump sum in the year in which the planting takes place.
- 18. Provision was also made for the calculation of standards for plantations expenditure and income and the assessed value of timber cut. The annual accounts from 1972–73 onwards have shown the actual income and expenditure against these standards.
- 19. Under the new arrangements the Commission's estate has been revalued at five-yearly intervals since 1972. Each valuation has been based on a physical inventory of the growing stock and the fixed assets. A comparison of successive valuations is made to show how the investment in forestry has developed and whether progress is in line with the achievement of the target rate of return. It is also possible to see annually whether the programmes are being achieved and to judge approximately how far the departures from the price and cost standards necessary to earn 3 per cent in real terms are attributable to general movements in the level of prices, and how price variations are balanced by those in costs.
- 20. The first quinquennium ended on 31 March 1977 and the results were set out in our 1976-77 Report. The second quinquennium having ended on 31 March 1982, a further revaluation as at 1 April 1982 has been completed. The main conclusions to be drawn from it are as follows:
 - (i) During the quinquennium 1977-82, there was a shortfall against the standards set in 1977 for the Plantations and the Harvesting and Marketing Accounts amounting to £61.6 million expressed in £(1982). The main reason for this was that, while costs were generally held within the standards, timber prices failed to keep pace with inflation as a result of the depressed market and exchange rate fluctuations. When account is taken of current assumptions about future work and output for the remainder of the rotation, using the 1977 cost and price assumptions updated by general inflation, the result is a further reduction of £89.1 million in the plantations value. The total shortfall against the cost, price and programme assumptions built into the 1977 valuation is therefore £150.7 million. Expressed as a return over the whole rotation, and after taking account of subsidies, this represents an overall return of 2.6 per cent against the 3 per cent target rate.
 - (ii) A reassessment of the plantation cash flows, based on updated estimates of future costs, prices and staffing levels to provide both the standards and the starting valuation for the next quinquennium, more than offsets the reduction of £89·1 million in the value of plantations previously mentioned. The total value of the Enterprise assets to be brought into the 1982–83 accounts at 1 April 1982 is

- £1,087·1 million, which is £0·2 million more than the figure in the Balance Sheet at 31 March 1982.
- (iii) The target rate of return will remain at 3 per cent for the 1982-87 quinquennium as the internal rate of return on good sites close to markets is still expected to be at about that level. The actual rate of return in more remote areas can be expected to be below 3 per cent, however, and we shall be looking for an average internal rate of return in respect of new planting and restocking during the period 1982-87 of not less than 2½ per cent, compared with 1½ per cent in 1977-82.
- (iv) The forest recreation and amenity subsidy will be contained within a ceiling of £4.5 million in real terms for the 1982–87 quinquennium.

Further commentary on the revaluation and its implications appears in the Forestry Enterprise section of this Report at paragraphs 96 to 104 and in the Special Notes to the Accounts on pages 108 to 112.

Grant-in-Aid

- 21. The Grant-in-Aid voted by Parliament forms the Commission's agreed cash limit. For 1981–82 the amount voted was £59·2 million, of which £57·2 million was drawn into the Forestry Fund. The unused balance of £2 million, mainly attributable to the large working balance brought forward from 1980–81, will be surrendered to the Consolidated Fund. The final call on Exchequer funds in 1981–82 was £58·7 million, made up of £57·2 million in Grant-in-Aid plus an adjustment of £1·5 million in respect of a net reduction in the working balance.
- 22. A new feature was introduced into the operation of the Forestry Fund in 1981–82 as a result of the Forestry Act 1981 adding a provision to the 1967 Act (Section 41(4A)) to enable Forestry Ministers, with the approval of the Treasury, to direct payment of such sums as they may from time to time determine from the Forestry Fund into the Consolidated Fund. A direction subsequently made by Forestry Ministers under this provision requires receipts from the disposal of land, buildings and plantations to be transferred to the Consolidated Fund, together with any working balance remaining in the Forestry Fund at the end of the financial year.
- 23. Payments, excluding amounts paid or due to the Consolidated Fund, amounted to £109·7 million. This was some £12·4 million (12 per cent) more than in 1980–81, due mainly to the continuing effect of inflation and pay awards, supplemented by an increase in the funds allocated to land acquisition and building works and a rise in private woodland grant payments. Receipts (excluding cash from the disposal of land, buildings and plantations) amounted to £51 million in 1981–82 compared with £52 million in the previous year, reflecting the depressed state of the market for wood and its consequential effect on prices.
- 24. The statement of Forestry Fund receipts and payments, together with notes and explanations, appears at Table 1 of Appendix XI.

Manpower Reductions

25. As part of the Government's policy of reducing staffing costs in the public service, we have been required to prune our salaries and wages bill by some 8 per cent over the three-year period from 1 April 1979 to 31 March 1982. The resultant manpower ceiling approved by the Civil Service Department (as it then was) was 7,698. The programme of staff reductions has taken place against a background of lengthy and occasionally difficult negotiations with the Trade Unions, but with their co-operation the lower manpower levels have been achieved. Due to the combined effect of expenditure cuts in other areas, leading to lower programmes, and the continuing recession in the timber market, the number of Commission employees at 31 March 1982 was in fact 153 below the target set (see paragraph 46).

Management Structure Review

26. The Commission's management structure was last formally examined in 1964 when the five tiers of management were reduced to four with the abolition of the national directorates. In December 1981, the Director General decided to set up an internal Management Structure Review Group with the task of reviewing the efficiency of the present structure and organisation at the Conservancy, District and Forest levels. In the course of their work, the four-man Group made numerous visits to working locations at the three levels of management under study and consulted with the staff associations both locally and centrally. Advice was also obtained from other organisations and individuals in both the public and private sectors. The Group were expected to present their report to the Director General in April 1982.

Study of Light Vehicle Use in the Commission

27. Following the success of the Rayner study into the administration of forestry grants and felling controls in 1980–81, we embarked on a second project under the auspices of Sir Derek Rayner in September 1981. This involved a scrutiny of the numbers, use and cost-effectiveness of our fleet of light vehicles, such as Land Rovers and personnel carriers, which number some 2,000. The examining officer's report was presented in January 1982 and produced a number of recommendations which, if implemented in full, would lead to changes in the types of vehicles used and their numbers, resulting in due course in cost savings of up to £650,000 per annum. Most of the recommendations were acceptable to us and at the end of the year an action plan for their implementation was being considered by Forestry Ministers.

State of the Wood Market

28. The market demand for small diameter roundwood improved a little during the year and the total volume of sales showed an increase compared with the previous year. Although deliveries to the particleboard industry fell as the result of a marked reduction in output from home manufacturers, total deliveries of small diameter roundwood from Commission forests increased by 5 per cent over the previous year due mainly to increased sales of pulpwood. The demand for sawlogs improved considerably as the year progressed and the volume we supplied was 37 per cent higher than in the previous year. The

combined effect of these changes was to increase the total volume of timber harvested by 11 per cent compared with 1980–81. Further details are to be found at paragraphs 69 to 77.

Closure of Scotboard Ltd

29. In August 1981 Scotboard Ltd announced the closure of their particle-board production plant at Irvine. They attributed the closure to substantial rises in energy, resin and transport costs which had not been matched by increases in the market price of their finished product, mainly due to excess capacity in Europe which generated severe price competition.

Pulpwood Exports

30. This was the first full year involving the supply of pulpwood for export on a large scale. Deliveries from our own harvesting operations were in excess of 270,000 tonnes, and we estimated that over the whole country and from all sources the total volume exported was about 600,000 tonnes. Exports were made on a regular basis to Scandinavia from ten ports throughout England, Wales and Scotland.

Wildlife and Countryside Act 1981

- 31. This major piece of countryside legislation, which was finally enacted in October 1981, will impinge on forestry interests in a number of respects. Principal among these is the provision for notification of potentially damaging activities in existing and in new Sites of Special Scientific Interest which will affect both the Forestry Commission in its own operations and the private sector in relation to felling permissions and grants. Discussions have taken place with the Nature Conservancy Council on the types of forestry operation which might be considered potentially damaging to the scientific interest of the sites; we have also discussed the arrangements for consultation in order to avoid duplicating the procedures we already carry out in relation to planting and felling proposals.
- 32. Another provision of this Act affecting forestry is the amendment to the Deer Act 1963 prohibiting the shooting of deer at night in England and Wales; this could act as a significant constraint on effective deer control, particularly in relation to restocking in the more extensive forest areas. The red squirrel, which can be a forest pest in certain circumstances, becomes protected under the Act, but provision is made for control by licence.

Scottish Deer Legislation

33. The Deer (Amendment) (Scotland) Bill began its passage through Parliament in the House of Lords on 19 January 1982. Its purposes were to make changes in the law relating to the shooting of deer out of season and at night, which would have important effects for forestry; to introduce a licensing system for venison dealers; and to increase penalties in order to reduce poaching. At the end of the year covered by this Report, the Bill was still in the House of Lords.

World Conservation Strategy

34. Following the launching of the World Conservation Strategy in London and other world capitals in March 1980, work has been going ahead on the preparation of a United Kingdom response to be presented in 1983. The Organising Committee has been assisted in this task by several review groups drawn from a wide field of interests, and the Director General served during the year under report as a member of the group dealing with rural resources. Their report, which is essentially concerned with striking the right balance between development and conservation, was expected to be published and debated later in 1982.

Award for New Cabin Site

- 35. Our new forest cabin site on the shores of Loch Awe in Argyll was opened in the spring of 1981. The project, which was financed by the Crown Estate Commissioners, consists of 44 cabins in five different styles (Plate 5) and a new village hall in the nearby forestry community of Dalavich.
- 36. Several of the cabins and the village hall, which will be available to visitors as well as the local community for indoor recreation, have been specially modified for use by disabled people and to accommodate wheelchairs. We were delighted to receive an International Year of the Disabled Award from the British Tourist Authority for the provision of outstanding facilities and services to the disabled at the Lochaweside site.

Visit of the Prince of Wales to Westonbirt Arboretum

37. His Royal Highness the Prince of Wales attended a small informal ceremony at Westonbirt Arboretum on 5 March 1982 during which he planted trees to mark the occasion of his marriage and to commemorate the 60th Anniversary of the Commonwealth Forestry Association (Plate 1).

The XVII World Congress on Forestry Research

38. Our Director of Research and Development and two other Commission representatives attended the XVII World Congress of the International Union of Forestry Research Organisations held at Kyoto in Japan from 6 to 17 September 1981. The Congress theme was Research Today for Tomorrow's Forests.

New Landscape Consultant

39. Following Mr Clifford Tandy's untimely death earlier in the year, we appointed Mr Gordon Patterson as our Landscape Consultant in November 1981. Mr Patterson, a graduate of Reading University, is a senior associate member of the Landscape Institute and has his practice in Aston, Hertfordshire.

Commissioners

40. Mr J. D. Pollock was reappointed as a part-time Commissioner from 1 October 1981 for a four-year period. Mr G. O. Hutchison was also appointed a part-time Commissioner on 1 October 1981 for a four-year period in place of Mr D. R. Hicklin, whose term of office expired on 30 September 1981.

Senior Staff

- 41. Mr J. W. L. Zehetmayr retired as Senior Officer Wales and Conservator South Wales in December 1981 and was succeeded as Senior Officer Wales by Mr R. T. Bradley on promotion to Director. Mr Bradley retained his responsibilities as Conservator North Wales. Mr A. Rix, formerly an Assistant Conservator in North Wales, was promoted to fill the post of Conservator South Wales.
- 42. Mr A. J. Grayson was appointed Director of Research and Development in March 1982 on the retirement of Mr D. R. Johnston. Mr Grayson's former post as Head of Planning and Economics Division was filled by Mr D. S. Grundy, who joined the Commission on transfer from the Civil Service College.
- 43. Dr D. H. Phillips retired as Chief Research Officer (South) in April 1981 and was succeeded by Mr D. A. Burdekin, formerly Head of Pathology Branch, on promotion to Senior Principal Scientific Officer. Dr Phillips was awarded the OBE in the 1981 Birthday Honours List.
- 44. Mr J. W. Elliott retired as Budgets Officer and Deputy Controller of Finance in June 1981 and was succeeded by Mr A. A. Cowan, formerly Industrial Personnel Officer, on promotion to Senior Principal.
- 45. Mr E. F. Granfield retired as Chief Engineer in November 1981 and was succeeded by Mr R. M. Hay on promotion to Superintending grade. Mr Hay was formerly the Principal Civil Engineer in East Scotland.

Staff Numbers

46. On 31 March 1982 the Commission employed 2,095 non-industrial staff (compared with 2,167 the previous year) and 5,450 industrial staff (5,785 the previous year).

Forestry Enterprise

Land Acquisition

47. The total area of plantable land acquired was 4,467 hectares, including 273 hectares already under trees. Even though this was less than the area we planted during the year (paragraph 50), it was a considerable improvement on the previous year's figure of 1,752 hectares which had reflected the severe cut we had had to make in the allocation of funds to land purchases. The distribution of this year's acquisitions was as follows:

	Total plantable
	area acquired
	(hectares)
England	275
Wales	42
Scotland	4,150

The average cost of plantable land was £398 per hectare, an increase of 21 per cent compared with the average for 1980–81 of £329 per hectare.

Seed Collection

48. In general, it was a poor year for seed. Useful collections were made, however, of Corsican and Lodgepole pine and some larch (Plate 3).

Nurseries

49. Most of our nurseries experienced cool, wet weather during the growing season which inhibited plant growth; the hard winter also delayed the lifting of plants in some areas. Despite this, the annual plant production programmes were largely met. The use of refrigerated lorries to transport plants between nursery and forest was further extended, as experience has confirmed that this form of transport ensures that the plants arrive on site in a better condition for planting.

Planting

50. A total of 10,978 hectares of new planting was undertaken during the year, and 5,510 hectares were restocked; these figures compared with the planned programmes of 10,931 hectares and 5,327 hectares respectively. The wet summer of 1981 was good for plant survival but resulted in heavy weed growth.

Forest Protection

Fires

51. Fire losses were below average because of a wet spring and summer. A total of 340 hectares of plantations was destroyed compared with over 1,300 hectares in 1980–81. The work we have been doing in association with the Scottish Northern Fire Brigade to develop the use of helicopters for fire fighting was put to the test for the first time this year when helicopters were called out to three fires in North Scotland Conservancy. They gave valuable

assistance in transporting men, equipment and water over difficult terrain and in observation and control work.

Pine Beauty Moth

52. In 1981 only 66 hectares of our Lodgepole pine plantations in Scotland had to be treated with the insecticide fenitrothion in order to control infestations of Pine beauty moth. The area requiring control has reduced each year since the first outbreak was treated in 1978, when 5,000 hectares had to be sprayed, and there is every prospect that no spraying at all will be needed in 1982.

Deer

53. The severe winter caused above-average marauding by red deer in plantations in the Scottish Highlands – at Rannoch as many as 600 broke into the Forest. Increasing numbers and the gradual extension of the red deer range in Argyll and Central Scotland are creating a problem in plantations previously free from red deer. The control of roe deer continues to be of concern, particularly in plantations at the restocking stage (Plate 6). In the English Midlands, the spread of muntjac deer is also becoming a problem; its small size, secretiveness and irregular breeding pattern make control measures particularly difficult.

Other animals

- 54. Considerable grey squirrel damage, especially to sycamore, was reported by private estates in the summer of 1981. This was not reflected in Forestry Commission areas where intensive control by trapping and poisoning was undertaken within vulnerable crops during the period from April to July. Red squirrel numbers have remained fairly static in England and Scotland, but they have declined substantially in Wales over the last ten years.
- 55. Rabbits continue to be a major pest in south-east England, and there were several reports during the year of serious vole damage to restocked areas in upland forests in Scotland.

Forest Management

Wildlife Conservation

56. The implementation of our wildlife conservation policy was taken a stage further by the preparation of forest conservation plans. These documents identify areas of particular conservation interest and lay down management strategies to ensure their protection.

Forest Design

Landscaping

57. In addition to routine work, a number of major projects were undertaken by our landscape architects during the year. Two of the most important were the landscaping of the new planting at Talladh a Bheithe in Rannoch Forest, situated in one of Scotland's National Scenic Areas, and the re-design of the upper forest margin on the north side of Loch Lochy in Clunes Forest which is visible from the main tourist route through the Great Glen.

Recreation

Visitor Centre Evaluation

58. It is estimated that nearly a million people come to our visitor centres each year. In 1979 we commissioned Surrey University's Psychology Department to undertake detailed research into visitors' reactions to the various interpretive techniques employed in these centres and to assess how effectively the information given in exhibits was being communicated to the public. The results of this study, which has evoked considerable interest among other bodies engaged in this field, are being analysed.

The British Forest Heritage

59. In our 1979-80 Report we announced our decision to make a start on the proper recording of the history of British forestry and its artefacts. It was hoped that an independent charity, to be known as the British Forest Heritage Trust, could eventually be formed to establish a main collection open to the public. The project was taken a step further in 1981 with the appointment of a steering group to undertake the preliminary work needed to set up the trust, including the appointment of trustees and the preparation of plans for the development of a heritage centre.

Estate Management

Queen's House, Lyndhurst

60. In our last Report we recorded our decision to proceed with the restoration of the Queen's House, Lyndhurst, a listed building which has been associated with the administration of the New Forest for several centuries. Work was begun in September 1981 and, despite the complexity of dealing with the parlous fabric of this ancient building, satisfactory progress had been made by the end of the year. It is hoped that the contractual work will be finished by March 1983, after which the Queen's House will be reoccupied as the Commission's administrative offices in the south east of England, and the Verderers of the New Forest will once again have the use of the Hall for their Court. A grant of £40,000 towards the cost of restoration is to be made by the Department of the Environment on the advice of the Historic Buildings Council; Hampshire County Council and the New Forest District Council have also offered to contribute.

Disposals

- 61. As mentioned at the beginning of this Report, the Forestry Act 1981 provides Forestry Ministers with wider powers to dispose of land and plantations managed by the Commission with the aim of reducing our call on public funds. In the period before the enactment of the new legislation we did a good deal of preliminary work in identifying suitable parcels to place on the open market once the wider powers were available, and the first were advertised in early September 1981.
- 62. Plantations for disposal fall into three main categories. First, there are small areas of woodland which are mainly of interest to adjoining owners. Then there are blocks of up to about 100 hectares which, when sold singly, attract private investors, or when grouped into packages are of interest to institutional purchasers. Thirdly, there are substantial blocks of a size

commensurate with the preferences of the institutional market whether sold outright or offered on a sale or leaseback basis. Our objective, during this initial stage of the programme, has been to test the market response to offers of plantations in these three categories in different parts of the country. The responsibility for the sale of the smaller plantations and plantable land rests with our territorial Conservators. The Chief Land Agent, at Headquarters, is responsible for the major plantation sales and sale and leaseback transactions.

- 63. By 31 March 1982, the total area of plantations on the market was over 4,500 hectares and preparations for the sale of a further 5,500 hectares were well advanced. The initial market response was reasonably satisfactory, and it was gratifying that our properties attracted the attention of pension funds and other institutions; contact was made with over 60 organisations of this kind in order to generate a continuing interest in our sales. Considerable progress was made with the practical aspects of sale and leaseback and we planned to launch the first such transaction during the summer of 1982.
- 64. Because of delays in the passage of the Forestry Act 1981, our disposals target for 1981–82 was reduced from £10 million to £7 million. In the event, sales totalled £6.9 million.

House Purchase by Tenants

65. There has been a good response to the scheme mentioned in our last Report to give sitting tenants of surplus residential property the opportunity to purchase their houses on discount terms. Some 192 houses were sold on this basis during the year.

Management of Property

- 66. During the year we spent £1.4 million on the construction, improvement and acquisition of buildings, compared with £0.8 million the previous year. Projects completed included the sawmill unit of a major redevelopment at Brandon Central Depot in Suffolk and new buildings to serve Glencoe and Tummel Forests in Scotland. Work was also started on a new forest centre at Clatteringshaws Forest in southern Scotland and on a new mechanical engineering workshop at Crychan Forest in Wales.
- 67. The Commission's rental income for the year amounted to £1.7 million. Our three-yearly review of house rents took place during the year and revised "fair rents" were applied in November 1981 to all our residential properties, except foresters' houses. The method of assessment and the provisions enabling tenants to appeal to an independent rent appeals committee followed previous practices and are similar to the rent control arrangements affecting private sector housing covered by the Rent Acts. Increases in rent are phased for sitting tenants and rent rebates are offered to qualified tenants. Rents of the Commission's agricultural properties were reviewed in accordance with the statutory provisions where these applied; otherwise rent reviews were conducted at the appropriate times.
- 68. The numbers of properties managed by the Commission are given at Table 13 of Appendix IX.

Harvesting and Marketing

Market Demand

69. The demand for small diameter roundwood improved marginally during the year; while quantities supplied to the particleboard industry declined, this was offset by an increase in the quantity of pulpwood supplied. The demand for sawlogs, which had been at a low ebb last year, improved progressively despite the continuing recession and there was evidence that the home industry had increased its market share of total sawn softwood consumption. The slight improvement in demand was reflected in an increase in the total volume of wood harvested in Commission forests (2,749,000 cubic metres) which was 11 per cent above last year's figure and slightly more than our planned programme.

Wood Prices

70. There was no significant change in the difficult trading conditions facing the main consumers of small diameter roundwood; markets continued to be poor and end product prices remained depressed. While there were some slight improvements in the price of small diameter wood, these were insufficient to halt the trend of recent years for the price to decline in real terms.

There was a fall in the average price of softwood sawlogs supplied in the year, this being a direct consequence of the significant reduction in the price of imported sawn softwood which developed during the latter half of 1980, to which we referred in our last Report. Towards the end of the year, sawlog prices at our auctions showed some improvement.

Forestry Commission Operations

71. The main features of our harvesting and marketing operations in the year, with comparable figures for previous years, are summarised below:

	Unit	1976–77	1977–78	1978–79	1979–80	1980–81	1981–82
	Million cubic						
Total Removals	metres	2.02	1.97	2.01	2.33	2.47	2.75
By Sale Standing	"	0.83	0.75	0.68	0.76	0.82	0.91
By Forestry Commission harvesting	"	1.19	1.22	1.33	1.57	1.65	1.84
Gross Receipts Expenditure (including oncosts but excluding	£ million	23.91	25.91	26-61	34-94	36-64	36-26
overheads)	"	9.23	12.31	14.70	19.37	23.79	24.54
Net Receipts		14-13	13-60	11.91	15.57	12.85	11.72
Receipts per cubic metre Expenditure per cubic	£	11-56	13-15	13.24	15-00	14.83	13-18
metre Net Receipts per cubic	1,	4-57	6.25	7.31	8-31	9.63	8.92
metre	***	6.99	6.90	5.93	6.69	5.20	4.26

The following paragraphs set out in more detail the performance achieved in each of the main sectors.

Conifer Sawlog Sales

72. The volume of logs sold from our own harvesting operations (Plate 2) recovered well from last year's very low level. Deliveries amounted to 848,000 cubic metres, an increase of 37 per cent over the previous year. The average price of logs supplied against contracts fell by 14 per cent reflecting the price trends for imported sawn softwoods and the depressed values of wood residues generated in sawmilling. Some firming of price became evident as the year progressed and our Log Price Index, which is an indication of prices in forward contracts, increased by 9 per cent from 126·3 at 31 March 1981 to 137·8 at 31 March 1982.

Conifer Small Roundwood Sales

- 73. Sales of pulpwood for export were a main feature of the market for small diameter roundwood, this being the first full year of activity on a significant scale. The transition to pulpwood exports involved many changes, but we are pleased to record that the necessary adaptations were successfully accomplished both in terms of our supplies to the ports and the provision of port facilities and shipping by the purchasers.
- 74. Our deliveries of pulpwood, for home consumption and export, increased by 12 per cent compared with the previous year. Exports accounted for 54 per cent of total pulpwood sales.
- 75. The quantity of wood we delivered to the particleboard industry was 16 per cent less than last year. This reflected the reduced production by home manufacturers, together with the closure of the mill at Irvine. These events took place against the background of continuing excess capacity in Europe leading to severe price competition amongst manufacturers. The position of domestic producers was made more difficult by increases in manufacturing costs, particularly for energy and resin.
- 76. Our deliveries of round pitwood to the National Coal Board were at the same level as last year. The Board have, however, announced that they are to make a significant reduction in their imports of pitwood as a final step in their policy of meeting their requirements from home sources.

Sales of Standing Trees

77. Removals of timber from Commission forests under standing sales contracts totalled 912,000 cubic metres, an increase of 11 per cent over last year. The average price for all sales of standing timber fell by 17 per cent. Our Great Britain Price Index for sales of trees in the smaller size categories fell from 244.4 at 31 March 1981 to 181.3 at the end of the year, a decrease of 26 per cent.

Other Developments.

78. The study commissioned by the Welsh Development Agency to identify potential developments for the utilization of small diameter conifer roundwood in Wales was completed in July 1981. Opportunities were identified for

development in the wood-based panel sector and the mechanical pulp sector. The findings were promoted to some 60 companies world-wide.

- 79. In November 1981, the Scottish Development Agency and the Highlands and Islands Development Board jointly commissioned a study to promote a strategy for the wood-processing industry in Scotland. The report is also expected to identify projects and potential developments which will be confidential to the steering group composed of the Scottish Development Agency, the Highlands and Islands Development Board, the Scottish Economic Planning Department, Timber Growers Scotland and the Forestry Commission. We have been closely involved with the consultants during their studies.
- 80. The feasibility study of small-scale chemical pulping referred to in our Report last year was completed by Reed International Consultants in December 1981. Their report, sponsored by a number of companies in the paper and board industry as well as the Department of Industry and the Forestry Commission, showed that there was no possibility of commissioning a plant using 70,000 tonnes of wood raw material per annum, which was the original objective. Even the smallest possible option, using 500,000 tonnes, would require the use of unproven technology. No company has to our knowledge shown any interest in the consultants' proposal to carry out further investigations and the project is now at an end.
- 81. During the year we have been in continuing and direct contact with a number of companies in this country and overseas interested in investigating the potential for developing wood-processing capacity in Britain. In the main, interest lies in the wood-based panel and mechanical pulp sectors. It is clear that our available and increasing wood resources are considered to provide an important opportunity for companies seeking to expand within Europe.
- 82. Following the closure, in November 1981, of the particleboard plant at Irvine owned by Scotboard Ltd, investigations were initiated by Caberboard Ltd with a view to acquiring the site and developing a new production line. Caberboard's decision on this matter was still awaited at the end of the year under report.
- 83. Towards the end of the year a new plant was commissioned near Invergordon for the manufacture and preservative treatment of telegraph and transmission poles. About 25 per cent of the poles are being supplied from Commission and privately-owned forests in the area, the remainder being from overseas sources. The finished poles are being exported.
- 84. Following experimental work on the preservation of spruce, a number of Norway spruce poles treated by the sap-displacement method have been supplied to the South Eastern Electricity Board and put into service in Sussex.

Harvesting

85. The efforts referred to in our last Report to find cost-effective methods of mechanised production, as part of our overall objective to increase harvesting efficiency and reduce costs, have met with some success (Plate 7).

Despite continuing cost inflation, the increased volume of production mentioned in paragraph 69 was achieved at a unit cost per cubic metre which was 7 per cent lower than the previous year. These results have been achieved by improvements in productivity through the use of new techniques, particularly the application of the shortwood system of extraction using forwarders, and by changes in management practice and a rigorous examination of some of the more costly operations. The type of forwarders in use has been extended to include larger machines capable of dealing with longer sawlog lengths. The development programme to adapt Scandinavian mechanised harvesting systems to British conditions continues.

Engineering

Roads

- 86. A large proportion of the work of our civil engineering staff is concerned with the construction and maintenance of the internal roading systems in Commission forests. The length of forest road being maintained now amounts to 16,744 km, of which 11,400 km are being used by lorries.
- 87. The road systems in many of our forests were designed at a time when timber extraction was undertaken by horse or tractor. Modern extraction methods are more economic over longer distances which means that new roads can be built at wider distances apart. At the same time, however, these have to be built to a higher standard to cater for the much heavier timber-carrying lorries now in use. As a result of these changes some of the old forest roads have been abandoned or downgraded for use by forwarders, while the remainder are being upgraded to the higher standard now necessary. We are now at the stage where we need to take further stock of our roading policy, and during the year a working party was formed to review the current road planning systems and instructions and to ascertain future roading needs for our estate.

Machinery and Vehicle Fleet

88. Our machinery and vehicle fleet contains some 12,500 items, and a major revaluation and recategorisation exercise was started during the year. This exercise will allow for greater management control of the various items within the fleet and is a separate, but complementary, exercise to the Rayner scrutiny of light vehicle use in the Commission to which we refer in paragraph 27.

Tip Reclamation Work

89. Much of our landholding in the South Wales Conservancy is in areas of complex geology and industrial dereliction, often close to places of high population. The restoration of these areas has required liaison with many authorities in order to carry out the works needed to alleviate problems ranging from visual eyesores to flooding; account has also been taken of the need to preserve significant examples of industrial archaeology. Twelve projects have been undertaken by the Conservancy engineering staff (Plate 8), involving the reshaping and planting of deep mine tips, the demolition of industrial structures, the capping of mine shafts and the control of water courses.

90. The cost of these works has been shared with a number of other organisations such as the Welsh Development Agency, derelict land units and local authorities. Our staff have also worked closely with the National Coal Board on the restoration and planting of opencast sites and in giving advice, gained from the experience on our own land, to authorities engaged on other reclamation schemes. The future maintenance of these investments is important and one that we think the Commission is well placed to undertake.

Forest Workers' Pay

- 91. The pay settlement for forest workers due to take effect from the beginning of February 1982 was still being negotiated at the end of the year under report.
- 92. The average weekly earnings of forest workers in 1981–82, based on a sample of one full week's work by all grades in each quarter, were £95.71.

Health and Safety

- 93. We are disappointed to have to record that after several years of improvement the number of reportable accidents that is, those which result in an absence from work lasting more than three days increased from 431 to 479. Coupled with a fall in the number of industrial employees, this was equivalent to a rise in the accident rate per hundred employees of 1·3 (from 7·3 to 8·6). Harvesting operations continue to be the major source of accidents, with average figures some three times above those for other activities. We are giving close and urgent attention to possible causes of this increase in an effort to reverse the trend.
- 94. Research and development aimed at the improvement of personal safety equipment has continued and several new products were introduced following successful field trials. An important objective in this work is to achieve a high standard of safety while at the same time providing the maximum comfort and convenience to those workers using the equipment.
- 95. In September 1981 the Industrial Injuries Advisory Committee recommended that vibration induced white finger (VWF), a complaint that can be brought on through the use of vibrating tools, including chain saws, should be recognised as a prescribed occupational disease. The Government's response to this recommendation was still awaited at the end of the year under report. In the meantime, we decided that the survey of the incidence of VWF, which had been confined to Thetford Forest should be widened in order to measure the extent of the problem among Commission workers over a varied range of working and climatic conditions. This wider study was expected to begin later in 1982.

Finance

Second Quinquennial Financial Review

96. The accounts of the Forestry Enterprise, including general notes and explanations and special notes in respect of the 1982 quinquennial revaluation,

appear after page 86, together with the Comptroller and Auditor General's report thereon. A general explanation of the revaluation exercise is given at paragraphs 15 to 20.

97. In considering the accounts, it has to be borne in mind that the 'deficits' shown in the Plantations Account (Statement 1 on page 87) and the Harvesting Trading Account (Statement 4 on page 89) are a measure of the shortfall in relation to the anticipated cash flows (standards) built into the 1977 valuation. Assuming that future cash flows do not vary from the standards set, a nil variance would indicate that the 3 per cent target was being achieved for the period under review. The adverse variances shown still imply a positive return, although below 3 per cent.

1982 Revaluation

- 98. The second quinquennium ended on 31 March 1982 and a revaluation of the plantations and fixed assets and the provision for staff superannuation liability was carried out as at 1 April 1982. This was undertaken in two stages.
 - (i) Stage 1: The same cost and price assumptions were used for the plantations valuation as in 1977, but taking into account different perceptions, as between 1977 and 1982, of future production forecasts and best silvicultural practices. This valuation showed a reduction of £89·1 million on the Balance Sheet figures; the reduction was also used in the assessment of performance against the 3 per cent target rate. The fixed assets were professionally revalued and incorporated in the Balance Sheet at 31 March 1982.
 - (ii) Stage 2: For the plantations valuation, revised costs and prices were used (timber prices were based on current price levels for the first five years and a $15\frac{1}{2}$ -year (1967–1982) average for later years); revised assumptions were also made on overheads. These adjustments resulted in an increase of £90·3 million on the Balance Sheet figure offset by the decrease of £89·1 million derived from the Stage 1 valuation. The superannuation liability was also revalued by the Government Actuary and minor adjustments made to fixed asset and net current asset values. These revised calculations provide the basis for the capital reconstruction at 1 April 1982 and standards for the measurement of performance in the next quinquennium.

Opening Valuation for Quinquennium 1982-87

99. The assets and liabilities figures in the Balance Sheet have been amended on the basis of the Stage 2 revaluation to provide revised opening valuations at 1 April 1982. The plantations valuation has increased by £1·2 million to £967·5 million, reductions in estimated future income resulting from price and volume changes being more than offset by changed assumptions about the future level of overheads. A decrease of £1·0 million in fixed and net current asset valuations, however, reduces the total increase for plantation values to £0·2 million. The total value of the assets to be brought into the 1982–83 accounts at 1 April 1982 will be £1,087·1 million.

100. Total liabilities have been similarly revised by £0·2 million. An increase of £13·6 million in the superannuation liability to £156·0 million, following the Government Actuary's revaluation, has been offset by a reduction in capital of £13·4 million to £931·1 million.

Planting Subsidies for Quinquennium 1982–87

- 101. As in previous reviews, calculations of net discounted revenues have been made for appropriate site-types and the results weighted to produce average new planting and restocking subsidies for each Conservancy. These are detailed in Special Note 2 to the Accounts on page 110.
- 102. The underlying internal rate of return expected on new planting and restocking planned for 1982–87 is some $2\frac{1}{4}$ per cent, as against $1\frac{3}{4}$ per cent for 1977–82. This is mainly due to changes in the type of land to be planted, to reductions in direct expenditure and overheads and to higher yield expectations. Expressed in terms of the planting programmes for 1982–87, the proposed subsidies result in a lower total requirement as against the application of the 1977–82 subsidies in £(1982).

Forest Recreation and Amenity Subsidy

103. Over the quinquennium 1977–82, annual expenditure in £(1982) has averaged some £4.5 million. This is less than the annual level of £3 million foreshadowed in the previous revaluation which is equivalent to £5.5 million at £(1982). For the quinquennium 1982–87, the annual subsidy will not exceed a ceiling of £4.5 million in £(1982).

Measurement of Performance 1977-82

- 104. The following are the main features to emerge:
 - Plantations.
 - (i) The performance within the quinquennium was measured by comparing the actual income realised and expenditure incurred with the cash flows built into the 1977 valuation, suitably updated to £(1982). This comparison shows a deficit of £61.6 million, due mainly to depressed timber prices offset to some extent by reduced expenditure in real terms.
 - (ii) In addition, assumptions made within the quinquennium about future work and outputs having an effect outside the quinquennium are estimated to result in a further net shortfall of £89·1 million. This is chiefly the result of changes that have taken place between 1977 and 1982 in the forecasts of future production and in silvicultural practices, the most important of which is a reappraisal of windthrow hazards leading to a substantial decrease in thinning and to delayed timber production.
 - (iii) The total shortfall against the judgements made in the 1977 valuation of future cash flows for the entire rotation is therefore £150·7 million. This can be expressed, after taking account of subsidies, as a rate of return over the whole rotation of 2·6 per cent against the target of 3 per cent.

Commercial Recreation (camp sites and forest cabins).

(iv) Over the quinquennium 1977-82, there was a total surplus in £(1982) of £1·2 million, which is equivalent to an average real rate of return of 6 per cent. The trend in the return showed an improvement during the period, from $4\cdot9$ per cent in 1977-78 to $8\cdot7$ per cent in 1981-82, the latter being in excess of the internal standard of $7\frac{1}{2}$ per cent.

Surplus Estate.

(v) The surplus properties we manage comprise a mixture of residential and agricultural subjects. In the main these properties, which are destined for sale whenever practicable, are relatively expensive to maintain due to their being dispersed and in remote locations, and income is restricted either by the marginal character of the property or, in the case of houses, because of statutory controls. Expressed in £(1982), there was an operational deficit of £1.5 million for the quinquennium, in addition to losses on disposals of £0.7 million.

Forestry Authority

Legislation

105. During the early part of the year, we were chiefly preoccupied with the progress of the Forestry Bill (now the Forestry Act 1981) through Parliament. This is referred to in more detail in paragraphs 2 to 5. The Bill was enacted on 27 July 1981.

106. The Forestry Commission Byelaws 1982 were laid before Parliament in draft on 16 March 1982 with an operational date of 1 June 1982.* These cover all Commission land including the Forest of Dean, the New Forest, Westonbirt Arboretum and Bedgebury Pinetum, which hitherto have had separate byelaws. As well as consolidating and bringing up to date existing byelaws, the opportunity has been taken to include new provisions and to extend generally provisions which were formerly of limited application. Included in the new provisions is a requirement that sheep turned out to graze in the unenclosed areas of the Forest of Dean should be marked with the owners' registration marks.

Private Forestry

- 107. The level of private planting showed a marked improvement and was at its highest level since 1974–75. A total of 15,912 hectares of planting was grant-aided under the Commission's schemes in 1981–82 (compared with 11,399 hectares the previous year), of which 12,462 hectares comprised new planting (Table 3 of Appendix IX). In addition, it is estimated that some 325 hectares were planted without grants.
- 108. Although the Basis III Dedication Scheme was closed to new entries on 1 July 1981 applications covering 19,200 hectares were received in the final three months of the scheme. As mentioned earlier in this Report (paragraph 8), the new Forestry Grant Scheme has started well with applications covering 43,100 hectares being received in the first six months, most of which related to new planting. In England and Wales, the average application was for an area of planting of about 10 hectares, while in Scotland, where the bulk of forestry expansion is taking place, the average was nearer 90 hectares.
- 109. The increasing activity in the private sector indicated by the latest planting figures is undoubtedly a reflection of the rising confidence generated by the Government's policy statement of December 1980, which endorsed a continuing expansion of the forest area in Britain in which there would be a greater place for participation by private forestry. It is too early to predict how much of the land entered for the Forestry Grant Scheme will eventually be afforested, but there must be grounds for optimism that this year's improvement in the level of private planting will continue.

^{*} These Byelaws came into effect on 1 June 1982 as SI 1982/648.

Research and Development

110. A full account of the wide range of work carried out or grant-aided by our Research and Development Division is given in the Commission's Report on Forest Research published each autumn. The paragraphs below represent a small selection of items of general interest.

Upland Silviculture

- 111. While we are continuing research on methods of tree and site improvement to increase the volume of wood produced (Plate 4), we are also giving more attention to improving selected wood properties with the major future markets in mind. Our joint programme of research with the Department of the Environment's Princes Risborough Laboratory has revealed relationships between timber properties and silvicultural practices which will allow closer control of timber quality in future, especially in Sitka spruce. Timber properties can also be strongly influenced by the selection and breeding of coniferous trees, and this offers an additional means of improving quality.
- 112. Our initial research into methods of propagating Sitka spruce by rooting cuttings in polythene houses has now been completed and we have started production trials at our Newton Nursery, near Elgin, which will involve some 100,000 cuttings per annum. It is more expensive to grow spruce from cuttings than from seed, but once genetically-superior parent trees have been identified in forest trials, cuttings offer a far more rapid means of producing planting stock from this source in quantity.

Lowland Silviculture

113. New methods of propagating and growing broadleaved and coniferous trees are being tested in the lowlands, and recent experiments have included growing trees inside cheap, individual tree shelters. It has been found that trees enclosed in tall, light plastic tubes at the time of planting have benefited from the improved growing conditions within the tubes, which also provide protection against animal damage and greatly facilitate weeding. Trials are not yet complete, but this new technique shows considerable promise for some forest tree species, particularly oak and alder.

Forest Protection

- 114. In collaboration with French forest pathologists and under the auspices of the European Community, we are taking part in trials of a range of European oaks in the United States to assess resistance to oak wilt under exposure to that disease. The possibility of oak wilt becoming established in Britain remains very remote, but we nevertheless consider it prudent to increase our knowledge of the reaction of European oak species to infection.
- 115. Although there was no significant damage to our plantations by Pine beauty moth during the year, research into the processes influencing British populations of this insect has been continued in collaboration with Southampton University and others, against the possibility of future damaging infestations.

Collaborative Research

116. Collaboration with other bodies on forestry or forestry-related research projects was widened during the year through contracts placed or undertaken by the Commission, and by closer integration of research with the Natural Environment Research Council and Agricultural Research Council institutes and with forestry research institutes in other member countries of the European Community. Joint research programmes were maintained with the Macaulay Institute for Soil Research in Aberdeen and the Department of the Environment's Princes Risborough Laboratory, and a wider range of investigation was undertaken by university departments using their own funds, under contract to the Commission or with grant-aid from Research Councils.

Forestry in the European Community

117. Discussions on the European Commission's Communication entitled Forestry Policy in the European Community, to which we drew attention in our 60th and 61st Reports, have made no progress during the year and it is now being reconsidered by the European Commission. The Director General and other Forestry Commission officials have continued to attend European Community meetings dealing with forestry policy, agricultural structures, plant health, forestry research, statistics and timber supplies.

Plant Health

Imports of Canadian Coniferous Sawn Wood

118. In our Report last year we referred to the plant health problems arising from the discovery in 1980 of imports of low-grade coniferous sawn wood from Canada which were found bearing excessive bark and, in some cases, harbouring non-indigenous pests. We also gave details of the formal agreement reached between the UK, Eire and the Canadian timber industry which introduced new procedures designed to ensure effective bark removal and to furnish supporting documentary evidence in the form of a certificate of debarking prepared by the industry. This scheme was reviewed in September 1981 and its terms and conditions strengthened by the greater involvement of the Canadian Plant Quarantine Service. There were one or two lapses in bark removal standards in wood consignments from certain Canadian mills during the year which gave rise to official and trade concern on both sides of the Atlantic, but with prompt Canadian co-operation these problems were overcome and the scheme has led to a distinct improvement in the standards of debarking. A draft derogation to adopt the new scheme in advance of a formal amendment to the EC Plant Health Directive is under discussion in Brussels

Oak wilt

119. The Import and Export of Trees, Wood and Bark (Health) (Great Britain) Order 1980 imposes stringent conditions on the importation of oak wood. These controls are particularly important in the case of wood from

North America because of the need to prevent the introduction of oak wilt, and this is reflected both in the terms of the Order and in the close scrutiny that the wood receives when it reaches this country. Our aim is to inspect every consignment, but there are inherent difficulties in inspecting containers at docksides because of the difficulty of obtaining reasonable access and problems of re-packing. In association with the importers and the timber trade, we have therefore developed a scheme for registering firms' premises where more thorough inspections can be undertaken. Under this scheme, interested firms have nominated premises to which unopened containerised consignments may be cleared by Customs officials for transit without prior inspection, provided that the documentation is satisfactory. Our local inspectors are then able to examine the wood when the container is opened, and this has improved the effectiveness of our inspections and generally helped importers to clear their goods more quickly. Imports which are not containerised will continue to be inspected at the dockside.

Dutch elm disease

- 120. The disease has continued to spread and intensify in northern Britain. Nevertheless, in some areas, particularly in towns, the levels of infection are still low and sanitation felling campaigns are playing a useful part in maintaining elm populations. Other areas which up to now have been able to mount successful sanitation programmes have unfortunately found the situation getting beyond them. Shortages of funds have also forced local authorities to reappraise their priorities, resulting in the further restriction of their campaigns.
- 121. After careful consideration, we decided to continue to classify the area broadly north of the line from the Mersey to the Humber as lightly affected that is the area where disease levels are still sufficiently low to justify control measures being applied under our Dutch Elm Disease Orders. We are also continuing to recommend to local authorities in the lightly affected area that their strategy should be to concentrate their resources on sanitation felling in localities where disease levels are low and can be positively controlled. The justification for retaining the present legal controls will have to be reviewed at the end of 1982 in the light of the progress of the disease and the effectiveness of local authorities in exercising their powers.
- 122. There has been much publicity about the potential of new control methods. These include the 'trap tree' technique using cacodylic acid, a tree killing herbicide which it is claimed can be used to attract elm bark beetles; artificial pheromones (beetle attractants) which are used in conjunction with sticky traps; and Ceratotect, a fungicide capable of curing the disease in lightly affected trees. It has been clear for some time, however, that these treatments must be seen as supplements to, rather than replacements for, disease control by sanitation felling. The efficacy of Ceratotect has been established, but the expense of the treatment means that the opportunities for its use will remain limited, and there seems little hope that research on beetle pheromones will lead to the development of a product which will make any significant

contribution to disease control. Cacodylic acid is still being evaluated, but at present its prospects also look poor.

Education and Training

- 123. With our present low level of recruitment of workers as the result of the continuing lack of demand for timber products, our internal training courses have again concentrated on updating the skills of our existing staff. Such courses have been given at our training centres and at the working site in a full range of craft, technical and management subjects. Felling courses were held at many production forests as the introduction of costly new harvesting machines and the need to keep down unit costs have underlined the need for improved working techniques.
- 124. In the private sector, the Inverness Technical College have now established their Scottish School of Forestry, which provides Britain's first fully-integrated scheme of forestry training at craft, technician and technologist levels. The scheme is in ten parts which may be taken by full-time or part-time study, or a combination of both, and leads to the award of the Scottish Technical Education Council's Certificates in Forestry Parts I–III and the Diploma.
- 125. During the year we issued a forestry training manual covering four one-hour lectures and associated field visits and exercises for use by lecturers at agricultural training colleges. This was well received by those colleges which adopted it, and we hope that it will improve their students' understanding of the most productive use of land and of the benefits to be derived from the well-planned integration of forestry and agriculture.

Public Relations

- 126. The major topic of interest by the media during the year was the new programme of plantation sales that we embarked upon following the passing of the Forestry Act 1981 (paragraphs 61–64). Other stories of general interest included the opening of our forest cabin site at Lochaweside in Argyll (paragraphs 35 and 36), the conservation scheme that we have introduced in conjunction with the Nature Conservancy Council at the forest butterfly reserve in Oxfordshire, and the Golden Jubilee of our Newton Nursery near Elgin.
- 127. In pursuit of our objective of advancing knowledge and appreciation of forestry and trees, we arranged a series of urban venues for our exhibition *The Living Forest* during the autumn and winter. The enthusiastic response from local authorities indicates that this is a strategy which we should continue. Educational interest in forestry continues to grow, particularly in urban areas, and we have tried to meet this with new publications and by transferring our popular range of audio-visual aids to video cassettes which schools are rapidly adopting in preference to film.

Finance

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

DAVID MONTGOMERY, Chairman G. D. HOLMES, Deputy Chairman and Director General D. S. BOWSER GIBSON-WATT G. O. HUTCHISON J. N. KENNEDY D. A. MITHEN G. S. MURRAY J. D. POLLOCK L. J. WHETSTONE

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

Appendix I

Statutory and other Committees appointed by the Forestry Commission: membership at 31 March 1982

National Committees

England

Mrs L. J. Whetstone (Chairman), Mr J. Brocklebank, Major D. J. C. Davenport, Mr G. O. Hutchison, Mr J. N. Kennedy, Mr W. E. Lane. Secretary to the Committee: Mr A. Lyon. The Committee met in July 1981 and March 1982.

Scotland

Captain D. S. Bowser (*Chairman*), Lt.-Col. A. E. Cameron, Mr D. A. Mithen, Mr J. D. Pollock, Mr William Wolfe, Captain J. M. A. Yerburgh. *Secretary to the Committee:* Mr W. MacLachlan. The Committee met in April and November 1982.

Wales

Lord Gibson-Watt (Chairman), Mr R. T. Bradley, Mr B. Davies, Mr D. Davies, Mr T. O. Lewis, Mr A. Rix. Secretary to the Committee: Mr E. G. Owen. The Committee met in May and November 1981.

Regional Advisory Committees

ENGLAND

North-West Conservancy

Lord Forester (*Chairman*), Mr G. Price Bowring, Mr J. E. Croasdale, Dr H. M. T. Frankland, Mr F. G. Humphreys, The Earl of Lonsdale, Mr M. Taylor. *Secretary to the Committee:* Mr D. P. Pringle. The Committee met in June and December 1981.

North-East Conservancy

Mr J. Brocklebank (*Chairman*), Mr F. K. Beaumont, Mr F. M. Berthele, Mr M. J. M. Bliss, Mr P. O. R. Bridgeman, Mr B. Minto, Mr M. L. Richardson, Mr G. F. Stevenson, Major P. B. Walker. *Secretary to the Committee:* Mr J. G. Armstrong. The Committee met in September 1981.

East Conservancy

Mr W. E. Lane (Chairman), Major G. K. Agnew, Mr R. W. R. Browning, Mr W. H. Darling, Mr W. R. Emms, Major A. G. N. Hadden-Paton, Mr T. Mabbutt, Mr P. H. Peck, Mr J. K. Royston. Secretary to the Committee: Mr W. O. Wittering. The Committee met in May and October 1981.

South-East Conservancy

Mr H. W. Mackworth-Praed (*Chairman*), Mr H. B. G. Dalgety, Mr T. J. Daniel, Mr D. J. Edwards, Mr J. P. M. H. Evelyn, Viscount Falmouth, Mr R. T. Gray, Mr A. G. Porter, Mr B. T. Tompsett. *Secretary to the Committee:* Mr B. Tipping. The Committee met in April and October 1981.

South-West Conservancy

Major D. J. C. Davenport (*Chairman*), Mr M. Bray, Mr I. Mercer, Mr R. M. Moody, Mr A. G. Phillips, Mr M. Roper, Mr R. F. Worgan, Mr J. H. B. Workman, Mr G. C. Wyndham. *Secretary to the Committee*: Mr J. E. Taylor. The Committee met in September 1981.

SCOTLAND

North Conservancy

Lt.-Col. A. E. Cameron (*Chairman*), Mr Ewan J. Brodie, Mr J. Evans, Mr A. N. S. Kinnear, Major A. McCall, Mr H. D. Skinner, Capt R. W. K. Stirling, Mr A. F. F. Williamson. *Secretary to the Committee:* Mr K. Roscoe. The Committee met in May and November 1981.

East Conservancy

Dr Jean Balfour (*Chairman*), Mr B. S. Brookes, Mr G. W. Christie, Mr G. Cruikshank, Mr A. D. M. Farquharson, Mr N. Gordon-Smith, Mr T. Bruce Jones, Mr D. F. Ogilvie, Mr J. G. Scalley. *Secretary to the Committee:* Mr W. D. Fraser. The Committee met in April and November 1981.

South Conservancy

Capt J. M. A. Yerburgh (*Chairman*), Mr J. Hunter Blair, Mr D. Bridges, Mr H. Crawford, Mr T. Y. Gibson, Mr D. W. N. Landale, Mr R. A. McClymont, Capt J. G. Milne-Home, Cllr P. O'Brien. *Secretary to the Committee:* Mr W. G. Williamson. The Committee met in May and October 1981.

West Conservancy

Mr William Wolfe (*Chairman*), Mr F. Bracewell, Mr D. Brierton, Mr W. J. Christie, Mr T. Doyle, Mr A. Fleming, Capt W. F. E. Forbes, Mr H. Smith, Mr T. Smith. *Secretary to the Committee:* Mr F. S. Henderson. The Committee met in May and October 1981.

WALES

North Conservancy

Mr T. H. Owen (Chairman), Mr F. C. Best, Mr J. M. Harrop, Mr R. ap Simon Jones, Mr D. R. L. Keogh, Mr V. Lewis, Capt D. Y. F. Myddelton, Major P. C. Ormrod, Mr J. W. Sutton. Secretary to the Committee: Mr J. McGough. The Committee met in May and October 1981.

South Conservancy

Mr M. A. McLaggan (Chairman), Mr E. Bartlett, Mr C. J. S. Burd, Mr S. K. Neale, Mr R. G. Thomas, Mr H. Thompson, Mrs D. Walmsley, Mr R. H. Wheelock, Mr C. R. Woosnam. Secretary to the Committee: Mr R. R. Davies. The Committee met in May and October 1981.

Home Grown Timber Advisory Committee

Mr J. D. W. Janes (Chairman)
Mr F. Baugh
Mr A. F. Bloomfield
*Mr R. E. Boote
Mr H. J. Brewis
Mr A. J. Brownlie
The Hon James Bruce
*Mr N. F. Cairncross
Mr D. J. Cooper
Mr J. G. M. Dawson
*Mr J. W. Dodds
The Hon James Galbraith
Mr J. Glegg

*Independent members

Mr R. M. Harley Mr H. J. Keys *Mr R. J. Lennox *Professor A. Macleary Mr F. A. Megginson *Mr A. Mills Mr P. S. Murray Mr R. Parker-Jervis *Mr R. Pierson Mr H. Richardson Mr J. F. Williams Mr C. R. Woosnam

Secretary: Mr J. R. Wallace

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

The Committee met in June, September and December 1981 and March 1982. The Annual Report of the Committee is at Appendix II, page 40.

Technical Sub-Committee of the Home Grown Timber Advisory Committee

Mr H. Richardson	(Chairman)
Major P. C. Ormrod Mr M. T. Rogers	Timber Growers England and Wales Ltd
Mr D. B. Crawford	Timber Growers Scotland Ltd
Mr J. R. Macer Mr R. J. Tilley	British Timber Merchants' Association (England and Wales)
Mr A. J. Brownlie Mr T. S. Smith	Home Timber Merchants' Association of Scotland
Mr J. Henderson	Institute of Foresters of Great Britain
Mr A. R. Powell	Association of Professional Foresters
Col D. A. Campbell	Royal Institution of Chartered Surveyors
Mr P. R. Willan	Association of United Kingdom Wood Pulp Producers
Mr T. D. Stitt	National Coal Board
Mr S. Neale	National Union of Agricultural and Allied Workers
	Secretary: Mr J. R. Aaron

The Sub-Committee met in April, June and October 1981 and January 1982.

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

Mr N. F. Cairncross (Chairman)

Mr P. J. Warburton-Lee Timber Growers England and Wales Ltd

Mr D. B. Crawford Timber Growers Scotland Ltd

Mr J. W. Sutton British Timber Merchants' Association (England and

Wales)

Mr T. Y. Gibson Home Timber Merchants' Association of Scotland

Mr A. F. Bloomfield UK Particleboard Association

Mr K. F. Deane Association of United Kingdom Wood Pulp Producers

Mr J. G. M. Dawson Timber Trade Federation
Mr J. Wotherspoon National Coal Board

Secretary: Mr W. J. Anderson

The Sub-Committee met in May and November 1981.

Advisory Committee on Forest Research

Professor P. F. Wareing
(Chairman)

Mr J. D. Brazier

Professor J. P. M. Brenan

Dr J. P. Dempster

Professor J. M. Hirst

Professor J. M. Hirst

Professor J. P. Wasen

Professor J. P. Hudson

Professor J. D. Matthews

Professor M. E. D. Poore

Professor L. Roche

Professor T. S. West

Secretary: Mr J. E. Applegate

The Committee met in October 1981.

Forestry Training Council

Professor J. D. Matthews (Chairman)

Employer Members

 Mr P. J. D. Donnelly
 Timber Growers England and Wales Ltd

 Major General T. A. Richardson
 Timber Growers Scotland Ltd

 Commander A. G. Claridge
 Timber Growers Scotland Ltd

 Mr J. F. Goodwin
 Forestry Commission

 Mr C. W. Simmonds
 Association of Professional Foresters

Employee Members

 Mr H. Crawford
 Mr D. Keogh
 Transport and General Workers' Union

 Mr A. Mills
 Mr J. H. Hose

 Miss A. Hock
 National Union of Agricultural and Allied Workers

Mr S. Neale J
Mr T. E. Radford Civil Service Union

Education and Training Members

 Mr A. P. B. Hamilton
 Forestry Education, Scotland

 Mr R. M. Boothroyd
 Forestry Education, England and Wales

 Mr J. Saddler
 Furniture and Timber Industry Training Board

Forestry Society etc Members

Professor C. J. Taylor Institute of Foresters of Great Britain Mr J. M. Fraser Royal Scottish Forestry Society

Mr W. Start Royal Forestry Society of England, Wales and Northern

Ireland

Dr P. G. Biddle Standing Committee for Arboricultural Education

Secretary

Mr J. McRitchie Forestry Commission

Forestry Safety Council

Col D. A. Campbell (Chairman)

Mr D. G. Whieldon Timber Growers England and Wales Ltd

Mr K. J. Ramsay Timber Growers Scotland Ltd

Mr D. J. Cooper British Timber Merchants' Association (England and

Wales

Mr P. B. Cruikshank Home Timber Merchants' Association of Scotland Mr J. H. Hose National Union of Agricultural and Allied Workers

Mr A. Mills Transport and General Workers' Union Mr R. Neale General and Municipal Workers' Union

Professor J. D. Matthews Forestry Training Council Mr C. W. Simmonds Forestry Commission

Mr D. A. Bardy Forestry Commission Safety Officer

Mr R. J. Bell Secretary

Appendix II

Home Grown Timber Advisory Committee: Annual Report for the year ended 31 March 1982

The Committee began a new three-year term on 1 August 1981. Sir Goronwy Daniel retired as Chairman, having given distinguished service for over 7 years. He was succeeded by Mr J. D. W. Janes, a former member of the Committee.

Concern continued to be expressed over the problems affecting the wood-processing industry. The closure during the year of a major particleboard manufacturer – the result of high energy costs and the artificial depression of UK prices for particleboard by dumping from certain European countries – was a serious blow to the forestry industry. At the request of the Committee, the Chairman wrote to the Forestry Commission explaining that confidence was being seriously undermined by the closure. The letter was forwarded to Forestry Ministers and a reply from the Secretary of State for Scotland's office said that investigations were being carried out into the costs of energy in the UK compared with the Continent and also into the allegations of dumping. Although no prospect of immediate relief could be promised, the Committee was pleased to learn that action had been taken against dumping by Spain. Members were urged to study the NEDO Report on Energy Costs and to consider the implications for their individual interests.

The Committee noted at its September meeting that the Forestry Act 1981 had come into effect in July. The misgivings of the Committee over the unrestricted nature of the proposed new powers to dispose of Commission land, as mentioned in last year's report, had been relayed to Ministers during the passage of the Bill, but the relevant clause was passed unamended. The Committee was reassured, however, by Ministerial statements that the disposals programme would be a limited one designed to reduce the dependence of the Commission on public funds for the management of its Forestry Enterprise activities. The Committee was also pleased to learn that Ministers would be leaving the choice of land for disposal to the discretion of the Commissioners having regard to a number of considerations which Ministers had outlined. The Committee asked to be kept informed of the progress of the disposals programme.

Papers presented at the December and March meetings focussed the Committee's attention once more on the integration of forestry and farming. This they felt could be encouraged by paying hill sheep and cattle grants on output rather than by headage. However, it was acknowledged that the present system of payment did not seem to have significantly inhibited the transfer of land to forestry, although it was agreed that the situation should be watched.

In September the Committee had an opportunity to comment on the new Forestry Grant Scheme. Growers' representatives welcomed the new scheme, although there was disappointment over the ending of the dedication system and the consequent loss of the continuing incentive of a management grant. The Committee asked to be kept informed of progress in the implementation of the scheme.

At its December meeting the Committee warmly welcomed the announcement by the National Coal Board that it was to cease importing timber from Russia. In future the NCB would be mainly dependent on British grown timber.

At the March meeting the Committee considered a paper on the export of pulpwood. It was agreed that, while such exports were important to maintain the viability of forestry in present circumstances, the long-term strategy should be to seek other uses for the timber at home. The Committee was also kept informed on the progress of the campaign against the spread of Dutch elm disease.

In March the Committee welcomed the opportunity to review and comment upon the programme of work of the Commission's Research and Development Division. This will be done each year in future.

During the year the Committee was able to take cognizance of a new Loan Guarantee Scheme, administered by the Department of Industry, designed to enable small businesses to raise loans. It was felt that this might prove attractive to small harvesting companies seeking to re-equip. The effects of the Wildlife and Countryside Act 1981 on forestry activities had been initially considered and will be reviewed from time to time.

The Committee received regular reports on the work of its Technical Sub-Committee and the Supply and Demand Sub-Committee. In particular the Technical Sub-Committee's report on current and future markets for hardwoods had been circulated to a number of organisations and the recommendations, amended in the light of comments received, were put to the Committee in December. The Committee indicated the future action that should be taken on these recommendations. The Sub-Committee was also asked to undertake a study into the various aspects of wood as an energy resource. A wide range of other subjects was considered, including timber utilisation and proposals for research at the Princes Risborough Laboratory. Discussions were also held on Forestry Commission work study reports for various types of forestry machinery and equipment. The Supply and Demand Sub-Committee reported to the Committee on wood supply and demand in Great Britain and on prospects for the coming year based on information supplied by consumers' and growers' organisations.

The Committee reviewed and approved the membership, terms of reference and programme of work of the Technical Sub-Committee. The Committee is much indebted to the members of both Sub-Committees for the quality and intensity of effort which they devote to their work.

Appendix III

Forestry Training Council

Annual Report for the year ended 31 March 1982

The Council and its Management Committee each met in Edinburgh at Forestry Commission Headquarters on 4 June and 1 October 1981 and 4 March 1982. There was one change in membership during the year, Mr T. E. Radford replacing Mr R. G. Braine as representative of the Civil Service Union. The Grant Award Committee and specialised Working Groups of Council members also met at various times during the year.

Statistics on the quantity of training undertaken were again compiled and the results appear in Tables 1 and 2.

Table 1

Attendance on courses for Recognised Craft, Supervisory and Managerial Qualification in 1980–81 and 1981–82

Courses	Grade and Type	Nur	80–81 nber of s/Students	Num	1–82 ber of /Students
City and Guilds 012 Stage 1	Craft (Young Workers)				
Circum d Coulds 012 Comma 2	Day and Block Release	8	123	5	72
City and Guilds 012 Stage 2	Craft (Adult Workers) Block Release	. 5	7 7	4	68
SCOTEC Certificate Part 1	Craft (Young Workers)	. ,	11	4	00
Score certificate rait r	Block Release	_	_	5	49
SCOTEC Certificate Part 2	Craft (Adult Workers)			-	-
	Block Release .	. —	_	1	9
Totals for Craft Courses		. 13	200	15	198
Ordinary National Diploma	Supervisory 3-Year Sandwich	1	90	1	100
SCOTEC Diploma	Supervisory 2-Year Sandwich			1	25
Certificate in Supervisory	Supervisory Block	_	_	1	43
Studies	Release	1	18	2	19
City and Guilds 012 Stage 3	Supervisory Block				
, s	Release	3	53	3	24
SCOTEC Certificate Part 3	Supervisory Block Release	. <u>—</u>	_	1	12
National Diploma in Forestry	Managerial Residential	. 2	8	2	7
Totals for Supervisory and	d Managerial Courses .	. 7	169	10	187

A wide variety of short courses for the private sector was arranged by the Scottish Forestry Training Group and the English and Welsh Forestry Training Group; the Forestry Commission also conducted short courses for their own work force.

Table 2

Attendance on Short Courses for Forest Workers, Supervisors and
Managers during 1980–81 and 1981–82

Level	Source of Participants	1980–81 Trainee Course Days	1981–82 Trainee Course Days
Craft	Private Forestry	 3,279	3,210
	Forestry Commission	 9,625	7,765
	Totals	 12,904	10,975
Supervisory and	Private Forestry	 2,123	2,003
Managerial	Forestry Commission	 2,447	2,694
J	Totals	 4,570	4,697

The Manpower Services Commission provided grant aid towards the cost of running the Council's Group Training Scheme. The Highlands and Islands Development Board also provided financial help for developing training in the Highlands. Both the Scottish Group and the English and Welsh Group continued to make sound progress during the year and it can now be said that most members of the forestry industry can receive training appropriate to their needs.

The Forestry Training Council continued to work closely with the Forestry Safety Council. The Council is pleased to record again the willing cooperation of many people and organisations, particularly that of the Manpower Services Commission, the Colleges providing courses in forestry, the Forestry Commission, the private sector of forestry and the assessors.

Signed for the Forestry Training Council.

John D. Matthews Chairman

J. McRitchie Secretary to the Council

Appendix IV

Forestry Safety Council

Annual Report for the year ended 31 March 1982

During the year meetings of the Council were held in Edinburgh on 12 May and 20 October 1981.

No new Forest Industry Safety Guides were published but the revision of existing guides continued with the result that seven were re-issued.

Safety Signs Regulations, based on a Directive aimed at encouraging standardisation throughout the European Community, came into force on 1 January 1981. There will be a five-year phasing in period after which all signs will require to conform. Meanwhile, the Council will ensure that any of their recommendations in relation to the use of safety signs accord with the Regulations.

A draft Health and Safety Executive Guidance Note on the Provision of Sanitary Conveniences and Washing Facilities was considered by the Council, but it was left to constituent bodies with members on the Council to respond individually direct to the Executive. The legal requirements were established by the Agriculture (Safety, Health and Welfare Provisions) Act 1956, but the Guidance Note seeks to provide advice on what is considered to be 'suitable and sufficient' within the meaning of the Act.

The Health and Safety (First-Aid) Regulations 1981 which come into operation on 1 July 1982 place a general duty on employers to make, or ensure that there is made, adequate first-aid provision for their employees if they are injured or become ill at work. Basically the Regulations not only rationalise existing legislation but also aim at standardisation. The Safety Guide dealing with First Aid (FSC 34) will require to be suitably modified to include a reference to these Regulations. Of particular concern to the Council is the availability of suitable training facilities and qualified instructors to meet the special needs of the forest industry with its often remote and scattered work-force.

A Consultative Document issued by the Health and Safety Commission and containing proposals relating to protection of hearing at work was discussed by the Council. The overall view taken was that, while operator protection by means of earmuffs would continue to be essential, the reduction of noise at source was of paramount importance. Accordingly the aim must be to get manufacturers to provide quieter machines. Significant differences between the Consultative Document and a draft European Commission proposal for a directive on protection of workers from noise, particularly in respect of exposure levels, would be an important factor in determining the content of the consequential Regulations.

The Forestry Commission has advised the Council of its intention to study the prevalence and severity of Vibration Induced White Finger by a random sampling technique. In addition to providing essential clinical information, the survey will assist in monitoring the effect of anti-vibration chain saws which have now been in extensive use for more than a decade. The Council will maintain a close interest in this project.

Appendix V

Guidelines on the Selection of Areas for Disposal

Letter from the RT HON GEORGE YOUNGER MP, Secretary of State for Scotland

Sir David Montgomery Bt, JP, DL Chairman The Forestry Commission 231 Corstorphine Road Edinburgh EH12 7AT

28 May 1981

As you know, the Forestry Bill will allow Ministers to dispose of any land acquired by them for forestry purposes under Section 39 of the Forestry Act 1967. This new provision is designed to enable land and plantations to be sold by Forestry Ministers in order to meet the Government's objective of progressively reducing the Commission's call on Exchequer funds for the management of the Forestry Enterprise. As in the case of the present limited disposal powers in the 1967 Act, the new power will be exercised on behalf of the Forestry Ministers by the Commissioners.

In meeting the stated objective the Commissioners will be responsible for selecting areas for disposal and for deciding whether disposal should be by sale of the freehold (outright sale in Scotland) or by sale and leaseback. The purpose of this letter is to set out the main considerations which Forestry Ministers would wish the Commissioners to take into account in the selection process. They are, not in any order of precedence,

- (a) the financial implications including the need for disposal to be fully in accordance with the principles of public accountability;
- (b) the maintenance and development of the wood processing industry;
- (c) the maintenance of employment and the viability of local communities, especially in socially fragile areas;
- (d) the use of forests for public access and recreation;
- (e) the interests of conservation, research and education;
- (f) market preferences;
- (g) the effect on efficient management of the Commission's remaining land holding;
- (h) the rationalisation of the forest estate;
- (i) the procedures for 'offer back' to former owners which are generally in force for the disposal of Government property in the case of freehold or outright sales, to be extended as appropriate to areas held on lease by the Forestry Ministers if any of these are selected for disposal.

In addition, the Commissioners should have full regard to the following:

- (a) the special status of the former Crown land in the New Forest and the Forest of Dean where disposals will, as hitherto, be on a very limited scale;
- (b) the undertaking given by the Forestry Ministers that in the case of plantations on land originally leased from the National Trust and still owned by them, the lease will not be assigned without the Trust's consent. This will similarly apply to properties leased from the National Trust for Scotland;
- (c) the need to consult the Forestry Ministers in the event of potentially significant aggregate sales to foreign or multi-national buyers.

The terms of this letter have been agreed with Peter Walker and Nicholas Edwards to whom I am sending copies.

Appendix VI

Forestry Grants

Announcement made by the Secretary of State for Scotland on 28 July 1981

The Rt Hon George Younger MP, Secretary of State for Scotland, made the following announcement in a Written Answer to a Parliamentary Question on 28 July 1981:

'In the light of the comments received on the Forestry Commission's consultative paper the Government have decided to introduce the following arrangements.

A new Forestry Grant Scheme will be started on 1 October 1981 aimed at encouraging private forestry to undertake a greater share of future planting, as envisaged in our December policy statement. The scheme has been designed to retain the practical advantages of the earlier grant arrangements whilst reducing costs by simplifying the administrative and legal procedures. It will offer a range of planting grants as set out in Table 1. These will be reviewed periodically by the Forestry Commission having regard to the average costs of establishing private woodlands, as indicated by the surveys carried out by the Universities of Oxford and Aberdeen. The first such review will take effect from 1 October 1982 and subsequent reviews will be carried out at two-yearly intervals. We have also decided that grant payments should be made on the basis of self-certification, subject to a system of spot checks by the Commission.

The new scheme will cater for individual areas of 0.25 hectares and over and will be open to both owners and tenants. Applications will be subject to approval by the Forestry Commission after consultation, as before, with the appropriate statutory authorities on land use and environmental considerations. As with the Basis III Dedication Scheme, applicants will be required to undertake to enter into discussions, if requested by the local authority, with a view to negotiating an access agreement; this undertaking will not, however, bind the applicant to conclude any such agreement.

Under the Dedication Schemes owners do not require a licence to comply with felling prescriptions in a plan of operations approved by the Forestry Commission and provision will shortly be made by Order for a similar exemption for those working to a plan of operations under the new scheme. As in the case of earlier schemes, woodlands grant-aided under the new scheme will not be subject to the application of Tree Preservation Orders under the terms of the Town and Country Planning Acts except with the consent of the Forestry Commission.

Fuller details of the Forestry Grant Scheme are set out in an explanatory leaflet available in the Vote Office and from Forestry Commission offices.

The new scheme supersedes the Dedication Basis III and Small Woods Schemes which were closed to further applications from 1 July 1981. Existing contracts with the Forestry Commission under those schemes, and the earlier Basis I and Basis II schemes which were closed in 1972, will continue but any applications for the inclusion of additional areas will be dealt with under the new scheme. In order to save administrative costs, however, opportunities will be taken whenever possible to reduce the number of dedicated estates. Owners will accordingly be encouraged to transfer to the new scheme, and on a change of ownership of dedicated land on or after 1 August 1981 the Forestry Commission will decline to enter into a fresh deed or agreement with the new owner. These changes are in accordance with recommendations made after a Rayner Study and will lead in due course to administrative savings of the order of £250,000 per annum at 1980 survey prices.

A review of grants under Dedication II and III and the Small Woods Scheme has now been completed and we have agreed to revised rates being introduced from 1 October 1980 as set out in Table 2. These represent substantial increases over the existing rates. We have also agreed to reduce the period between reviews to two years; the next review will therefore fall due in October next year.

Any future grant adjustments, whether under the old or the new schemes, will of course need to be contained within agreed cash limits and take account of the economic circumstances at the time.

Final decisions have yet to be taken on the changes in the selling control system proposed in the consultative paper, and these will be the subject of a separate statement. When they have been announced, the Forestry Commission will enter into discussions aimed at simplifying and speeding up the consultative procedures in the light of the comments already received.

The changes I have announced today are tangible evidence of the importance we attach to the continuing expansion of forestry and our wish to see private interests playing a larger part in it. The new grant scheme, with its simplified procedures and realistic grant levels, will allow private forestry to look to the future with assurance.'

NEW FORESTRY GRANT SCHEME: GRANT RATES EFFECTIVE FROM 1 OCTOBER 1981

Table 1 per hectare

A	rea of '	Wood		Conifers	Broadleaves
0·25 ha-0·9 ha 1·0 ha-2·9 ha 3·0 ha-9·9 ha 10·0 ha and over			 	 £600 £480 £400 £230	£850 £700 £600 £450

Payment of these amounts will be made in two instalments – 80 per cent on completion of planting, the remainder five years later subject to satisfactory establishment.

dedication and small woods schemes: grant rates effective from 1 october 1980

Table 2 per hectare

Basis II Dedi	cation	Basis III Dedica	tion	Small Woods Se	cheme
Planting grant Management grant (per annum)- first 40 hectares second 40 hectares	£105 - £4·80 £3·25	Planting grant— Conifers Broadleaves Management	£140 £315	Planting grant— Areas from 0·25 to 2·9 ha Areas from 3 to 9·9 ha	£420* £350*
balance	£2.00	grant (per annum)	£4·20		

^{* 75} per cent payable on completion of planting and the remainder five years later subject to satisfactory establishment.

Appendix VII

Scientific Aspects of Forestry

Text of the Government's response to the Report of the House of Lords Select Committee on Science and Technology made by the Earl of Mansfield, Minister of State, Scottish Office, on 4 February 1982.

'The Government welcome the detailed and comprehensive report on the Scientific Aspects of Forestry which was published in December 1980 by your Lordships' Select Committee under the Chairmanship of the noble Lord, Lord Sherfield. The choice of this subject for study was opportune at a time when the Government were considering their general policy towards forestry, and the Select Committee's Report makes a valuable contribution towards our thinking on the organisation and co-ordination of the forestry research that will be required to further the policies announced in the Statement made to your Lordships on 10 December 1980.

Forestry and timber production contribute to the national economy in providing employment, reducing reliance on imports and in regional development. Forestry is also important in terms of amenity, nature conservation and recreation, and there is a general recognition of the need for it to develop in harmony with other land uses. To ensure rational planning of forestry development, and to encourage long-term confidence, it is essential that effective arrangements are made to co-ordinate and implement research programmes relevant to the needs of the industry. The Government therefore broadly accept the findings of the Select Committee in relation to forestry research.

At present fundamental research in areas relevant to forestry is mainly carried out by the Natural Environment Research Council (NERC) through its institutes and the Universities and, to a lesser extent, by the Agricultural Research Service. The Forestry Commission on the other hand concentrates almost entirely on applied research. The Government accept the Select Committee's view that research to support the forestry industry requires a more coherent approach and agree that the solution lies in the Forestry Commission assuming responsibility for co-ordinating the broad strategy of forestry research in Britain. This will be pursued through the establishment of a Forestry Research Co-ordination Committee to act as a forum to identify research requirements and opportunities and to encourage the co-ordination of research programmes in forestry. We envisage that the Committee will have a particular role to play in identifying strategic research needs, that is, research of a more fundamental nature which is clearly of relevance to the Forestry Commission's applied research programmes and to long-term management requirements. The Research Councils will, however, continue to exercise their responsibilities for fundamental research, while the various research establishments will have continuing responsibility for the planning and execution of their internal research programmes. The Committee will be under the Chairmanship of the executive Forestry Commissioner responsible for research, and will comprise the Commission's Director of Research and a senior representative from the NERC, the Agricultural Research Council, the Commission's Research Advisory Committee, the Department of the Environment, the Nature Conservancy Council and the Agriculture Departments.

We have given careful consideration to the Select Committee's associated recommendation that the Commission should appoint a Chief Scientist to carry out its wider co-ordination responsibility, and through him stimulate and commission research which would complement and support its own research programme. The co-ordination role will be fulfilled by the new Committee. As regards the commissioning of research with outside bodies, the Government accept that, within the financial resources available, it is desirable to maintain an appropriate balance within the Forestry Commission's research expenditure between applied and strategic research. The Forestry Research Co-ordination Committee will keep this balance under review but in the present period of economic stringency no additional funds can be provided for the Commission's research budget. Against this background, the Government have concluded that the appointment of a Chief Scientist cannot in present circumstances be justified.

The Government have given careful consideration to the Select Committee's recommendation that one Research Council should take the lead in providing the fundamental and applied scientific



PLATE 1
During a visit to Westonbirt Arboretum in March 1982, His Royal Highness the Prince of Wales planted trees to mark the occasion of his marriage and to commemorate the Diamond Jubilee of the Commonwealth Forestry Association.

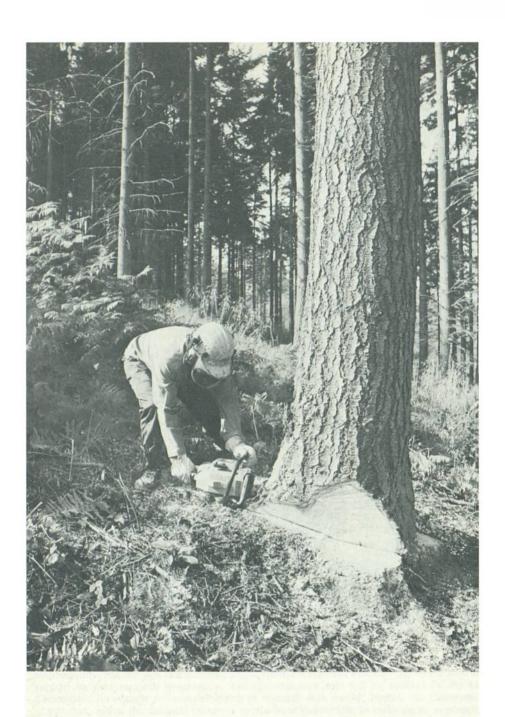


PLATE 2
Felling mature timber in Mortimer Forest, North West England.



Plate 3
The Afron HN450 hydrostatic power ladder being used to collect cones from grafted 26-year-old European larch in a seed orchard at the Northern Research Station, near Edinburgh.

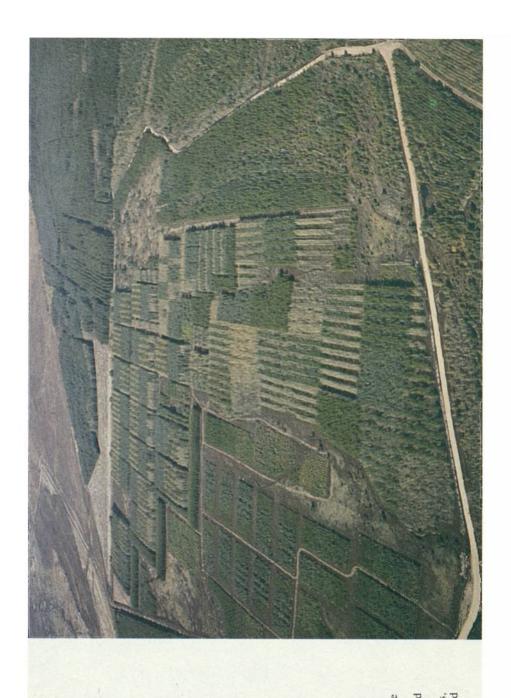


PLATE 4
An aerial view of Teindland,
Speymouth Forest, East
Scotland, where experiments are
in progress aimed at improving
the afforestation of poor hill land
in Scotland. The various plots
represent work on exotic species,
mixtures of species, drainage and
cultivation methods, and
different fertiliser treatments.

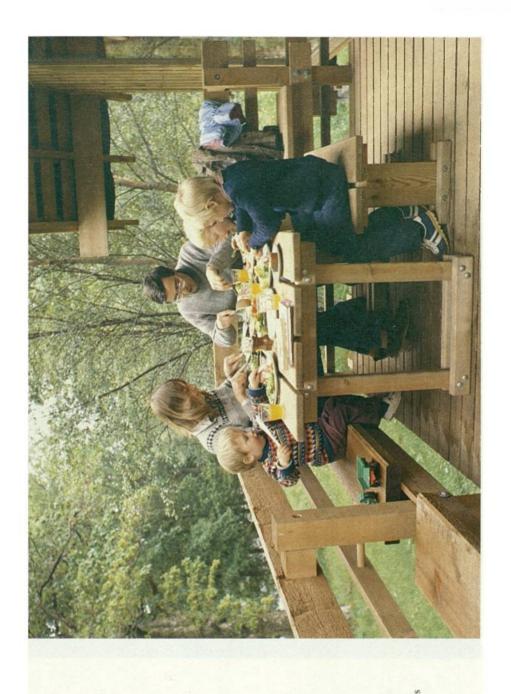


PLATE 5
Breakfast on the balcony of one of the Commission's forest cabins at Lochaweside, Argyll, West Scotland. The Crown Estate Commissioners provided the capital investment for this latest forest holiday development.

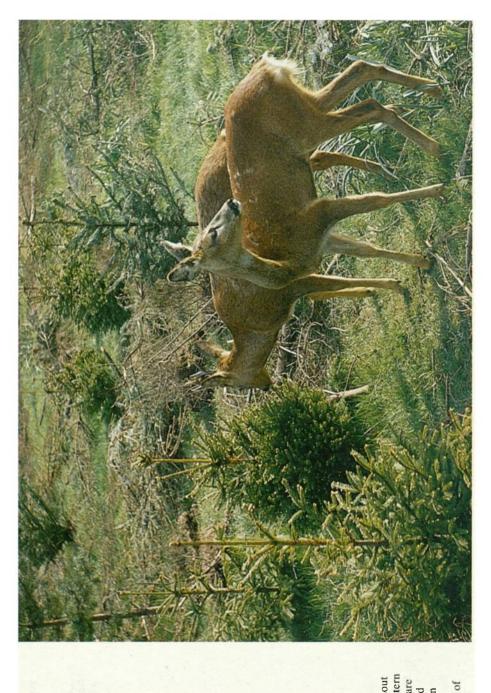


PLATE 6
Roe deer are present throughout Scotland and in northern, eastern and southern England. They are mainly woodland animals, and here a buck and a doe are seen browsing on young conifers which have not yet grown out of the vulnerable stage.

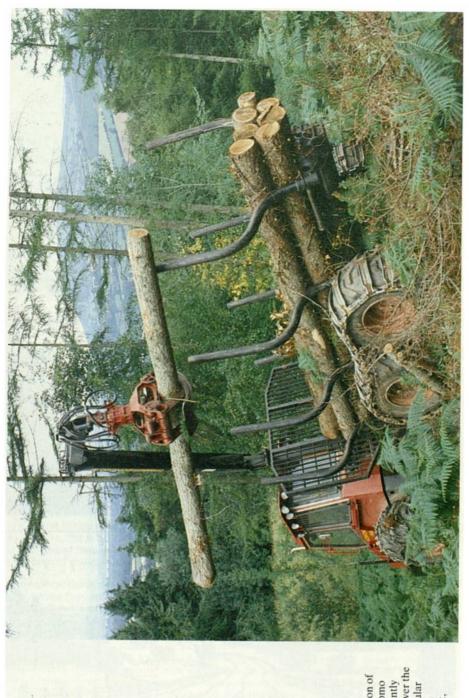
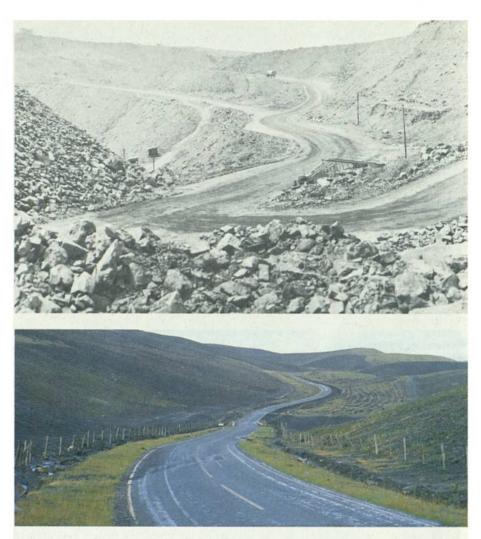


PLATE 7
The widespread introduction of machines such as this Lokomo 919 forwarder has significantly reduced harvesting costs over the past few years. This particular machine is extracting larch sawlogs in Talybont Forest, South Wales.



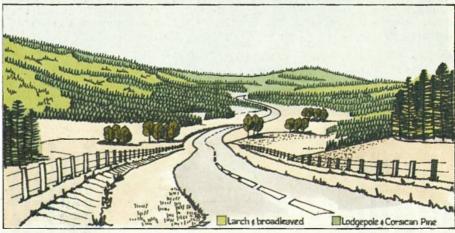


PLATE 8
The Commission makes a major contribution to the restoration of opencast coal sites, such as this one at Dunraven/Rhigos, Glyn Neath, South Wales. The top picture shows the site during working, and in the centre is a view of the restored area before planting. The artist's impression is of the same view some 20 years from now.

support for research in forestry, but have decided that forestry is not a sufficiently significant component of the programmes of any of the Research Councils to make this a realistic proposition. In order, however, to provide for the wider role foreseen for the Forestry Commission in forestry research, we have concluded that it should establish more formal links with the NERC, who already have the main responsibility for fundamental research in forestry, and suitable arrangements will be made.

The Select Committee's proposal that the Forestry Commission should assume responsibility for applied research into the end uses of wood and of forest products, through the establishment of a Forest Products Research Laboratory, has been considered against the background of the role of the Building Research Establishment's Laboratory at Princes Risborough and the substantial financial support for research and development of products such as pulp, paper, board and furniture, provided by the Department of Industry. The present status of the Princes Risborough Laboratory rests on the requirement for the Department of the Environment to have access to a sufficient body of research expertise to meet its responsibilities. The work at Princes Risborough has accordingly become diversified to include material other than wood to make it more responsive to the needs of the department. Current research on timber, both home-grown and imported, in the Building Research Establishment absorbs 35 man-years per annum of effort, of which 4 man-years are funded by the Forestry Commission. Thus at present only a relatively small effort is devoted to research on wood as a material compared with that on the use of wood in construction. If wood research at the Building Research Establishment were to be discontinued, however, the Forestry Commission would only be in a position to take over the area concerned with wood as a raw material and some aspects of primary processing. This would mean a loss of the overall integration of the wide range of wood research at present undertaken by the Establishment. The Government do not therefore consider that responsibility for wood research should be transferred to the Forestry Commission. The present arrangements work satisfactorily, with the Departments of Environment and Industry taking considerable interest in supporting research and development in their respective fields.

The Select Committee made some interesting proposals about research into wood properties and the end use of timber. We accept that more effort should be applied to work on wood properties, and regard will be had to this in planning future research programmes. We are also in full agreement with the Select Committee that there should be more work done on the avoidance of waste in the use of wood, and the Commission and the other departments concerned will be considering whether greater priority can be given to research in this area within the funds available.

The Government note the Select Committee's views on the need for a long-term policy for broadleaved woodlands throughout Great Britain, and the Forestry Commission is looking into this question in consultation with the Nature Conservancy Council, the Countryside Commissions and the Environment Departments. It is agreed that these woodlands are a significant part of our national heritage, being important in terms of landscape, wood production, recreation and conservation, but it has to be recognised that the cost of preserving the traditional structure of certain types of broadleaved woodlands can be relatively high; this is already recognised by the higher rates of grant available for broadleaved planting.

We endorse the recommendation that close attention should be paid to advance forest planning to harmonise the location and design of new forests with other interests. There are economic and scenic advantages in harmonising the design of forest planting with the environment, and this is an area to which the Forestry Commission has devoted increased attention in recent years in co-operation with other interests concerned. Similarly, in line with other recommendations of the Select Committee, the Forestry Commission is already collaborating in an active research programme with the NERC Institute of Hydrology into the interaction of forestry and water resources, and is working closely with the NERC Institute of Terrestrial Ecology to monitor selected sample forest areas for more than one rotation in order to follow changes in soil fertility and the influence of afforestation on other environmental features.

The Government accept in part the recommendation that forests should be diversified as soon as possible both in age and composition. There is evidence that diversity in age classes may be beneficial from the points of view of windthrow, insect damage and disease, as well as improving the landscape. This will take some time to achieve, but it is happening both naturally and through deliberate felling policies pursued by the Forestry Commission and private owners aimed at converting even-aged plantations into forests of varying age. There is a lack of evidence, however.

that crops of mixed species are inherently less liable to disease than pure crops, and the introduction of a large number of species on a small scale makes for management and marketing difficulties. On the other hand, the Forestry Commission recognises that some reduction in its reliance on a relatively small range of species would be prudent.

The Select Committee's Report made a number of recommendations on the subject of integrated land use, some of which are outside the context of forestry research. We are in agreement with the Select Committee that this is an important subject but one "on which it is extremely difficult to design critical research". We consider that the best way forward lies in close collaboration between the Forestry Commission and organisations already working in this field. The recommendation that responsibility for research into aspects of integrated land use be vested in one particular department and Research Council is not considered to be practicable, however, because of the diversity of interests involved, but the new Forestry Research Co-ordination Committee will provide a suitable vehicle for dealing with this issue. The Select Committee's proposal relating to the establishment of strategic guidelines to govern the inter-relationships between different land use interests is one to which the Government departments concerned will be giving consideration.

The Report contains a number of other recommendations relating to integrated land use, such as the development of a more comprehensive advisory service, the need for common courses in agriculture and forestry and the provision of specific financial incentives. These are all important questions but we consider it would be more appropriate to pursue them within the wider framework of forestry and agricultural policy in general.

We shall similarly be bearing in mind in the wider forestry policy context the Committee's concluding recommendation that the Forestry Commission's management objectives and terms of reference should reflect more explicitly the conditions under which it now operates. We would remind the House that the Countryside Acts have already extended the Commissioners' remit with regard to the provision of recreational facilities and the planting and management of trees in the interests of amenity. As regards the Commission's management objectives, these have been set by the Commissioners themselves to give practical expression to the broad principles of forestry policy laid down by the Government and are kept under regular review.'

Appendix VIII

New Publications

The following titles were published during the year:

Reports

61st Annual Report and Accounts of the Forestry Commission (1980–81) (£8·00). Report on Forest Research, 1982 (£5·40).

Rooklets

No. 47 Investment Appraisal in Forestry (£3·75).
No. 48 Yield Models for Forest Management (£1·20).

(162 individual models 10p each; binders £1·50; index cards £3.00).

Forest Record

No. 103 Badgers in Woodlands (Revision) (80p).

Leaflets

- No. 12 Taxation of Woodlands (Revision) (60p).
- No. 79 Decay Fungi in Conifers (£1-30).

Arboricultural Leaflets

- No. 7 Removal of Tree Stumps (£2.00).
- No. 8 Phytophthora Diseases of Trees and Shrubs (£2.40).
- No. 9 Verticillium Wilt (£1.35).

Occasional Papers

- No. 11 Aerial Application of insecticide against Pine Beauty Moth (£2.50).
- No. 12 Spatial Analysis of Forest Growth (£5.00).

Guides

Hazel Coppice at Westonbirt (20p). Explore the New Forest (reprint) (£3·20).

In addition the following free pamphlets were produced:

Forestry Facts and Figures
Forestry Grant Scheme
Native Pinewood Grants
Improving Upland Forests for Birds
Trees and People (New Edition)
The Living Forest (Wallchart)
Get Away to it All (Cabins brochure)
Come Camping in the Forest (Campsites brochure)

Appendix IX Statistical Tables

Forestry Authority

DEDICATION SCHEMES FOR PRIVATE ESTATES POSITION AT 31 MARCH 1982

Table 1Area in hectares

	En	gland	W	'ales	Sco	otland	Great	t Britain
	Num- ber	Area	Num- ber	Area	Num- ber	Area	Num- ber	Area
Basis I and II Dedications in existence	2,469	209,482	517	31,069	1,161	236,050	4,147	476,601
Basis III Dedications in existence	359	17,188	92	5,881	467	65,864	918	88,933
Dedications in preparation	73	5,422	25	2,193	174	35,804	272	43,419
Total Basis III	432	22,610	117	8,074	641	101,668	1,190	132,352

Notes:

- (i) A dedication exists when the Deed of Covenant or Agreement has been completed.
- (ii) Dedications in preparation include all applications which have been approved as suitable for dedication.

THE APPROVED WOODLANDS SCHEME FOR PRIVATE ESTATES POSITION AT 31 MARCH 1982

Table 2 Area in hectares

	En	gland	w	/ales	Sco	otland	Great	Britain
_	Num- ber	Area	Num- ber	Area	Num- ber	Агеа	Num- ber	Area
Plans of Operations in existence at the beginning of the year	130	14,883	6	851	18	4,666	154	20,400
Terminations during the year	61	6,811	3	223	7	2,771	71	9,805
Plans remaining	69	8,072	3	628	11	1,895	83	10,595

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

AREA OF PLANTING BY PRIVATE WOODLAND OWNERS FOR WHICH GRANTS were paid in the year ended $31\ \mathrm{march}\ 1982$

Table 3

In Forestry Grant Scheme Re-
Flanting Stocking
326 1,000 54 544 380 1,544
943 173 19 23 962 196
10,280 1,077 31 69 10,311 1,146
11,549 2,250 104 636 11,653 2,886

New Planting Restocking	110 107			200 125	
	England	Wales	Scotland	Great Britain	
	In addition it is estimated that the following areas were planted without grant aid:				

* Includes 311 ha paid in 1980-81 but not recorded in the Annual Report for that year.

area of planting by private woodland owners for which grants were paid in the 10-year period 1 april 1972 to 31 march 1982

Hectares

Table 4

g stocking Total New 250 1,542 15,233 175 1,502 15,392 123 1,357 15,037 112 520 8,170 125 848 5,734 36 627 4,900 90 681 6,656 112 668 6,932 142 703 6,934	England	England		1		Wales			Scotland			Great Britain	
2,234 5,730 1,292 250 1,542 1 2,147 4,317 1,327 175 1,502 1 1,633 3,666 1,234 123 1,357 1 1,454 2,480 408 112 520 1 1,156 1,931 723 125 848 1,008 1,839 591 36 627 1,439 2,141 591 90 681 1,731 2,545 556 112 668 1,930 2,835 561 142 703 1,000 2,603 1,004 1,004 1,004		New Planting	Re- stocking	Total	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total
2,147 4,317 1,327 175 1,502 1 1,633 3,666 1,234 123 1,357 1 1,454 2,480 408 112 520 1,156 1,931 723 125 848 1,008 1,839 591 36 627 1,439 2,141 591 90 681 1,731 2,545 556 112 668 1,930 2,835 561 142 703 1,000 2,603 1,004 1,004 1,004	3,4	96	2,234	5,730	1,292	250	1,542	15,233	1,269	16,502	20,021	3,753	23,774
1,633 3,666 1,234 123 1,357 1 1,454 2,480 408 112 520 1,156 1,931 723 125 848 1,008 1,839 591 36 627 1,439 2,141 591 90 681 1,731 2,545 556 112 668 1,930 2,835 561 142 703	2,	170	2,147	4,317	1,327	175	1,502	15,392	1,579	16,971	18,889	3,901	22,790
1,454 2,480 408 112 520 1,156 1,931 723 125 848 1,008 1,839 591 36 627 1,439 2,141 591 90 681 1,731 2,545 556 112 668 1,930 2,835 561 142 703 1,000 2,835 1,004 272 1,277 1,277	2	,033	1,633	3,666	1,234	123	1,357	15,037	1,287	16,324	18,304	3,043	21,347
1,156 1,931 723 125 848 1,008 1,839 591 36 627 1,439 2,141 591 90 681 1,731 2,545 556 112 668 1,930 2,835 561 142 703 1,000 2,603 1,004 223 1,227 1,227	I	,026	1,454	2,480	408	112	520	8,170	1,071	9,241	9,604	2,637	12,241
1,008 1,839 591 36 627 1,439 2,141 591 90 681 1,731 2,545 556 112 668 1,930 2,835 561 142 703 1,000 2,603 1,004 272 1,277 1,277		775	1,156	1,931	723	125	848	5,734	643	6,377	7,232	1,924	9,156
1,439 2,141 591 90 681 1,731 2,545 556 112 668 1,930 2,835 561 142 703 1,930 2,835 561 142 703	ı ı	831	1,008	1,839	591	36	627	4,900	933	5,833	6,322	1,977	8,299
1,731 2,545 556 112 668 1,930 2,835 561 142 703 1,000 2,623 1,004 222 1,227 1,227		702	1,439	2,141	591	06	681	6,656	1,321	7,977	7,949	2,850	10,799
1,930 2,835 561 142 703		814	1,731	2,545	556	112	899	6,932	1,022	7,954	8,302	2,865	11,167
7001 1000		905	1,930	2,835	561	142	703	6,934	927	7,861	8,400	2,999	11,399
1,22,1 625 1,004 625 1,227		795	1,888	2,683	1,004	223	1,227	10,663	1,339	12,002	12,462	3,450	15,912

Note: This table does not include planting done without Forestry Commission grants.

volume of timber licensed for felling and thinning on private estates in the year ended $31\ \text{March}\ 1982$

Table 5

Volume in thousands of cubic metres

					England	Wales	Scotland	Great Britain
Conifer				 	95	5	89	189
Broadleaved				 	150	7	25	182
Total volume				 	245	12	114	371
Number of licer	ices is	ssued	• • •	 	1,099	87	267	1,453

Note: Excludes felling and thinning covered by an approved plan of operations under the Dedication and Forestry Grant Schemes, for which no licence is required.

AREA LICENSED FOR CLEAR FELLING ON PRIVATE ESTATES IN THE YEAR ENDED 31 MARCH 1982

Table 6 Hectares

			England	Wales	Scotland	Great Britain
Conditional licences Unconditional licences		 	1,079 198	71 20	246 87	1,396 305
Total	• •		1,277	91	333	1,701

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

Forestry Enterprise

Table 7 LAND USE AT 31 MARCH 1982

Hectares

	England	Wales	Scotland	Great Britain
Forest Land Under plantations Retained scrub To be planted Total	. 1,813 . 5,983 . 259,420	136,847 1,614 2,158 140,619	517,032 4,487 43,363 564,882	905,503 7,914 51,504 964,921
Other Land Agricultural and grazing Forest workers' holdings Unplantable and miscellaneous (includes nur sery land) Total Total	. 500 . 30,679	10,680 428 7,252 18,360	104,970 3,196 124,463 232,629	127,244 4,124 162,394 293,762
Total area	. 302,193	158,979	797,511	1,258,683

NET AREA OF FOREST LAND ACQUIRED/DISPOSED OF DURING
Table 8 THE YEAR ENDED 31 MARCH 1982

Hectares

			England	Wales	Scotland	Great Britain
Plantations acquired Plantations disposed of	 		33 539	137	240 1,145	273 1,821
Planting land acquired Planting land disposed of	 		242 137	42 24	3,910 365	4,194 526
Other land acquired Other land disposed of	 		20 633	6 1,582	571 5,861	597 8,076
Net area of forest land acqu	of	(1,014)	(1,695)	(2,650)	(5,359)	

Table 9	planting in the year ended 31 march 1982	Hectares

_				New Planting	Re- stocking	Total
England Conifer Broadleaved Total	 	 	 	543 15 558	1,824 125 1,949	2,367 140 2,507
Wales Conifer Broadleaved Total	 	 	 	326 326	1,503 21 1,524	1,829 21 1,850
Scotland Conifer Broadleaved Total	 	 	 	10,058 36 10,094	2,023 14 2,037	12,081 50 12,131
Great Britain Conifer Broadleaved Total	 	 	 	10,927 51 10,978	5,350 160 5,510	16,277 211 16,488

area planted annually by the commission in the 10-year period 1 april 1972 to 31 march 1982

Table 10	0											Hectares	
;		-	England			Wales			Scotland)	Great Britain	
en 31 M	y ear ended 31 March	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total
1973	:	. 1,735	1,419	3,154	1,469	771	2,240	16,174	1,590	17,764	19,378	3,780	23,158
1974	:	1,552	1,348	2.900	1,417	762	2,179	15,433	1,211	16,644	18,402	3,321	21,723
1975	:	1,239	1,384	2,623	1,412	649	2,061	17,010	1,461	18.471	19,661	3,494	23,155
1976	:	. 1,487	1,043	2,530	1,131	924	1,607	14,651	1,723	16,374	17,269	3,242	20,511
1977	:	1,302	1,170	2,472	1,096	862	1,889	13.148	1,194	14,342	15,546	3,157	18,703
1978	:	. 1,148	1,164	2,312	692	286	1,706	12,206	896	13,174	14,123	3,069	17,192
1979	.	989	1,424	2,110	572	884	1,456	10,584	1,259	11,843	11,842	3.567	15,409
1980		868	2,168	3,066	762	1,241	2,038	14,135	2,260	16,395	15.830	5,669	21,499
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

AREAS OF PLANTATIONS AND VOLUMES OF TIMBER THINNED AND FELLED IN THE YEAR ENDED 31 MARCH 1982

Table 11

Area in hectares; Volume in thousands of cubic metres

	Fel	lled	Thir	nned	Total Volume	
	Area	Volume	Area	Volume	Felled and Thinned	
England						
Conservancy: North-West North-East East New Forest South-East Dean Total	474 900 440 173 438 2,425	129 204 130 34 125 622	1,883 1,601 2,440 2,962 1,873 10,759	79 63 140 105 93 480	208 267 270 139 218 1,102	
Wales Conservancy: North South Total	637 770 1,407	169 186 355	2,540 1,989 4,529	146 103 249	315 289 604	
Scotland Conservancy: North East South West Total	435 495 675 625 2,230	154 120 152 171 597	1,108 2,734 2,950 1,150 7,942	62 157 169 58 446	216 277 321 229 1,043	
Great Britain	6,062	1,574	23,230	1,175	2,749	

SALES OF TIMBER IN THE YEAR ENDED 31 MARCH 1982

Table 12 Thousand cubic metres

Description	England	Wales	Scotland	Great Britain
Trees sold standing	343	255	314	912
Converted*				
Round timber and saw logs	343 6 37 12 216 25 29 3 671	167 1 20 9 82 6 2 —	338 8 1 326 8 1 682	848 15 57 22 624 39 31 4 1,640

^{*} In addition 5,000 cubic metres were converted and used internally for forest and estate purposes. (England 2,000; Wales 1,000; Scotland 2,000).

PROPERTIES MANAGED BY THE COMMISSION AT 31 MARCH 1982

Table 13 Number

Type of Property		England	Wales	Scotland	Great Britain
Forest properties					
Forest workers' houses Forest workers' holdings		185 598 43 1,411	95 155 42 490	267 626 111 820	547 1,379 196 2,721
Total		2,237	782	1,824	4,843
Other properties†					
Decidential and other lettings		527 1,196	457 706	607 1,144	1,591 3,046
Total		1,723	1,163	1,751	4,637

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

PUBLIC RECREATIONAL FACILITIES AT 31 MARCH 1982

Table 14 Number

	England	Wales	Scotland	Great Britain
Camping and caravan sites* Picnic places	 21 366 285 13 9	1 111 146 6 7	9 139 230 9 5	31 616 661 28 21
Forest cabins and holiday houses	 108	4	90	202

^{*} In addition to these campsites, the Commission provides the following:-

[†] In addition there are 2,410 sporting lettings.

⁽i) five sites leased to the Caravan Club and two sites to the Camping Club of Great Britain and Northern Ireland;

⁽ii) 42 sites set aside for youth camping;

⁽iii) facilities for caravan rallies.

LAND USE, PLANTING AND TIMBER PRODUCTION BY FORESTS—ENGLAND

Table 15

			e at 31 Ma (hectares)			During Year 1981-82		
North-West England Conservancy	Total Area	Under					ating ares)	Pro- duction
	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000 cu. m.)
Arden, Hereford and Worcester, West Midlands, Warwick						_	_	_
and Leics Blengdale, Cumbria	965 2,361	932 1,845	36	15 172	18 308	7 5	5 5	2 9
Bowland, Lancs Cannock, Staffs Dalton, Cumbria and	1,821 3,613	1,703 3,480	_	60	118 73	_	16 39	5 17
Lancs. Delamere, Cheshire	1,654 958	1,381 916	5 1 25	_ _ 52	268 41	_ _ _		3 6
Ennerdale, Cumbria Greystoke, Cumbria Grizedale, Cumbria	3,657 1,270 3,527	1,584 1,161 3,070	3	52 —	1,996 106 457		22	12 10 14
Inglewood, Cumbria Kershope, Cumbria	996 5,732	951 5,306		7 56	38 370	_ _		4 33
Launde, Derby, Notts and Leics	891	864	_	20	7	_		1
Matlock, Derby and Cheshire Mortimer, Shropshire,	2,966	1,932	24	506	504	17	_	1
Hereford and Worcester	4,794	4,592	23	21	158	_	111	42
Sherwood, Notts Shropshire Hills,	6,370	5,983	_	54	333	_	93	29
Shropshire Spadeadam, Cumbria and	1,118	937	_	88	93	_	_	3
Northumberland Swynnerton, Staffs	6,614 1,020	4,839 975	22 —	800 30	953 15	141 —	9	
Thornthwaite, Cumbria	2,652	2,201	_	9	442	8	34	12
Тотац	52,979	44,652	139	1,890	6,298	178	417	208

Table 15—continued

			e at 31 Ma (hectares)			During Year 1981-82			
North-East England Conservancy	Total Area	Under					iting ares)	Pro- duction	
	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000 cu. m.)	
Chopwell, Durham, Tyne and Wear Cleveland, North Yorks and	874	795	2	_	7 7	_	4	. 4	
Cleveland	3,288	3,057	77	32	122	4	25	3	
Cropton, North Yorks	4,642	3,859	70	134	579	23	25	15	
Dalby, North Yorks	3,064	2,767	_	11	286	_	35	20	
Dales, North and West	2 152	1.003	۔	105	40	2	0		
Yorks and Durham Don, South, West and	2,152	1,993	5	105	49	2	9	1	
North Yorks	2,921	1,849	36	826	210	81	13	6	
Falstone, Northumberland	15,018	13,266	_	47	1,705	_	71	42	
Hambleton, North	4 424	2.072	22	110	420	10		٠.	
Yorks	4,434	3,863	22	110	439	10	17	11	
Hamsterley, Durham	4,378	3,409	_	727	242	_	14	25	
Harwood, Northumberland	4,525	4,103	_	38	384	_	92	12	
Kidland,	ĺ	,							
Northumberland	3,545	2,705	_	96	744	52	1	1	
Keilder,									
Northumberland	16,292	10,211	-	6	6,075	3	63	38	
Redesdale,									
Northumberland	5,615	5,009	-	_	606	_	19	15	
Slaley, Northumber-	1 100	1.004	,	40	41		17	_	
land and Durham	1,190	1,094	6	49	41	4	17	5	
Thrunton, Northumberland	3,721	3,290	39	120	272	84	35	15	
Wark.	3,721	3,290	39	120	212	04	33	13	
Northumberland	13,755	11,690		464	1,601	47	129	24	
Wykeham, North	13,733	11,000		101	1,001	1,	127		
Yorks	7,986	6,297	61	118	1,510	32		24	
Wynyard, Cleveland	593	581		11	1,510		9		
York, North Yorks and					-				
Humberside	2,326	2,187	11	46	82	1	5	7	
Total	100,319	82,025	329	2,940	15,025	343	583	268	

Note: Dales is a newly-formed forest comprising the former Jervaulx and Knaresborough Forests.

Table 15—continued

		Land us	e at 31 Ma (hectares)			During Year 1981–82			
EAST ENGLAND CONSERVANCY	Total Area	Under		l			nting ares)	Pro- duction	
	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000 cu. m.)	
Aldewood, Suffolk	3,520	3,315	6	43	156	l —	55	37	
Ampthill, Beds	1,441	1,265	82	45	49	l —		2	
Bardney, Lincs	3,040	2,927	17	4	92	l —	3	10	
Chilterns, Bucks,									
Oxon, Beds and									
Herts	2,988	2,834	57	60	37	l —	5	7	
Hazelborough, Nor-									
thants and Bucks	1,394	1,375	7	2	10	l —	38	3	
Kesteven, Lines	2,073	1,986	_	12	75	2	_	2 1	
Lavenham, Suffolk	811	807	_	_	4	l —	1		
North Lindsey, Lines	2,084	2,014	-	2	68	l –	13	15	
Rockingham, Nor-									
thants and Cambs	2,860	2,630	115	3	112	5	15	6	
Thetford, Norfolk and									
Suffolk	21,202	20,038	43	124	997	9	248	176	
Walden, Essex, Cambs									
and Herts	705	672	27	6		l —	_		
Wensum, Norsolk	2,187	2,122	1	_	64	2	5	8	
Wymersley, Beds,									
Northants and									
Bucks	1,506	1,469	15	3	19	_	10	4	
TOTAL	45,811	43,454	370	304	1,683	18	393	271	

Note: Bramfield has been added to Ampthill.
Bernwood has been added partly to Hazelborough and partly to Chilterns.

Table 15—continued

		Land us	e at 31 Ma (hectares)			_ Durir	During Year 1981–82		
New Forest and Southi-East England Conservancy	Total	Under					nting (ares)	Pro-	
	Area of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	duction (000 cu. m.)	
Alice Holt, Hamp- shire, West Sussex	-	_							
and Surrey	3,182	3,017	33	3	129	<u> </u>	13	10	
Arundel, West Sussex	3,426	3,204	70	23	129	\ —	-	9	
Bedgebury, Kent and	4.0==								
East Sussex	3,973	3,641	_	_	332	i —	19	16	
Bramshill, Hampshire and Berks	2,361	2,213	22	12	114	i	13	8	
and Berks Challock, Kent	3,705	3,629	36	12	40	l –	13	10	
Micheldever. Berks	5,705	3,029	30	_	40	-	9	10	
and Hampshire	2,412	2,317	35	2	58	l _	_	7	
New Forest, Hamp-	2,2	_,	55	_				, , , , , , , , , , , , , , , , , , ,	
shire	26,981	11,731	135	<u> </u>	15,115	l —	45	38	
Queen Elizabeth For- est, West Sussex and									
Hampshire	4,207	3,965	90	5	147	l —	11	7	
Ringwood, Dorset	2,976	2,602	32	_	342		36	22	
St Leonards, East Sussex and West		l.							
Sussex	1,746	1,554	8	_	184	l —	3	3	
Wight, Isle of Wight	1,850	1,702	20	_	128	_	16	9	
TOTAL	56,819	39,575	481	45	16,718	_	165	139	

Note: Shipbourne has been added to Challock.

Table 15—continued

Course Wages			e at 31 Ma (hectares)			Durir	ng Year 19	81–82
SOUTH-WEST ENGLAND AND DEAN CONSERVANCY	Total Area	Under					nting ares)	Pro-
CONSERVANCE	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000 cu. m.)
Brendon, Somerset and Devon Dartmoor. Devon Dean Forest, Glouces- ter, Hereford and Worcester and	1,545 2,384	1,394 2,123	5 —	13	133 261	1 -	23 18	11 27
Gwent Eggesford, Devon Exeter, Devon Hereford, Gloucester and Hereford and	10,706 1,157 2,686	9,574 1,135 2,431	 1 33	147 1 148	985 20 74	<u>-</u> 12	80 17 30	52 7 20
Worcester Kernow, Cornwall Mendip, Avon, Somer-	2,355 3,492	2,047 3,286	41	300 48	8 117	<u> </u>	7 17	5 19
set and Wilts Neroche, Somerset and	1,410	1,358	12	1	39	5	8	5
Devon Powerstock, Dorset Quantock, Somerset Savernake, Wiltshire, Hampshire and	2,057 1,549 1,311	1,818 1,456 1,095	9 10	29 9 3	210 75 203	_ _ _		3 2 5
Berks Torridge, Devon Wareham, Dorset Westonbirt.	5,032 3,676 4,828	4,784 3,453 4,177	84 	41 40 24	123 183 527	_ _ _	31 70 44	15 27 12
Gloucester Wyre, Salop, Here- ford and Worcester	242 1,835	— 1,787	199 —	_ _	43	_ _	— 19	_ 6
TOTAL	46,265	41,918	494	804	3,049	19	391	216

LAND USE, PLANTING AND TIMBER PRODUCTION BY FORESTS—WALES

Table 16

			e at 31 Ma (hectares)	rch 1982		During Year 1981–82		
North Wales Conservancy	Total Area	Under					nting (ares)	Pro-
	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000 cu. m.)
Aeron, Dyfed	2,346	2,270	19	_	57	_		4
Beddgelert, Gwynedd	3,927	3,216	32	11	668		53	16
Ceiriog, Clwyd	1,775	1.719	1	7	48	_	6	5
Ceri, Powys	1,789	1,775] 3	_	11	_	65	10
Clocaenog, Clwyd	6,301	5,757	_	5	539	1	83	41
Clwyd, Clwyd	2,069	1,926	7	21	115	_	_	5
Coed Sarnau, Powys	3,072	2,982	29	39	22	1 —	40	10
Coed-y-Brenin,	,	,				1		
Gwynedd	9,295	6,591	72	132	2,500	60	58	44
Cynwyd, Gwynedd and	ĺ	,				ŀ		
Clwyd	785	723		14	48	2	23	6
Dyfi, Gwynedd and								
Powys	7,477	6,518	24	162	773	56	9	49
Dyfant, Powys	3,253	2,623	_	_	630	58	1	10
Gwydyr, Gwynedd and								
Clwyd	8,134	5,950	53	48	2,083	12	23	33
Hafren, Powys	4,743	4,545	-	1	197	l —	18	19
Mathrafal, Powys and						ł		
Clwyd	1,576	1,491	5	4	76	l —	16	6
Newborough,				,		1		
Gwynedd	1,760	1,457	9	7	287	1 —	_	4
Penllyn, Gwynedd	4,249	3,857	-	148	244	8	1	6
Radnor, Powys	2,479	2,421	-	5	53	l —	58	17
Rheidol, Dyfed	5,418	4,283	34	176	925	2	1	10
Ystwyth, Dyfed and						1		
Powys	7,088	5,792	20	271	1,005	21	26	20
TOTAL	77,536	65,896	308	1,051	10,281	220	481	315

Table 16—continued

SOUTH WALES CONSERVANCY Total Area of Forest Total Area of Michael Area of Forest Total Area of Michael Area of Mich							,		
Total Area of Planta-Forest vitions							Durir	ng Year 19	81–82
Brechfa, Dyfed Company Company	•		Under						
Forest tions Scrub planted land Planting stocking cu.m.)				Retained	To be	Other	New	Re-	
Brycheiniog, Powys 1,602 1,495 — 1 106 — 25 10 Caco, Dyfed 3,143 2,884 72 2 185 — 110 19 Coed Abertawe, West 868 808 32 — 28 — 14 3 Coed Deufor, Dyfed Coed Morgannwg: Gord Dyfed 3,955 3,167 70 8 710 — 5 6 Coed Deufor, Dyfed Coed Morgannwg: Grynart, West 6 3,955 3,167 70 8 710 — 5 6 Coed Drest Glam and Mid Glam 5,295 4,666 30 108 491 — 98 6 Margam, West Glam and Mid Glam 4,730 4,175 173 5 377 — 82 23 Rheola, West Glam and Mid Glam 5,246 4,311 87 — 848 — 84 20 Coed Presci, Dyfed Coed Taf, Powys and Dyfed		Forest	tions	Scrub	planted	land	Planting	stocking	cu.m.)
Brycheiniog, Powys 1,602 1,495 — 1 106 — 25 10 Caco, Dyfed 3,143 2,884 72 2 185 — 110 19 Coed Abertawe, West 868 808 32 — 28 — 14 3 Coed Deufor, Dyfed 0cod Morgannweg: Crynant, West 6 6 710 — 5 6 Coed Dufor, Dyfed 0cod Morgannweg: Crynant, West 6 6 710 — 5 6 Coymer, West Glam and Mid Glam 5,295 4,666 30 108 491 — 98 6 Margam, West Glam and Mid Glam 4,730 4,175 173 5 377 — 82 23 Rheola, West Glam and Mid Glam 5,246 4,311 87 — 848 — 84 20 Coed Preseli, Dyfed 2,159 1,866 201 — 92 — — 2 <td>Brechfa, Dyfed</td> <td>6,789</td> <td>6,208</td> <td>88</td> <td>71</td> <td>422</td> <td>l _</td> <td>95</td> <td>54</td>	Brechfa, Dyfed	6,789	6,208	88	71	422	l _	95	54
Caeo, Dyfed 3,143 2,884 72 2 185 — 110 19 Coed Abertawe, West Glam 868 808 32 — 28 — 14 3 Coed Deufor, Dyfed 3,955 3,167 70 8 710 — 5 6 Coed Morgannwg: Crynant, West Glam 3,249 2,458 53 241 497 15 71 9 Cymer, West Glam and Mid Glam 5,295 4,666 30 108 491 — 98 6 Margam, West Glam and Mid Glam 4,730 4,175 173 5 377 — 82 23 Rheola, West Glam and Mid Glam 5,246 4,311 87 — 848 — 84 20 Coed Taf, Powys and Mid Glam 2,569 2,148 21 1 399 — 33 8 Coed-y-Rhaiadr, Powys and Dyfed <t< td=""><td>Brycheiniog, Powys</td><td>1,602</td><td>1,495</td><td>_</td><td>1</td><td>106</td><td>1 —</td><td>25</td><td>10</td></t<>	Brycheiniog, Powys	1,602	1,495	_	1	106	1 —	25	10
Coed Abertawe, West Glam 868 808 32 — 28 — 14 3 Coed Deufor, Dyfed Coed Morgannwg: Crynant, West Glam 3,955 3,167 70 8 710 — 5 6 Coed Morgannwg: Crynant, West Glam 3,249 2,458 53 241 497 15 71 9 Cymer, West Glam and Mid Glam 5,295 4,666 30 108 491 — 98 6 Margam, West Glam and Mid Glam 4,730 4,175 173 5 377 — 82 23 Rheola, West Glam and Mid Glam 5,246 4,311 87 — 848 — 84 20 Coed Preseli, Dyfed 2,159 1,866 201 — 92 — — 2 Coed-y-Rhaiadr, Powys 2,569 2,148 21 1 399 — 33 8 Coed-y-Rhaiadr, Powys 2,512 1,928 201 2 381 22 37		3.143	2,884	72	2	185	1 —	110	19
Glam		l '	,						
Coed Morgannwg: Crynant, West Glam 3,249 2,458 53 241 497 15 71 9 Cymer, West Glam and Mid Glam 5,295 4,666 30 108 491 — 98 6 Margam, West Glam and Mid Glam 4,730 4,175 173 5 377 — 82 23 Rheola, West Glam and Mid Glam 5,246 4,311 87 — 848 — 84 20 Coed Preseli, Dyfed 2,159 1,866 201 — 92 — — 2 Coed Taf, Powys and Mid Glam 2,569 2,148 21 1 399 — 33 8 Coed-y-Rhaiadr, Powys 2,512 1,928 201 2 381 22 37 — Crychan, Powys and Dyfed 3,707 3,567 54 — 86 1 82 25 Ebbw, Gwent 5,163 4,586 34 181 362 8 53 16 <td>-</td> <td>868</td> <td>808</td> <td>32</td> <td>_</td> <td>28</td> <td>_</td> <td>14</td> <td>3</td>	-	868	808	32	_	28	_	14	3
Coed Morgannwg: Crynant, West 3,249 2,458 53 241 497 15 71 9 Cymer, West Glam and Mid Glam S,295 4,666 30 108 491 — 98 6 Margam, West Glam and Mid Glam 4,730 4,175 173 5 377 — 82 23 Rheola, West Glam and Mid Glam 5,246 4,311 87 — 848 — 84 20 Coed Preseli, Dyfed Coed Taf, Powys and Mid Glam 2,569 2,148 21 1 399 — 33 8 Coed-y-Rhaiadr, Powys 2,512 1,928 201 2 381 22 37 — Crychan, Powys and Dyfed 3,707 3,567 54 — 86 1 82 25 Ebbw, Gwent 5,163 4,586 34 181 362 8 53 16 Glasfynydd, Powys and Dyfed 2,695 2,321 8 62 304 1	Coed Deufor, Dyfed	3.955	3,167	70	8	710	_	5	6
Crynant, West Glam 3,249 2,458 53 241 497 15 71 9 Cymer, West Glam and Mid Glam 5,295 4,666 30 108 491 — 98 6 Margam, West Glam and Mid Glam 4,730 4,175 173 5 377 — 82 23 Rheola, West Glam and Mid Glam 5,246 4,311 87 — 848 — 84 20 Coed Preseli, Dyfed 2,159 1,866 201 — 92 — — 2 2 Coed Taf, Powys and Mid Glam 2,569 2,148 21 1 399 — 33 8 Coed-y-Rhaiadr, Powys and Dyfed 2,512 1,928 201 2 381 22 37 — Crychan, Powys and Dyfed 3,707 3,567 54 — 86 1 82 25 Ebbw, Gwent		-,	-,						_
Glam								i	
Cymer, West Glam and Mid Glam 5,295 4,666 30 108 491 — 98 6 Margam, West Glam and Mid Glam 4,730 4,175 173 5 377 — 82 23 Rheola, West Glam and Mid Glam 5,246 4,311 87 — 848 — 84 20 Coed Preseli, Dyfed 2,159 1,866 201 — 92 — — 2 Coed Taf, Powys and Mid Glam . 2,569 2,148 21 1 399 — 33 8 Coed-y-Rhaiadr, Powys and Dyfed . 2,512 1,928 201 2 381 22 37 — Crychan, Powys and Dyfed . 3,707 3,567 54 — 86 1 82 25 Ebbw, Gwent . 5,163 4,586 34 181 362 8 53 16 Glasfynydd, Powys and Dyfed . 2,695 2,321 8 <td< td=""><td></td><td>3.249</td><td>2,458</td><td>53</td><td>241</td><td>497</td><td>15</td><td>71</td><td>9</td></td<>		3.249	2,458	53	241	497	15	71	9
Mid Glam 5,295 4,666 30 108 491 — 98 6 Margam, West Glam and Mid Glam 4,730 4,175 173 5 377 — 82 23 Rheola, West Glam and Mid Glam 5,246 4,311 87 — 848 — 84 20 Coed Preseli, Dyfed 2,159 1,866 201 — 92 — — 2 Coed Taf, Powys and Mid Glam 2,569 2,148 21 1 399 — 33 8 Coed-y-Rhaiadr, Powys and Dyfed 2,512 1,928 201 2 381 22 37 — Crychan, Powys and Dyfed 3,707 3,567 54 — 86 1 82 25 Ebbw, Gwent 5,163 4,586 34 181 362 8 53 16 Glasfynydd, Powys and Dyfed 1,484 1,463 1 2 18 10 46 14 <		,	_,						-
Margam, West Glam and Mid Glam 4,730 4,175 173 5 377 — 82 23 Rheola, West Glam and Mid Glam 5,246 4,311 87 — 848 — 84 20 Coed Preseli, Dyfed 2,159 1,866 201 — 92 — — 2 Coed Taf, Powys and Mid Glam 2,569 2,148 21 1 399 — 33 8 Coed-y-Rhaiadr, Powys 2,569 2,148 201 2 381 22 37 — Crychan, Powys and Dyfed 3,707 3,567 54 — 86 1 82 25 Ebbw, Gwent 5,163 4,586 34 181 362 8 53 16 Glasfynydd, Powys and Dyfed 1,484 1,463 1 2 18 10 46 14 Irfon, Powys and Gwent 2,695 2,321 8 62 304 1 21 8		5 295	4.666	30	108	491	_	98	6
and Mid Glam		0,270	1,000		100			, ,	J
Rheola, West Glam and Mid Glam		4 730	4 175	173	5	377	l _	82	23
and Mid Glam 5,246		1,750	1,175	1,5		5,,		02	25
Coed Preseli, Dyfed 2,159 1,866 201 — 92 — — 2 Coed Taf, Powys and Mid Glam . 2,569 2,148 21 1 399 — 33 8 Coed-y-Rhaiadr, Powys . . 2,512 1,928 201 2 381 22 37 — Crychan, Powys and Dyfed . . 3,707 3,567 54 — 86 1 82 25 Ebbw, Gwent . 5,163 4,586 34 181 362 8 53 16 Glasfynydd, Powys and Dyfed . 1,484 1,463 1 2 18 10 46 14 Irfon, Powys and Dyfed . 2,695 2,321 8 62 304 1 21 8 Mynydd Du, Powys and Glam 4,510 3,348 — 264 898 28 — — St Gwynno, Mid Glam 1,364 1,150 <t< td=""><td></td><td>5 246</td><td>4 311</td><td>87</td><td>_</td><td>848</td><td>l _</td><td>84</td><td>20</td></t<>		5 246	4 311	87	_	848	l _	84	20
Coed Taf, Powys and Mid Glam 2,569 2,148 21 1 399 — 33 8 Coed-y-Rhaiadr, Powys 2,512 1,928 201 2 381 22 37 — Crychan, Powys and Dyfed 3,707 3,567 54 — 86 1 82 25 Ebbw, Gwent 5,163 4,586 34 181 362 8 53 16 Glasfynydd, Powys and Dyfed 1,484 1,463 1 2 18 10 46 14 Irfon, Powys and Dyfed 2,695 2,321 8 62 304 1 21 8 Mynydd Du, Powys and Gwent 1,468 1,312 — — 156 8 22 11 Rhondda, Mid Glam 4,510 3,348 — 264 898 28 — — St Gwynno, Mid Glam 1,364 1,150 73 15		,	/ /		_		_	_	
Mid Glam 2,569 2,148 21 1 399 — 33 8 Coed-y-Rhaiadr, Powys 2,512 1,928 201 2 381 22 37 — Crychan, Powys and Dyfed 3,707 3,567 54 — 86 1 82 25 Ebbw, Gwent 5,163 4,586 34 181 362 8 53 16 Glasfynydd, Powys and Dyfed 1,484 1,463 1 2 18 10 46 14 Irfon, Powys and Dyfed 2,695 2,321 8 62 304 1 21 8 Mynydd Du, Powys and Gwent 1,468 1,312 — — 156 8 22 11 Rhondda, Mid Glam 4,510 3,348 — 264 898 28 — — St Gwynno, Mid Glam 1,364 1,150 73 <td></td> <td>2,137</td> <td>1,000</td> <td>201</td> <td></td> <td>/-</td> <td></td> <td></td> <td>_</td>		2,137	1,000	201		/ -			_
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Powys 2,512 1,928 201 2 381 22 37 — Crychan, Powys and Dyfed 3,707 3,567 54. — 86 1 82 25 Ebbw, Gwent 5,163 4,586 34 181 362 8 53 16 Glasfynydd, Powys and Dyfed 1,484 1,463 1 2 18 10 46 14 Irfon, Powys and Dyfed 2,695 2,321 8 62 304 1 21 8 Mynydd Du, Powys and Glam 1,468 1,312 — — 156 8 22 11 Rhondda, Mid Glam 4,510 3,348 — 264 898 28 — — St Gwynno, Mid Glam 3,950 3,364 — 109 477 13 77 9 Tair Onen, Mid and South Glam 1,364 1,150 73 15 126 <		2,307	2,110		•	3//		33	
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Irfon, Powys and Dyfed 2,695 2,321 8 62 304 1 21 8 Mynydd Du, Powys and Gwent 1,468 1,312 — — 156 8 22 11 Rhondda, Mid Glam 4,510 3,348 — 264 898 28 — — St Gwynno, Mid Glam . 3,950 3,364 — 109 477 13 77 9 Tair Onen, Mid and South Glam . 1,364 1,150 73 15 126 — 20 5 Talybont, Powys . 1,601 1,506 15 — 80 — 16 10 Tintern, Gwent . 3,888 3,795 29 2 62 — 49 20 Tywi, Powys and Dyfed . 8,424 7,420 10 33 961 — — 3 Wentwood, Gwent 1,072 1,005 54 — 13 — 3 6	, , ,	1 484	1 463	1 1	2	18	10	46	14
Dyfed 2,695 2,321 8 62 304 1 21 8 Mynydd Du, Powys and Gwent 1,468 1,312 — — 156 8 22 11 Rhondda, Mid Glam 4,510 3,348 — 264 898 28 — — St Gwynno, Mid Glam 3,950 3,364 — 109 477 13 77 9 Tair Onen, Mid and South Glam 1,364 1,150 73 15 126 — 20 5 Talybont, Powys 1,601 1,506 15 — 80 — 16 10 Tintern, Gwent 3,888 3,795 29 2 62 — 49 20 Tywi, Powys and Dyfed 8,424 7,420 10 33 961 — — 3 Wentwood, Gwent 1,072 1,005 54 <t< td=""><td></td><td>1,,0,</td><td>1,.00</td><td>-</td><td>_</td><td></td><td> '`</td><td> </td><td>• •</td></t<>		1,,0,	1,.00	-	_		'`		• •
Mynydd Du, Powys and Gwent 1,468 1,312 — — 156 8 22 11 Rhondda, Mid Glam St Gwynno, Mid Glam 4,510 3,348 — 264 898 28 — — Tair Onen, Mid and South Glam 1,364 1,150 73 15 126 — 20 5 Talybont, Powys 1,601 1,506 15 — 80 — 16 10 Tintern, Gwent 3,888 3,795 29 2 62 — 49 20 Tywi, Powys and Dyfed 8,424 7,420 10 33 961 — — 3 Wentwood, Gwent 1,072 1,005 54 — 13 — 3 6		2.695	2.321	8	62	304	l 1	21	8
and Gwent 1,468 1,312 — — 156 8 22 11 Rhondda, Mid Glam 4,510 3,348 — 264 898 28 — — St Gwynno, Mid Glam 3,950 3,364 — 109 477 13 77 9 Tair Onen, Mid and South Glam 1,364 1,150 73 15 126 — 20 5 Talybont, Powys 1,601 1,506 15 — 80 — 16 10 Tintern, Gwent 3,888 3,795 29 2 62 — 49 20 Tywi, Powys and Dyfed 8,424 7,420 10 33 961 — — 3 Wentwood, Gwent 1,072 1,005 54 — 13 — 3 6		2,070	2,021				_		
Rhondda, Mid Glam St Gwynno, Mid Glam 3,950 3,364 — 109 477 13 77 9 Tair Onen, Mid and South Glam 1,364 1,150 73 15 126 — 20 5 Talybont, Powys 1,601 1,506 15 — 80 — 16 10 Tintern, Gwent 3,888 3,795 29 2 62 — 49 20 Tywi, Powys and Dyfed 8,424 7,420 10 33 961 — — 3 Wentwood, Gwent . 1,072 1,005 54 — 13 — 3 6		1.468	1.312	_	_	156	8	22	11
St Gwynno, Mid Glam 3,950 3,364 — 109 477 13 77 9 Tair Onen, Mid and South Glam 1,364 1,150 73 15 126 — 20 5 Talybont, Powys 1,601 1,506 15 — 80 — 16 10 Tintern, Gwent 3,888 3,795 29 2 62 — 49 20 Tywi, Powys and Dyfed . 8,424 7,420 10 33 961 — — 3 Wentwood, Gwent 1,072 1,005 54 — 13 — 3 6					264				
Glam	-	,,,,,,	,,,,,,			0,0	-		
Tair Onen, Mid and South Glam 1,364 1,150 73 15 126 — 20 5 Talybont, Powys 1,601 1,506 15 — 80 — 16 10 Tintern, Gwent 3,888 3,795 29 2 62 — 49 20 Tywi, Powys and Dyfed 8,424 7,420 10 33 961 — 3 Wentwood, Gwent 1,072 1,005 54 — 13 — 3 6		3.950	3.364		109	477	13	77	9
South Glam 1,364 1,150 73 15 126 — 20 5 Talybont, Powys 1,601 1,506 15 — 80 — 16 10 Tintern, Gwent 3,888 3,795 29 2 62 — 49 20 Tywi, Powys and Dyfed 8,424 7,420 10 33 961 — — 3 Wentwood, Gwent 1,072 1,005 54 — 13 — 3 6		0,,,,,	-,,		• • •				
Talybont, Powys 1,601 1,506 15 — 80 — 16 10 Tintern, Gwent 3,888 3,795 29 2 62 — 49 20 Tywi, Powys and Dyfed 8,424 7,420 10 33 961 — — 3 Wentwood, Gwent 1,072 1,005 54 — 13 — 3 6	•	1.364	1.150	73	15	126	l _	20	5
Tintern, Gwent 3,888 3,795 29 2 62 — 49 20 Tywi, Powys and Dyfed 8,424 7,420 10 33 961 — — 3 Wentwood, Gwent 1,072 1,005 54 — 13 — 3 6					_		l _		_
Tywi, Powys and Dyfed 8,424 7,420 10 33 961 — 3 Wentwood, Gwent 1,072 1,005 54 — 13 — 3 6		,	,	-	2		l _		
Dyfed 8,424 7,420 10 33 961 — — 3 Wentwood, Gwent 1,072 1,005 54 — 13 — 3 6	,] 2,000	5,,,5			_ ~ _		'´	_~
Wentwood, Gwent . 1,072 1,005 54 — 13 — 3 6	~ ~	8 424	7 420	10	33	961	l		3
T- 01.442 70.051 1.200 1.107 0.070 1.00 1.042 207			,		_			3	
Total 81,443 70,951 1,306 1,107 8,079 106 1,043 287		1,072	1,005		_	1.5			
	Total	81,443	70,951	1.306	1,107	8,079	106	1,043	287
					,				

Note: Pembrey has been added to Coed Deufor.

LAND USE, PLANNING AND TIMBER PRODUCTION BY FORESTS—SCOTLAND Table 17

			at 31 Ma (hectares)			Durin	g Year 19	981–82
North Scotland Conservancy	Total Area	Under					nting tares)	Pro- duction
<u> </u>	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000 cu. m.)
Achnashellach, Highland Affric, Highland Ardross, Highland Black Isle, Highland Clunes, Highland Culloden, Highland Dornoch, Highland	4,745 28,743 10,793 5,602 6,819 8,499 1,956	3,024 7,333 7,700 5,138 4,423 6,123 1,656	10 	195 240 2,034 — 209 945 149	1,516 21,170 971 435 2,153 1,429 148	68 120 230 — — 212 50	14 	6 3 8 20 15 16
Farigaig, Highland Fiunary, Highland Glengarry, Highland Glenurquhart,	4,376 6,683 17,275	3,319 4,939 6,373	100 46 10	30 173 524	927 1,525 10,368	50 120	7 20 15	5 6 17
Highland Hoy Experiments Orkney Islands	10,470 13	5,073	107	460 —	4,830	34 —	24 —	16 —
Inchnacardoch, Highland Inshriach, Highland Leanachan, Highland Mull, Strathclyde Naver, Highland Oueen's Forest,	10,453 4,028 13,056 15,861 13,934	6,219 3,417 6,146 9,682 7,448	81 10 178 249 53	903 3 89 1,757 2,185	3,250 598 6,643 4,173 4,248	57 15 102 497 305	27 3 49 8 31	22 3 13 8
Highland Ratagan, Highland Rumster, Highland Shin, Highland Skye, Highland and	2,644 5,013 9,300 34,360	1,535 2,709 4,290 16,453		33 4,021 5,798	1,109 2,271 989 12.074	— 364 547	22 — 89	$\frac{1}{16}$
Western Isles South Strome, Highland	21,524 2,947	8,612 1,952	90 19	1,518 61	11,304 915	304 4	11 8	5 3
Strathmashic, Highland Sunart, Highland Torrachilty, Highland	18,604 13,017 16,695	4,379 6,730 8,672	12 226 6	16 504 118	14,197 5,557 7,899	 168 98	14 35 13	4 16 9
TOTAL	287,410	143,358	1,388	21,965	120,699	3,345	510	217

Note: Helmsdale has been added partly to Naver and partly to Dornoch.

Table 17—continued

			at 31 Ma (hectares)			Durin	g Year 19	981–82
EAST SCOTLAND CONSERVANCY	Total Area	Under					nting (ares)	Pro-
	Area of	Planta-	Retained	To be	Other	New	Re-	duction (000
	Forest	tions	Scrub	planted	land	Planting	stocking	cu. m.)
Alltcailleach.								
Grampian	1,806	1,670	_	10	126	l —		ı
Angus, Tayside	10,658	8,604	13	546	1,495	89	13	23
Banchory, Grampian	5,524	5,344	4	51	125	9		15
Bennachie, Grampian	7,107	5,692	3	239	1,173	132	_	17
Craigellachie,	,	,			,			
Grampian	11,032	9,176	22	1,126	708	129	7	17
Drummond Hill,	,			,				
Tayside	4,016	2,778	41	673	524	50	15	10
Dunkeld, Tayside	4,248	3,580	66	360	242	118	9	17
Eden, Fife and	,	,						
Central	3,601	3,330	47	16	208	1 —	31	23
Forest of Deer,			1					
Grampian	2,876	2,648	21	59	148	41	28	16
Huntly, Grampian	10,209	8,850	_	369	990	97	22	39
Kirkhill, Grampian	1,199	1,166	5	2	26	_	9	3
Laigh of Moray, Gram-								
pian and Highland	6,923	6,512	39	2	370	_	46	41
Mearns, Grampian	7,619	6,686	17	_	916	33	15	25
Ochil, Fife, Tayside		,						
and Central	4,493	4,118	27	_	348	77	17	9
Rannoch, Tayside	14,129	7,934	59	1,081	5,055	277	5	2
Speymouth,	,	·						
Grampian	10,609	9,948	3	174	484	126	10	17
Tornashean,								
Grampian	4,434	3,520	_	245	669	95	<u> </u>	_
Tummel, Tayside	8,303	5,678	109	271	2,245	_	4	1
Тотац	118,786	97,234	476	5,224	15,852	1,273	231	276

Note: Glenlivet has been added to Craigellachie.

Table 17 - continued

	_		at 31 Ma			Durin	g Year 19	981-82
SOUTH SCOTLAND CONSERVANCY	Total Area	Under					nting lares)	Pro- duction
	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000
Ae. Dumfries and Galloway Arecleoch,	6,996	6,402	_	467	127	103	44	· 19
Strathclyde	4,002	3,388		561	53	161	90	_
Bareagle, Dumfries and Galloway Bennan, Dumfries and	4,933	4,622	170	42	99	_	_	1
Galloway Carrick, Dumfries and	6,877	6,349	_	_	528	_	38	19
Galloway and Strathclyde Castle O'er, Dumfries	17,537	8,633	3	1,450	7,451	124	38	19
and Galloway and Borders	5,505	5,273	_	6	226	_	65	24
Clatteringshaws, Dum- fries and Galloway Clydesdale, Strath-	12,699	8,840	–	211	3,648	153	7	10
clyde and Lothian Craik, Borders	5,298 6,047	4,774 5,297	4	115 294	405 456	100 137	58 16	1 5
Dalmacallan, Dum- fries and Galloway	4,294	3,450	_	251	593	78	_	9
Dundeugh, Dumfries and Galloway Fleet, Dumfries and	3,705	3,217	_	12	476	31	5	14
Galloway Glentress, Borders and	8,152	6,664	_	806	682	146	1	11
Lothian Glentrool, Dumfries and Galloway and	9,785	8,750	_	120	915	201	95	52
Strathclyde Kirroughtree, Dum-	24,655	14,264	2	792	9,597	217	2	12
fries and Galloway	6,857	4,271	-	257	2,329		56	26
Kyle, Strathclyde Lammermuir, Borders Moffat, Dumfries and	6,411 2,571	5,494 2,473		579 8	338 90	221 —	37 39	8
Galloway and Borders Newcastleton, Dum-	12,920	10,990	_	203	1,727	82	37	8
fries and Galloway and Borders	3,845	3,759	_	13	73	_	80	26
Penninghame, Dum- fries and Galloway Solway, Dumfries and	6,943	6,594	_	136	213	-	6	4
Galloway Upper Nithsdale,	7,065	6,521	3	23	518	_	47	33
Dumfries and Galloway and								
Strathclyde Wauchope, Borders	3,448 9,422	3,151 8,236	8	141 119	156 1,059	103 112	_	
Bush Nursery, Lothian	24	_	_	_	24	_	_	
TOTAL	179,991	141,412	190	6,606	31,783	1,969	761	321

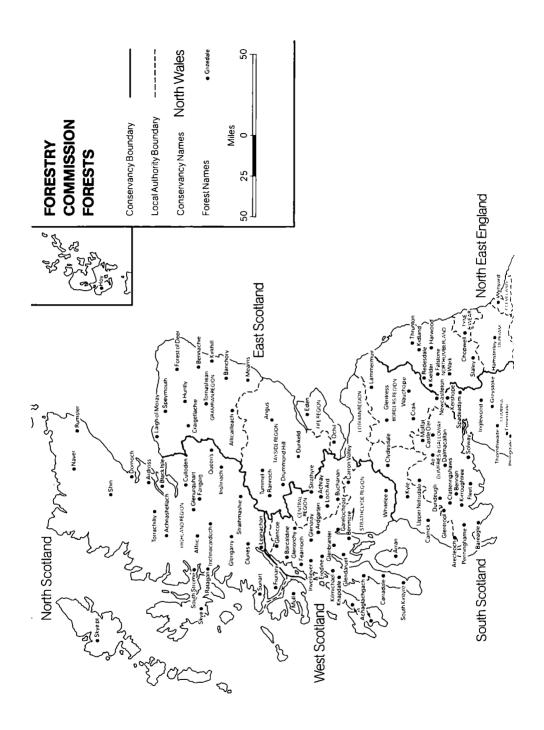
Table 17—continued

	Г		-	_				_
		Land use	at 31 Ma (hectares)			Durin	g Year l'	981–82
WEST SCOTLAND CONSERVANCY	Total Area	Under					nting tares)	Pro- duction
	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000 cu. m.)
Achaglachgach,								
Strathclyde	10,444	5,571	175	2,036	2,662	498	l —	6
Achray, Central	5,561	3,842	106	75	1,538	-	1	7
Ardgartan,								
Strathclyde	12,860	5,230	212	37	7,381	_	54	27
Arran, Strathclyde	11,355	6,825	_	982	3,548	340		_
Barcaldine,								
Strathclyde	7,779	4,724	251	115	2,689	55	20	14
Benmore, Strathclyde	10,384	5,949	129	157	4,149	108	37	21
Buchanan, Strathelyde	1							
and Central	6,402	3,474	186	_	2,742	–	9	2
Carradale, Strathclyde	6,396	3,934	41	821	1,600	312	—	1
Carron Valley, Strath-								
clyde and Central	4,604	4,300	_	75	229	81	35	10
Eredine, Strathclyde	6,941	5,049	32	60	1,800	113	—	7
Fearnoch, Strathclyde	6,013	4,981	149	306	577	68	60	3
Garelochhead,							_	
Strathclyde	2,647	1,825	65	91	666	24	2	_
Glenaray, Strathclyde	7,449	4,419	150	679	2,201	160	-	_
Glenbranter,	7.12 0	4 400	0.5	2.0				
Strathclyde	7,428	4,492	85	318	2,533	14	60	21
Glencoe, Strathclyde	7.750	4 (24		0.5	2.070	(3		
and Highland	7,759	4,634	51	95	2,979	63	27	12
Glendaruel,	9,449	6 220	164	829	2 220	330	2	4
Strathclyde	9,449	6,228	164	829	2,228	330	4	4
Glenorchy, Strathclyde and Central	15,213	7,705	63	270	7,175	82		
Inverliever.	13,213	1,703	0.5	270	7,175	62	_	_
Strathclyde	13,361	8,800	36	270	4,255	94	30	16
Kilmichael,	13,301	0,000	50	270	7,233	77	30	10
Strathclyde	11,112	8,688	125	110	2.189	113	21	27
Knapdale, Strathclyde	7,212	5,260	173	168	1,611	150	19	17
Loch Ard, Central	10,778	7,681	193	315	2,589	114	146	16
South Kintyre,	10,770	7,001	.,,	210	2,505	•••	1	
Strathclyde	11,855	9,979	47	162	1,667	238		2
Strathyre, Central and	11,000	. ,						
Tayside	9,477	5,829	_	771	2,877	101	12	17
Whitelee, Strathyre	8,843	5,609	_	826	2,408	449	_	_
Chapelhall Depot,	· ·				, i			
Strathclyde	2	—	— i	_	2		_	_
Torus	211,324	135,028	2,433	9,568	64,295	3,507	535	229
Total	211,324	133,028	2,433	9,308	04,293	3,307	333	229
•								

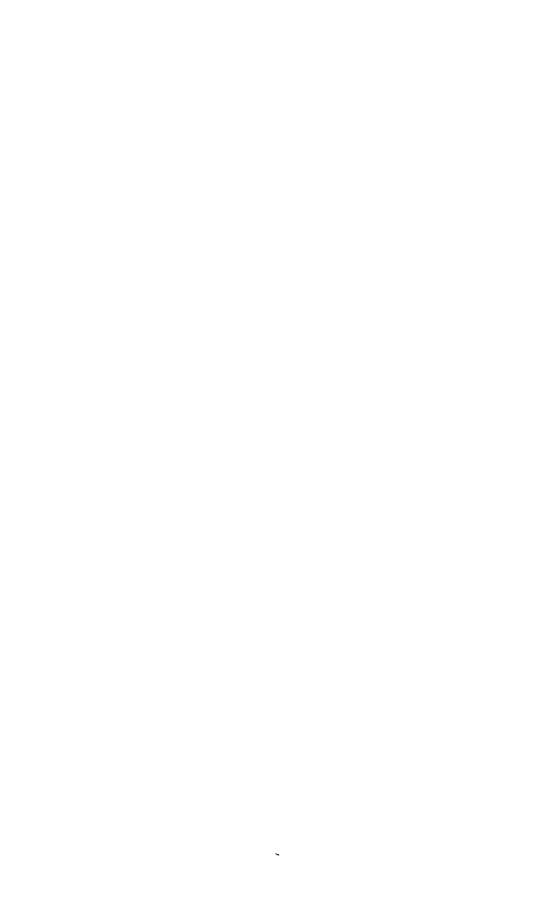


Appendix X

Map showing the situation of the Commission Forests and the boundaries of the Conservancies at 31 March 1982







Appendix XI Financial Tables

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

Table 1

STATEMENT OF FORESTRY FUND RECEIPTS AND PAYMENTS

in the year ended 31 March 1982

Previous		
Year	Receipts	
£000		£000
42,250	Grant-in-Aid	57,195
41,391	Sales of timber	39,533
4,524	1 , 0 1	163
}	—cash received payable to the	
J J	Consolidated Fund	6,849
10,636	Miscellaneous	<u>11,271</u>
98,801		115,011
322	Balance brought forward at 1 April 1981	1,866
99,123		116,877
	Payments	
50 445	, , , , , , , , , , , , , , , , , , ,	52 (72
50,445	Salaries, wages and related expenses	53,672
6,910 27,210	Pensions and gratuities to retired staff	9,343
27,210	Materials, contract services and general expenses	30,328
1,444	buildings	3,286
6,775	Mashinani and antinopost	7,373
0,773	Grants to private woodland owners (£3,956,439), universities, institutions,	1,313
2.540	etc	4,048
1,933	Remittances of VAT to Customs and Excise	1,635
-,	Payment to the Consolidated Fund in respect of cash received from sales	.,
_	of land, buildings and plantations	4,376
97,257		114,061
,,	Balance carried forward at 31 March 1982 to be surrendered to the	1.,001
1,866	Consolidated Fund during 1982–83	2,816
99,123		116,877

NOTES ON TABLE 1

General

- 1. Expenditure incurred by the Forestry Commissioners in the exercise of their powers in the performance of their duties is financed from the Forestry Fund which was constituted under Section 8 of the Forestry Act 1919. All sums received by the Commissioners in 1981–82 were paid into this fund.
- 2. Receipts and payments are shown inclusive of VAT where applicable.

Cash Limit Constraints

- 3. 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 shall be 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).
- 4. In 1981–82 timber prices failed to pick up from the depressed market level which developed in 1980–81 and a shortfall in receipts against the original estimate was expected for the second year running. Offsetting the expected shortfall in receipts (which by the end of the year amounted to some £4 million) savings in payments of grants to private woodland owners (£1 million) were anticipated. The remaining offsetting savings were achieved by effecting reductions in land acquisition, construction of new buildings, purchase of vehicles and machinery, payments for goods, materials and services and travelling and subsistence expenses of staff.

Receipts

- 5. The Grant-in-Aid of the Forestry Fund voted by Parliament for 1981–82 was £59,195,000 of which £57,195,000 was drawn into the Forestry Fund. The unused balance of £2,000,000, which was mainly attributable to the large carry-forward of working balance from 1980–81, will be surrendered to the Consolidated Fund. A sum of £36,016 was received from the EEC Regional Development Fund in respect of roadwork and construction carried out by the Forestry Commission and this was remitted direct to the Exchequer.
- 6. Despite an increase in the volume harvested receipts from the sale of timber fell short of the 1980-81 level by £1,858,000, due mainly to a significant fall in the average price of softwood sawlogs, which resulted as a direct consequence of the reduction in the price of imported sawn softwood. This reduction in timber prices, rather than the expected slight increase, resulted in a shortfall in timber receipts of some £4,117,000 less than originally estimated, hence the substantial income shortfall against cash limit already mentioned.
- 7. Miscellaneous receipts rose by £635,000 due to increased activity on agency work for outside parties (£162,000), increased activity and higher prices on sale of vehicles and machinery (£462,000) increased rents from estate properties, wayleaves, etc (£63,000) and increased usage and higher charges for campsites, forest cabins and other recreational facilities (£174,000). Offset against these higher receipts were reduced receipts from sales of venison and plants (£112,000) and pension contributions from fewer staff (£114,000).

Payments

- 8. Payments of salaries, wages and related expenses rose by over 6 per cent due to increased rates of pay and allowances, offset by a reduction in staff numbers.
- 9. Because of industrial action in the Paymaster General's office the accounting action for certain pensions payments made in 1980-81 was not taken until 1981-82. After allowing for the effect of this delay, payments of pensions and gratuities to retired staff rose by some £1,500,000 due to the award of higher superannuation benefits and an increase in the number of pensioners.
- 10. As already mentioned above, payments for materials, contract services and general expenses were less than estimated because of the need to offset reduced receipts. Nevertheless expenditure rose by £3,118,000 over the previous year due mainly to continuing price inflation but also because of the purchase of additional plants, increased road maintenance because of severe winter conditions, slightly increased general administrative expenses, particularly legal expenses on disposals, and increased purchase of fencing materials and fertiliser stocks.
- 11. Expenditure on land acquisition and buildings construction, although less than originally estimated, rose by £1,842,000 over the previous year's expenditure which had been curtailed because of public expenditure cuts and cash limit constraints due to a shortfall in receipts. Land was acquired to consolidate existing forest blocks and in some areas to enable the continued provision of employment. The total plantable land acquired was 4,467 hectares compared with 1,752 hectares in the previous year, the average cost per hectare being £398 compared with £329 in 1980-81.
- 12. Expenditure on machinery and equipment rose by £598,000 which was entirely due to the effects of inflation. In effect, the curtailed level of expenditure in the previous year was maintained because of the recurring shortfall in receipts.
- 13. Payments of grants to private woodland owners, universities, institutions, etc rose by £1,508,000 as a result of the review of grant rates retrospective to October 1980 and a substantial increase in planting. As already mentioned, expenditure in 1981–82 was less than originally estimated due to a smaller increase in grant rates than expected.
- 14. Remittances of net VAT to Customs and Excise fell by £298,000 due to a lower level of output tax on account of reduced timber receipts and an increase in recoverable input tax from increased expenditure.

Table 2

EXPENDITURE ON FORESTRY AUTHORITY SERVICES

in the year ended 31 March 1982

Previous Year		
£000		£000
	Services to Private Woodland Owners for Grants and advisory services	2000
_	Forestry Grant Scheme	38
29	Basis I	35
228	Basis II: Planting Grants	285
849	Management Grants	1,194
736	Basis III: Basic Grant	1,564
56 199	Broadleaved Supplement	76 205
199	Management Grant Native Pinewood Planting Grants	305
8	A second We all a de Disades Courts	10 5
281	Small Woods Planting Grants	358
6	Other Grants	2
54	Miscellaneous	80
1,439	Overhead expenses	1,561*
3,888		5,513
5,000	Less Miscellaneous Income	28
	Debb Mildenaneous Meome	
3,828		5,485
	Constitution of the contract o	
347	Special Services Licensing of Felling	338*
764	Information and Shows	740*
704	General administration (EEC, fiscal and regulatory duties and including	710
1,074	£1,123,000* overheads)	1,139
2,185	,	2,217
2,163		2,217
	Research and Development	
1,611	Silviculture	1,792
362	Genetics	426
114	Physiology	135
45	Seed Research	43
234	Site Studies	266
677	Protection	757
351	Statistics	399
174	Communications	187
228 84	Westonbirt and Bedgebury Arboreta Experimental Workshops	272 83
109	Grants to Universities	113
602	Work Study	665
1,423	Field Surveys	1,658
6,014		6,796
0,014 2,706	Total (includes £285,000* overheads) Less allocation to Forestry Enterprise (Statement 1 on page 87)	3,058
	Less anocation to Potestry Emerprise (Statement 1 on page 67)	
<u>3,308</u>		3,738
0.331	Market Same Street	11 440
9,321	Net total expenditure in year	11,440
4	Notional sick and injury benefit and maternity pay	4
9,325		11,444
	Change in Assets £000	
7	Increase – Current 41	
(43)	Decrease – Fixed 10	
50	Net increase	31
9,375	Amount of Grant-in-Aid appropriated for the Forestry Authority	11,475

^{*}Statement 11 of Forestry Enterprise Accounts page 95, £4,047,000

Notes on Table 2

1. The Forestry Authority share of the Grant-in-Aid amounted to £11,475,000 compared to £9,375,000 last year.

Services to Private Woodland Owners

2. Net expenditure rose in the year by £1,657,000 to £5,485,000 due principally to a substantial increase in both the planting programmes under the Dedication schemes and the level of grants.

Special Services

3. There was only an increase of £32,000 (1 per cent) in the total cost of Special Services with rises in staff costs being offset by a reduction in the number of felling licensing applications handled.

Research and Development

4. The total cost of Research and Development activities, which also include technical services to management, at £6,796,000 is £782,000 or 13 per cent higher than in the previous year. Rises in staff costs and additional work on the census of all trees and woodlands are the principal reasons for the increase. During the quinquennium 1977/78–1981/82 45 per cent of the net cost of Research and Development has been charged to the Forestry Enterprise and shown in the Plantations Account (Statement 1 on page 87). This allocation amounts to £3,058,000 in 1981–82 reducing the cost of Research and Development chargeable to the Forestry Authority to £3,738,000.



FORESTRY ENTERPRISE ACCOUNTS 1981–82

BALANCE SHEET of the Forestry Commission Forestry Enterprise as at 31 March 1982, and ACCOUNTS for the year ended 31 March 1982, together with the Report of the Comptroller and Auditor General thereon.



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FORESTRY COMMISSION

ACCOUNTS OF THE FORESTRY ENTERPRISE FOR THE YEAR ENDED 31 MARCH 1982

BALANCE SHEET AS AT 31 MARCH 1982

As at 31 March 1	981	See Notes/ Statements		
£000			£000	£000
	Source of Funds			
	CAPITAL AND RESERVES			
530,466	Capital	Note 2	568,896	
	Trading and Variance Account			
(35,064)	balances	Statement 8	(59,709)	
383,685	Current Cost Reserve	Note 5	435,329	
879,087				944,516
123,621	Notional Superannuation Fund	Note 6		142,372
1,002,708				1,086,888
	Employment of Funds			
144,246	Fixed Assets	Note 7		103,515
	Net Current Assets			
10,155	Stocks and work in progress	Note 8	10,349	
10,610	Debtors and sundry debit balances		11,810	
,	Cash at bank and in hand, less amount		•	
	surrenderable to the Consolidated	Notes 2		
2,511	Fund	and 9	1,626	
23,276			23,785	
7,956	Creditors and accrued expenses		6,686	
				17 000
15,320				17,099
843,142	PLANTATIONS at standard cost	Statement 1		966,274
1,002,708				1,086,888

The notes on pages 96 to 112 form part of these Accounts.

G. D. Holmes Accounting Officer 1 February 1983

I certify that I have examined the above Balance Sheet, the annexed Statements 1 to 11, the Notes and the Special Notes.

As stated in Note 20 inaccuracies in the attribution of the standards set for labour oncost at the 1977 revaluation could affect the valuation of plantations and planting subsidy levels referred to in Note 1(a). The precise effect of these inaccuracies could be determined only by a complex and costly exercise necessitating the revision of accounts and valuations from 1 April 1977. The Forestry Commission consider however that the effect is unlikely to be sufficiently material to justify such an exercise, especially as a full revaluation taking these matters into account has been made at 1 April 1982.

Subject to these inaccuracies, in my opinion the above-mentioned Balance Sheet, Statements, Notes and Special Notes give, as assessed in accordance with the accounting policies described in Note 1, a true and fair view of the state of affairs of the Forestry Enterprise at 31 March 1982, of its results for the year ended on that date and of the results of the quinquennial review of performance and revaluation of assets at 31 March 1982, and comply with the provisions of the Forestry Act 1967 and the directions made thereunder by the Treasury.

12th May 1983 Exchequer and Audit Department Gordon Downey
Comptroller and Auditor General

FORESTRY COMMISSION

PLANTATIONS ACCOUNT FOR THE YEAR ENDED 31 MARCH 1982

Previous Year £000		See Notes/ Statements	£000	£000
2000	At 1 April 1981: 902,846 hectares valued a	t	2000	2000
675,592 128,361	standard (1980-81) cost Revaluation adjustment	Note 5		843,142 84,144
803,953				927,286
	F			
69	Expenditure Plantations acquired		148	
3,777	Land planted	Note 7(c)	4,023	
4,237	Formation	14010 7(0)	4,442	
3,637	Protection		3,591	
3,105	Crop improvement		3,276	
684	Lease rents, supplies and miscellaneous	•	725	
3,790	Road construction		4,251	
1,807	Road maintenance		2,271	
2,706	Research and development		3,058	
8,660	Labour oncost	Statement 10	9,688	
10,391	Overhead expenses	Statement 11	11,042	
24,457	Interest	Note 4	28,520	
	interest	11016 4		75.025
67,320				75,035
871,273				1,002,321
553 13	INCOME Disposal of plantations Surplus on sale of Forest Estate pro perties		1,700 244	
699	Sundry income		625	
1,265	•			2,569
870,008	NET EXPENDITURE			999,752
0,000	THE EXPENSIONE			,,,,,,,,
8,136	Subsidies and Transfers Planting and restocking subsidies . Transfer charge to Harvesting Trading	. Note 2(c), (d) and (e)	8,840	
	Account for thinnings and felling	s Statement 4		
18,224	removed	and Note 12	23,984	
26,360				32,824
843,648	NET TOTAL			966,928
843,142	At 31 March 1982: 913,417 hectares valued at standard (1981-82) cost			966,274
(506)		Note 10		(654)
	Variance from standard Deficit	Note 10		
(4,408)	Variance from standard Deficit Variance from previous year Deficit	Note 10		(4,914)
<u>(4,408)</u> <u>(4,914)</u>		Statement 8		

FORESTRY COMMISSION

FOREST RECREATION AND AMENITY ACCOUNT FOR THE YEAR ENDED 31 MARCH 1982

Previous				
Year		See Notes/		
£000		Statements	£000	£000
1,615	Direct expenditure		1,784	
719	Labour oncost	Statement 10	852	
1,508	Overhead expenses	Statement 11	1,422	
176_	Interest	Note 4	131	
4,018				4,189
(15)	Plus decrease in stock		_	10
4,003				4,199
618	Income		_	707
3,385	Recreation and Amenity subsidy	Note 2(c), (d) and (f)		3,492
			-	

Statement 3

COMMERCIAL RECREATION TRADING ACCOUNT FOR THE YEAR ENDED 31 MARCH 1982

Previous		See Notes/			
Year		Statements			
£000				£000	£000
	(A) Campsites and forest cabins				
780	Direct expenditure			917	
89	Labour oncost	Statement 10		117	
158	Overhead expenses	Statement 11		154	
30	Interest	Note 4		22	
1,057					1,210
(2)	Less increase in stock				2
1,059					1,208
1,327	Income				1,591
268	Balance (standard surplus £331,000)		Surplus		383
206	Interest on capital employed	Note 4	•		221
62	Balance in year after interest	Note 11	Surplus		162
(17)	Balance from previous year		Surplus		45
45	Balance to date		Surplus		207
	(B) Shooting and Fishing				
81	Direct expenditure				87
46	Labour oncost	Statement 10			51
208	Overhead expenses	Statement 11			207
19	Interest	Note 4			16
354					361
477	Income				477
123	Balance in year	Note 11	Surplus		116
102	Balance from previous year		Surplus		225
225	Balance to date		Surplus		341
270	(A) and (B) Balance to date	Statement 8	Surplus		548

FORESTRY COMMISSION

HARVESTING TRADING ACCOUNT FOR THE YEAR ENDED 31 MARCH 1982

Previous		See Notes/			
Year		Statements			
£000	T			£000	£000
35,896	Income Sale of produce			36,075	
33,690	Value of produce used in Commis-			30,073	
235	sion's forests			244	
36,131					36,319
,	Expenditure				,
	Marking, measuring, harvesting,				
14,087	extraction and conversion			14,445	
<u>3,485</u>	Carriage and other expenses			3,591	
17,572				18,036	
	Add decrease in stock and work in				
(507)	progress			<u>62</u>	
17,065					18,098
19,066	NET HARVESTING REVENUE				18,221
6,221	Deduct Labour oncost	Statement 10		6,507	
8,641	Overhead expenses	Statement 11		9,124	
1,263_	Interest	Note 4		1,023	
16,125					16,654
2,941	BALANCE		Surplus		1,567
	Deduct Transfer charge from Plan-		•		
	tations Account for thin-				
	nings and fellings removed	6			
10 224	(at 1981–82 standard value)	Statement 1 and Note 12			23,984
18,224	_	and Note 12			
(15,283)	BALANCE		Deficit		(22,417)
(11,067)	Balance from previous year		Deficit		(26,350)
(26,350)	Balance to date	Statement 8	Deficit		(48,767)

G

FORESTRY COMMISSION

SURPLUS ESTATE TRADING ACCOUNT FOR THE YEAR ENDED 31 MARCH 1982

Operational Account 324	Previous		See Notes/			
Operational Account 324	Year		Statements			
324 Direct expenditure 585 19 Labour oncost Statement 10 42 393 Overhead expenses Statement 11 613 24 Interest Note 4 35 760	£000				£000	£000
19 Labour oncost Statement 10 42 393 Overhead expenses Statement 11 613 24 Interest Note 4 35 760 88 760 88 760 94 495 Income Deficit (419 1,412 Interest on capital employed Note 4 1,312 (1,677) Balance in year after interest Deficit (1,731 Capital Adjustments Deficit (1,532 (1,721) Balance in year Deficit (1,882 (2,905) Balance from previous year Deficit (4,626		Operational Account				
393 Overhead expenses	324	Direct expenditure			585	
24 Interest Note 4 35 760 1,275 — Add decrease in stock 86 760 1,366 495 Income 945 (265) Balance Deficit (416 1,412 Interest on capital employed Note 4 1,312 (1,677) Balance in year after interest Deficit (1,731 Capital Adjustments Capital Adjustments (44) Deficit on sale of properties Statement 9 (151 (1,721) Balance in year Deficit (1,882 (2,905) Balance from previous year Deficit (4,626	19	Labour oncost	Statement 10		42	
760 1,27: — Add decrease in stock 88 760 1,366 495 Income 94: (265) Balance Deficit (419 1,412 Interest on capital employed Note 4 1,312 (1,677) Balance in year after interest Deficit (1,731 Capital Adjustments Capital Adjustments (151 (44) Deficit on sale of properties Statement 9 (153 (1,721) Balance in year Deficit (1,882 (2,905) Balance from previous year Deficit (4,626	393	Overhead expenses	Statement 11		613	
— Add decrease in stock 88 760 1,36 495 Income 94 (265) Balance Deficit (419 1,412 Interest on capital employed Note 4 1,312 (1,677) Balance in year after interest Deficit (1,731 Capital Adjustments Capital Adjustments (44) Deficit on sale of properties Statement 9 (158 (1,721) Balance in year Deficit (1,882 (2,905) Balance from previous year Deficit (4,626	24	Interest	Note 4		35	
— Add decrease in stock 88 760 1,36 495 Income 94 (265) Balance Deficit (419 1,412 Interest on capital employed Note 4 1,312 (1,677) Balance in year after interest Deficit (1,731 Capital Adjustments Capital Adjustments (44) Deficit on sale of properties Statement 9 (158 (1,721) Balance in year Deficit (1,882 (2,905) Balance from previous year Deficit (4,626	760					1,275
495 Income 943 (265) Balance Deficit (418 1,412 Interest on capital employed Note 4 1,312 (1,677) Balance in year after interest Deficit (1,731 Capital Adjustments Capital Adjustments (44) Deficit on sale of properties Statement 9 (158 (1,721) Balance in year Deficit (1,882 (2,905) Balance from previous year Deficit (4,626	_	Add decrease in stock				89
495 Income 943 (265) Balance Deficit (418 1,412 Interest on capital employed Note 4 1,312 (1,677) Balance in year after interest Deficit (1,731 Capital Adjustments Capital Adjustments (44) Deficit on sale of properties Statement 9 (158 (1,721) Balance in year Deficit (1,882 (2,905) Balance from previous year Deficit (4,626	760					1,364
1,412Interest on capital employedNote 41,312(1,677)Balance in year after interestDeficit(1,73)Capital Adjustments(44)Deficit on sale of propertiesStatement 9(15)(1,721)Balance in yearDeficit(1,882)(2,905)Balance from previous yearDeficit(4,620)		Income				945
Capital Adjustments (44) Deficit on sale of properties Statement 9 (1,721) Balance in year Deficit (1,882) (2,905) Balance from previous year Deficit (4,626)	(265)	Balance		Deficit		(419)
Capital Adjustments (44) Deficit on sale of properties Statement 9 (1,721) Balance in year Deficit (1,882) (2,905) Balance from previous year Deficit (4,626)	1,412	Interest on capital employed	Note 4			1,312
(44)Deficit on sale of propertiesStatement 9(15)(1,721)Balance in year Deficit(1,882)(2,905)Balance from previous year Deficit(4,626)	(1,677)	Balance in year after interest		Deficit		(1,731)
(44)Deficit on sale of propertiesStatement 9(15)(1,721)Balance in year Deficit(1,882)(2,905)Balance from previous year Deficit(4,626)		Capital Adjustments				
(2,905) Balance from previous year . Deficit (4,626)	(44)		Statement 9			(151)
(2,905) Balance from previous year . Deficit (4,626)	(1,721)	Balance in year		Deficit		(1,882)
	, , ,			Deficit		(4,626)
(4,626) Balance to date Statement 8 Deficit (6,508)	(4,626)	Balance to date	Statement 8	Deficit		(6,508)

FORESTRY COMMISSION AGENCY SERVICES TRADING ACCOUNT FOR THE YEAR ENDED 31 MARCH 1982

Previous Year £000		See Notes/ Statements		£000
1.009	Direct expenditure			1,123
413	Labour oncost	Statement 10		484
327	Overhead expenses	Statement 11		306
57	Interest	Note 4		41
1,806				1,954
1,935	Income			1,903
129	Balance	Note 14	Deficit	(51)
(100)	Balance from previous year		Surplus	<u>`29</u>
29	Balance to date	Statement 8	Deficit	(22)

Statement 7

MISCELLANEOUS TRADING ACCOUNT FOR THE YEAR ENDED 31 MARCH 1982

Previous		See Notes/		
Year		Statements		
£000				£000
	Joint Management Scheme	Note 15		
156	Income			81
<u> 371</u>	Balance from previous year			527
527	Balance to date	Statement 8	Surplus	608

FORESTRY COMMISSION

TRADING AND VARIANCE ACCOUNTS SUMMARY FOR THE YEAR ENDED 31 MARCH 1982

Previous			See		
Year			Statements		
£000					£000
(4,914)	Plantations		1	Deficit	(5,568)
(26,350)	Harvesting		4	Deficit	(48,767)
(31,264)	Sub Total				(54,335)
270	Commercial Recreation		3	Surplus	548
(4,626)	Surplus Estate		5	Deficit	(6,508)
29	Agency Services		6	Deficit	(22)
527	Miscellaneous		7	Surplus	608
	Balance at 31 March 1982 being accum	ulated			
(35,064)	to end of quinquennium (1982)			Deficit	(59,709)

FORESTRY COMMISSION

SALE OF LAND, BUILDINGS AND PLANTATIONS ACCOUNT FOR THE YEAR ENDED 31 MARCH 1982

Previous		See Notes/			
Year cooo		Statements		£000	£000
£000 3,642	Sale price			1000	8,546
2,659	Deduct Current valuation			6,696	
314	Disposal expenses			492	
I	Labour oncost	Statement 10		1	
659	Overhead expenses	Statement 11		1,200	
<u>40</u>	Interest	Note 4		64	
3,673					8,453
(31)	Balance in year		Surplus		93

	Analysed to			Transferred to
(44)	Surplus Estate		(151)	Surplus Estate Trading Account
13	Forest Estate	Surplus	34	(Statement 5) Plantations Account (Statement 1)
	Plantations	Surplus	210	Plantations Account (Statement 1)

FORESTRY COMMISSION STATEMENT OF LABOUR ONCOST FOR THE YEAR ENDED 31 MARCH 1982

Previous			
Year £000			6000
5,350	National insurance, holidays and sick pay		£000 6.052
1,671	Wet time		1,549
4.287	Transport of workers and travelling and subsistence		4,851
433	Training		438
216	Miscellaneous		282
385	Protective clothing		429
3,955	Provision for pensions and gratuities	• •	4,241
16,297			17.842
126	Less Miscellaneous income		100
16,171			
			17,742
	Distribution	See Statements	
8,660	Distribution Plantations	See Statements	9,688
8,660 6,221		See Statements 1 4	9,688 6,507
6,221	Plantations Harvesting	See Statements 1 4	6,507
	Plantations Harvesting Sub-total (standard £16,523,000)	See Statements 1 4	•
<u>6,221</u> 14,881	Plantations Harvesting Sub-total (standard £16,523,000) Forest Recreation and Amenity	1 4	6,507 16,195
<u>6,221</u> 14,881	Plantations Harvesting Sub-total (standard £16,523,000) Forest Recreation and Amenity	1 4	6,507 16,195
6,221 14,881 719	Plantations Harvesting Sub-total (standard £16,523,000) Forest Recreation and Amenity Commercial Recreation: Campsites and forest	1 4 2	6,507 16,195 852
6,221 14,881 719 89	Plantations Harvesting Sub-total (standard £16,523,000) Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins	1 4 2 3	6,507 16,195 852 117
6,221 14,881 719 89 46	Plantations Harvesting Sub-total (standard £16,523,000) Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins Shooting and Fishing Surplus Estate Agency	1 4 2 3 3 5 6	6,507 16,195 852 117 51
6,221 14,881 719 89 46 19	Plantations Harvesting Sub-total (standard £16,523,000) Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins Shooting and Fishing Surplus Estate Agency Sale of Land and Buildings	1 4 2 3 3 5	6,507 16,195 852 117 51 42
6,221 14,881 719 89 46 19 413	Plantations Harvesting Sub-total (standard £16,523,000) Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins Shooting and Fishing Surplus Estate Agency	1 4 2 3 3 5 6	6,507 16,195 852 117 51 42 484
6,221 14,881 719 89 46 19 413 1	Plantations Harvesting Sub-total (standard £16,523,000) Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins Shooting and Fishing Surplus Estate Agency Sale of Land and Buildings	1 4 2 3 3 5 6	6,507 16,195 852 117 51 42 484

FORESTRY COMMISSION

STATEMENT OF OVERHEAD AND FOREST ESTATE EXPENSES FOR THE YEAR ENDED 31 MARCH 1982

Previous		
Year		
£000		£000
14,720	Salaries and national insurance	15,786
2,745	Travelling, subsistence and staff transfer expenses	3,121
2,292	Office expenses	2,528
457	Losses, compensation and bad debts	640
203	Legal expenses	199
226	Depreciation on equipment	265
947	Miscellaneous expenses	985
2,788	Provision for pensions and gratuities	3,060
2,104	Accommodation and estate expenses (Note 17)	1,850
26,482		28,434
359	Less Miscellaneous income	319
26,123		28,115
	Distribution	Saa Statamants
10 301	Distribution Plantations	See Statements
10,391	Plantations	1 11,042
10,391 1,508	Plantations	
1,508	Plantations Forest Recreation and Amenity Commercial Recreation: Campsites and forest	1 11,042 2 1,422
1,508 158	Plantations Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins	1 11,042 2 1,422 3 154
1,508 158 208	Plantations Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins Shooting and Fishing	1 11,042 2 1,422 3 154 3 207
1,508 158 208 8,641	Plantations	1 11,042 2 1,422 3 154 3 207
1,508 158 208 8,641 393	Plantations Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins Shooting and Fishing Harvesting Surplus Estate	1 11,042 2 1,422 3 154 3 207 4 9,124
1,508 158 208 8,641 393 327	Plantations Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins Shooting and Fishing Harvesting Surplus Estate Agency	1 11,042 2 1,422 3 154 3 207 4 9,124 5 613 6 306
1,508 158 208 8,641 393	Plantations Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins Shooting and Fishing Harvesting Surplus Estate	1 11,042 2 1,422 3 154 3 207 4 9,124 5 613 6 306
1,508 158 208 8,641 393 327 659	Plantations Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins Shooting and Fishing Harvesting Surplus Estate Agency Sale of Land and Buildings Debtors	1 11,042 2 1,422 3 154 3 207 4 9,124 5 613 6 306 9 1,200
1,508 158 208 8,641 393 327 659 3 22,288	Plantations Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins Shooting and Fishing Harvesting Surplus Estate Agency Sale of Land and Buildings Total Forestry Enterprise	1 11,042 2 1,422 3 154 3 207 4 9,124 5 613 6 306 9 1,200 24,068
1,508 158 208 8,641 393 327 659 3 22,288 3,835	Plantations Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins Shooting and Fishing Harvesting Surplus Estate Agency Sale of Land and Buildings Debtors	1 11,042 2 1,422 3 154 3 207 4 9,124 5 613 6 306 9 1,200 ———————————————————————————————————
1,508 158 208 8,641 393 327 659 3 22,288	Plantations Forest Recreation and Amenity Commercial Recreation: Campsites and forest cabins Shooting and Fishing Harvesting Surplus Estate Agency Sale of Land and Buildings Total Forestry Enterprise	1 11,042 2 1,422 3 154 3 207 4 9,124 5 613 6 306 9 1,200 24,068

FORESTRY COMMISSION

FORESTRY ENTERPRISE NOTES ON THE ACCOUNTS

1. Accounting Policies

(a) Target rate of return

The Commission has been set a target rate of return of 3 per cent in real terms on its forest estate assets and 5 per cent in real terms on its surplus and commercial recreation assets. The assets are revalued in their entirety at the end of each quinquennium with plantations, the main asset, being valued on the basis of future incomes and expenditures discounted at 3 per cent. The assets are updated in the subsequent annual accounts by published indices, professional valuation or, in the case of plantations, by a general price index using the GDP implicit price deflator (see (c) for further details). Subsidies were brought into the accounts to record:

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

(b) Measurement of performance

Performance against the 3 per cent target rate of return on the forest estate can only be effectively measured after a complete revaluation of the plantations which because of the complexities involved can only be undertaken at five-yearly intervals. To monitor progress during the years between valuations an annual comparison is made of the actual costs involved and income realised from sales with the cash flows (standards) assumed in the plantations valuation suitably adjusted for inflation. The variances between the standards and actual results are accumulated in the Balance Sheet and explained in the notes to the accounts. The complete revaluation carried out at the end of the quinquennium is undertaken in two stages, namely:

- (i) Stage 1 showing the effect of revised assumptions about future programmes at the standard prices and costs (suitably adjusted for inflation) used in the valuation at the start of the quinquennium.
- (ii) Stage 2 showing the effect of revised assumptions about future prices and costs on the programmes used in Stage 1.

The Stage 1 results, together with the accumulated variances within the quinquennium updated to current £s, are used in assessment of the rates of return achieved in the quinquennium and achievable for the whole rotation on the assumption that future prices and costs will not differ from those set at the beginning of the quinquennium (suitably adjusted for inflation). The Stage 2 results are used as the basis for a capital reconstruction at the beginning of the subsequent quinquennium. The valuation and performance measurements are set out in special notes at the end of the fifth year's accounts (in these 1981–82 accounts for the 1977–1982 quinquennium).

(c) Inflation accounting

The general objectives of current cost accounting as promulgated in the Statement of Standard Accounting Practice (SSAP) 16 have been adopted in preparation of the accounts. Supplementary historical cost information has not, however, been prepared in addition to the current cost accounts since it is inappropriate and unnecessary with a complete revaluation and capital reconstruction at five-yearly intervals. Individual groups of assets have been revalued yearly in the accounts as follows:

Notes on the Accounts (continued)

- (i) Stocks and furniture and by the use of specific published indices where appropriate.
- machinery and associated equipment
- (ii) Land, buildings, vehicles, by the use of specific published indices for the first four years of the quinquennium and by the substitution of a professional valuation in the final year of the quinquennium.
- (iii) Plantations
- there is no specific published forestry index and one cannot be accurately constructed because of the varying weights of expenditure and income. Instead a general price index (based on the GDP implicit price deflator) of the purchasing power of the pound has been used to update the valuation. the planting and restocking subsidies and the standards used in the measurement of performance in each of the annual accounts. A complete revaluation is undertaken at the end of each quinquennium and the results used both in a comprehensive measurement of performance for the past quinquennium and as a starting valuation for the following quinquennium (see Special Note 1).

A financial gearing adjustment is not made since it is inappropriate for a grant-aided body and no adjustment is made to reflect the impact of price changes on the funds tied up as monetary working capital because the effect on the Commission is considered to be minimal.

- (d) Prior year amounts are provided for comparison but without adjustments for the change in the purchasing power of the pound.
- (e) The accounting policies adopted for other items are explained under appropriate headings in the notes below.

2. CAPITAL

Previous			
Year		C000	6000
£000		£000	£000
496,432	Balance at 1 April 1981		530,466
59	Prior year adjustment		
496,491	As restated		530,466
42,250	Grant-in-Aid of the Forestry Fund for 1981–82 57	7,195	
9,375	Less Appropriated for the Forestry Authority 11	,475	
32,875	Grant-in-Aid of the Forestry Enterprise for 1981–82 45 Less Amounts surrenderable to the Consolidated Fund (see	5,720	
_	•	.192	
<u>11,634</u>		,460	
21,241	Addition of Grant-in-Aid to Capital for 1981-82		26,068
12,838	Notional interest on Capital (see Note 4 below)		12,718
530,570			569,252
	Less Decrease in liability for assets acquired without		
104	payment		356
530,466	Balance at 31 March 1982		568,896

(a) The balance at 31 March 1982 includes:

- (i) A liability to the Crown Estate Commissioners of £887,000 (£1,247,000 in 1980-81) contingent upon the sale of property acquired without payment under Forestry (Transfer of Woods) Orders 1924-61.
- (ii) Gifts to the value of £178.000 (£174.000 in 1980-81). The increase relates to gifts of land for afforestation in Scotland.

S Notes on the Accounts (continued)

Details of Subsidies (see page 00)			1						
				Planting		·	Restocking		Forest
			Area Planted (hectares)	Subsidy per hectare	Subsidy £81/82 (000)	Area Planted (hectares)	Subsidy per hectare	Subsidy £81/82 (000)	recreation and Amenity
Great Britain	:	:	10,978	£ 463	5,078	5,510	£89	3,762	£000 3,492
England Total		:	558	558	311	1,949	1,192	2,323	1.770
Conservancy: North-West		:	178	843	150	417	1,314	548	206
North-East		:	343	377	129	583	784	457	247
South Fast		:	81	65/	12	393	854 2 077	336	346 655
South-West	:	: :	19	1,060	20	391	1,636	639	316
Scotland Total		:	10,094	441	4,454	2,037	(142)	(290)	1,016
Conservancy:		:	3,345	734	2,456	510	121	62	238
East		:	1,273	392	499	231	(39)	(6)	273
South	:	:	1,969	195	384	761	(247)	(188)	274
West	:	:	3,507	318	1,115	535	(586)	(155)	231
WALES			Ì	,					ì
Total		:	326	961	313	1,524	1,135	1,729	706
North South	:	: :	220 106	845 1,202	186 127	481 1,043	1,249 1,082	601 1,128	416 290

Further analysis of Great Britain Forest Recreation and Amenity Subsidy is shown on Statement 2. *Note* brackets indicate extent of expected return in excess of 3 per cent.

(b) The sum of £7,192,000 deducted in respect of amounts surrenderable to the Consolidated Fund is made up as follows:

	Receipts from disposals of land, buildings and plantations (including £2,474,000 yet to be surrendered for 1981-82)	6,850
	Cash balance in excess of sums required to settle net outstanding liabilities	
	for tax, national insurance, etc (yet to be surrendered)	342
		7,192
(c) The su	um of £12,460,000 deducted for Subsidies, etc is made up of:	
Previous		
Year		
£000		£000
8,136	Planting and restocking subsidies ((d) and (e) below)	8,840
	Forest Recreation and Amenity subsidy (Statement 2 and (d) and (f)	
3,385	below)	3,492
113	Notional sick and injury benefit and maternity pay	128
11,634		12,460

- (d) Details of subsidies (see page 110).
- (e) The planting and restocking subsidies per hectare for each Conservancy are derived from the weighted average of the net discounted revenues at 3 per cent of the various soil type models representing the reserve of the plantable land at 1 April 1977. The total subsidies for each Conservancy are calculated by multiplying the total area planted and restocked in the year by the average subsidy per hectare converted into current pounds by application of the index based on the GDP implicit price deflator.
- (f) Forest Recreation and Amenity covers visitor centres, car parks, forest walks, nature trails, conservation of wild life, etc and small-scale amenity planting from which no commercial rate of return can be expected, together with motor sports and other specialist activities. Expenditure on these facilities less related income is met by a subsidy which amounts to £3,492,000 in 1981-82 (compared to £3,385,000 in 1980-81). The level of subsidy is substantially less than the amount foreshadowed annually for the current quinquennium in the 1976-77 Annual Report of £3 million in real terms.

3. Forestry Subsidy

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

	£000
Interest at 5 per cent in real terms being the required rate of return (RRR) set for public sector trading bodies calculated on the average	
value of assets employed at the beginning and end of the year Interest charge in real terms made in the accounts (see Note 4 below) based on the average value of assets employed at the beginning and	51,382
end of the year	_31,385
Difference being Forestry Subsidy	19,997
	(RRR) set for public sector trading bodies calculated on the average value of assets employed at the beginning and end of the year Interest charge in real terms made in the accounts (see Note 4 below) based on the average value of assets employed at the beginning and end of the year

£000

4. INTEREST CHARGE

The target rate of return set for forestry is 3 per cent in real terms except for investment in Surplus Estate and Commercial Recreation where the required rate is that set for public sector trading bodies, currently 5 per cent. In addition an internal standard is used in investment appraisal and setting charges for camp sites and cabin projects based on yielding a surplus of $7\frac{1}{2}$ per cent on the current value of capital employed. This particular standard is recorded separately in the Commercial Recreation account for comparison with the surplus earned prior to interest charges at the required rate of return.

The target rates of return are reflected in the accounts by interest charges which are based on the average value of assets employed at the beginning and end of the year. These interest charges are calculated as follows:

			£000
5 per cent on Surplus Estate assets	 		1,312
5 per cent on Commercial Recreation assets	 	 	221
3 per cent on all other assets	 	 	29,852

The total interest of £31,385,000 has been distributed within the accounts as follows:

See Notes/ Statements	
Capital Note 2	£000 12,718
Superannuation Fund Note 6	18,667
	31,385
Plantations Statement 1	28,520
Forest Recreation and Amenity Statement 2	131
Commercial Recreation: Camp sites and forest cabins Statement 3	243*
Shooting and Fishing Statement 3	16
Harvesting Statement 4	1,023
Surplus Estate Statement 5	1,347*
Agency Statement 6	41
Sale of Land, Buildings and Plantations Statement 9	64
	31,385

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

5 CURRENT COST RESERVE

Previous Year £000		£000	£000
<u>248,411</u>	Balance at 1 April 1981	2000	383,685
	Increases/(decreases) arising from revaluation of assets at 31 March 1982		
128,361	Standard value of plantations	84,144	
4,449	Land and buildings in Forest Estate	(24,268)	
329	Land and buildings in Surplus Estate	(10,770)	
1,406	Vehicles, machinery and associated equipment	2,346	
136	Furniture and equipment	79	
123	Stocks and work in progress	113	
134,804			51,644
470	Adjustments arising from reclassification of assets		
383,685			435,329

The balance of £435,329,000 represents the amount by which plantations and other asset values have been increased during the quinquennium to take account of the effect of inflation on replacement value.

The standard value of plantations, including the land, is reassessed annually by application of an index based on the GDP implicit price deflator; this index records a rise of 10 per cent in the year and 84 per cent since the beginning of the quinquennium. Other assets are revalued as described in Notes 7 and 8 below and comments are made in Note 7 on the sizeable decrease in the property valuation.

6. NOTIONAL SUPERANNUATION FUND

Previous		
Year		
£000		£000
107,583	Balance at 1 April 1981	123,621
14,846	Interest at 15·1 per cent on opening balance	18,667
	Provision made during year (including £627,000 charged to Forestry	
7,318	Authority)	7,928
1,183	Contributions received during the year	1,165
130,930		151,381
7,309	Payments made during the year	9,009
123,621	Balance at 31 March 1982	142,372

The balance of the Fund represents the Commission's liability for payments of pension rights to existing and retired staff. The Fund was revalued by the Government Actuary as at 1 April 1982 and details of the valuation and appropriate adjustments (to the Commission's liabilities at the start of the new quinquennium) are shown in Special Note 1 to these accounts.

7. Fixed Assets

Freehold and Leasehold Land and Buildings

	Little	Litare	10141
	£000	£000	£000
At 1 April 1981	90,859	33,495	124,354
Additions	3,014	96	3,110
Disposals and transfers at book value	(5,324)	(3,821)	(9,145)
Depreciation charge for year	(1,035)	(-,0)	
			(1,035)
Revaluation adjustment	(24,268)	(10,770)	(35,038)
At 31 March 1982	63,246	19,000	82,246
Plant and Equipment			
	Vehicles.		
	Machinery	Furniture	
	,		
	and	and	
	Associated	Equipment	
	Equipment	- 4 F	Total
	£000	£000	£000
Gross current replacement cost			
At 1 April 1981	48,942	2,453	51,395
		,	
Additions during year at cost	5,810	128	5,938
Disposals and transfers at book value	(9,316)	(26)	(9,342)
Revaluation adjustment	7,365	194	7,559
At 31 March 1982	52,801	2,749	55,550
7.001 11.010 17.02			
	Vehicles		
		F	
	Machinery	Furniture	
	and	and	
	Associated	Equipment	
		Equipment	T . I
	Equipment		Total
	£000	£000	£000
Depreciation			
At 1 April 1981	30,052	1,451	31,503
Provision for year	6,188	211	6,399
Eliminated on disposals and transfers	(8,735)	(20)	(8,755)
Backlog depreciation on revaluation	5,019	115	5,134
A 4 21 M 1002	22.524	1 757	
At 31 March 1982	32,524	1,757	34,281
Net current replacement cost			
	20.077	000	24.260
At 31 March 1982	20,277	992	21,269
At 1 April 1981	18,890	1,002	19,892
Total Fixed Assets			
At 31 March 1982	_	_	103,515
			,
At 1 April 1981	_	_	144,246

Forest

Estate

Surplus

Estate

Total

Land and Buildings

- (a) Land under plantations is treated as part of the overall Plantations asset (Statement 1) and is accordingly revalued annually by reference to the index based on the GDP implicit price deflator.
- (b) Other freehold and leasehold land and all buildings were revalued by professionally qualified staff at 31.3.82 generally on the basis of open market value for existing use with disposal expenses deducted for surplus properties. Specialist buildings were, however, revalued at replacement cost and a nil value was ascribed to forest recreation and amenity facilities.

This professional revaluation has reduced the book valuation by approximately £35 million with the corresponding entry being shown in the Current Cost Reserve (Note 5). The book valuations had been assessed during the first four years of the quinquennium by the application of external and internal indices to a professional valuation at 1.4.77. The size of the discrepancy over a period of only five years is due to a number of factors, namely larger discounts now being offered to tenants to purchase properties, an increase in the amount of disposal expenses deducted from surplus property valuations, a considerable reclassification of properties from forest estate to surplus estate without revaluation in the quinquennium and the lack of adequate external indices for the range of properties managed by the Commission. Changes in the bases adopted for the annual updating to current value are still being considered for the next quinquennium.

(c) Disposals and transfers include land afforested in the year with a corresponding entry in the Plantations account. Differences between the updated value of the land used for planting and the standard value of land under plantations (see (a) above) are reflected in the Plantations Variance account and the Current Cost Reserve.

Vehicles, Machinery and Associated Equipment

(d) These assets were professionally revalued at 31.3.82 at gross current replacement cost less aggregate depreciation on the basis stated below to reflect the expired proportion of the assets' working lives. The professional valuation shows an increase of approximately £24 million over the book figures with the corresponding accounting adjustment being reflected in the Current Cost Reserve (Note 5). During the first four years of the quinquennium the valuation had been updated by reference to asset type indices issued by the Department of Industry and the professional revaluation has indicated that generally these indices are appropriate to the plant and equipment used by the Commission.

Furniture and Equipment

(e) These assets have been revalued at gross current replacement cost calculated by reference to asset type indices issued by the Department of Industry (showing increase of 8 per cent in 1981-82) less aggregate depreciation on the basis stated below to reflect the expired proportion of the assets' working lives. A change has been made in accounting practice from the start of the next quinquennium to capitalise only the office machinery and equipment within this group of assets. A revaluation of these items was carried out as at 1.4.82 and the results are shown in Special Note 1 to these accounts.

Depreciation

(f) Depreciation is provided at varying rates designed to write off the cost of fixed assets in equal annual instalments over their anticipated useful lives. Freehold and leasehold land and buildings classified as surplus are not, however, depreciated. The estimated useful lives used for depreciation calculations are as follows:—

Buildings	—— 1-80 years or in the case of leasehold buildings the term of the lease, whichever is the shorter.
Vehicles, nachinery and equipment	——- 3–16 years
Furniture and equipment	—— 5–20 years

8. STOCKS AND WORK IN PROGRESS

Previous		
Year		
£000		£000
5,895	Timber	5,832
1,111	Plants and seed	1,238
103	Livestock	15
3,046	Consumable materials and supplies	3,264
10,155		10,349

The bases for valuation are as follows:

Timber and plants - at net realisable value

Livestock – at the lower of historic cost and net realisable value

Consumable materials,

supplies and seed -- at current replacement cost assessed either by the last

price paid or by application of a DOI index thereto.

9. CASH AT BANKS AND IN HAND

Previous			
Year			
£000		£000	£000
5	Cash in transit and in hand		6
<i>584</i>	Balance in banks		620
1,922	Balance of Forestry Fund with Paymaster General	3,816	
	Less Outstanding liability to Consolidated Fund in respect		
	of balance of disposal receipts in 1981-82 (£2,474,000)		
	and excess cash balances at 31.3.82 (£342,000)	2,816	
	·		1,000
2,511			1,626

10. Variance on Plantations Account

The increase in the valuation of plantations during the year (at 1981–82 standard costs and prices) is £38,988,000 while the actual net expenditures and transfer values amount to £39,642,000, an adverse variance of £654,000 which arises as follows:

Plantations acquired Land planted Formation Protection Crop Improvement Lease rents, supplies and miscellaneous	Standard at 1981–82 costs and prices £000 139 3,266 4,537 4,064 2,738 799	Actual £000 148 4,023 4,442 3,591 3,276 725	Variances £000 (9) (757) 95 473 (538) 74
Road construction Road maintenance	3,197 2,253	4,251 2,271	(1,054) (18)
Sundry income	20,993	22,727 625	(1,734) 16
Net operational expenditure Labour oncost Overhead expenses Research and development	20,384 7,994 13,454 3,404	22,102 9,688 11,042 3,058	(1,718) (1,694) 2,412 346 (654)

The contributory reasons for the variances are detailed below:

- (a) The excess cost of £757,000 on Land planted represents the difference between the current value and the standard allowed for in the plantations valuation updated by the GDP index. The difference between the two sets of values is significant with acquisition costs of plantable land having risen by 161 per cent since the start of the quinquennium against an increase in the standard value of planted land of 84 per cent based on the GDP.
- (b) The overall saving of £95,000 on Formation arises principally from a lower weeding programme than envisaged when the standards were set.
- (c) Except in the Western and Northern Highlands fire protection costs were considerably less than standard and together with reductions in both other protection and fence maintenance costs produced an overall saving of some £473,000.
- (d) The additional cost of £538,000 on Crop improvement arises mainly from increased programmes of both fertilisation and cleaning. The additional investment in fertilisation serves to reduce the percentage of crops in check and is also expected to lead to an improved yield beyond the level envisaged in the valuation at the start of the quinquennium. These increases were to some extent financed by reductions in programmes of brashing and drain maintenance brought about by less intensive management regimes and increased mechanisation.
- (e) The excess cost of £1,054,000 on Road construction is principally due to programme increases, particularly on upgrading to meet the higher specifications required by the trend to larger and heavier vehicles and safety requirements.
- (f) The excess cost of £1,694,000 on Labour oncost is principally due to increases above the standard both in the provisions for superannuation benefits to industrial staff and in transport costs and also to the inclusion of protective clothing previously treated as overheads (see also Note 20).
- (g) The reduction of £2,412,000 in Overhead expenses is principally due to the fact that staff costs have risen by a smaller margin since the beginning of the quinquennium than the GDP increase of 84 per cent. The transfer of protective clothing costs from Overheads to Labour oncost is another contributory reason.
- (h) Research and development charges to the Enterprise were £346,000 less than anticipated, again due principally to staff costs rising less than the general increase in inflation.

11. Commercial Recreation Trading Account

The Commercial Recreation account covers the provision of tourist accommodation in the form of camping and caravan sites, forest cabins etc for overnight visitors and the letting of shooting and fishing rights belonging to the Commission. Campsites and cabins show a surplus of £383,000 before interest on capital employed. The surplus is equivalent to a return of 8·7 per cent compared to the target rate of 5 per cent for public sector trading bodies and 7·5 per cent set as the internal standard. The overall return for the quinquennium measured in £1982 is 6 per cent (see also Special Note 3 to these accounts).

No separate standard has been set for shooting and fishing. There is a surplus of £116,000 on the account in the year after charging interest for the use of vehicles and forest estate properties and a cumulative surplus of £341,000 for the quinquennium.

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There was a deficit of £22,417,000 in the year on the Harvesting Trading Account after charging £23,984,000 for the value of fellings and thinnings consumed at current standard values. A nil balance would have indicated for the trees harvested no deviation from the 3 per cent target.

The deficit arose as follows:

	Standard at 1981–82 costs and	A -41	V
	prices £000	Actual £000	Variance £000
Income (after adjustment for decrease in stock of £188,000)	66,944	36,131	(30,813)
Expenditure (after adjustment for increase in work in progress of £126,000)	23,938	17,910	6,028
Net Harvesting Revenue Labour oncost (see Note 16)	43,006 8,529	18,221 6,507	(24,785) 2,022
Surplus Overheads and Interest	34,477 10,493	11,714 10,147	(22,763) 346
Balance	23,984	1,567	(22,417)

The standards are based on unit costs per cubic metre so that the comparison with actual performance remains unaffected by changes in the volume of wood handled.

The 1981-82 standards allow for an increase of 10 per cent in both expenditure and income based on the GDP index.

Expenditure continued to be held well below the standard and in fact costs per cubic metre were reduced by about 10 per cent compared with 1980-81 despite continuing cost inflation with a corresponding benefit on the labour oncost variance. These benefits have been achieved as a result of changes and continuing improvements in harvesting techniques, notably through the move to forwarders which increased the efficiency of the extraction of timber to forest roadside.

Actual income per cubic metre, however, fell by about 11 per cent compared to the previous year against the increase of 10 per cent in the standard. This decrease is a direct consequence of the recession, which continued to deepen during the year, of which a particular feature was the decline in the price of imported sawn softwood in market sectors served by British timber, which had an adverse effect on sawlog prices obtained by the Commission.

13. SURPLUS ESTATE TRADING ACCOUNT

Surplus Estate comprises those properties which are not required for the Forestry Enterprise and are intended to be sold at the earliest opportunity. The account shows an operational deficit on letting the properties of £1,731,000 after charging interest on capital employed at 5 per cent. In addition a deficit of £151,000 arose on sales during the year (see Statement 9 for details).

14. Agency Services Trading Account

Agency services covers the provision of staff and machinery to carry out motorway and trunk road planting and maintenance on behalf of the Department of the Environment, forestry operations for private estates generally where there is no contractual service available and the occasional loan of labour to adjoining landowners. The account should be in balance with income equalling expenditure. Due, however, to a failure to fully recover supervisory costs and machinery costs there was a small undercharge of £51,000. Charges have since been adjusted to recover current costs and the cumulative deficit in the quinquennium, which is only £22,000 (or approximately \frac{1}{2} per cent of total charges made).

15. MISCELLANEOUS TRADING ACCOUNT

The income in this account comprises a receipt from the Severn Trent Water Authority representing an equal share in the surplus on the joint management scheme at Lake Vyrnwy in North Wales.

16. LABOUR ONCOST

Labour oncost covers those expenses incurred in the employment of industrial labour which cannot be allocated directly to activities, e.g. employers' national insurance, wet time, provision for superannuation rights. The total cost is distributed to activities on a time basis.

Standards are only set for the Plantations and Harvesting accounts and the respective variances are set out in Notes 10 and 12. There is a minor overall favourable variance of £328,000 in the year with savings derived from increased productivity in harvesting and marketing being offset by higher actual charges for superannuation benefits and transport costs and the transfer of protective clothing from overheads to labour oncost (see also Note 20).

17. Overhead and Forest Estate Expenses

The actual cost of overheads and forest estate expenses amounted to £28,115,000 compared to an updated standard of £32,242,000, giving a favourable variance of £4,127,000. This variance is due principally to a lower rise in salaries and associated staff costs than the 84 per cent increase (based on the GDP implicit price deflator) built into the standard together with a transfer of protective clothing expenditure to labour oncost.

Accommodation and estate expenses detailed in Statement 11 comprise the net cost of properties (other than Commercial Recreation) needed for the Forestry Enterprise. The properties include houses let to forest workers, foresters and outside parties, administration buildings and agricultural and other subjects temporarily let pending planting. The total net cost in the year amounted to £1,850,000 and is analysed as follows with royalties and other income from mineral exploitation being detailed separately.

	Expenditure	Income	Net
	£000	£000	£000
Forest workers' houses and holdings	785	314	(471)
Foresters' houses	370	307	(63)
Administration buildings	2,375	523	(1,852)
Agricultural properties and other residential			, ,
accommodation	419	778	359
Mineral exploitation		177	177
	3,949	2,099	(1,850)

18. FUTURE CAPITAL EXPENDITURE

Future capital expenditure on Fixed Assets in 1982–83 authorised by the Commission amounts to £11,236,000 (£12,683,000 for 1981–82).

19. Contingent Liabilities

Contingent liabilities exist at 31 March 1982 for damages caused by the Commission to other persons' property and for compensation for personal injury to Commission employees amounting in all to an estimated sum of £526,000 (£245,000 at 31 March 1981).

20. Note on Labour Oncost Standard

Examination of the variances on the Plantations and Harvesting Trading accounts has revealed inaccuracies in the attribution of the standards set for Labour oncost at the 1977 revaluation, as between these accounts. This will have no net effect on the activity variances used in the measurement of performance to be reported at the end of the quinquennium but could alter the opening (1977) and subsequent valuation of the plantations and planting subsidy levels as a result of the discounting effect on the future cash flows. The precise effect on the Annual Accounts as a whole could only be quantified and corrected by a complex and costly exercise necessitating a revision of the accounts and valuations from 1 April 1977. It is however considered that the overall effect on the valuation and subsidies is unlikely to be sufficiently significant to justify the costs and resources involved in its correction, especially bearing in mind that a complete revaluation of the plantations was undertaken at 31 March 1982 (see Special Note 1).

SPECIAL NOTES

The purpose of these Special Notes is to set out the results of the revaluation of the plantations at 31 March 1982. The revaluation is based on current perceptions of future volumes of work and outputs together with costs and prices to be applied to those programmes. This information is used in conjunction with the annual accounts to;

- (a) provide the starting level of capital and other liabilities to be serviced from 1 April 1982 (Special Note 1);
- (b) compute the level of subsidies required to achieve the target rate of return of 3 per cent on new planting and restocking planned for the next quinquennium (Special Note 2);
- (c) assess performance against the target rate of return of 3 per cent, measured in terms of variations from the cash flows built into the 1977 valuation (Special Note 3).

1. Revaluation of Assets and Liabilities

(a) A revaluation of the Plantations, Fixed Assets and the staff superannuation liability was carried out at 31 March 1982 in two stages as follows:

Stage 1

Plantations

- using an expectation value basis by discounting at 3 per cent the value of future work and outputs at the costs and the long-term price assumptions used in the 1977 valuation suitably adjusted for inflation. The Stage 1 valuation therefore measures only the monetary effect for the remainder of the rotation of the anticipated programme changes which arise from management decisions taken in the quinquennium.

Land and Buildings

 generally at open market value for existing use less disposal costs in the case of surplus properties and depreciated current replacement cost in the case of specialised buildings.

Vehicles, Machinery and Associated Equipment

- at net current replacement cost.

The valuations of the Fixed Assets concerned were substituted in the 1981–82 accounts for the previous Current Cost (CCA) indexed figures. The Plantations valuation was not included in the 1981–82 accounts but is compared below with the standard valuation as shown in the Balance Sheet at 31.3.82 which has been updated by the GDP index measuring the general change in purchasing power (CPP).

Stage 2

Plantations

- using an expectation value basis by discounting at 3 per cent the value of the identical future work and outputs used in Stage 1 at reassessed costs and prices. Direct expenditure is based on 1982 cost levels. Overheads for the first five years are assumed to remain constant at their current level. For the longer term it is assumed that there will be an increase in cost per member of staff of 1½ per cent a year, offset by increases in productivity. Overheads also incorporate an increase in the proportion of research and development chargeable to the Forestry Enterprise (55 per cent instead of 45 per cent) and higher provisions for superannuation benefits. Timber prices are based on current price levels for the first five years and a 15½-year (1967-1982) average for later years.

Fixed Assets

 adjustments were made to the Vehicle and Machinery valuation to take account of the reassessment of remaining lives with a restatement of office machinery and equipment at net current replacement cost but excluding office furniture which is no longer to be capitalised.

Notional Superannuation

- revalued by the Government Actuary.

Fund

(b) The revaluations have the overall effect of marginally increasing the plantations valuation and total assets and liabilities at the start of the next quinquennium by £1·2 million and £0·2 million respectively. Changes from the forecasts of timber production built into the plantations valuation at 1/4/77 in relation to the timing of timber availability and prices reduce the future timber income. This reduction is counterbalanced by substantial savings now forecast in overheads due both to higher productivity and lower costs in real terms than in 1977.

	Balance Sheet 31/3/82 £ million	Stage 1 Revaluation £ million	Stage 2 Revaluation £ million	£ million	Total Change £ million
Assets employed	102.5	102.5	102.2		0.2
Fixed Assets	103·5 17·1	103·5 17·1	103·2 16·4		-0.3
Net Current Assets	966.3			Cto 1 00 1	-0.7
Plantations	900-3	877-2	967-5	Stage 1 -89.1 Stage 2 $+90.3$	+1.2
	1,086.9	997.8	1,087-1		+0.2
Source of Funds Notional Superannuation Fund	142.4	142.4	156.0		+13.6
Emillion Capital (including Current Cost Reserve) . 1,004.2 Less balances on Trading and Variance Accounts . (59.7)	944-5	855-4	931-1		-13.4
	· — —				
	1,086.9	997.8	1,087·1		+0.2

- (c) Differences between the Balance Sheet figures and the Stage 1 and Stage 2 valuations are explained in more detail as follows:
 - (i) Fixed Assets (-£0·3 million)
 Exclusion of office furniture no longer to be capitalised, offset by an increase in the Vehicle and Machinery valuation arising from a restatement of lives.
 - (ii) Net Current Assets (-£0.7 million) Changes in accounting practice whereby stocks of publications are treated as Forestry Authority assets and work in progress on marking and measuring timber for standing sales is no longer evaluated.
 - (iii) Plantations (+£1·2 million) (a) Stage 1 (-£89·1 million)

£ million (bracketed entries show reduction in plantations valuation)

(i) Net reduction in future revenues from timber (-£92.9 million) and forest management operations (+£1.8 million). This arises mainly from delayed volume production from an increased area of plantations which will not be thinned because of a high risk of windblow. The balance is due principally to the real fall in roundwood prices since 1977 which has resulted in decisions not to thin and thus again alter the timing of the volume available compared to the standards adopted at the previous review.

 $(91 \cdot 1)$

£ million (bracketed entries show reduction in plantations valuation)

(47.5)

- (ii) Increase in direct expenditure, principally on roading, resulting from a reclassification and upgrading of roads to serve larger and heavier vehicles.
- (iii) Reduction in overheads, research charges (£15.3 million) and charges for use of plantation land, roads and forest estate assets (£34.2 million) brought about principally by a shortening of the rotation consequent upon the increase in area of crops which will not be thinned (see paragraph).

 $\frac{49.5}{(89.1)}$

(b) Stage 2 (+£90-3 million)

(i) above).

(i) Reduction in future revenues from timber (£135.0 million) and forest management operations (£2.9 million) arising in the case of timber from the move from a 10½-year average surplus to a current obtainable level for the first five years and a 15½-year average for the longer term (equivalent to a 7½ per cent decrease on the timber revenue assumptions in Stage 1).

(137.9)

(ii) Reduction in direct expenditure, mainly in the cost of future roading.

13.4

 (iii) Reduction in overheads and research charges brought about both by increased productivity and by lower costs in real terms.

192.8

(iv) Reduction in charges for use of plantation land, roads and forest estate fixed assets arising from net reduction in the valuation of these assets against Stage 1.

22·0 90·3

2. Recalculation of Subsidies

Planting Subsidies

These were introduced in 1972 to cover new planting and restocking undertaken primarily for social reasons which could not earn the target rate of return. New levels of subsidy have been calculated for the quinquennium starting on 1 April 1982 using the same assumptions on long-term prices for timber and overhead charges as incorporated in the Stage 2 plantations valuation. The results are set out below.

		Conservancies			1982–1987 Subsidy per hectare £(1982)		
						Planting	Restocking
England							
North-W	Vest					408	550
North-E	ast					370	731
East						*	784
South-E	ast					*	1,477
South-W	√est					2,539†	9 89
Scotland							
North						724	519
East						458	(89)
South						47	57
West		• •				175	48

^{*}No new planting planned in these Conservancies †Small area of broadleaved new planting

	Conservancies		1982 1987 Subsidy pe hectare £(1982)	
Wales			Planting	Restocking
North			849	944
South		• •	872	813

The underlying internal rate of return for all new planting and restocking in the period 1982–1987 is about $2\frac{1}{4}$ per cent. Despite the real decrease in timber prices this rate of return is higher than the figure of $1\frac{3}{4}$ per cent forecast at 1 April 1977 on planting in the past quinquennium. This comes from changes in the type of land to be planted, reductions in direct expenditure and overheads and also higher yield classes. When related to the planting programmes for 1982–1987 the revised subsidies produce a total of £32.5 million compared with £38.7 million applying the 1977–1982 subsidy levels in £(1982).

Forest Recreation and Amenity Subsidy

In real terms annual expenditure has decreased from £5.3 million in 1977–78 to £3.5 million in 1981–82. The annual level of £3 million £(1977) forecast in the 1976–77 Report is equivalent to £5.5 million £(1982). For the next quinquennium the annual level of subsidy will be contained within a ceiling of £4.5 million in real terms.

3. Measurement of Performance

Plantations

Actual income realised and expenditure incurred differed from the cash flow targets built into the 1977 valuation by a net £61·6 million (1982) deficit, due mainly to depressed timber prices, offset to some extent by reduced expenditure in real terms. Details are as follows:

Shortfall in timber income	£(1982) million (72·8)	The world recession and exchange rate problems have principally contributed to a situation where prices realised at the end of the quinquennium are 46 per cent less in real terms than forecast.
Net savings in direct expenditure	9.8	Improved productivity in harvesting coupled with changes in the product mix have resulted in a situation where unit costs at the end of the quinquennium are approximately 25 per cent less in real terms than anticipated. This saving is offset by a net increase in forest management costs, mainly because of changed assumptions about the benefit of fertilization and also higher specifications for roading.
Net savings in oncost and overheads	7⋅5	Staff costs were contained well within the general rate of inflation.
Prices of land planted higher than standard	(6·1)	Indicates the difference between the current market value of land and the standard value incorporated into the 1977 valuation as updated by the GDP.

In addition to the above-mentioned deficit of £61.6 million current assumptions made about future work and outputs for the remainder of the rotation at 1977 costs and prices expressed in £(1982) are estimated to result in a further net adverse variance of £89.1 million (see Special Note 1(c)(iii)(a)).

The total adverse variance against the forecasts made in 1977 of future cash flows for the entire rotation total £150·7 million (£61·6 million within the quinquennium and £89·1 million outside it). This represents a real rate of return over the whole rotation of $2\cdot6$ per cent against the target of 3 per cent.

Commercial Recreation (camp sites and cabins)

The total surplus for the five years in £(1982) is £1.2 million and this represents an annual average real rate of return of 6 per cent over the quinquennium compared with the internal standard of

7½ per cent. However the trend of return on capital improved during the five-year period from 4.9 per cent in 1977-78 to 8.7 per cent in 1981-82 despite making provision in some sensitive areas for comparatively uneconomic facilities to combat wild camping.

Surplus Estate

The total operational deficit in £(1982) is £1.5 million to which must be added losses on disposal of assets amounting to £0.7 million. The target rate of return was 5 per cent on assets employed which is equivalent to a £5.7 million surplus. The property concerned is a mixture of residential and agricultural subjects which are surplus to requirements and will be sold whenever practicable. Most of the properties are relatively expensive to maintain because of their scattered and remote locations and income is restricted either by the marginal nature of the property or by rent control linked to the statutory provisions for private sector housing.

REPORT OF THE COMPTROLLER AND AUDITOR GENERAL

FORESTRY COMMISSION FORESTRY ENTERPRISE

Quinquennial Revaluation of Assets and Review of Performance

General

The Trading Accounts of the Forestry Enterprise were reconstructed at 1 April 1972 with the intention that at five yearly intervals the assets would be revalued and the performance of the Forestry Commission over the quinquennium reviewed in relation to a target rate of return. In the intervening years the accounts would compare actual costs and income from sales with standards set by the Commission designed to achieve the target rate of return. The broad object of these arrangements was that, after allowing for the non-economic and non-commercial features of the Enterprise, the Commission's management should be governed by a commercial approach and the return from Forestry assets be measured against a fair target. For the forest estate the target was set at a 3 per cent return on capital employed, and at 1 April 1972 the Commission's assets were revalued to represent a notional capital on which they could expect to earn 3 per cent in real terms. The 1981-82 accounts are the last of the 1977-1982 quinquennium and the Special Notes to the accounts reflect the results of the Commission's quinquennial financial review

- B. The financial review had four main functions:
 - (a) to revalue the assets as at the end of the second quinquennium;
 - (b) to analyse performance over the second quinquennium;
 - (c) to set new standards against which annual expenditure and income would be compared, as an interim measure of performance, during the third quinquennium;
 - (d) to calculate the subsidies to be provided for new planting and restocking expected to be undertaken in the third quinquennium.

Revaluation of assets

- C. The Commission undertook the revaluation of fixed assets and plantations as at 31 March 1982 in two stages. The main variation in values related to plantations and at Stage 1 they revalued these on the basis of current forestry programmes, but otherwise used the same assumptions, accounting concepts, costs and prices used in the 1977 valuation, suitably adjusted for inflation. This Stage 1 valuation established the value of total assets employed at £997.8 million, and was used as the basis for measuring performance in the second quinquennium. At Stage 2 the Commission re-assessed at current costs and prices the future work and outputs relating to plantations used in Stage 1, to produce the starting value for the third quinquennium. Total assets at Stage 2 were valued at £1,087.1 million.
- D. For revaluation purposes each of the 11 Conservancies provided basic information; this was then processed and refined by the Commission's Finance

Division and Planning and Economics Division at headquarters. While my examination indicated that work on the valuation at Stages 1 and 2 was generally acceptable, I noted that the system for the revaluation exercise was not prescribed in a manual and the integrity of the results relied heavily on the knowledge and experience of a few key members of the staff. The Commission informed me that they recognised that a manual would ensure continuity and consistency in the exercise and undertook to prepare one well in advance of the next review.

E. I observed that in the Stage 2 revaluation the Commission had at a late stage made changes in assumptions relating to overheads and charges which produced a reduction of £192.8 million in projected costs, to be achieved by an increase in productivity of 3 per cent per annum over the next 20 years. However they had apparently made no allowance for further possible cost reductions arising from a management structure review in progress at the end of the second quinquennium. The Commission informed me that although the final outcome and financial effect of the management review had not been available when the revaluation was being undertaken, the review had exerted some influence on the decision to amend the overhead assumptions. They intended to introduce a revised management structure but regarded the 3 per cent productivity increase as an ambitious target which would include any cost reductions arising from a revised structure.

Analysis of performance on the forest estate

- F. At the end of each quinquennium the Commission assess their performance:
 - (a) by comparison of variances between the actual income and expenditure in the five year period and the cash flows built into the opening valuation suitably adjusted for inflation, and
 - (b) by assessment of the future variances that will arise during the remainder of the forest crop rotation from altered assumptions about future work and outputs.

For the 1977–1982 quinquennium there was an overall deficit of £157·3 million on total capital employed. Of this £150·7 million arose on the forest estate, ie on plantations, including harvesting and marketing activities, and the Commission have identified £61·6 million as arising within the quinquennium under (a) above, and £89·1 million as arising outside the quinquennium under (b) above. The deficit of £150·7 million reduces the rate of return over the whole rotation period of the crops to 2·6 per cent on notional capital employed on the forest estate, against the target of 3 per cent.

G. The Committee of Public Accounts of Session 1977–78 considered the results of the 1972–1977 quinquennium, and in their Ninth Report commented on the low rate of return before crediting the Exchequer planting and restocking subsidy. They recommended, inter alia, that the Commission should make every effort to control costs and maximise revenue. In view of the substantial deficit arising in the 1977–1982 quinquennium compared with the standards set, I investigated the Commission's harvesting and marketing activities on their plantations. Special Note 3 explains the deficit as due mainly

to depressed timber prices, offset by some reduction in direct costs which by 1981–82 were 25 per cent below standard, and in overhead staff costs. I sought evidence that the Commission had endeavoured to mitigate the effects of a world recession in timber prices by maximising revenue and by economies in working practices.

- H. The Commission informed me that an understanding of the impact of the world recession on the paper and board industry was fundamental to any judgement of their performance compared with standards set at the beginning of the quinquennium. My examination indicated that the depth of the recession in the timber trade in Great Britain had in fact left the Commission little scope to obtain additional revenue by increasing the prices for their products and that the pressure throughout the quinquennium had been almost invariably in the opposite direction, in order to sustain major customers.
- I. I enquired whether the Commission could have reduced costs further by extending certain of their more economical practices, for example sales of standing trees, including competitive rather than negotiated sales, sales by weight or area rather than by volume measurement, expansion of their own timber processing, and greater use of subcontractors. The Commission informed me that their general objective was to maximise the surplus from the total volume of timber to be sold and that they had pursued all potential economies in working practices as vigorously as was possible in the prevailing circumstances. Their comments on the particular examples were:
 - (i) Standing sales: although throughout the quinquennium standing sales produced consistently better trading results than sales of cut timber, the Commission said they had to strike a balance between the short term advantage of standing sales and the need to encourage the development of the timber industry. Through the sale of timber from their own harvesting operations under long-term contracts the Commission encouraged the establishment and expansion of timber using industries and helped to ensure their further development to match future increases in wood production. Through their own harvesting the Commission also exercised some measure of control on employment of labour in the forests, obtained first hand experience of costs necessary to the determination of relative produce values, and functioned as the main agency for research into harvesting methods and equipment. At the start of the 1977-1982 quinquennium they had had a positive policy to achieve a higher ratio of Commission working to standing sales. In the last four years of the quinquennium the proportion of standing sales had remained fairly constant at 33 per cent, but the Commission had now set a target for standing sales of 40 per cent of the total volume worked.
 - (ii) Competitive sales: these realised appreciably higher values than negotiated sales, particularly in the case of larger size trees. The Commission informed me that they needed a significant element of negotiated sales in order to create and maintain harvesting capability within the timber trade in remote areas, difficult terrain and above all in early thinning crops, all of which provided only a marginal return to the buyer.

- (iii) Sales by weight or area: these can be more economical than sales involving prior marking and measuring of trees. The Commission informed me that they are not averse to the maximum use of sales by weight although there are problems arising both from the loss of weight through drying out, if produce is not regularly removed from the forest, and from the risk of theft. At present sales by weight amounted to 23 per cent of all standing sales. With regard to sales by area the Commission told me they were continuing to experiment with this method of sale, but there were constraints associated with the acceptability of the commercial risks involved.
- (iv) Commission processing: in the light of the Commission's activities in pitwood sales, I asked whether the Commission's own processing could be extended in scope. They told me that as they consider that their statutory powers did not permit any extension of their current processing activities, they would need to seek specific guidance from Counsel before doing so.
- (v) Use of sub-contractors: the Commission accept that in certain circumstances the use of sub-contractors in harvesting work is cheaper than the use of direct labour. They informed me that every effort had been and would continue to be made to optimise the use of sub-contractors bearing in mind the need to maintain the Commission's own forest operations and limitations imposed by the availability of sub-contract labour, particularly in areas of sparse population.

Standards for the 1982-1987 quinquennium

- J. The Commission informed the Public Accounts Committee of Session 1977–78 that standard costs and revenues were then being analysed between individual jobs and resources thereby improving the Commission's ability to make a critical examination of any variances. PAC noted in their Ninth Report of that Session that the usefulness of comparing expenditure and income with standards depended on the soundness of the standards.
- K. The Commission have now established standards for costs and revenues in the 1982–1987 quinquennium. They have also prepared basic budgets for each of the 5 years using the principles of the Government's Public Expenditure Survey, and a detailed budget for the first year taking account of approved estimates. My comparison of the data used to produce standards with the data included in the basic and detailed budgets revealed discrepancies between the two sets of data, and as a result the Commission amended the standards. Nevertheless significant differences persisted in the prime cost, volumes of work and unit cost of individual operations between the standards and basic and detailed budgets. In addition, standards for harvesting and marketing were not analysed to individual operations to the same extent as those for other Commission functions.
- L. I asked the Commission whether they intended to use standards to monitor and control jobs and activities in their individual Conservancies and, if so, whether the standards were sound enough for the purpose. The Commission stated that standards should not be used for such monitoring but

rather the annual cash budgets. They regarded the standard as setting an expenditure and income model for the whole quinquennium which would demonstrate whether they had achieved their objective of maximising net revenue. Although average annual expenditure and income could be expected to match the overall standard over the quinquennium, the cash budgets for each year could differ from standard. Such differences could be due to a variety of causes, including changes in market conditions, variations in work inputs from one year to another and the development of new techniques.

M. The Commission said that the use of detailed budgets, coupled with management control reports and inspection visits to each Conservancy as their control and monitoring procedures, enabled them to ensure efficiency whilst allowing for flexibility in their operations. In addition, performance indices were considered regularly to ensure that standards of performance expected from men and machines were achieved. The Commission said their main achievement during the second quinquennium had been to reduce substantially their machine holdings and increase productivity per man employed. Their efforts over the next quinquennium would be mainly towards further reductions in manpower costs.

Subsidies

N. The Commission identify three subsidies in the Enterprise Accounts. First, the planting and re-stocking subsidy which measures the extent to which new planting and restocking is undertaken primarily for social reasons and will not earn the target rate of return; second, the forest recreation and amenity subsidy, which represents the net cost of those recreational etc facilities for which commercial objectives cannot be set; and third – which is different in kind from the other two – the forestry subsidy which measures the difference between the target rate of return for forestry and the rate set for other public sector trading bodies. Adjusted to a common (1982) price basis, the levels of subsidy in the first and second quinquennia were:

	1972–1977	1977-1982
	Quinquennium	Quinquennium
	£ (1982) m	£ (1982) m
Planting and restocking	45.9	45.4
Forest recreation and amenity	21.3	23.5
Forestry	203.4	92.4

In the first quinquennium forestry subsidy was based on the difference between the target return of 3 per cent and an average Government long term lending rate determined by the Treasury. In the second quinquennium current cost accounting was introduced and the subsidy was based on the difference between the 3 per cent target return and the required rate of return 5 per cent set for public trading bodies.

Other matters

O. I have qualified my certificate on the Enterprise Accounts for 1981–82 and each of the previous three years of the 1977–1982 quinquennium in respect of inaccuracies in the attribution of the standards set for labour oncost at the

1977–78 revaluation as between the Plantations and Harvesting Trading Accounts (see Note 20). The Commission have taken action to prevent a repetition of these inaccuracies in the calculation of standards for the third quinquennium.

- P. Under the quinquennial review programme, standards for a new quinquennium are finalised immediatly prior to submission for audit of the final account for the previous quinquennium. The Commission informed the Treasury on 5 November 1982 that there was little prospect that they would meet the statutory date of 31 January 1983 for laying the 1981–82 Enterprise Accounts before Parliament and Treasury granted dispensation from this requirement on 19 November 1982. The 1981–82 Accounts were signed and formally submitted to me on 1 February 1983 but a longer than normal period is needed for audit and completion of my Report in a quinquennial review year.
- While some delay to the annual accounts programme is inevitable because of the need to obtain final year figures before quinquennial performance can be measured, many other aspects could be dealt with at an earlier stage of the programme. In the current exercise, a change in the basic assumptions on overheads (resulting in substantial amendment of valuations, standards and subsidies) was made as late as January 1983. The Commission attributed the delay mainly to the reappraisal of forest management standards to take account of known financial constraints, and the review of the assumptions about overhead expenditure and the formula for ascribing and absorbing this expenditure into the revaluation and subsidy calculations. They promised to give some consideration to accelerating the next quinquennial review process in order to permit earlier consideration of the result. Despite the delay in producing standards for the third quinquennium and in presenting the final accounts for the second quinquennium, the Commission told me they had continued effective monitoring of their activities in 1982-83 by means of the detailed budget for that year.

GORDON DOWNEY

Comptroller and Auditor General Exchequer and Audit Department 12 May 1983