Forestry Commission 61st Annual Report and Accounts 1980-81



Front Cover Strathyre Forest, showing the Commission's forest cabin site on the shores of Loch Lubnaig (E5112).

HC 136 ISBN 010 213682 3

CORRECTIONS

Page 51, Table 13

Table 13

The entries against "Forest properties" and "Other properties" in lines 1 and 7 respectively were included in error. They are in fact the correct totals for the two types of property, and their inclusion in the table has resulted in the totals shown in line 6 and 10 being double counted. The correct version of Table 13 is given below:

Number

PROPERTIES MANAGED BY THE COMMISSION AT 31 MARCH 1981

, , , , , , , , , , , , , , , , , , ,				rumoer
Type of Property	England	Wales	Scotland	Great Britain
Forest properties				
Foresters' houses	199	102	282	583
Forest workers' houses	643	184	685	1,512
Forest workers' holdings	53	44	128	225
Miscellaneous*	1,408	491	839	2,738
Total	2,303	821	1,934	5,058
Other properties†				
Farms and other agricultural subjects	559	493	661	1,713
Residential and other lettings	1,281	723	1,249	3,253
Total	1,840	1,216	1,910	4,966

*Miscellaneous covers hostels, bothies, offices, repair workshops and other buildings not normally let. +In addition there are 2,360 sporting lettings.

Page 19, paragraph 50, line 4: for page "74" read page "76".

Page 25, paragraph 85, line 3: for page "70" read page "72".

Page 25, paragraph 86, line 5: for page "73" read page "75"; and for page "75" read page "77"; line 7: for page "78" read page "80".

Sixty-First Annual Report and Accounts of the Forestry Commission for the year ended 31 March 1981

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 29th April 1982

LONDON HER MAJESTY'S STATIONERY OFFICE £8.00 net

Previous Reports

1979-80 HC	14 (1980–81)
1978–79 HC	358 (1979-80)
1977–78 HC	108 (1978–79)

FORESTRY COMMISSION 231, Corstorphine Road Edinburgh, EH12 7AT 5 March 1982

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 61st Annual Report of the Forestry Commissioners which covers the year ended 31 March 1981.

I should explain that presentation of the Report has been delayed because of problems last year with the computer which processes the Commission's Accounts, which held up their completion.

I am, Gentlemen, Your obedient Servant, (Sgd) DAVID MONTGOMERY Chairman The Forestry Commissioners and Senior Staff at 31 March 1981

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 D. R. Hicklin OBE 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 J. W. L. Zehetmayr VRD Director, Research and Development: Mr D. R. Johnston 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 J. W. L. Zehetmayr vRD

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

Contents

	Page
Names of Forestry Commissioners and Senior Staff	4
Report for the Year Ended 31 March 1981:	
General Review	8
Forestry Policy	8
The Commission's Finances	12
State of the Wood Market	13
Land Acquisition	13
Recreation	14
Awards to the Commission	14
The Eleventh Commonwealth Forestry Conference	14
Meeting of EEC Heads of Forest Services	14
Chinese Forestry Delegation's Visit	14
Commissioners	15
Senior Staff	15
Staff Numbers	15
Forestry Enterprise	
Land Acquisition	16
Nurseries	16
Planting	16
Seed Collection	16
Forest Protection	16
Forest Management	17
Forest Design	18
Estate Management	19
Harvesting and Marketing	21
Engineering	23
Forest Workers' Pay	24
Health and Safety	24
Finance	25
Forestry Authority	
Legislation	27
Private Forestry	27
Forestry in the European Community	27
Research and Development	28
Plant Health	30
Education and Training	31
Public Relations	32
Finance	32
	5

Appendices

		Page
I	Statutory and other Committees appointed by the Forestry Commission	33
	National Committees	33
	Regional Advisory Committees	33
	Home Grown Timber Advisory Committee	34
	Technical Sub-Committee of the Home Grown Timber Advisory	54
	Committee	35
	Supply and Demand Sub-Committee of the Home Grown Timber	
	Advisory Committee	35
	Advisory Committee on Forest Research	35
	Forestry Training Council	35
	Forestry Safety Council	36
II	Home Grown Timber Advisory Committee: Annual Report for	
	the year ended 31 March 1981	37
ш	Forestry Training Council: Annual Report for the year ended	20
	31 March 1981	39
IV	Forestry Safety Council: Annual Report for the year ended31 March 1981	41
v	New Publications	42
VI	Statistical Tables	43
Fores	try Authority	
1	Dedication Schemes for Private Estates	44
2	Approved Woodlands Scheme for Private Estates	44
3	Area of Planting by Private Woodland Owners for which Grants were paid	45
4	Progress of Planting by Private Woodland Owners in Last Ten Years	46
5	Volume of Timber Licensed for Felling and Thinning on Private Estates	47
6	Area Licensed for Clear Felling on Private Estates	47
Fores	etry Enterprise	
7	Land Use	48
8	Net Area of Forest Land Acquired/Disposed of	48

Appendices—continued

Fores	try Enterprise	Page
10	Progress of Planting in Last Ten Years	49
11	Areas of Plantations and Volumes of Timber Thinned and Felled	50
12	Sales of Timber	50
13	Properties Managed	51
14	Public Recreational Facilities	51
15	Land Use, Planting and Timber Production by Forests-England	52
16	Land Use, Planting and Timber Production by Forests-Wales	57
17	Land Use, Planting and Timber Production by Forests-Scotland	59
VII	Map of Forestry Commission Forests and Conservancies	63
VIII	Financial Tables	67
1	Forestry Fund Receipts and Payments	68
2	Expenditure on Forestry Authority Services	70

Balance Sheet of the Forestry Commission Forestry Enterprise as at 31 March 1981, and Accounts for the year ended 31 March 1981, together with the Report of the Comptroller and Auditor General thereon 74

Addresses of the Main Offices of the Forestry Commission Inside back cover

Acknowledgements

The cover and other pictures were taken from photographs in the Forestry Commission collection.

General Review

Forestry Policy

1. During the year covered by this Report, forestry policy questions were the subject of much Parliamentary and public debate. They included not only the Government's review of forestry policy, to which we referred in our last Report, and the consequential Forestry Bill providing for wider powers to dispose of Commission land and plantations, but also forestry taxation, a Rayner study into the administration of forestry grants and felling controls, and a House of Lords' Select Committee Report on forestry research.

Government's Policy Statement

2. The Government's conclusions arising from the forestry policy review were announced by Mr George Younger, Secretary of State for Scotland, in a statement to the House of Commons on 10 December 1980, which was repeated in the House of Lords by the Earl of Mansfield, Minister of State at the Scottish Office. Mr Younger said:

"With the projected rise in demand for timber into the next century and with the world's forests likely to come under increasing pressure, the Government believe that long-term confidence in both forestry and woodprocessing industries in this country is fully justified. We look for a steadily increasing proportion of our requirements of timber to come from our own resources. A continuing expansion of forestry is in the national interest, both to reduce our dependence on imported wood in the long term and to provide continued employment in forestry and associated industries.

Recent difficulties in the pulp and paper sector, which represents only one-eighth of the market for wood grown in this country, do not change that conclusion. Forest owners have adjusted to the changed markets. Export opportunities in Europe for small roundwood are being successfully exploited. Looking further ahead, our industries, with the more advanced processes being developed in this country, are expected to be capable of absorbing the rising production from our existing forests, and of enlarging their present 9 per cent share of the home market.

There should be scope for new planting to continue in the immediate future at broadly the rate of the past 25 years while preserving an acceptable balance with agriculture, the environment and other interests. We see a greater place for participation by the private sector in new planting, but the Forestry Commission will also continue to have a programme of new planting, in particular where it will contribute to the rational management of its existing plantations, and also in the more remote and less fertile areas, where afforestation will help maintain rural employment.

The main basis of policy for the future must remain the successful and harmonious partnership between the private sector and the Forestry Commission. In accordance, however, with the Government's support for private enterprise and our policy of reducing public expenditure, a determined effort will be made, by making better use of the capital invested in its existing assets, to reduce that part of the Commission's grant-in-aid which finances the Forestry Enterprise. We therefore propose to provide opportunities for private investment in these assets, including the sale of a proportion of the Commission's woodlands and land awaiting planting, with lease-back arrangements where it is important to maintain continuity of management to meet wood supply requirements or to preserve environmental interests. In planning its broad implementation of this policy, the Forestry Commission will take account of the views of the organisations concerned. We will seek an early opportunity to take the necessary powers for private investment in Commission assets on these lines.

Following a review of the administration of grant-aid and felling licensing, carried out under the auspices of Sir Derek Rayner, we propose to make these less complex and less costly to administer. A single new scheme will be introduced at the start of the next forest year on 1 October 1981, of which the main features will be planting grants, a simplified plan of operations and a minimum of legal formalities. The Basis III Dedication Scheme and the Small Woods Scheme will accordingly be closed as from 1 July 1981. Existing Dedication Schemes will continue for present participants, although some procedures will be simplified and individual dedication agreements will not be renewed on a change of ownership. The felling licensing system will be simplified to recognise the change in circumstances since this was introduced. Copies of a consultative paper, on which the various interested parties are being invited to comment, have been placed in the Vote Office.

As my right honourable and learned Friend, the Chancellor of the Exchequer, has already informed the House, the Government intend to continue the current income tax arrangements for forestry in order to maintain confidence in the private sector."

3. The Government's recognition of the importance of forestry and the woodprocessing industry in Britain and their clear commitment to the continuing expansion of the nation's forests have been widely welcomed within the forestry industry. We believe the statement to be a far-sighted declaration of confidence, coming as it did in a period of recession, and it goes a long way towards the objectives suggested in our consultative document *The Wood Production Outlook in Britain* published in March 1978. We welcome particularly the reference in the statement to our successful and harmonious partnership with the private sector and the confirmation that this will continue to be the main basis of policy for the future. The proposal to reduce our call on public funds for the running of the Forestry Enterprise, through the sale of a proportion of our land and plantations, presents us with an added challenge in the commercial management of the national asset the Commission has built up over the past 60 years.

Forestry Bill

4. As foreshadowed in the Government's policy statement, a Forestry Bill was introduced in the House of Commons on 11 December 1980 to provide Ministers with wider powers to dispose of land and plantations managed by the Commission. The Bill, which was given its Second Reading on 26 January 1981, also provided for transfers from the Forestry Fund to the Consolidated Fund of sums specified by Forestry Ministers with the approval of the Treasury, and for the appointment of an additional Forestry Commissioner. 5. In introducing the Bill at Second Reading, the Secretary of State for Scotland explained that new disposal powers were needed because the existing powers in the Forestry Act 1967 were inadequate to permit more than minor sales of land managed by the Commission. He stressed that it was no part of the Government's policy to dismember the Commission or to place it at a commercial disadvantage; the Commission would be in full control of the proposed disposals programme, the object of which was to reduce the call on the Exchequer for the future funding of the Forestry Enterprise. Some plantations would be for outright sale, but others would be leased back for continued management by the Commission. In deciding the method of sale and in selecting areas for sale under the new policy, the Commission would be taking into account a number of important factors. Paramount among these would be the need to ensure long-term supplies to wood-using industries, the effect on employment and special commitments to public recreation, amenity and wildlife conservation.

6. The Secretary of State reassured the House that the disposals programme would be a limited one and that, on the scale envisaged and with the additional safeguard of lease-back arrangements where appropriate, the Commission's ability to negotiate long-term supply contracts with developing wood-using industries should remain unimpaired. Every effort would be made to minimise the effect of sales on jobs in the forest, particularly in areas where the Commission was the major employer. Although it was expected that some of the Commission's reserves of plantable land would be sold to the private sector for afforestation, the Commission would continue to acquire and plant additional land in the circumstances outlined in the Government's policy statement.

7. The provision to enable the transfer of funds from the Forestry Fund to the Consolidated Fund had been included for two reasons. First, as the Commission's forests matured and yielded an increasing harvest, there would be a positive balance of income over expenditure on its operations as the Forestry Enterprise. The break-even point might be a decade or more ahead, but in forestry legislation it was wise to look to the future; until then there would continue to be deficits in the Enterprise's cash flow. Secondly, these deficits would be reduced by a new form of income from the disposal of land and plantations, but because land transactions flowed unevenly, it was not the Government's intention to allow short-term fluctuations in the property market to disrupt the long-term programmes of the Commission. To avoid difficulties arising from an uneven flow, the Commission's expenditure and cash limits would therefore be separated from the proceeds of the sale of land and plantations, and of surplus assets, by transferring those proceeds to the Consolidated Fund as extra receipts. Notes on the Supply Estimates and the public expenditure survey would show the effect of those receipts on the Commission's net call on Exchequer funds.

8. The Secretary of State explained that the additional Forestry Commissioner would be expected to have business and commercial experience outside the forestry and wood-using industries. This would broaden the range of advice and experience available to the Commission.

9. The Committee stage of the Bill took place between 12 February and 3 March 1981 and involved six sittings. It passed to the House of Lords unamended after Report and Third Reading in the House of Commons on 31 March 1981.

Forestry Taxation

10. In a report published on 21 May 1980*, the Public Accounts Committee recommended the phased abolition of the Schedule B income tax option available to owners of commercially-managed woodlands. Responding to this proposal on 9 December 1980, the Chancellor of the Exchequer announced that he had decided not to make any changes in the present income tax arrangements for private forestry, which had existed for a considerable time and which he recognised as playing an important part in encouraging investment by the private sector in the industry. The Chancellor said that it was particularly important in an industry with the long time-scale of forestry for there to be stability in the tax arrangements so that confidence was maintained.

Rayner Study

11. In our Report for 1979-80, we referred to a study into the administration of our grant-aid schemes and felling controls started in January 1980 under the auspices of Sir Derek Rayner. The main proposals arising from that study were outlined in the Government's forestry policy statement of 10 December 1980 (see paragraph 2) and fuller details were contained in a consultative paper *The Administration of Felling Control and Grant Aid* which we issued at the same time. The consultative paper was distributed to a wide range of interested organisations and individuals both within the forestry industry and outside, and at the end of the year under report we were collating and evaluating the many comments received.

Select Committee Report on Forestry Research

12. During the year a sub-committee of the House of Lords Select Committee on Science and Technology investigated the scientific aspects of forestry in Britain. The sub-committee's report**, which was published on 10 December 1980 following the taking of evidence from a wide range of interested parties, including the Forestry Commission, commented favourably on the Commission's programme of applied research. Its chief recommendation was that the Commission should take the lead in co-ordinating forestry research in Britain. Linked to this was a proposal that we should have on our establishment a Chief Scientist, who would be responsible not only for planning the Commission's applied research programme but also for stimulating and encouraging research at Research Council establishments and elsewhere. Among its other recommendations, the sub-committee proposed that the Commission should assume responsibility for applied research into the end uses of wood and of forest products and that long-term policies and appropriate financial arrangements should be made to preserve the future of broadleaved woodlands.

13. A debate on the report was held in the House of Lords on 23 February 1981 on a motion by the sub-committee's Chairman, Lord Sherfield. In replying to the debate, the Earl of Mansfield, Minister of State at the Scottish Office, said that the report touched on some extremely important aspects of forestry

^{*} Eighth Report from the Committee of Public Accounts: Session 1979-80, Cmnd 448, HMSO, £2.75 net.

^{**} Second Report of the House of Lords Select Committee on Science and Technology: Session 1979-80, Cmnd 381, HMSO, £3.60 net.

research and practice, and of organisation and funding, which would require careful evaluation. At the end of the year under review, the implications of the report were being studied by the Forestry Commission in consultation with other Government Departments prior to our considered views being presented to Ministers.

The Commission's Finances

14. The statement of Forestry Fund receipts and payments, together with notes and explanations, appears at Table 1 of Appendix VIII.

Grant-in-Aid

15. The Grant-in-Aid voted by Parliament forms the Commission's agreed cash limit. During 1980-81 it became clear that the general effect of the recession and the strengthening of sterling would keep timber prices below the level expected when the original cash limit was fixed, and that as a result the total receipts for the year would be £5.2 million less than we had originally predicted. Drastic action was therefore needed to reduce expenditure as much as possible to offset this loss of income, and savings of £4.5 million were planned. The measures taken included a halt to further land acquisition, a reduction in building work, the deferment and cancellation of machinery and equipment purchases, a general reduction in other expenditure and restrictions on recruitment. An addition of £750,000 to our cash limit to cover the anticipated shortfall was announced to Parliament on 22 January 1981. In the event, this supplementary provision was not required as the actual shortfall in receipts was some £1.1 million less than had been expected, while, thanks to the efforts of management at all levels, the savings in expenditure achieved were £5.1 million, £0.6 million more than had been anticipated.

16. The working balance at 31 March 1981 was $\pounds 1.9$ million. This was $\pounds 1.6$ million more than the balance brought forward from 1979-80. The increase was mainly due to the industrial action which affected the operation of the computer at the Paymaster General's office in March 1981 with consequential delays in the processing of some payments and the flow of management information.

17. After adjusting for changes in the working balance, the call on Exchequer funds in 1980-81 was £42.3 million. This was £3.7 million (10 per cent) higher than the comparable figure for 1979-80, which amounted to £38.6 million after a downward adjustment of £4.7 million had been made to take account of the carry-over of payments from the previous year caused by the closure by industrial action in 1979 of the computer processing our accounts.

18. Payments were held at $\pounds 97.3$ million, which was $\pounds 8.6$ million higher than in 1979-80 after adjustments had been made for the effects of the 1979 industrial action mentioned in the previous paragraph. The main cause of the increase was the continuing effect of inflation and pay awards. This was offset in part by a reduction of $\pounds 5$ million in the planned level of expenditure for the year resulting from the Government's public expenditure savings referred to in our last Report; a substantial lowering of our expenditure on land acquisition and building construction; and a severe cut-back in purchases of machinery and equipment. Receipts rose by $\pounds 6.9$ million to $\pounds 56.5$ million, mainly comprising increases in income from the sale of timber ($\pounds 4.2$ million) and the disposal of surplus assets ($\pounds 1.7$ million).

State of the Wood Market

A Year of Varied Demand

19. The market demand for small diameter roundwood showed little change in volume during the year, but major changes occurred in the pattern of consumption following pulpmill closures. The market for sawlogs, which began on a buoyant note, deteriorated as the year progressed, and the total volume of timber harvested was only 6 per cent higher than in the previous year. Deliveries of wood for particleboard manufacture increased by 30 per cent, but those for pulping fell by $6\frac{1}{2}$ per cent and those for sawlogs by 6 per cent. Fuller details are given in paragraphs 61-69.

Mill Closures

20. The year was dominated by the closure of three pulpmills. Our last Report referred to events leading to the decision by Wiggins Teape Ltd to close their chemical pulpmill at Fort William. The mill ceased operation in June 1980. On 15 August 1980, Bowater UK Paper Co Ltd announced their intention to close the roundwood pulpmill and associated newsprint production at Ellesmere Port. This followed extensive and detailed negotiations, covering such aspects as Government financial assistance, energy costs and the price of wood supplied by the Commission and private growers. Despite these efforts the pulpmill was closed in November 1980. On 23 September 1980, St Anne's Board Mill Ltd announced the immediate closure of their pulp and board mill at Bristol. These closures resulted in the total loss of a market for some 550,000 tonnes of pulpwood annually.

Export of Pulpwood

21. In close association with private forestry interests, we sought to develop alternative markets to replace those lost by the pulpmill closures in order to sustain wood production and forestry employment. While our first objective was to exploit alternative markets within this country to the maximum extent feasible, it proved necessary to develop a substantial export market for pulpwood, mainly to Scandinavia (Plate 1). By the end of the year arrangements had been made for export contracts at a number of ports throughout England, Scotland and Wales on a scale equivalent to about 500,000 tonnes per annum. Of this quantity, approximately 60 per cent comes from our own harvesting operations and the remainder from private forestry interests. Although this initiative has proved essential as a result of the mill closures, our longer-term aim remains the encouragement and promotion of viable wood-using industries in Great Britain to take advantage of the opportunity offered by the increased availability of small roundwood.

Land Acquisition

22. The area of plantable land we acquired during the year, at 1,752 hectares, was the lowest on record. This reflected the severe cut we had to make in the

allocation of funds to land purchases because of planned reductions in public expenditure and the sharp fall in timber prices which gave rise to difficulties in keeping within our cash limits. Details of the location and price of the land acquired are given in paragraph 33.

Recreation

23. We have also had to make substantial reductions in our recreation budget over the past two years as part of the Commission's contribution to the general reduction in public expenditure. Our limited resources are being concentrated on the maintenance of existing facilities, with priority being given to revenueearning developments, such as forest cabins, campsites and sportings, and to visitor centres and popular day-visitor facilities (Plate 2), particularly those close to towns. Further new developments may be possible, however, using funds from outside the Commission, on the lines of the Lochaweside forest cabins scheme which we are developing with the aid of finance provided by the Crown Estate Commission (see paragraph 48).

Awards to the Commission

24. Following our success in 1978 in obtaining a Civic Trust Award for our Deerpark cabins in Cornwall, we were pleased to receive a similar award for our new visitor centre at Westonbirt Arboretum in Gloucestershire. This was one of only 21 awards for the United Kingdom in 1980. The citation praised the skill, care and sensitivity with which the visitor centre had been designed and built. The architect was Andris Berzins and the builder R. A. Palmer & Sons Ltd. A commendation was also received from the Civic Trust for our forest cabins at Keldy in North Yorkshire.

The Eleventh Commonwealth Forestry Conference

25. A delegation led by the Director-General attended the Eleventh Commonwealth Forestry Conference in Trinidad and Tobago in September 1980. The Conference theme was *The Contribution of Forestry to Social and Economic Development*, and some 80 invited papers were discussed by delegates from more than 30 Commonwealth countries. The discussions reflected the concern felt over the high rate of depletion of forests, especially in tropical regions, and the Conference accepted that the forestry profession had a major role to play in ensuring a continuous flow of goods and services from the land.

Meeting of EEC Heads of Forest Services

26. The Forestry Commission acted as host to the 35th meeting of Heads of EEC Forest Services in Edinburgh from 14–17 April 1980. The meeting was combined with a successful forestry tour in central Scotland and the Government gave an official reception for the delegates at Edinburgh Castle.

Chinese Forestry Delegation's Visit

27. Following the visit of a British forestry delegation to the People's Republic of China in 1979, a party of eight Chinese forestry experts, led by Deputy Minister of Forestry Tang Ziqi, visited Britain for three weeks in May and June 1980. The tour, which was planned and co-ordinated by the Commission under the auspices of the Great Britain-China Centre, included discussions with Forestry Commissioners in Edinburgh and visits to Commission forests, private estates, universities, research establishments (Plate 3) and wood-processing plants in various parts of the country. The visit ended in London where the delegates attended receptions given by the Government and by the Chinese Embassy.

Commissioners

28. Lord Gibson-Watt and Captain D. S. Bowser were reappointed as parttime Commissioners from 1 October 1980 for four-year and two-year periods respectively. Mrs L. J. Whetstone was also appointed a part-time Commissioner on 1 October 1980 for a three-year period in place of Sir Ralph Verney. Sir Ralph, who had given outstanding service to the Commission for 12 years, became Chairman of the Nature Conservancy Council in May 1980.

29. Mr J. M. Hunter, Commissioner for Administration and Finance since 1976, retired on 31 January 1981 and was succeeded by Mr G. S. Murray, formerly an Assistant Secretary in the Department of Agriculture and Fisheries for Scotland. Mr Hunter was appointed a CB in the 1980 Birthday Honours List.

Senior Staff

30. Mr J. R. Booth retired as Chief Land Agent on 30 June 1980 and was succeeded by Mr J. M. Gwynn on promotion to Director. Mr R. P. Illingworth, a Principal Land Agent in the Estate Management Division, was promoted to fill Mr Gwynn's former position as Conservator, Estate Management.

31. Mr J. H. James, Conservator North West England, retired on 4 September 1980. He was succeeded by Mr A. A. Rowan, formerly an Assistant Conservator in South Scotland. Mr M. P. Shapcott retired on 4 January 1981 and was succeeded as Deputy Establishment Officer by Mr C. W. Simmonds on promotion from Senior Principal.

Staff Numbers

32. On 31 March 1981 the Commission employed 2,167 non-industrial staff (compared with 2,179 the previous year) and 5,785 industrial staff (5,950 the previous year).

Forestry Enterprise

Land Acquisition

33. The total area of plantable land acquired was 1,752 hectares, including 129 hectares already under trees. This represents a reduction of 77 per cent on the previous year's figures. The distribution was:—

	Total plantable
	area acquired
	(hectares)
England	230
Wales	313
Scotland	1,209
	1 0000 1

The average cost of plantable land was £329 per hectare, a reduction of 8 per cent compared with the average for 1979-80 of £357 per hectare.

Nurseries

34. The spring of 1980 was exceptionally dry and proved the worth of earlier investment in irrigation systems at Commission nurseries. The remainder of the year presented no major problems, and for the most part plant requirements were met.

Planting

35. The mild spring of 1980 enabled an early start to be made to our planting programmes, although they had to be suspended for several weeks during April and May as a result of the prolonged drought: in some areas 60 days with no measurable rainfall were recorded. Helped by the unusually open winter of 1980–81, however, new planting during the year under report totalled 11,634 hectares, and 5,014 hectares were restocked, compared with the planned programmes of 12,500 hectares and 4,800 hectares respectively.

Seed Collection

36. In an attempt to intensify efforts to collect conifer seed from British sources, seed liaison officers were appointed last year in many Conservancies. The results, in a moderately good year for cone crops, exceeded expectations and led to severe pressure on our seed extraction facilities. We estimate that over 3000 kg of seed will be extracted from the cones collected – far more than in any previous season.

Forest Protection

Fires

37. Over 1,300 hectares of plantations were destroyed by fire during the year. By comparison with the long-term average of about 400 hectares per annum, this was a high-loss year, approaching the levels experienced in the two worst postwar years of 1956 and 1976. A major contributory factor was the dry, windy weather during most of April and May and, as in 1976, it became necessary to ask the public to stay away from many of our forests. The most serious outbreaks, totalling some 500 hectares, occurred at Beddgelert Forest in Gwynedd, Arecleoch and Carrick Forests in southern Scotland and Ringwood Forest in Dorset. Once again, we should like to record our appreciation of the efforts and dedication of Fire Service personnel and our own staff which prevented more serious losses.

38. Equipment still under development by our Work Study Branch was used to apply foam to act as a barrier to the spread of fires in the South East England and South Wales Conservancies. This proved very successful, and the use of this technique will be extended. In collaboration with the Scottish Northern Fire Brigade, we are also looking into the possibility of using commercial helicopters for fire protection purposes (Plate 5). Their main advantages would be for observation and control of fire-fighting and for transporting men and equipment into otherwise inaccessible places.

Pine Beauty Moth

39. Some 1,500 hectares of our Lodgepole pine plantations in Scotland had to be treated with the insecticide fenitrothion in the summer of 1980 to control infestations of Pine beauty moth. The success of these measures is indicated by the fact that the area requiring treatment has reduced substantially for the second year running: in 1978 we had to treat 5,000 hectares and in 1979 some 3,200 hectares.

Deer

40. Deer are becoming an increasing problem to foresters. All species browse upon young trees, stopping or retarding their growth. In addition, red and sika deer strip the bark from older trees, causing death or severe deterioration of the timber. Browsing damage is most serious during the restocking phase following rotational felling, and an increasing number of plantations are now reaching this stage. The problem is greatest with roe deer which have a high rate of reproduction compared with other species. They browse at night and find good daytime cover in adjacent plantations making control by shooting difficult. Red and sika deer are a particular problem in the Highlands of Scotland. They prefer the open hills in summer but seek the shelter of plantations during the winter months.

41. The total number of deer culled on Commission land during the year under report was 18,471, comprising 11,669 roe, 5,014 red, 1,199 fallow, 504 sika and 85 muntjac. This was an increase of some 5 per cent over the 1978–79 and 1979–80 culls, but recent research in south east Scotland has indicated the need for a significantly larger cull if the population is to be kept under control and plantation damage kept down to an acceptable level. Fortunately, Sitka spruce, the main species of tree planted for commercial use, appears to be less susceptible to deer damage than most of the others. But unless deer numbers can be controlled, the diversification of tree species for landscape and wildlife conservation purposes will be severely limited.

Forest Management

Conservation

42. As a result of discussions with the Nature Conservancy Council, we have agreed to make nature conservation the prime management objective for three areas of mature, mixed-broadleaved woodland in the lower Wye Valley. The areas concerned are Lady Park Wood on the east side of the Wye and Blackcliff and Wyndcliff Woods on the west side, all of which are Grade I Sites of Special Scientific Interest. This project will enable the Nature Conservancy Council to monitor the development of woodland in the absence of commercial management.

43. Following an inspection by the International Commission on Silurian Stratigraphy, a comprehensive series of rock exposures at Mortimer Forest, near Ludlow, have been adopted as the international archetypes for rocks of this era. In liaison with the Nature Conservancy Council, we had previously excavated and exposed for demonstration a succession of fossil strata spanning a deposition period of about 10 million years. These strata, which were first revealed by road construction works, now form the basis of a local 'geological trail'.

2,**4**,5-T

44. The controversy over the use of the herbicide 2,4,5-T continued during the year. As mentioned in our last Report, the Advisory Committee on Pesticides was asked by the Minister of Agriculture, Fisheries and Food to evaluate the dossier produced by the National Union of Agricultural and Allied Workers containing details of cases where harmful effects were alleged to have followed its use. The Commission assisted the Committee in their examination of case histories of forest workers mentioned in the dossier. The Committee's report was published on 17 December 1980 and in a unanimous verdict stated that there was no valid medical or scientific evidence that 2,4,5-T herbicides harm humans, animals or the environment if they are used in the recommended way and for the recommended purposes. In response to a written parliamentary question the Minister of Agriculture, Fisheries and Food indicated that the Government accepted the Committee's advice.

45. Despite this assurance, the forestry Trade Unions, with TUC support, have continued to instruct their members not to handle herbicides containing 2,4,5-T. Although the need to use 2,4,5-T has markedly declined over the years, it still remains the cheapest and most effective method of dealing with woody weeds.

Forest Design

Landscaping

46. Fourteen projects were undertaken by our landscape architects during the year. These included the preparation of a comprehensive scheme at Ennerdale Forest in the Lake District which will involve the re-design of about twenty miles of the forest margin, as well as the landscaping of a pattern of felling coupes extending to over 1,000 hectares. The scheme aims to achieve a good balance between productive forestry and the requirements of this highly sensitive landscape in the Lake District National Park. Extensive consultations were carried out with the Lake District Planning Board, and discussions with other interested parties are nearing completion.

Visitor Centres

47. A start has been made on a comprehensive renovation of our oldest and largest visitor centre in Grizedale Forest in Cumbria, and work has been completed on converting the old kennels at Bedgebury Pinetum in Kent into a small visitor centre. We are also carrying out experiments to see whether outdoor 'listening posts' can be effectively used as a guide to the Pinetum. These are located in various parts of the Pinetum and contain information on tape explaining its development and giving details of the unique collection of coniferous trees.

Estate Management

Lochaweside Cabins

48. Work on our joint project with the Crown Estate Commissioners for the development of 44 forest cabins at Lochaweside in Argyll continued with the objective of having the cabins ready for letting by the spring of 1981. The Crown Estate Commissioners are financing the building of the cabins which we shall operate and manage. The site is located close to the forestry village of Dalavich, and a new village hall is included in the development which will meet the needs of the local residents as well as holidaymakers. A range of recreational facilities is also planned. In this International Year of Disabled People, a special effort is being made to cater for the needs of disabled holidaymakers with several of the cabins and the village hall being adapted for this purpose.

Queen's House, Lyndhurst

49. Last year we reported that an architect had been appointed to prepare a detailed scheme for the restoration of the Queen's House, Lyndhurst, for further use by our staff. The Queen's House, a Grade II listed building which has been associated with the administration of the New Forest for several centuries, had to be evacuated in 1977 on being found to be in a dangerous structural condition. We have now decided to proceed with its restoration on the basis of the architect's scheme at a cost of some $\pounds 0.5$ million. Alternative schemes for providing permanent accommodation for our local staff were considered, but the restoration of the Queen's House proved to be the cheapest option. The important historical features inside the building and its external appearance will be preserved with the guidance of the Historic Buildings Council, from whom a grant is being sought.

Sporting

50. The development, letting and control of sporting is a continuing estate and forest management function which rarely features in our Annual Reports. It does, however, provide a useful contribution to the Commission's income (see Statement 3 at page 74).

51. The scope for shooting in the Commission's forests is limited by two major factors. The sporting rights over some 60 per cent of our estate are either reserved by the lessors of the land or have been leased for long periods at nominal rents under arrangements made at the time of acquisition. Naturally, this area comprises much of the land with the best sporting potential. Of the remainder, some 15 per cent is deliberately not let because of possible conflict between sporting and other recreational activities, and as public access increases this percentage will tend to rise.

52. Where shooting is available for let, tenants are normally selected by competitive tender and a typical lease is of between three and five years' duration. As would be expected, rents vary widely throughout the country, from a few pence per hectare for extensive upland areas to as much as £14 per hectare in parts of East Anglia. Modern leases take careful account of conservation and designate species which may be shot for sport and those which must be controlled. Newly-planted areas generally provide good sport for the first seven years. Their sporting value then declines as the plantation enters the thicket stage. Large even-aged woods do not provide good shooting unless the open areas are extensive, but now that many plantations are moving into rotational felling regimes, resulting in a patchwork of uneven-aged crops, the quality of sporting in many larger woods is improving.

53. Our first priority in deer control is to keep damage to plantations down to an acceptable level. For this reason, deer shooting within plantations is only made available through lettings to individuals, syndicates or clubs on terms which will ensure selective control to a plan agreed with the Commission. As an alternative, we give day permits to sportsmen accompanied by a Commission stalker, but these tend to be limited by staff resources rather than by a shortage of suitable locations. Sportsmen are charged for the stalker's service, together with a trophy charge and a charge for any venison taken. Of last year's total deer cull of 18,471 (see paragraph 41), day-permit holders shot 1,412 and leaseholders 1,952; the remainder were shot by Commission rangers. The sum of £121,833 was obtained from the issue of day permits.

54. We also provide fishing through leases and day permits (Plate 4). As with shooting, the best fishing tends to be reserved or leased back to the vendor of the land. When fishing is under Commission control, leases to angling associations are preferred as this ensures that the sport can be enjoyed by a large number of people. Day-permit fishings provide even greater opportunities for the public, but the scope is limited by the cost of stocking and management.

55. Ways of improving the fishing potential of forest streams are described in a new Forestry Commission publication *The Management of Forest Streams* by Dr Derek Mills of the Department of Forestry and Natural Resources at Edinburgh University.*

Disposals

56. Income from the sale of land, houses, farms and other property no longer needed for forestry purposes, together with receipts derived from the transfer of land required by local authorities and other public bodies for statutory works, increased last year by $\pounds 1.7$ million to $\pounds 4.5$ million.

57. As indicated in paragraph 2, the Government's forestry policy statement announced the intention to reduce our call on public funds for the management of the Forestry Enterprise through the sale, or sale and lease-back, of some of our land and plantations. We have already done a good deal of preliminary work in identifying suitable parcels which will be offered on the open market once the enabling legislation is passed.

House Purchase by Tenants

58. During the year a scheme was introduced to encourage sitting tenants of surplus residential accommodation to purchase their homes on terms similar to those available to local authority tenants. Substantial discounts on the open-market, vacant-possession value of the property are available to tenants who have been in occupation of a publicly-owned house for at least three years.

Management of Property

59. During the year we spent $\pounds 0.8$ million on the construction, improvement and acquisition of buildings, compared with $\pounds 1.8$ million the previous year.

^{*} Forestry Commission Leaflet No 78, HMSO, £0.70 net.

Projects completed included a new bark-peeling and milling unit at Brandon Central Depot in Suffolk, which formed a significant part of a major redevelopment we are carrying out at the depot, and a new mechanical engineering workshop and civil engineering store at Shin Forest in Highland Region. The Commission's rental income for the year amounted to $\pounds 1.5$ million.

60. The numbers of properties managed by the Commission are given at Table 13 of Appendix VI.

Harvesting and Marketing

Demand

61. The demand for small diameter roundwood altered little during the year, increased quantities supplied to the particleboard industry being offset by reductions in the total quantity of pulpwood supplied. Within the pulpwood sector, there were dramatic changes associated with the closure of three pulpmills, as described in paragraphs 20 and 21. The log market began the year well, but this was short-lived as the effects of the recession combined with aggressive competition from overseas producers in the sawn softwood market caused a drop in demand. Despite these adverse factors, the total volume of wood harvested (2,469,000 cubic metres) was 6 per cent above the previous year's figure and only 5 per cent below the planned programme.

Prices

62. Prices for small diameter roundwood came under pressure toward the end of the year as the industries concerned faced increasingly difficult trading conditions and escalating costs, particularly for energy. At the same time, their competitive position was adversely affected as sterling gained strength, especially against European currencies. The developments in exchange rates also had an adverse effect on prices for pulpwood for export. While prices for softwood sawlogs showed marginal gains over the year compared with the previous twelve months, this concealed very significant changes. Prices paid at auctions for logs to be supplied from April 1980 showed considerable increases, but they began to fall from the second quarter of 1980 and showed a sharp decline at auction sales later in the year.

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

Unit	1976–77	1977–78	1978–79	1979-80	1980-81
Million	-	-			
cubic metres	2.02	1.97	2.01	2.33	2.47
**	0.83	0.75	0.68	0.76	0·8 2
13	1.19	1.22	1.33	1.57	1.65
£ million	23.91	25.91	26.61	34.94	36.64
		10.01	14.70	10.27	a a a a
**					23.79
**	14.13	13.60	11.91	15.57	12.85
£	11.56	13-15	13.24	15.00	14.83
	4.57	6.25	7.31	8.31	9.63
>>	6.99	6.90	5.93	6.69	5.20
	Million cubic metres " f million " f f u f y	Million cubic metres 2.02 0.83 ,, 1.19 £ million 23.91 ,, 9.23 ,, 14.13 £ 11.56 ,, 4.57 , 6.99	$\begin{array}{c} \hline Million \\ cubic metres & 2.02 & 1.97 \\ , & 0.83 & 0.75 \\ \hline , & 1.19 & 1.22 \\ \hline \pounds million & 23.91 & 25.91 \\ \hline , & 9.23 & 12.31 \\ , & 14.13 & 13.60 \\ \hline \pounds & 11.56 & 13.15 \\ , & 4.57 & 6.25 \\ \hline , & 6.99 & 6.25 \\ \hline \end{array}$	Million cubic metres 2.02 1.97 2.01 ,, 0.83 0.75 0.68 ,, 1.19 1.22 1.33 £ million 23.91 25.91 26.61 ,, 9.23 12.31 14.70 ,, 14.13 13.60 11.91 £ 11.56 13.15 13.24 ,, 4.57 6.25 7.31 6.99 6.90 5.93	Million cubic metres 2.02 1.97 2.01 2.33 ,, 0.83 0.75 0.68 0.76 ,, 1.19 1.22 1.33 1.57 \pounds million 23.91 25.91 26.61 34.94 ,, 9.23 12.31 14.70 19.37 ,, 14.13 13.60 11.91 15.57 \pounds 11.56 13.15 13.24 15.00 ,, 4.57 6.25 7.31 8.31

Conifer Sawlog Sales

64. The average price of logs supplied against contracts increased marginally compared with the previous year. However, the Commission's Log Price Index, which is an indication of forward prices, fell from 203.4 at 31 March 1980 to 126.3 at 31 March 1981; this represents a drop of 38 per cent and reflects the marked deterioration in price experienced in our competitive sales in the second half of the year.

Conifer Small Roundwood Sales

65. The year was dominated by the closure of three pulpmills consuming some 550,000 tonnes of pulpwood annually. Closures in the paper and board industry have not been confined to those mills using home-produced wood for pulping, as the competitive position of overseas producers continued to be favoured by the strength of sterling and lower energy costs.

66. Deliveries of pulpwood were sustained by strong activity at home mills up to the time the closures took place and subsequently by the successful transition to export sales, and they were only $6\frac{1}{2}$ per cent below the record level of the previous year.

67. For the second successive year there was an increase in the volume of wood supplied to the particleboard industry. Demand for roundwood was strong at the start of the year but weakened as the year progressed. Our deliveries of wood to this market were 30 per cent more than the previous year.

68. Deliveries of round pitwood to the National Coal Board were maintained at last year's level. The Board continued their policy of substituting British roundwood for imports.

Sales of Standing Trees

69. Removals of timber under standing sales contracts totalled 818,000 cubic metres, an increase of 7 per cent compared with the previous year. Average prices for all sales of standing timber fell by 20 per cent. Our Great Britain Price Index for sales of trees in the smaller size categories fell from 276.6 at 31 March 1980 to 244.4 at the end of the year, a decrease of 12 per cent.

Other Developments

70. To deal with the consequences of the pulpmill closures, arrangements were made to set up a working group with the growers' and trade organisations. This close co-operation produced positive results. In England and Wales we took steps to enter into export contracts at a number of well-situated ports which also provided market opportunities for private forestry interests, and in Scotland this co-operation led to successful export tenders by ourselves and the growers' and trade organisations.

71. The modernisation and expansion of Kilmallie Sawmill at Fort William, owned by Riddoch of Rothiemay Ltd, to which we referred in last year's Report, has now been completed. Another welcome development was the opening of a major new sawmill by Western Softwoods Ltd on a greenfield site at Newbridgeon-Wye.

72. Along with the Department of Industry and a number of companies in the paper and board industry, we are sponsoring a study to consider the feasibility

of small-scale chemical pulping in this country. We have also been closely involved, with private forestry interests, in a study sponsored by the Welsh Development Agency to identify potential developments in the small roundwoodusing industry in Wales.

Harvesting

73. The unit cost of producing small roundwood is always greater with small trees and with thinnings as opposed to clear felling. The effect of the inflation experienced over the past five years has been particularly severe in relation to production costs; the situation has been further exacerbated by the fall in wood prices in real terms over the period. As a consequence, we have increased our efforts to find cost-effective methods of mechanised production. The increase in the use of forwarders for shortwood working has continued. Trials of a feller-buncher and a flail delimber from the United States proved unsuccessful, however, under most British conditions, and the emphasis for development now rests firmly on Scandinavian experience. A thinnings harvester from Denmark and a compact processor from Sweden (Plate 6) have been purchased for field evaluation.

Engineering

74. While improvements in road-construction techniques and plant are constantly being sought, our major effort in this field has been placed upon improving the efficiency of road maintenance in view of the increasing length and more intensive use of our forest roads. The effect of poor road-maintenance standards on transport costs, both direct and through increased vehicle-repair costs, is well known, which makes it important to aim for improved standards while striving for reduced costs. Measures being adopted or investigated include the more efficient integration of grading and compaction plant; the wider use of crushed stone; improved screening of road stone, particularly of economically won local deposits; and a low-cost method of bituminous surfacing.

75. The length of forest road being maintained now amounts to some 15,491 km (9,682 miles). During the year, roads constructed or subject to major improvements totalled 209 km (131 miles).

76. The location of deposits of construction materials on Commission land, and the subsequent identification of their properties and potential uses and markets, is an objective to which we have been giving increasing priority. Where such materials have been exploited, care has been taken to minimise damage to the environment.

77. During the year we replaced a number of our wide-tracked crawler tractors by four-wheel-drive tractors for use on soft ground. The new tractors are equipped with lightweight tracks, or half tracks combined with tyres of exceptional width (1,100 mm) to improve flotation. Their main use so far has been for mounting rotary ditchers, the introduction of which should materially reduce the cost of forest drain maintenance.

78. With the growing size and complexity of the Commission's mechanical plant and vehicle fleet, the need to reduce maintenance costs becomes increasingly important. This is particularly true in the case of hydraulics, which are used in their simpler forms on virtually all items of mechanical plant, and which

in the form of hydrostatic drive are used for main power transmission and increasingly for powering auxiliary functions. Such systems are very demanding in terms of mechanical maintenance and the diagnosis of faults, and we are paying increasing attention to the appropriate training of our mechanics in the latest techniques and developments.

Forest Workers' Pay

79. There were two settlements for forest workers during the year under report. The first, effective from 21 July 1980, followed an interim revision of the rates of pay of agricultural workers in Scotland, which affected the averaging formula we use to fix forest workers' pay throughout the Commission. The relevant weekly increases were ± 1.30 for unskilled forest workers and ± 1.50 for forest craftsmen, giving new rates of ± 58.40 and ± 66.45 a week respectively; at the same time the piecework incentive level was reduced to $123\frac{1}{2}$ per cent. Pay rates were further increased from 2 February 1981 by ± 6.10 a week for unskilled forest workers and ± 6.90 a week for forest craftsmen, giving new weekly rates of ± 64.50 and ± 73.35 respectively. The annual holiday allowance is also to be increased by two days from November 1981.

80. The average weekly earnings of forest workers, based on a sample of one full week's work by all grades in each quarter, were £87.73.

Health and Safety

81. The accident rate, expressed as a proportion of the number of employees, showed almost no change over the previous year. The actual number of accidents reported increased very slightly from 423 to 431, although the general trend over the past decade continues to be one of improvement. There was a significant increase in the number of employees engaged on harvesting work which might have been expected to result in a sharp increase in the accident rate in this activity, but we are pleased to record that the rate actually improved from 18.8 per cent to 16.5 per cent.

82. New regulations requiring the reporting of serious accidents and certain dangerous incidents directly to the Health and Safety Executive came into force on 1 January 1981. Our departmental instruction on accident reporting has been revised in the light of these new legal requirements.

83. Following the successful introduction of new lightweight protective suits for use by workers spraying pesticides, a review of other pesticide safety equipment was undertaken in 1980. Several new products have emerged as a result of this exercise and will be introduced as existing stocks are exhausted.

84. We have continued to co-operate closely with those international organisations concerned with the health and safety of forest workers, notably the International Labour Organisation and the International Organisation for Standardisation. These bodies are closely involved in the development of safety equipment, working techniques and the safe design and construction of machinery. We have also continued to monitor the effects of vibration among a group of chainsaw operators in order to measure the long-term benefits of antivibration (A/V) systems. The dramatic improvement witnessed soon after the introduction of A/V chainsaws is showing signs of levelling out and there will be a continuing need for further medical and technical research into this problem.

Finance

85. The accounts of the Forestry Enterprise, including general notes and explanations together with the Comptroller and Auditor General's report thereon, appear after page 70.

86. The current quinquennium does not end until 31 March 1982 and a full assessment of the performance of the Enterprise must therefore await the asset revaluation to be carried out at that date. A preliminary indication is possible, however, by comparing the actual results for the Plantations Account (Statement 1 on page 73) and the Harvesting Trading Account (Statement 4 on page 75) with the standards set and examining the variances on other activities. These are set out in the summary at Statement 8 of the report on page 78.

87. It is important to emphasise that the 'deficits' shown in the Plantations and Harvesting statements are adverse variances in relation to standard values including the 3 per cent target rate of return in real terms. On the assumption that future expenditure and income flows did not vary from the standards set, a nil variance would indicate that the 3 per cent target rate was being achieved for the period under review. Variances of the order shown, while implying a return below 3 per cent, nevertheless indicate the achievement of a positive surplus.

88. The main conclusion to be drawn is that, because of the economic recession, and in particular the failure of timber prices to keep up with the general rate of inflation, the 3 per cent target rate of return in real terms on the plantation investment will not be achieved in the 1977–82 quinquennium. Generally speaking, expenditure has been held within the standards, but harvesting income, which is mainly influenced by world market conditions and exchange rate fluctuations, has fallen well below the standard based upon prices prevailing up to 1977.

Harvesting Trading Account

89. The cumulative adverse variance against the standard over the first four years of the quinquennium was $\pounds 26.3$ million, analysed as follows:—

			Variances		
	Standard	Actual	Absolute	Percentage	
	£ million	£ million	£ million		
Income	157-3	123.4	(33·9)	(22)	
Expenditure	107-3	99 ∙7	7.6	7	
Balance	50-0	23.7	(26.3)		

Whereas costs have been held within the standards set, income has fallen well below the rate of inflation and the situation is unlikely to improve in 1981-82.

Plantations Account

90. The cumulative adverse variance to date is $\pounds 4.9$ million, of which the main elements are:—

			Vari	Variances	
	Standard £ million	Actual £ million	Absolute £ million	Percentage	
Land planted and plantations ac-					
quired	12.6	16.7	(4.1)	(34)	
Road construction and maintenance	16.3	17-8	(1.5)	(9)	
Forest management and formation				-	
(net)	34.9	35-1	(0·2)	_	
Oncost, overheads, etc	72-4	71·5	0.9	1	

The standard for land planted represents the average price of land at the 1977 revaluation, updated by the GDP inflation factor as appropriate. Comparison with the actual cost of land during the period gives rise to the variance shown. The actual price of land has increased by 124 per cent during the first four years of the quinquennium, whereas the GDP factor has risen by only 67 per cent. The additional cost of road construction and maintenance is due to the trend to larger and heavier vehicles and more stringent safety requirements.

Surplus Estate

91. The cumulative adverse variance on the management of properties not required for the Enterprise now stands at $\pounds4.6$ million, reflecting the way in which statutory provisions limit our ability to make charges sufficient to cover outgoings, management expenses and interest on capital employed. The substantial write-up of $\pounds9.3$ million on surplus estate properties, which because it is unrealised has been credited to current cost reserve, more than offsets the operational deficit.

Forestry Authority

Legislation

92. Work on legislation during the year was mainly concentrated on the Forestry Bill, of which details are given in paragraphs 4-9.

93. The following Statutory Instruments made in our name were laid before Parliament on 9 April 1980 and came into force on 1 May 1980:—

- (a) Import Controls The Import and Export of Trees, Wood and Bark (Health) (Great Britain) Order 1980 (SI 1980/449) which implements the EEC Plant Health Directive of 1976 (as amended).
- (b) Domestic Controls The Tree Pests (Great Britain) Order 1980 (SI 1980/450) which contains powers to combat non-indigenous tree pests and diseases which, despite the import controls, might secure a foothold in Britain.

94. The following Statutory Instrument was made by the Minister of Agriculture, Fisheries and Food on 27 March 1981 but did not come into operation until after the end of the period covered by this Report:—

New Forest – The New Forest (Confirmation of Byelaw of the Verderers of the New Forest) Order 1981* which provides for increases in the maximum fees levied by the Verderers for the marking of each head of cattle depastured in the Forest to £25 (Commoners' animals) and to £50 (other animals).

Forestry Commission Byelaws

95. The new composite set of Byelaws to cover all Commission land, to which we referred in our last Report, has still to be laid before Parliament.

Private Forestry

96. The level of private planting showed a further slight improvement. A total of 11,399 hectares of planting was grant-aided under the Commission's schemes in 1980-81 (compared with 11,167 hectares the previous year), of which 8,400 hectares were new planting (Table 3 of Appendix VI). In addition, it is estimated that some 543 hectares were planted without grant aid.

97. Applications for entry to the Basis III Dedication Scheme continued at a high level with some 27,700 hectares being approved in the year. As announced in the Government's forestry policy statement (paragraph 2), the Basis III and Small Woods Schemes are to be closed to new applications from 1 July 1981 and will be superseded by a new and administratively simpler scheme on 1 October 1981. This was the main proposal arising from the Rayner study into the administration of forestry grants and felling controls to which we referred earlier (paragraph 11).

Forestry in the European Community

98. Discussion of the European Commission's Communication entitled Forestry Policy in the European Community, to which we drew attention in our 1978–79 Report, has continued in Brussels. The status of forestry in the Treaty of Rome

^{*} This Order came into operation on 11 May 1981 as SI 1981/550.

is less than straightforward and there are legal limitations on the actions that can be taken at Community level. This explains the care with which proposals affecting forestry have been treated and the resultant delay in reaching agreement on the Communication.

99. The Director General attended the regular twice-yearly meetings of Heads of EEC Forest Services, one of which was held in Edinburgh (see paragraph 26). Other Forestry Commission officials attended meetings of EEC Working Groups on forestry policy, agricultural structures, plant health, forestry research and timber supplies.

Research and Development

100. 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.

Contract Work

101. Our five-year contract with the Department of the Environment to provide an arboricultural information and advisory service and to undertake arboricultural research ended in December 1980 and was extended for a further three years. The information and advisory service is fulfilling a long-felt need, especially amongst arboriculturists in local authorities, and is successfully supplying information obtained from arboricultural research and from relevant forestry research to practitioners in arboriculture. Requests for advice continue to rise. The main arboricultural research efforts have been on tree decay and wound treatment (which has demonstrated that most wound treatments are of doubtful benefit) and on plant handling and grass-sward control. The latter work has shown that in lowland sites complete control of weeds, particularly grass, can have a highly beneficial effect on tree growth. Inadequate care of plants between lifting in the nursery and planting is a serious source of planting losses.

102. Under another contract with the Department of the Environment for research into the establishment of trees on deep-mined colliery spoil, an extensive range of experiments has been established on colliery tips with the active co-operation of local authorities. We also have a contract with the Energy Technology Support Unit of the Department of Energy. Under this contract, which is partially funded by the EEC, we are conducting a number of experiments to test species, spacing and rotation length of short-rotation coppice for the production of energy feedstock.

103. All these contracts are of mutual advantage both to the Departments commissioning the work and to the Forestry Commission which benefits from the wider range of research experience generated within the Research and Development Division.

Research Work at Universities

104. During the year under review, we funded in whole or in part 23 research projects at various universities at a total cost of £89,000. Of these, 17 were funded by the Forestry Commission with Co-operative Awards in Science and Engineering (C.A.S.E. studentships); these awards require only a modest outlay from the co-operating agency and have enabled the Commission to involve itself in a wide

range of university expertise within the limited budget available for commissioning research with outside agencies. The remaining six research grants were considerably larger and included work on the Elm bark beetle at Salford, on vegetative propagation at Aberdeen and on Beech bark disease and various aspects of recreation at Surrey.

Hydrology

105. Studies by the Institute of Hydrology over more than ten years at Hafren Forest in Powys have suggested substantially lower water yields from forests than from well-managed sheep pastures. In order to estimate yields where rainfall is lower, with substantial snowfall, and where the comparison is with rough upland pasture, a new experiment is being started at Strathyre Forest in central Scotland. There has been increasing concern over the effects on water quality of top-dressing forests with phosphatic fertiliser. The Water Research Centre are therefore planning an investigation on water quality in Glenorchy Forest in Strathclyde. Two consortia – one for water quantity and one for water quality studies – have been formed to fund and steer these and other new projects on hydrology, of which we are one of the supporting bodies.

New Herbicides

106. Glyphosate has replaced paraquat to a large degree for the control of grasses and broadleaved herbaceous weeds. It can also be used instead of asulam for bracken control, has shown considerable promise for controlling heather (aerial trials having been completed) and is better, although more expensive, than 2,4,5-T for the control of broadleaved deciduous woody weeds.

107. Hexazinone is an excellent grass and broadleaved herbaceous weedkiller, which shows good activity on peat as well as mineral soils and is tolerated by pines and spruces. An atrazine/dalapon granule has recently become available which improves the aggressiveness of atrazine alone and reduces the weight of granules carried due to the higher level of active ingredient. Other new herbicides of interest are terbuthylazine, a grass herbicide which is longer-lasting than atrazine and less damaging to broadleaved deciduous trees, and cyprazine, which shows excellent crop tolerance to pines and spruces and is capable of killing heather outright; neither of these herbicides is being marketed as yet in this country.

Census of Trees and Woodland

108. In our 1978–79 Report we announced our intention to undertake a census of all trees and woodland in Great Britain. This, the first national census since 1965, was started in the autumn of 1979 (Plate 7). One of its major objectives is to produce a clear picture of the distribution of Britain's trees and woodland and their potential timber production to assist in planning the expansion of existing wood-using industries and the location of new ones. It will also provide local authorities and others with information on numbers and species of trees and their current condition, from which subsequent assessments can monitor change. Satisfactory progress had been maintained in the survey work, which has made use of aerial photographic techniques, and we shall begin publishing the results in 1982, county by county in England and Wales and by Forestry Commission Conservancy areas in Scotland.

Plant Health

109. As mentioned at paragraph 93, two new plant health Orders came into operation on 1 May 1980. The first of these, the Import and Export of Trees, Wood and Bark (Health) (Great Britain) Order 1980, implements the EEC Plant Health Directive of 1976 and controls the import of forest tree plants, the wood of conifers and of certain broadleaves (oak, elm, sweet chestnut and poplar) and isolated bark. These controls also extend to wooden pallets, containers and dunnage. Our plant health inspectors, based in Conservancies and covering strategic locations throughout the country, have powers under the Order to enter ports and premises, examine wood, prohibit landing or release of consignments and, if necessary, to direct importers to take remedial action such as removal of bark, fumigation or other treatment of the consignment. Because of the close working relationship between Commission inspectors and Customs officials, inspections have continued to be carried out promptly and effectively.

110. The second new Order, the Tree Pests (Great Britain) Order 1980, provides for immediate action to be taken if, despite import controls, a non-indigenous pest or disease arrives in this country and establishes a foothold.

Imports of Canadian Coniferous Sawn Wood

111. During 1980, imports of low-grade coniferous sawn wood from Canada were found bearing excessive bark and, in some cases, harbouring non-indigenous pests. In order to assess and deal with the problem, our Plant Health Officer and Chief Research Officer (South), together with a representative of the Irish Forest and Wildlife Service, visited both western and eastern Canada. Material for export was examined at first hand, and in conjunction with the nine Canadian Wood Associations and the Canadian Plant Quarantine Authority a procedure was developed to ensure effective bark removal and to furnish supporting documentary evidence in the form of a certificate of debarking prepared by the industry. A formal agreement between the UK, Eire and the Canadian industry to implement these procedures was reached in Ottawa in November 1980. After some initial teething problems, the new system, which came into force on 1 February 1981, appears to be working well and consignments now entering the UK have shown a marked improvement in standards of bark removal. The EEC is currently considering the scheme for more general application and possible changes in the Plant Health Directive.

Oak Wilt

112. Stringent controls continue in force to prevent the entry into this country of oak wilt, which is known only to occur in the USA. Our objective for the time being remains the examination of all consignments of sawn oak wood from North America. The UK continues to maintain a ban on the entry of oak logs from that region.

113. The Forestry Commission is participating in a joint EEC/USA research programme on oak wilt. This is designed to provide information on new treatments for North American oak wood to reduce still further the possibility of the disease reaching Europe. Studies are also under way on the resistance of European oak to the disease and on possible European vectors. In the USA the disease spreads through points of natural grafting between the roots of adjacent trees, and we have received a research grant from the EEC for work on the frequency of root grafting in European oak.

Dutch Elm Disease

114. The disease continued to spread in northern Britain during the year. Although in some areas reported losses were about the same or in a few cases slightly lower than in previous years, there was no significant change overall. The area broadly north of a line from the Mersey to the Humber remains classified as lightly affected—that is the area where disease levels are still sufficiently low to justify control measures being applied. The strategy we have recommended to local authorities in the lightly affected area continues to be one of concentrating their resources on sanitation felling in localities where disease levels are low and can be positively controlled.

115. Many local authorities are no longer able or prepared to provide finance for Dutch elm disease control measures, and some have announced their decision to cease exercising their powers under the Dutch Elm Disease (Local Authorities) Order 1977 (as amended 1979). We have decided, however, not to change the statutory boundaries of the control area for the time being, and to continue to operate movement control, still under licence, but more flexibly where this is justified and consistent with our general strategy.

116. Trials of curative injections of the fungicide ceratotect have continued with the co-operation of several local authorities. Results so far are encouraging, but it must be emphasised that early detection and specialist application of the chemical is essential. In view of the cost, this is still likely to be a treatment suitable only for specimen trees of considerable amenity value. The use of cacodylic acid to create 'trap trees' for beetles is also being investigated, but it will be some time before any realistic assessment can be made of its likely contribution to control programmes.

117. Under the auspices of the EEC, trial planting of resistant types of elm have been established in many European countries, including Britain. These elms are not regarded as suitable visual replacements for native elms, because of their different form and shade characteristics. They may, however, be of value in certain situations, especially in urban plantings.

Education and Training

118. There was a reduction of about 20 per cent in the demand for training in harvesting operations (Plate 8), mainly because of the fall in the market for timber and our ban on the recruitment of workers in the last quarter of the year. Training was given in the usual wide range of craft, technical and management subjects, with more time available for the technical updating of supervisors and the revision of technical manuals.

119. The Scottish Technical Education Council have prepared a new, unified system of part-time and full-time courses leading to a Certificate and Diploma in Forestry. Commission staff have had a principal role in the design of the new system, and the first part-time course is due to start at the Inverness Technical College in May 1981, with the first full-time Diploma course expected to begin in the autumn.

120. We plan to continue offering courses for forest workers outside the Commission, but it is of interest that the major role in 'on site' training of industrial staff in the private sector is now being carried out under the auspices of the Forestry Training Council itself.

Public Relations

121. Over the past year forestry has received more than its usual share of attention from all sections of the media as a result of the policy considerations to which we referred at the beginning of this Report. Other major news stories included the export of pulpwood following the mill closures (paragraph 21) and the continuing controversy over 2,4,5-T (paragraphs 44-45). The press, radio and television all responded well in publicising the critical forest fire risks during the early part of the year (paragraph 37); as well as giving excellent coverage to the Commission's announcements and appeals, many initiated their own features to highlight the threat to Britain's woodlands.

122. Our mobile display units' theme last year was the developments in forestry during the Commission's 60-year history, and they are estimated to have attracted some three-quarters of a million visitors at agricultural shows. A special display was also produced for the Commonwealth Forestry Conference in Trinidad and Tobago (paragraph 25).

123. Countryside subjects are currently very popular among the reading public, and besides our own publications on forestry and countryside matters (Appendix V contains a list of those titles we published during the year), we were substantial contributors to books published by Reader's Digest, the Automobile Association, Marks and Spencer and Observer Newspapers. We were also closely involved with major documentaries on forestry screened by Border TV and Granada TV and with a number of programmes in the BBC TV series *In the Country*.

Finance

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

DAVID MONTGOMERY, Chairman G. D. HOLMES, Deputy Chairman and Director General D. S. BOWSER GIBSON-WATT D. R. HICKLIN 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



PLATE 1 Pulpwood for export to Scandinavia being loaded at Montrose Harbour.



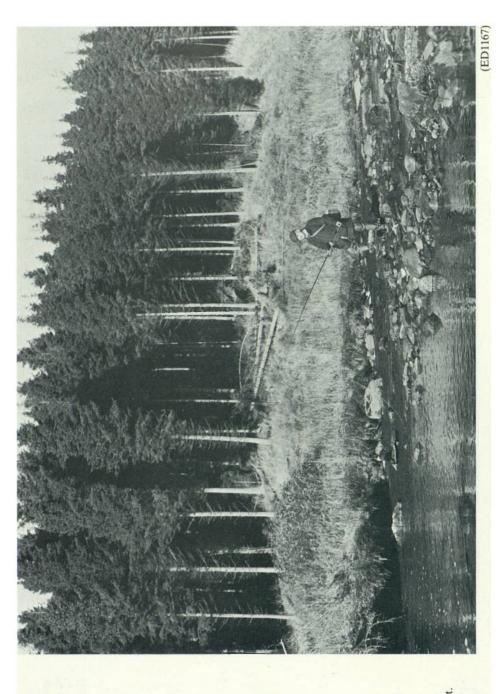
PLATE 2 Visitors at the David Marshall Lodge in the Queen Elizabeth Forest Park. The Lodge receives some 200,000 visitors each year.

(E5429)

PLATE 3 Members of the Chinese forestry delegation at a tree planting ceremony during their visit to the Forestry Commission's Research Station at Alice Holt Lodge, Surrey, in June 1980.



PLATE 4 An angler tries his luck in a stream at Newcastleton Forest. Many forest streams provide good fishing.



Appendix I Statutory and other Committees appointed by the Forestry Commission: membership at 31 March 1981

National Committees

England

Mr J. N. Kennedy (*Chairman*), Mr J. L. Benson, Mr J. Brocklebank, Major D. J. C. Davenport, Mr D. R. Hicklin, Mrs L. J. Whetstone. *Secretary to the Committee:* Mr J. R. Wallace. The Committee met in June 1980 and February 1981.

Scotland

Capt. D. S. Bowser (*Chairman*), Lt.-Col. A. E. Cameron, Dr Jean Balfour, Mr D. A. Mithen, Mr J. D. Pollock, Mr William Wolfe, Capt. J. M. A. Yerburgh. *Secretary to the Committee*: Mr W. MacLachlan. The Committee met in April and November 1980.

Wales

Lord Gibson-Watt (*Chairman*), Mr R. T. Bradley, Mr B Davies, Mr D Davies, Mr T. O. Lewis, Mr J. W. L. Zehetmayr. *Secretary to the Committee*: Mr E. G. Owen. The Committee met in June and November 1980.

Regional Advisory Committees

ENGLAND

North-West Conservancy

Mr J. L. Benson (*Chairman*), Mr G. Price Bowring, Mr J. E. Croasdale, Lord Forester, Dr H. M. T. Frankland, Mr F. G. Humphreys, The Earl of Lonsdale, Mr M. Taylor, Mr A. H. Unsworth. *Secretary to the Committee*: Mr D. P. Pringle. The Committee met in April and August 1980 and January 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 D. L. Hendry. The Committee met in April 1980 and February 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 March and September 1980.

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 1980.

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 May 1980 and January 1981.

SCOTLAND

North Conservancy

Lt.-Col. A. E. Cameron (*Chairman*), Mr Ewan J. Brodie, Mr J. Evans, Mr A. N. S. Kinnear, Mr G. G. Lyon, Major A. McCall, Mr H. D. Skinner, Capt. R. W. K. Stirling, Mr A. F. F. Williamson. *Secretary to the Committee:* Mr K. Roscoe. The Committee met in May and October 1980.

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 E. G. Roberts. The Committee met in May and November 1980 and January 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, Father M. Lynch, Mr R. A. McClymont, Capt. J. G. Milne-Home. *Secretary to the Committee*. Mr R. B. Stewart. The Committee met in April and June 1980.

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 June and November 1980.

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 1980.

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 1980.

Home Grown Timber Advisory Committee

Sir Goronwy Hopkin Daniel (Chairman)	*Mr J. D. W. Janes
Mr W. J. Alsford	Mr H. J. Keys
Mr F. Baugh	*Mr W. E. Lane
*Dr R. H. Best	*Mr R. J. Lennox
Mr H. J. Brewis	The Earl of Lonsdale
Mr A. J. Brownlie	Mr P. S. Murray
The Hon James Bruce	*Mr A. Mills
Mr D. J. Cooper	*Mr R. Pierson
Mr J. G. M. Dawson	Mr J. V. Pomeroy
Lord Dulverton	Mr H. Richardson
The Hon. James Galbraith	*Professor C. J. Taylor
Mr J. Glegg	Mr R. N. J. Watson
Mr R. M. Harley	Secretary: Mr W. G. Williamson

*Independent Members

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 1980 and March 1981. The Annual Report of the Committee is at Appendix II, page 37.

Technical Sub-Committee of the Home Grown Timber Advisory Committee

Mr H. Richardson	Chairman
Mr A. E. Aitkens Major P. C. Ormrod	Timber Growers England and Wales Ltd
Mr D. B. Crawford	Timber Growers Scotland Ltd
Mr J. R. Maeer	British Timber Merchants' Association (England and
Mr R. J. Tilley	Wales)
Mr T. S. Smith	Hame Timber Marsharts' Association of Soctland
Mr J. E. McDonald	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 A. O'Connor	UK Particleboard Association
Mr S. Neale	National Union of Agricultural and Allied Workers
	Secretary: Mr J. R. Aaron

The Sub-Committee met in April, July and October 1980 and January 1981.

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

Professor C. J. Taylor	Chairman
The Earl of Lonsdale	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 C. E. Budden	Association of United Kingdom Wood Pulp Producers
Mr J. G. M. Dawson	Timber Trade Federation
Mr J. Wotherspoon	National Coal Board
-	Constants Mr. W. L. Anderson

Secretary: Mr W. J. Anderson

The Sub-Committee met in May and November 1980.

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. 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 1980 and February 1981.

Forestry Training Council

Professor J. D. Matthews (Chairman)

Employer Members

Major General T. A. Richardson
Mr P. J. D. DonnellyTMr A. F. F. Williamson
Commander A. G. ClaridgeTMr C. W. Simmonds
Mr J. F. GoodwinFMr A. G. PhillipsA

Timber Growers England and Wales Ltd Timber Growers Scotland Ltd Forestry Commission Association of Professional Foresters

35

Employee Members

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

Education and Training Members

Mr A. I. MacNab Mr A. P. B. Hamilton	Forestry Education, Scotland
Mr A. G. Pyman Mr R. M. Boothroyd Mr J. Saddler	Forestry Education, England and Wales 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 Mr D. G. Whieldon Mr K. J. Ramsay Mr D. J. Cooper Mr P. B. Cruickshank Mr J. H. Hose Mr A. Mills Mr R. Neale

Prof. J. D. Matthews Mr C. W. Simmonds Mr D. A. Bardy Mr R. J. Bell Chairman Timber Growers England and Wales Ltd Timber Growers Scotland Ltd British Timber Merchants' Association (England and Wales) Home Timber Merchants' Association of Scotland National Union of Agricultural and Allied Workers Transport and General Workers' Union General and Municipal Workers' Union Forestry Training Council Forestry Commission Forestry Commission Safety Officer Secretary

Appendix II

Home Grown Timber Advisory Committee:

Annual Report for the year ended 31 March 1981

At its December 1980 meeting the Committee considered the Ministerial statement on forestry policy which had been made on 10 December 1980 and for which it had long been pressing. The Committee warmly welcomed the statement's commitment to the continuing expansion of forestry in Britain, although certain members considered that it paid insufficient regard to the problems of the wood-processing industries which were a cause of grave concern to the Committee throughout the year. These problems had arisen as a result of the trade recession, high interest rates, high fuel costs and the unfavourable exchange rate of the pound, and had culminated in the closure of major pulp and board installations. A deputation from the Committee which met Ministers on 13 January 1981 received a fair and frank reception, but Ministers were unable to offer any early solutions to the industries' difficulties, apart from a suggestion of some assistance in relation to fuel costs. At the March 1981 meeting serious concern was also expressed about the Budget increase of 20p per gallon in the price of diesel fuel and urgent representations were made to Forestry Ministers.

The Committee continued to press for Government aid for the purchase of forestry harvesting machinery. A letter setting out in detail the case for such aid was sent to the Minister of Agriculture, Fisheries and Food in August 1980, but he was unable to offer any immediate help.

At the June 1980 meeting the Committee considered the report by Jaakko Poyry (UK) Limited on a *Marketing Strategy for Small Roundwood and Sawmill Residues*, and made a number of recommendations to the Forestry Commissioners. At the same meeting the Committee gave further consideration to the report by the Reading Centre for Agricultural Strategy on *A Strategy for the UK Forest Industry* which received the strong support of the Committee. Consideration was given at the Committee's meeting in September 1980 to the report of the Technical Sub-Committee Working Party on *Current and Future Markets for Hardwoods* which it was agreed should be made available for comment by trade and growers' organisations and Area Marketing Liaison Committees. At the March 1981 meeting the Committee tresumed its consideration of the subject of forestry and farming interaction and agreed that it was important for the agricultural advisory services to press the need for this more strongly.

During the year the Committee was kept informed of developments in forestry policy and of the progress through Parliament of the Forestry Bill. At the March 1981 meeting the Committee expressed particular disquiet about the open-ended nature of Clause 1 of the Bill relating to the powers of Ministers to dispose of forestry land, and it urged the Forestry Commissioners to make representations to Ministers about an amendment to the Clause. The Committee also gave detailed consideration at that meeting to the House of Lords Select Committee's Report on the Scientific Aspects of Forestry.

The Committee received reports throughout the year on developments in the plant health field and on the working of the Import and Export of Trees, Wood and Bark (Health) (Great Britain) Order 1980 which came into force on 1 May 1980 to implement the EEC Plant Health Directive. In this connection the Committee was kept informed of the progress of negotiations with the Canadian authorities about plant health controls over the import of Canadian softwoods. At the December 1980 and March 1981 meetings the Committee considered the problem of grey squirrel control and it was agreed to set up discussions on possible remedies between the growers' organisations and the Research and Development Division of the Forestry Commission.

The Technical Sub-Committee and the Supply and Demand Sub-Committee made regular reports throughout the year. The Technical Sub-Committee completed a report on current and future markets for hardwoods, and a further report on softwood sawmilling was almost finished at the end of the year. The Sub-Committee also considered a wide range of other subjects, including wood poles for overhead lines, timber utilisation, the use of alternative species for pallet blocks, and Forestry Commission Work Study reports on various types of forestry machinery and equipment. The Supply and Demand Sub-Committee reported to the main Committee on wood supply and demand in Great Britain and on prospects for the coming year on the basis of information supplied by consumers' and growers' associations.

The main Committee wishes to record its appreciation of the high quality of advice it invariably receives from these two Sub-Committees.

Appendix III Forestry Training Council Annual Report for the year ended 31 March 1981

The Council met in Edinburgh at Forestry Commission Headquarters on 5 June and 2 October 1980 and 5 March 1981. Mr M. P. Shapcott retired during the year and his place as a Forestry Commission representative was taken by Mr C. W. Simmonds. Other changes in membership were Mr J. M. Fraser for Mr R. S. Carlaw representing the Royal Scottish Forestry Society, Mr W. R. Start for Mr R. Rowland representing the Royal Forestry Society of England, Wales and Northern Ireland, and Miss A. Hock for Mr R. Pierson representing the National Union of Agricultural and Allied Workers. The Management Committee of the Forestry Training Council met three times during the year, on 5 June and 2 October 1980 and 5 March 1981. The Grant Award Committee and specialised Working Groups of Council members also met at various times through the year.

Statistics on the quantity of training undertaken were again compiled. The number of attendances on courses leading to nationally recognised craft qualifications was slightly down on the previous year but there was an increase in the number of attendances on courses leading to supervisory and managerial qualifications (Table 1).

Courses	Grade and Type	Nu	979–80 mber of s/Students	Num	0–81 ber of /Students
City and Guilds 012 Stage 1	Craft (young workers) Day and Block Release	,	162	8	123
City and Guilds 012 Stage 2	Craft (adult workers) Block Release) 3	47	5	77
Totals for Craft Courses		. 14	209	13	200
Ordinary National Diploma	Supervisory 3-year Sandwich	1	91	1	90
Certificate in Supervisory Studies	Supervisory Block Releas	se 3	44	1	18
City and Guilds 012 Stage 3 National Diploma in Forestry	Supervisory Block Releas Managerial Residential	se 2 2	15 10	3 2	53 8
Totals for Supervisory and	d Managerial Courses .	. 8	160	7	169

 Table 1

 Attendance on courses for Recognised Craft, Supervisory and Managerial Qualifications in 1979–80 and 1980–81

Short courses for the private sector were arranged by both the Scottish Forestry Training Group and the English and Welsh Forestry Training Group, and the Forestry Commission conducted short courses for their own workforce (Table 2). Once again, there was a substantial increase over the previous year in the number of trainee course days in the private sector at craft, supervisory and managerial levels; this satisfactory position stems from the Council's increased ability through its centrally organised group training system, now firmly established throughout the UK, to identify and meet private sector training demands. There was a reduction in the quantity of training by the Forestry Commission in respect of their own employees at craft level but an increase at supervisory and managerial level.

Level	Source of Participants	Tra	1979–80 inee Course Days	1980–81 Trainee Course Days
Craft	Private Forestry		2,996	3,279
	Forestry Commission		12,575	9,625
	Totals	••	15,571	12,904
Supervisory and	Private Forestry		1,872	2,123
Managerial	Forestry Commission		2,331	2,447
-	Totals		4,203	4,570

Table 2 Attendance on Short Courses for Forest Workers, Supervisors and Managers during 1979-80 and 1980-81

Agencies which supplied courses and instructors for the private sector included the Cumbria College of Agriculture and Forestry, the Forest Industry Centre at Inverness, Merrist Wood Agricultural College, Lincolnshire College of Agriculture and Horticulture, the Forestry Commission, Forestry Training Associations, the Furniture and Timber Industry Training Board, Scottish Woodland Owners Association (Commercial) Ltd, Aberdeen University and the West of Scotland College of Agriculture; these agencies supplemented the provision by the Council's own Training Development Managers, who are themselves qualified instructors. The Council continued to assist in arranging 12-week forestry induction courses for unemployed young persons under the Youth Opportunities Programme sponsored by the Manpower Services Commission; Inverness Technical College, Barony Agricultural College, Dumfries, and Hereford College of Agriculture each held three such courses.

The Manpower Services Commission continued to provide grant-aid towards the cost of running the Council's Group Training Scheme. The Highlands and Islands Development Board also provided some financial help in developing training in the Highlands. Both the Scottish Group and the English and Welsh Group made sound progress during the year and were able to meet most of the training demands placed on them. There were reasonable expectations that the two Groups would reach a position of financial self-sufficiency by 1984.

A survey of manpower and training needs in private forestry in England and Wales undertaken on behalf of the Council by Mr Roy Lorrain-Smith of Bradford University and financed by the Manpower Services Commission was completed during the year; the information obtained will be of considerable help in planning future training programmes. A similar survey has been scheduled for Scotland.

Progress was made in conjunction with the National Proficiency Tests Council towards the establishment of a proficiency testing scheme for forestry in England and Wales.

The Forestry Training Council continued to work closely with the Scottish Technical Education Council in devising courses leading to new types of qualifications at Certificate and Diploma level. The scheme of courses brings to the industry for the first time a vertically-integrated series of courses allowing progression of the student through various certificated levels to diploma level, subject to ability. The scheme also offers options of part-time or full-time study and provides specialist options with greater opportunities for personal development and an ability more easily to react to changes brought about by market or other forces.

Under its Grant Award Scheme, the Forestry Training Council made 26 awards during the year to trainees who wished to complete City and Guilds courses but were unable to obtain financial support from their employers or local education authorities.

The Forestry Training Council continued to work closely with the Forestry Safety Council. The Council is pleased to record again the willing co-operation of many people and organisations, and 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 1981

During the year meetings of the Council were held in Edinburgh on 15 May 1980 and in Coleford on 24 September 1980. In addition, the Safety Guides Sub-Committee met on four occasions.

The meeting in Coleford coincided with the Association of Professional Foresters' third National Forest Machinery Demonstration which was staged in the Forest of Dean on 24 and 25 September 1980. The Council was well represented at the Demonstration with members on hand to deal with enquiries relating to the Forest Industry Safety Guides which were on display.

Forest Industry Safety Guides dealing with extraction by forwarder and extraction by cablecrane were published early in the year. Subsequent activity revolved in the main around the need to revise existing Guides. Eight were reissued, including six in the chain saw series. An important consideration was the need to achieve brevity by the omission of detailed working techniques. A relevant explanatory note has been included on the title page of each revised Guide.

The Council decided that a projected Guide concerned with electricity in the forest would not be published. Instead, use has been made of a booklet produced by a joint Electricity Supply Industry/Forestry Commission Working Party. A note on the front cover of the booklet indicates that the content has been approved by the Council. The booklet deals basically with the avoidance of danger from overhead electric lines and underground electric cables.

The Notification of Accidents and Dangerous Occurrences Regulations 1980, based on a Consultative Document already considered by the Council, came into operation on 1 January 1981. Under the Regulations accidents in forestry when an employee is absent for more than three consecutive working days are now legally reportable, with the method of notification depending on the degree of injury. Embodied in the Regulations are selective lists of dangerous occurrences which also require to be reported.

Positive steps being taken by the Health and Safety Executive aimed at reducing the risk involved in handling timber close to a circular saw were fully supported by the Council who noted that the use of grippers is not at present required under the Agriculture (Circular Saws) Regulations 1959.

Appendix V New Publications

The following titles were published during the year:

Reports

60th Annual Report and Accounts of the Forestry Commission (1979-80) (£7·20). Report on Forest Research, 1980 (£4·90)

Forest Records

No. 121. Production of Wood Charcoal in Great Britain (75p).

No. 122. Nothofagus in Britain (£1.00).

Leaflets

- No. 56. Grey Squirrel Control (revision) (80p).
- No. 75. Harvesting Windthrown Trees (£1.00).
- No. 76. Nutrient Deficiencies in Conifers in British Forests an illustrated guide (£1.25).
- No. 77. Line Thinning (90p).
- No. 78. The Management of Forest Streams (70p).

Aboricultural Leaflets

- No. 4. Virus and Virus-like Diseases of Trees (revision) (£1.00).
- No. 6. Trees and Water (£2.00).

Research and Development Paper

No. 129. Chemically Mediated Behaviour in the Large Elm Bark Beetle (£1.50).

Occasional Papers

- No. 6. Forestry and Farming in Upland Britain (£3.00).
- No. 7. Establishment of Trees in Regraded Colliery Spoil Heaps (£1.00).
- No. 8. The Forestry Mission to China, 1979 (£1.50).
- No. 10. Research for Practical Arboriculture (£2.00).

Five papers were also published especially for the Commonwealth Forestry Conference held in Trinidad and Tobago in September 1980.

Appendix VI Statistical Tables

Forestry Authority

DEDICATION SCHEMES FOR PRIVATE ESTATES POSITION AT 31 MARCH 1981

Table 1

Area in hectares

	En	gland	W	'ales	Sco	otland	Grea	t Britain
	Num- ber	Агеа	Num- ber	Area	Num- ber	Area	Num- ber	Area
Basis I and II Dedications in existence	2,500	210,718	511	31,247	1,172	241,000	4,183	482,96 5
Basis III Dedications in existence	288	13,424	68	3,974	395	54,320	751	71,718
Dedications in prepara- tion	155	9,089	53	4,248	221	53,462	429	66,799
Total	443	22,513	121	8,222	616	107,782	1,180	138,517

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 1981

Table 2

Area in hectares

	En	gland	W	/ales	Sco	otland	Great	t Britain
	Num- ber	Area	Num- ber	Area	Num- ber	Area	Num- ber	Агеа
Plans of Operations in existence at the begin- ning of the year	173	20,696	9	1,063	32	7,387	214	29,146
Terminations during the year	43	5,813	3	212	14	2,721	60	8,746
Plans remaining	130	14,883	6	851	18	4,666	154	20,400

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.

Hectares

AREA OF PLANTING BY PRIVATE WOODLAND OWNERS FOR WHICH GRANTS WERE PAID IN THE YEAR ENDED 31 MARCH 1981

C 1	
9	
-	
÷.	

	In Dedi Bi	In Dedicated Woodlands Basis I and II	odlands 11	In Dedic	In Dedicated Woodlands Basis III	odlands	In Appr	In Approved Woodlands	odiands	In Small	In Small Woods Schemes	chemes		Total	
Country	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total	New Planting s	Re- stocking	Total	New Planting	Re- stocking	All Planting
ENGLAND Conifer Broadleaved	102 36 138	874 352 1,226	976 388 1,364	227 71 298	135 147 282	362 218 580	4 4	25 25 49	24 23 53	210 255 465	163 210 373	373 465 838	539 366 905	1,196 734 1,930	1,735 1,100 2,835
WALES Conifer Broadleaved . Total	135 2 137	63 13 76	198 15 213	345 12 357	29 8 37	374 20 394				43 24 67	15 14 29	58 38 96	523 38 561	107 35 142	630 73 703
SCOTLAND Conifer Broadleaved . Total	651 3 654	652 29 681	1,303 32 1,335	5,991 36 6,027	108 9 117	6,099 45 6,144		1 1	1 	214 39 253	110 18 128	324 57 381	6,856 78 6,934	871 56 927	7,727 134 7,861
Great Britain Conifer Broadleaved . Total	888 41 929	1,589 394 1,983	2,477 435 2,912	6,563 119 6,682	272 164 436	6,835 283 7,118	44	25 25 50	25 29 54	467 318 785	288 242 530	755 560 1,315	7,918 482 8,400	2,174 825 2,999	10,092 1,307 11,399
In addition it is estimated that the following areas were planted without grant aid:	estimated	that the fc	ollowing a	treas were	planted w	vithout gr		England Wales Scotland	358 26 159						

Great Britain 543

Hectares

Area of planting by private woodland owners for which grants were paid in the 10-year period 1 april 1971 to 31 march 1981

Table 4													Hectares
No.			England			Wales			Scotland)	Great Britain	c
ended 31 March	led arch	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total
1972		3,766	2,391	6,157	1,409	266	1,675	14,505	1,673	16,178	19,680	4,330	24,010
1973	:	3,496	2,234	5,730	1,292	250	1,542	15,233	1,269	16,502	20,021	3,753	23,774
1974	:	2,170	2,147	4,317	1,327	175	1,502	15,392	1,579	16,971	18,889	3,901	22,790
1975	:	2,033	1,633	3,666	1,234	123	1,357	15,037	1,287	16,324	18,304	3,043	21,347
1976	:	1,026	1,454	2,480	408	112	520	8,170	1,071	9,241	9,604	2,637	12,241
1977	:	775	1,156	1,931	723	125	848	5,734	643	6,377	7,232	1,924	9,156
1978	:	831	1,008	1,839	591	36	627	4,900	933	5,833	6,322	1,977	8,299
1979	:	702	1,439	2,141	591	90	681	6,656	1,321	7,977	7,949	2,850	10,799
1980	:	814	1,731	2,545	556	112	668	6,932	1,022	7,954	8,302	2,865	11,167
1981	:	905	1,930	2,835	561	142	703	6,934	927	7,861	8,400	2,999	11,399

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 MARCH 1981

Table 5

Table 5					V	olume in th	ousands of c	ubic metres
					England	Wales	Scotland	Great Britain
Conifer					137		16	252
Broadleaved					211	22	14	247
Total volume		••	••	••	348	121	30	499
Number of licences	issued				1,453	307	115	1,875

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

AREA LICENSED FOR CLEAR FELLING ON PRIVATE ESTATES IN THE YEAR ENDED 31 MARCH 1981

Table 6						Hectares
			England	Wales	Scotland	Great Britain
Conditional licences Unconditional licences	••		 1,702 502	310 111	108 36	2,120 649
Total	••	••	 2,204	421	144	2,769

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

Forestry Enterprise

LAND USE AT 31 MARCH 1981

Table 7		AT	31 мл	rch 1981			Hectares
				England	Wales	Scotland	Great Britain
Forest Land Under plantations Retained scrub To be planted Total	 	 	 	251,060 1,920 6,495 259,475	136,642 1,619 2,915 141,176	508,015 3,590 53,657 565,262	895,717 7,129 63,067 965,913
Other Land Agricultural and grazing Forest workers' holdings Unplantable and miscella nursery land)		 15 (inch 	 1des 	12,101 634 31,061 43,796	10,970 594 7,934 19,498	102,723 3,619 128,448 234,790	125,794 4,847 167,443 298,084
Total area	•••			303,271	160,674	800,052	1,263,997

NET AREA OF FOREST LAND ACQUIRED/DISPOSED OF DURING THE YEAR ENDED 31 MARCH 1981

Hectares

				England	Wales	Scotland	Great Britain
Plantations acquired Plantations disposed of	 	•••	•••	129 187	88	140	129 415
Planting land acquired Planting land disposed of	•••			101 2	313 43	1,209 228	1,623 273
Other land acquired Other land disposed of		•••		74 225	12 230	193 1,097	279 1,552
Net area of forest land acc	quired,	/dispose	ed of	(110)	(36)	(63)	(209)

Table 9

Table 8

planting in the year ended 31 march 1981

Hectares

							New Planting	Re- stocking	Total
England Conifer . Broadleaved Total .	i	•••	 	 	 	 	453 17 470	1,833 69 1,902	2,286 86 2,372
Wales Conifer . Broadleaved Total .	i	 	 	· · · · ·	 	 	664 19 683	1,111 5 1,116	1,775 24 1,799
Scotland Conifer . Broadleaved Total .		•••	••	•••	 	 	10,425 56 10,481	1,975 21 1,996	12,400 77 12,477
Great Britain Conifer . Broadleaved Total .	ł	 	 		 	· · · · ·	11,542 92 11,634	4,919 95 5,014	16,461 187 16,648



PLATE 6 A Brunnett compact processor working in Kielder Forest. This machine delimbs felled timber, cross-cuts it to required lengths and stacks it ready for removal.



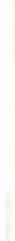
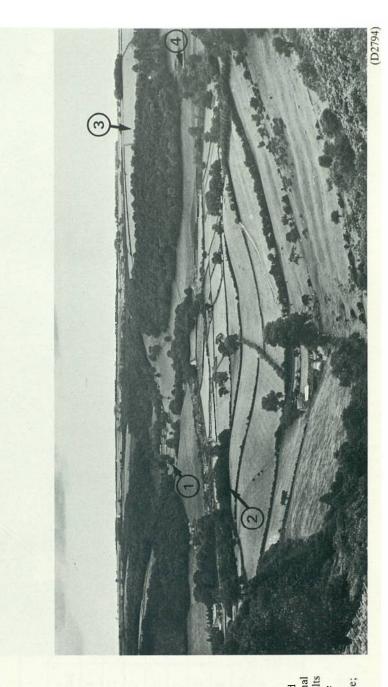


PLATE 7 This photograph, taken in Yorkshire, illustrates the different categories of trees and woodland covered in the national census started in 1979, the results of which will be made available during 1982. These are: 1. isolated tree; 2. linear feature; 3. woodland; 4. clump.





A machine operator under instruction at the Commission's Machinery Training Centre, Ae Forest. PLATE 8

(ED1169)

8
5
-
E.
CH
RCH
2
5
4
Ţ
3
~
2
-
19
T
2
PRIL
æ.
е,
Ł
_
PERIOD
g
7
8
PE
5
.≲
Ħ
σ.
0-YEAR
IN THE
Ę.
THE
ISSION IN THE
Z
NOISS
5
H.
22
H.
Σ
Σ.
б
Ö
_
Ē
E
H
54
6
×
ĻΥ
TLY
JALLY
IUALLY
NUALLY
NUV
ANNUALLY
ANNUALLY
DAI
DAI
NTED ANNUALLY
DAI
LEA PLANTED AI
DAI

Table 10		E		-			- 1 - 11						e e	Hectares
Figland	England	England	England			ſ	Wales		-	Scotland			Great Britain	
ended New Re- No 31 March Planting stocking Total Plan	Re- stocking Total	Re- stocking Total	Total		Plan	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total	New Planting	Re- stocking	Total
	1,923 4,174	1,923 4,174	4,174		1,8	21	598	2,419	17,686	1,956	19,642	21,758	4,477	26,235
	1,419 3,154	1,419 3,154	3,154		1,4	69	771	2,240	16,174	1,590	17,764	19,378	3,780	23,158
	1,348 2,900	1,348 2,900	2,900		1,41	7	762	2,179	15,433	1,211	16,644	18,402	3,321	21,723
1,239 1,384 2,623 1,412	1,384 2,623	1,384 2,623	2,623		1,41	2	649	2,061	17,010	1,461	18,471	19,661	3,494	23,155
	1,043 2,530	1,043 2,530	2,530		1,13	1	476	1,607	14,651	1,723	16,374	17,269	3,242	20,511
1,302 1,170 2,472 1,096	1,170 2,472	1,170 2,472	2,472		1,0	96	793	1,889	13,148	1,194	14,342	15,546	3,157	18,703
1,148 1,164 2,312 7	1,164 2,312	1,164 2,312	2,312		-	769	937	1,706	12,206	968	13,174	14,123	3,069	17,192
	1,424 2,110	1,424 2,110	2,110		S	572	884	1,456	10,584	1,259	11,843	11,842	3,567	15,409
898 2,168 3,066 75	2,168 3,066	2,168 3,066	3,066		52	797	1,241	2,038	14,135	2,260	16,395	15,830	5,669	21,499
	1,902 2,372	1,902 2,372	2,372		9	683	1,116	1,799	10,481	1,996	12,477	11,634	5,014	16,648
			-	-		-	-	-	-					

AREAS OF PLANTATIONS AND VOLUMES OF TIMBER THINNED AND FELLED IN THE YEAR ENDED 31 MARCH 1981 Area in bectares:

Table 11

Area in hectares; Volume in thousands of cubic metres

	Fe	lled	Thir	nned	Total Volume Felled and
	Area	Volume	Area	Volume	Thinned
England					
Conservancy: North-West North-East East New Forest and South-East South-West and Dean Total	294 631 500 187 358 1,970	78 150 115 36 101 480	2,013 1,669 3,900 2,061 1,629 11,272	100 78 156 72 94 500	178 228 271 108 195 980
Wales					
Conservancy: North South Total	367 577 944	98 146 244	3,279 2,205 5,484	179 103 282	277 249 526
Scotland					
Conservancy: North East South West Total	360 377 396 522 1,655	132 86 100 138 456	1,390 2,866 3,255 1,551 9,062	77 162 187 80 506	209 248 287 218 962
Great Britain	4,569	1,180	25,818	1,288	2,468

sales of timber in the year ended 31 march 1981

Table 12

Thousand cubic metres

Description	England	Wales	Scotland	Great Britain
Trees sold standing	294	248	276	818
Converted*				
Round timber and saw logs Telegraph and other selected poles Mining timber Posts and stakes Pulpwood and boardmill material Firewood Miscellaneous Poles sold in length (other than selected) Total	270 7 39 12 187 21 28 3 567	104 1 18 9 90 5 1 1 229	243 7 316 5 2 576	617 15 57 24 593 31 29 6 1,372

*In addition the following volumes were converted and used internally for forest and estate purposes:

England	3
Wales	2
Scotland	4
Great Britain	9

HC 136 ISBN 010 213682 3

CORRECTIONS

Page 51, Table 13

The entries against "Forest properties" and "Other properties" in lines 1 and 7 respectively were included in error. They are in fact the correct totals for the two types of property, and their inclusion in the table has resulted in the totals shown in line 6 and 10 being double counted. The correct version of Table 13 is given below:

PROPERTIES MANAGED BY THE COMMISSION AT 31 MARCH 1981

Table 13	ксп 1981			Number
Type of Property	England	Wales	Scotland	Great Britain
Forest properties				
Foresters' houses Forest workers' houses Forest workers' holdings Miscellaneous*	199 643 53 1,408	102 184 44 491	282 685 128 839	583 1,512 225 2,738
Total	2,303	821	1,934	5,058
Other properties [†] Farms and other agricultural subjects Residential and other lettings	559 1,281	493 723	661 1,249	1,713 3,253
Total	1,840	1,216	1,910	4,966

*Miscellaneous covers hostels, bothies, offices, repair workshops and other buildings not normally let. †In addition there are 2,360 sporting lettings.

Page 19, paragraph 50, line 4: for page "74" read page "76".

Page 25, paragraph 85, line 3: for page "70" read page "72".

Page 25, paragraph 86, line 5: for page "73" read page "75"; and for page "75" read page "77"; line 7: for page "78" read page "80".

LONDON: HER MAJESTY'S STATIONERY OFFICE

May 1982

properties managed by the commission at 31 march 1981

Table 13

Type of Property		England	Wales	Scotland	Great Britain
Forest properties		2,303	821	1,934	5,058
Foresters' houses Forest workers' houses Forest workers' holdings Miscellaneous*	•••	199 643 53 1,408	102 184 44 491	282 685 128 839	583 1,512 225 2,738
Total		4,606	1,642	3,868	10,116
Other properties†		1,840	1,216	1,910	4,966
Farms and other agricultural subjects Residential and other lettings	•••	559 1,281	493 723	661 1,249	1,713 3,253
Total		3,680	2,432	3,820	9,932

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

†In addition there are 2,360 sporting lettings.

PUBLIC RECREATIONAL FACILITIES AT 31 MARCH 1981

Table 14

	England	Wales	Scotland	Great Britain
Picnic places Forest walks and forest nature trails Visitor centres Arboreta Forest drives	· 25 · 368 · 282 · 13 · 11 · 3 · 108	1 104 141 6 7 1 4	9 122 231 11 5 2 46	35 594 654 30 23 6 158

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

(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.

Number

Number

Table 15

North-West			e at 31 Ma (hectares)	Durin	During Year 1980-81			
North-west England Conservancy	Total Area	Under				Planting (hectares)		Pro-
	of Forest		Retained To be Scrub planted	Other land	New Planting	Re- stocking	(000	
Arden, Hereford and Worcester, West Midlands, Warwick and Leics	1,075	990		67	18	_	_	2
Blengdale, Cumbria Bowland, Lancs Cannock, Staffs Dalton, Cumbria and	2,210 1,821 3,715	1,840 1,703 3,567	33	45 	292 118 _73		4 37	6 7 15
Lancs Delamere, Cheshire Ennerdale, Cumbria Greystoke, Cumbria Grizedale, Cumbria Inglewood, Cumbria	1,654 969 3,657 1,270 3,527 996 5,734	1,378 937 1,584 1,161 3,070 951 5,306	5 25 3 —		271 32 1,996 106 457 38 400		$ \frac{\overline{31}}{8} \\ \frac{8}{-} \\ \overline{23} $	2 6 9 16 2 27
Launde, Derby, Notts and Leics	891	864	_	20	7	-	-	1
Matlock, Derby and Cheshire Mortimer, Shropshire Hereford and Wor-	2,966	1,754	—	237	975	29		1
cester	4,794 6,410	4,604 6,036	30	44 103	146 241	-	98 91	32 27
Shropshire Spadeadam, Cumbria and Northumber-	1,293	924	_	101	268		—	I
land	6,583 1,020	4,629 975	<u>22</u>	1,134 30	798 15	114	3	4
bria	2,656	2,193		17	446	—	20	11
Total	53,241	44,466	118	1,960	6,697	158	323	178

Note: Bagot has been added to Cannock. Dunnerdale has been added to Blengdale.

Norm			at 31 Ma (hectares)	During Year 1980-81				
North-East England Conservancy	Total Area	Under					nting ares)	Pro- duction
	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000
Chopwell, Durham, Tyne and Wear Cleveland, North Yorks and Cleve-	875	802	2	6	65	1	4	3
land Cropton, North Yorks Dalby, North Yorks	3,288 4,642 3,110	3,053 3,836 2,767	77 70 —	32 157 11	126 579 332	17 16 —	5 25 60	3 14 22
Don, South West and North Yorks	2,921	1,623	32	862	404	39	30	2
Falstone, Northum- berland	14,964	13,268		—	1,696	1		36
Hambleton, North Yorks Hamsterley, Durham Harwood, Northum-	4,486 4,378	3,854 3,409	28	155 727	449 242	4	19 26	6 17
berland	4,525	4,103	—	38	384	23	58	13
Jervaulx, North Yorks and Durham Kidland. Northum-	876	797	5	74	_	2	1	1
berland	3,545	2,653	—	145	747	56	—	—
Keilder, Northum- berland	16,389	10,210	—	6	6,173	1	31	28
Knaresborough, North and West Yorks Redesdale, Northum-	1,276	1,194	_	33	49		6	1
berland	5,697	5,009			688	-	1	16
land and Durham Thrunton, Northum-	1,190	1,090	8	51	41	—	1	3
berland	3,727	3,313	—	209	205	59	24	11
Wark, Northumber- land	13,745	11,643	—	511	1,591	10	137	15
Wykeham, North Yorks Wynyard, Cleveland	8,113 593	6,265 581	61 —	119 11	1,668 1	2 10	<u>14</u>	31
York, North Yorks and Humberside	2,328	2,201	11	51	65	1	22	6
Total	100,668	81,671	294	3,198	15,505	242	464	228

Table 15-continued

Note: Langdale has been added to Wykeham.

			e at 31 Ma (hectares)			During Year 1980-81		
East England Conservancy	Total Area	Under					Planting (hectares)	
	of Forest		Retained Scrub	To be planted	Other land	New Planting	Re- stocking	duction (000 cu.m.)
Aldewood, Suffolk	3,623	3.471		23	129	12	7	70
Ampthill, Beds	820	665	80	35	40	12	1	28
Bardney, Lincs	3,040	2,927	17	4	92	2	6	29
Bernwood, Bucks and	5,040	2,921	11	4	92	4	0	9
Oxon	888	697	191			_		
Bramfield, Herts	639	618	2	10	9			1
Chiltern, Bucks, Oxon,	007	010	-	10		_		1
Beds and Herts	2,399	2,217	_	137	45		4	6
Hazelborough, North-	_,	_,		13.			•	v
ants and Bucks	1,145	1.104	8	24	9	1	4	6
Kesteven, Lincs	2,076	1,985	2	4	75		3	2
Lavenham, Suffolk	812	807		1	4	1	_	6 2 1
North Lindsey, Lincs	2,090	2,010	3	2	75	i i	35	14
Rockingham, North-								
ants and Cambs	2,863	2,632	76	44	111		41	5
Thetford, Norfolk and		-						
Suffolk	21,271	20,114	43	82	1,032	32	278	184
Walden, Essex, Cambs					,	1		
and Herts	705	650	42	6	7			1
Wensum, Norfolk	2,187	2,122	1	—	64		21	9
Wymersley, Beds,		1						
Northants and								
Bucks	1,519	1,467	33	2	17	5	14	3
Total	46,077	43,486	498	384	1,709	51	413	271

Table 15—continued

New France of		Land use	e at 31 Ma (hectares)	Durin	During Year 1980-81			
New Forest and South-East England Conservancy	Total	Under					Planting (hectares)	
	Area of Forest		Retained Scrub	To be planted	Other land	New Planting	Re- stocking	duction (000 cu.m.)
Alice Holt, Hamp- shire, West Sussex								
and Surrey	3,189	2,903	16	16	254		8	9
Arundel, West Sussex	3,426	3,204	70	16	136	-	12	5
Bedgebury, Kent and East Sussex	3,973	3,641	_	_	332	-	16	13
Bramshill, Hampshire and Berks	2,442	2,309	49	24	60	_	8	7
Challock, Kent	2,578	2,558	2		18	-	10	7
Micheldever, Berks and Hampshire	2,412	2,321	31	4	56	_	8	7
New Forest, Hamp- shire Queen Elizabeth For-	27,022	11,724	138	_	15,160		46	38
est, West Sussex and Hampshire	4,210	3,964	90	13	143			3
Ringwood, Dorset St Leonards, East	2,976	2,602	32	<u> </u>	342	-	110	11
Sussex and West Sussex	1,748	1,554	10		184	—	2	2
Shipbourne, Kent and Surrey Wight, Isle of Wight	1,127 1,850	1,071 1,702	34 20		22 128	—	4 11	2 4
Total	56,953	39,553	492	73	16,835		235	108

Table 15-continued

South-West			at 31 Ma (hectares)	Durin	ng Year 19	8081		
England and Dean Conservancy	Total Area	Under					nting tares)	Pro- duction
	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000)
Brendon, Somerset and Devon Dartmoor, Devon Dean Forest, Glou- cester, Hereford and Worcester and	1,545 2,384	1 ,38 7 2,123	5	<u>20</u>	133 261	=	37 26	10 20
Gwent Eggesford, Devon Exeter, Devon Hereford, Gloucester and Hereford and	10,739 1,157 2,687	9,574 1,135 2,420	1 33	147 1 160	1,018 20 74	<u>-</u> 5	93 13 16	39 6 16
Worcester	2,355 3,492	2,047 3,286	41	300 48	8 117	4 2	2 54	6 13
Mendip, Avon, Somer- set and Wilts Neroche, Somerset	1,411	1,353	12	6	40	_	—	5
and Devon Powerstock, Dorset Quantock, Somerset Savernake, Wiltshire,	2,057 1,565 1,311	1,818 1,456 1,095	9 10	44 9 3	195 91 203	7 	$\frac{6}{24}$	3 1 6
Hampshire and Berks Torridge, Devon Wareham, Dorset Westonbirt, Glou-	5,042 3,681 4,828	4,774 3,454 4,175	104 101	41 76 25	123 151 527		38 106 43	16 28 16
cester Wyre, Salop and Here- ford and Worcester	242 1,836	 1,787	202 —		40 49		9	— 10
Total	46,332	41,884	518	880	3,050	19	467	195

Table 15—continued

Table 16

]		at 31 Mar hectares)	ch 1981		During Year 1980–81		
North Wales Conservancy	Total Area	Under				Planting (hectares)		Pro- duction
	of Forest		Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000)
Aeron, Dyfed Beddgelert, Gwynedd Ceiriog, Clwyd Ceri, Powys Clocaenog, Clwyd Clwyd, Clwyd Coed, Sarnau, Powys Coed, Sarnau, Powys	2,346 3,927 1,775 1,852 7,094 2,090 3,072	2,270 3,199 1,719 1,838 5,757 1,942 2,982	19 32 1 3 	14 28 — 6 20 39	43 668 55 11 1,331 121 22	$ \begin{array}{c} $	59 68 24 4	5 15 4 12 45 2 15
Coed-y-Brenin, Gwynedd Cynwyd, Gwynedd and Clwyd	9,320 785	6,534 721	55	568	2,163 64	53 —	81 17	32 6
Dyfi, Gwynedd and Powys Dyfant, Powys Gwydyr Gwynedd and	7,483 3,553	6,462 2,565	24	198 306	799 382	<u>15</u>	2 8	28 12
Clwyd Hafren, Powys Mathrafal, Powys and	8,159 5,077	5,938 4,545	53	17	2,168 515	22 —	105 —	22 24
Clwyd Newborough,	1,576	1 ,49 1	5	—	80	1	5	7
Gwynedd Penllyn, Gwynedd Radnor, Powys Rheidol, Dyfed Ystwyth, Dyfed and	1,791 4,232 2,490 5,447	1,485 3,849 2,421 4,281	$\frac{9}{5}$	1 199 179	296 184 64 953	$1\overline{61}$ $\overline{26}$	$\frac{1}{52}$	4 5 14 6
Powys Total	7,105 78,874	5,771 65,770	20 296	292 1,867	1,022 10,941	16 337	25 455	

]		at 31 Mar hectares)	ch 1981		Durin	ig Year 19	80-81
South Wales Conservancy	Total Area	Under					ting tares)	Pro- duction
	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000)
Brechfa, Dyfed Brycheiniog, Powys Caeo, Dyfed Coed Abertawe, West	6,801 1,612 2,129	6,208 1,505 1,900	$\frac{88}{43}$	21 1 2	484 106 184		101 27 6	50 13 16
Glam Coed Deufor, Dyfed Coed Morgannwg: Crynant, West	868 1,991	808 1,901	32 53	8	28 29	Ξ	20 4	5 3
Glam	3,249	2,443	53	367	386	3	203	7
and Mid Glam Margam, West Glam	5,310	4,666	30	108	506	—	31	8
and Mid Glam Rheola, West Glam	4,750	4,179	170	5	396	7	36	15
and Mid Glam Coed Preseli, Dyfed	5,246 2,171	4,311 1,866	87 201		848 104		35	17 1
Coed Taf, Powys and Mid Glam	2,569	2,148	21	1	399	—	23	8
Coed-y-Rhaiadr, Powys	2,512	1,906	221	33	352	88	—	1
Crychan, Powys and Dyfed Ebbw, Gwent Glasfynydd, Powys	4,763 5,169	4 ,5 50 4,578	83 34	10 34	120 523	5	94 18	27 12
and Dyfed	1,493	1,453	1	13	26	27	—	13
Dyfed Mynydd Du, Powys	2,695	2,320	8	62	305	—	2	4
and Gwent Pembrey, Dyfed Rhondda, Mid Glam	1,468 1,978 4,601	1,304 1,268 3,320	<u>17</u>	8 277	156 693 1,004	 45	3 7 —	8 3 —
St Gwynno, Mid Glam	3,998	3,351		48	5 9 9	33	11	6
Tair Onen, Mid and South Glam Talybont, Powys Tintern, Gwent	1,366 1,601 3,898	1,152 1,506 3,804	73 15 29	$\frac{15}{2}$	126 80 63	=	$\frac{9}{31}$	6 4 16
Tywi, Powys and Dyfed	8,490 1,072	7,420 1,005	10 54	33	1,027 13	138	—	1 5
Total	81,800	70,872	1,323	1,048	8,557	346	661	249

Table 16—continued

Table 17

	Land use at 31 March 1981 (hectares)					During Year 1980–81		
North Scotland Conservancy	Total Area	Under					iting ares)	Pro- duction
	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000)
Achnashellach, High-								
land	4,745	2,956	10	263	1,516	32	14	8
Affric, Highland	28,743	7,213		761	20,769	170		3
Ardross, Highland	9,850	7,490	88	1.345	927	142	50	9
Black Isle, Highland	5,837	5,370	29		438			19
Clunes, Highland	6,819	4,423		209	2,187			12
Culloden, Highland	8,551	5,955	2	1,157	1,437	168	8	16
Dornoch, Highland	1.204	1.103	3	1,157	98	100		1
Farigaig, Highland	4,377	3,319	100	30	928	-	4	6
Fiunary, Highland	6,683	4,889	46	181	1,567	$\overline{\Pi}$	20	8
	17,275		10	644		150	20	13
Glengarry, Highland Glenurguhart, High-	17,275	6,253	10	044	10,368	150		13
land	10,470	5.039	107	494	4 020	1 77	12	13
			107		4,830	23	13	12
Helmsdale, Highland	1,548	1,009		233	306	40	1	
Hoy Experiments		1			l			
Orkney Islands	13	13	-			-	—	
Inchnacardoch, High-	10.450							10
land	10,453	6,162	81	960	3,250	112	6	19
Inshriach, Highland	4,089	3,402	10	18	659	22		3
Leanachan, Highland	13,056	6,044	-	191	6,821	134	31	14
Mull, Strathclyde	16,001	9,185	-	2,857	3,959	371		7
Naver, Highland	13,138	6,637	53	2,456	3,992	293	55	—
Queens Forest, High-			i i			1		
land	2,644	1,535			1,109	· ·	—	2
Ratagan, Highland	5,013	2,709		33	2,271	8	44	18
Rumster, Highland.	9,128	3,926	I — I	4,215	987	442	—	
Shin, Highland	34,609	15,920	35	7,195	11,459	545	73	4
Skye, Highland and			1 ·					
Western Isles	21,524	8,311	90	1,817	11,306	456	12	5
South Strome, High-								
land	2,978	1,948	19	61	950	4	9	5
Strathmashie, High-		_,			1	1	-	-
land	18,604	4,379		16	14,209		14	4
Sunart, Highland	13,447	6,562		230	6,655	143	56	13
Torrachilty, Highland	16,585	8,574	6	38	7,967	90	2	8
			·					
Total	287,384	140,326	689	25,404	120,965	3,356	412	209

	Land use at 31 March 1981 (hectares)					During Year 1980–81		
East Scotland Conservancy	Total Area	Under					iting ares)	Pro- duction
	of Forest		Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000)
Angus, Tayside	10,293	8,615	13	170	1,495	105	8	21
pian	1.806	1,670		10	126	_	3	2
Banchory, Grampian	5,524	5,335	4	60	125	28	12	15
Bennachie, Grampian	7,112	5,565	3	371	1,173	143	7	13
Craigellachie, Gram-	.,	-,	_					
pian	5,626	4,745	— I	585	296	129	2	3
Drummond Hill, Tay-	,							
side	3,644	2,728	41	454	421	88	20	8
Dunkeld, Tayside	4,548	3,463	66	651	368	77	25	18
Eden, Fife and Central	3,549	3,309	7	_	233	18	52	24
Forest of Deer, Gram-								
pian	2,870	2,601	21	100	148	50	7	17
Glenlivet, Grampian	4,634	4,296	7		331	—	5	2
Huntly, Grampian	10,212	8,753		441	1,018	57	9	29
Kirkhill, Grampian.	1,199	1,166		6	27		9	4
Laigh of Moray,	-,	-,		-			-	
Grampian and								
Highland	6,923	6,512	39	2	370	- I	67	38
Mearns, Grampian	7,619	6.653	17	29	920	52	32	18
Ochil, Fife, Tayside	.,]					
and Central	4,512	4.041	27	72	372	112	21	10
Rannoch, Tayside	14,164	7,657	59	1,475	4,973	241	49	
Speymouth, Grampian		9,822	3	300	490	113	31	23
Tornashean, Gram-	,	-,	-					
pian	4,463	3,425		340	698	103	2	_
Tummel, Tayside	8,338	5,693	109	272	2,264	111	2	3
Total	117,651	96,049	416	5,338	15,848	1,427	363	248

Table 17—continued

Note: Inglismaldie section of Montreathmont has been added to Mearns. Angus is a newly formed forest comprising the former Braes of Angus, Montreathmont (less Inglismaldie section) and Strathardle Forests, and the Hallyburton Section of Dunkeld.

	Land use at 31 March 1981 (hectares)					During Year 1980-81		
South Scotland Conservancy	Total Area	Under					nting ares)	Pro- duction
	of Forest	Planta- tions	Retained Scrub	To be planted	Other land	New Planting	Re- stocking	(000 сu. m.)
Ae, Dumfries and								
Galloway Arecleoch, Strathclyde	7,136 4,002	6,299 3,227	_	703 722	134 53	138	152 37	<u>19</u>
Bareagle, Dumfries and Galloway	4,953	4,639	170	42	102	112	—	2
Bennan, Dumfries and Galloway Carrick, Dumfries and	6,877	6,349		—	528	-	31	16
Galloway and Strathclyde Castle O'er, Dumfries and Galloway and	17,537	8,509	3	1 ,172	7,853	6	154	19
Borders	5,493	5,368	—		125	-	73	25
Clatteringshaws, Dum- fries and Galloway	12,699	8,687	_	364	3,648	325	—	9
Clydesdale, Strath- clyde and Lothian	5,405	4,779	4	115	507	92	_	4
Craik, Borders Dalmacallan, Dum-	6,047	5,160	-	431	456	110	21	6
fries and Galloway Dundeugh, Dumfries	4,057	3,384	-	212	461	132	—	12
and Galloway Fleet, Dumfries and	3,706	3,187	—	40	479	150	—	10
Galloway	8,076	6,518		668	890	86	—	19
Lothian Glentrool, Dumfries	9,820	8,553	—	221	1,046	146	37	33
and Galloway and Strathclyde	24,605	14,047	2	963	9,593	137	2	11
Kirroughtree, Dum- fries and Galloway	6,621	4,249	-		2,372	-	45	15
Kyle, Strathclyde Lammermuir, Borders	6,411 2,762	5,273 2,653		521 9	617 100	98 —	31	10
Moffat, Dumfries and Galloway and								
Borders	13,037	11,102	—	152	1,783	158		14
fries and Galloway and Borders Penninghame, Dum-	3,845	3,759	—	9	77	_	57	18
fries and Galloway	6,839	6,617		6	216	55	—	4
Solway, Dumfries and Galloway Upper Nithsdale,	6,986	6,375	3	_	608	3	45	27
Dumfries and Galloway and								
Strathclyde Wauchope, Borders	3,698 9,422	3,048 8,124		183 231	467 1,059	102 89		 14
Bush Nursery, Lothian		0,124			6		_	
Whittingehame Seed Orchard, Lothian	12	-		_	12		-	_
Total	180,052	139,906	190	6,764	33,192	1,939	685	287

 Table 17—continued

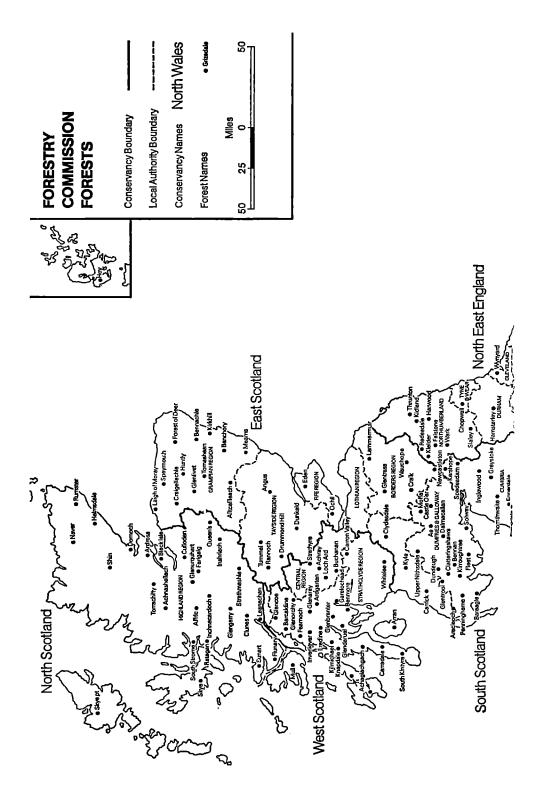
Т

	Land use at 31 March 1981 (hectares)					Durin	During Year 1980–81		
West Scotland 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.)	
Achaglachgach,]								
Achray, Central Ardgartan, Strath-	11,424 5,561	5,115 3,842	175 106	3,072 122	3,062 1,491	278 25	2	5 8	
clyde Arran, Strathclyde	13,363 11,418	5,230 6,485	212	97 1,400	7,824 3,533	5 370	42 	21	
Barcaldine, Strath- clyde	7,779	4,669	251	295	2,564	52	44	11	
Benmore, Strathclyde Buchanan, Strath-	10,394	5,841	129	242	4,182	79	43	19	
clyde and Central Carradale, Strath-	6,402	3,474	186	4	2,738	—	86	2	
clyde	6,575	3,625	41	1,477	1,433	295		4	
Carron Valley, Strath- clyde and Central Eredine, Strathclyde	4,672 6.956	4,219 4,936	$\frac{1}{32}$	82 357	371 1,631	71 204	41	15 4	
Fearnoch, Strathclyde Garelochhead, Strath-		4,913	149	421	530	133	2	3	
clyde	2,659 7,454	1,813 4,259	65 108	138 1,488	643 1,599	22 134	16		
Glenbranter, Strath- clyde	6,910	4,478	85	68	2,279	43	39	23	
Glencoe, Strathclyde	9,023	4,571	51	138	4,263	1	19	10	
and Highland Glendaruel, Strath-			164		,	261	2	4	
clyde Glenorchy, Strath-	9,829	5,898		1,238	2,529			4	
clyde and Central Inverliever, Strath-	15,296	7,623	63	267	7,343	116	2		
clyde Kilmichael, Strath-	13,371	8,710	36	364	4,261	163	56	17	
clyde	11,627	8,724	17	118	2,768	100	20	20	
clyde Loch Ard, Central	7, 237 10, 808	5,113 7,567	185 193	485 594	1,454 2,454	210 85	18 90	20 13	
South Kintyre, Strath-	ĺ ĺ		47	623	1,444	351	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2	
clyde Strathyre, Central and	11,855	9,741	4/		,		_	_	
Tayside Whitelee, Strathyre	9,477 8,860	5,728 5,160	_	972 1,089	2,777 1,611	207 554	14 —	17	
Chapelhall Depot, Strathclyde	2	—	-		2		_		
TOTAL	214,965	131,734	2,295	16,151	64,785	3,75 9	536	218	

Table 17—continued

Appendix VII

Map showing the situation of the Commission Forests and the boundaries of the Conservancies at 31 March 1981





Appendix VIII 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 1981

Previous Year £000	Receipts	£000
43,250 37,216 2,785	Grant-in-Aid Sales of timber Disposals of surplus assets	42,250 41,391 4,524
9,648	Miscellaneous	10,636
92,899 (478)	Increase in working balance	98,801 1,544
93,377		97,257
	Payments	
42,832	Salaries, wages and related expenses	50,445
6,285	Pensions and gratuities to retired staff	6,910
25,834	Materials, contract services and general expenses	27,210
5,025	buildings	1,444
9,044	Grants to private woodland owners (£2,449,000), universities, insti-	6,775
2,682	tutions, etc	2,540
1,675	Remittances of VAT to Customs and Excise	1,933
93,377		97,257

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 1980–81 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. During 1980-81 it became clear that receipts would be some $\pounds 5 \cdot 2$ million less than originally estimated as a result of the general effect of the recession and strengthening of the pound which kept timber prices below the previously expected levels. To offset this income shortfall as far as possible offsetting savings amounting to about $\pounds 4 \cdot 5$ million were made on expenditure heads mainly affecting funds for land acquisition, construction of new buildings, purchase of vehicles and machinery and goods materials services and administration expenses. To bridge the remaining shortfall an increase of $\pounds 750,000$ in the cash limit was authorised and a spring supplementary estimate approved.

Receipts

4. The original Grant-in-Aid of the Forestry Fund voted by Parliament for 1980-81 (inclusive of increases for salaries centrally allocated) was \pounds 41,785,000 to which was added \pounds 750,000 by way of a spring supplementary estimate making a total of \pounds 42,535,000. \pounds 42,250,000 was drawn into the Forestry Fund leaving a balance of \pounds 285,000 to be surrendered to the Consolidated Fund. The sum of \pounds 99,306 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.

5. Receipts from the sale of timber exceeded the 1979–80 level by $\pounds 4,175,000$ due to an increase in the volume harvested and some price enhancement over 1979 prices. However timber prices did not reach the level previously expected and thus 1980–81 timber receipts were some $\pounds 6$ million less than originally estimated hence the substantial income shortfall against cash limit already mentioned above.

6. Increased activity and improved prices led to an increase of $\pounds 1,739,000$ in receipts from the disposal of surplus assets.

Notes on Table 1 (continued)

•

7. Miscellaneous receipts rose by £988,000 due to increased charges for campsites and forest cabins, sporting lets and car rallies (£585,000), increased activity and higher prices on venison sales and the sale of vehicles and machines (£294,000), work done for outside parties (£223,000), pension contributions, salaries of seconded staff, research work, repayment of private woodland grants, etc (£336,000), offset by a fall in estate income of £450,000, mainly due to a reduction in mineral royalties and sales of livestock.

Payments

8. Payments of salaries, wages and related expenses rose by over 17 per cent due to increased rates of pay and allowances.

9. Payment of pensions and gratuities to retired staff and their dependants rose by £625,000 due to the award of higher superannuation benefits and an increase in the number of pensioners.

10. After adjusting 1979-80 to reflect the effect of the 1979 industrial action, payments for materials contract services and general expenses rose by $\pounds 4,376,000$, mainly due to continuing price inflation.

11. After adjusting 1979-80 to reflect the effect of the 1979 industrial action, expenditure on land acquisition and buildings construction fell by £3,181,000. A reduction in funds was planned as a result of public expenditure cuts which, together with the effect of inflation, amounted to £1.4 million, mainly on land acquisition. In addition further cuts of about £1.8 million, mainly on land purchase, were made as a result of the cash limits constraints due to the income shortfall already mentioned. In consequence the area of plantable land acquired was 1,773 hectares compared with 7,565 hectares in the previous year, the average cost per hectare being £321 per hectare compared with £357 in 1979-80.

12. After adjusting 1979-80 to reflect the effect of the 1979 industrial action, expenditure on machinery and equipment fell by £969,000. After adjustment for the effects of inflation the reduction became some $\pounds 1.5$ million and this was mainly due to the need to make offsetting savings against the income shortfall previously mentioned. It was achieved by placing a stop on orders and deferring some orders already placed.

13. Remittances of net VAT to Customs and Excise increased by £258,000 due to a higher level of output tax from increased receipts which more than offset the rise in recoverable input tax from increased expenditure.

Table 2

Previous

Previous		
Year £000		tono
1000	Services to private woodland owners for grants and advisory services	£000
32	Basis I	29
238	Basis II: Planting grants	228
877	Management grants	849
675	Basis III: Basic grant	736
54	Broadleaved supplement	56
159	Management grant	199
_	Native pinewood planting grants	3
14	Approved woodlands planting grants	8
265	Small woods planting grants	281
107	Other grants	6
47	Miscellaneous	54
1,110	Overhead expenses	1,439*
3,578		1 999
3,578 87	Less miscellaneous income	3,888 60
	Less miscenaneous meome	
3,491		3.828
	Special Services	
273	Licensing of felling	347*
709	Information and shows	764*
1.040	General administration (EEC, fiscal and regulatory duties and includ-	1.074
1,040	ing £1,059,000* overheads)	1,074
2,022		2,185
2,022		2,105
	Research and Development	
1,323	Silviculture	1,611
294	Genetics	362
79	Physiology	114
42	Seed research	45
176	Site studies	234
556	Protection	677
238	Statistics	351
174	Communications	174
181	Westonbirt and Bedgebury Arboreta	228
62	Experimental workshops	.84
80	Grants to universities	109
651 1.124	Work study	602
1,124	Field surveys	1,423
4,980	Total (includes £226,000* overheads)	6,014
2,241	Less allocation to Forestry Enterprise (Statement 1 on page 73)	2,706
	Less anotation to Porosity Emerprise (Statement Pon page 75)	
2,739		3,308
8,252	Net total expenditure in year	9,321
4	Notional sick and injury benefit and maternity pay	4
8,256		9,325
110	Change in Assets £000	
120 64	Increase – current 7 Increase – fixed 43	
	Increase – fixed 43	
	Net increase	50
8,440	Amount of Grant-in-Aid appropriated for the Forestry Authority	9,375

EXPENDITURE ON FORESTRY AUTHORITY SERVICES in the year ended 31 March 1981

*Statement 11 of Forestry Enterprise Accounts page 83, £3,835,000

NOTES ON TABLE 2

1. The Forestry Authority share of the Grant-in-Aid amounted to $\pm 9,375,000$ compared to $\pm 8,440,000$ last year.

Services to Private Woodland Owners

2. Net expenditure rose in the year by £377,000 (10 per cent) to £3,828,000 due principally to increases in staff costs.

Special Services

3. Rises in staff costs account for an increase of £163,000 (8 per cent) in the total cost of Special Services.

Research and Development

4. The total cost of Research and Development activities, which also includes technical services to management, at $\pounds 6,014,000$ is $\pounds 1,034,000$ or 20 per cent higher than in the previous year. Rises in staff costs and continued work on the new 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 will be charged to the Forestry Enterprise and shown in the Plantations Account (Statement 1). This allocation amounts to $\pounds 2,706,000$ in 1980-81 reducing the cost of Research and Development chargeable to the Forestry Authority to $\pounds 3,308,000$.

FORESTRY ENTERPRISE ACCOUNTS 1980-81

BALANCE SHEET of the Forestry Commission Forestry Enterprise as at 31 March 1981, and ACCOUNTS for the year ended 31 March 1981, together with the Report of the Comptroller and Auditor General thereon.

CONTENTS

					Statement	Page
Balance Sheet as at 31 March 1981			••			74
Plantations Account		••	••		1	75
Forest Recreation and Amenity Accou	nt	••			2	76
Commercial Recreation Trading Account	unt	••		••	3	76
Harvesting Trading Account		••			4	77
Surplus Estate Trading Account				••	5	78
Agency Services Trading Account			••	••	6	79
Miscellaneous Trading Account		••			7	79
Trading and Variance Accounts Summ	агу		• •	••	8	80
Sale of Land and Buildings Account			••	••	9	81
Labour Oncost	••			••	10	82
Overhead and Forest Estate Expenses	••	••	••	••	11	83
Notes on the Accounts	••	••	••	••		84

FORESTRY COMMISSION ACCOUNTS OF THE FORESTRY ENTERPRISE FOR THE YEAR ENDED 31 MARCH 1981 BALANCE SHEET AS AT 31 MARCH 1981

As at 31 March I	980	See Notes/ Statements		
£000			£000	£000
5	Source of Funds			
101 122	CAPITAL AND RESERVES	NI-4- 2	620 466	
496,432	Capital	Note 3	530,466	
(18,024)	Trading and Variance Account balances	Statement 8	(35,064))
248,411	Current Cost Reserve	Note 6	383,685	
726,819				879,087
107,583	NOTIONAL SUPERANNUATION FUND	Note 7		123,621
107,585	NOTIONAL SUPERANNUATION FUND	Note /		123,021
834,402				1,002,708
]	Employment of Funds			
144,935	Fixed Assets	Note 8		144,246
				- · · · j - · · ·
	NET CURRENT ASSETS			
9,087	Stocks and work in progress	Note 9	10,155	
10,539	Debtors and sundry debit balances		10,610	
I,417	Cash at bank and in hand	Note 10	2,511	
21,043			23,276	
7,168	Creditors and accrued expenses		7,956	
13,875				15,320
175 500		a		
675,592	PLANTATIONS at standard cost	Statement 1		843,142
834,402				1,002,708
034,402				1,002,708

The notes on pages 84 to 94 form part of these Accounts.

G. D. Holmes Accounting Officer 19 January 1982

I have examined the above Balance Sheet and the annexed Statements 1 to 11 and Notes.

As stated in Note 21 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 will be made at 1 April 1982.

Subject to these inaccuracies, I certify that in my opinion the above mentioned Balance Sheet, Statements and 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 1981 and of its results for the year ended on that date, and comply with the provisions of the Forestry Act 1967 and the directions made thereunder by the Treasury.

26 January 1982 Exchequer and Audit Department Gordon Downey Comptroller and Auditor General

PLANTATIONS ACCOUNT FOR THE YEAR ENDED 31 MARCH 1981

Previous Year £000 558,113 83,717 641,830	See Notes/ Statements £000 At 1 April 1980: 890,939 hectares valued at standard (1979–80) cost Revaluation adjustment Note 6	£000 675,592 128,361 803,953
139 6,201 3,791 3,053 2,333 645 3,368	Land plantedNote 8(d)3,7Formation4,2Protection3,6Crop improvement3,1Lease rents, supplies and miscellaneous6	37 37 05 84
1,450 2,241 7,823 8,518 20,149	Road construction 3,7 Road maintenance 1,8 Research and development 2,7 Labour oncost Overhead expenses Interest Note 5 24,4	07 06 60 91 57
59,711 701,541 365 102 550	Surplus on sale of Forest Estate properties Statement 9	67,320 871,273
1,017		
		1,265
700,524	NET EXPENDITURE	1,265
8,406	SUBSIDIES AND TRANSFERS Planting and restocking subsidies Note 3(b), (c) and (d) 8,1 Transfer charge to Harvesting Trading Account for thinnings and fellings Statement 4	870,008
8,406 13,796	SUBSIDIES AND TRANSFERS Planting and restocking subsidies Note 3(b), (c) and (d) 8,1 Transfer charge to Harvesting Trading	870,008 36
8,406	SUBSIDIES AND TRANSFERS Planting and restocking subsidies Note 3(b), (c) and (d) 8,1 Transfer charge to Harvesting Trading Account for thinnings and fellings Statement 4	870,008
8,406 13,796	SUBSIDIES AND TRANSFERS Planting and restocking subsidies Note 3(b), (c) and (d) 8,1 Transfer charge to Harvesting Trading Account for thinnings and fellings Statement 4	870,008 36
8,406 13,796 22,202	SUBSIDIES AND TRANSFERS Planting and restocking subsidies Note 3(b), (c) and (d) 8,1 Transfer charge to Harvesting Trading Account for thinnings and fellings Statement 4 removed	870,008 36 24 26,360
8,406 13,796 22,202 678,322 675,592 (2,730)	SUBSIDIES AND TRANSFERS Planting and restocking subsidies Note 3(b), (c) and (d) Transfer charge to Harvesting Trading Account for thinnings and fellings Statement 4 removed and Note 13 18,22 NET TOTAL At 31 March 1981: 902,846 hectares valued at	870,008 36 24 26,360 843,648

FORESTRY COMMISSION FOREST RECREATION AND AMENITY ACCOUNT FOR THE YEAR ENDED 31 MARCH 1981

Previous Year £000 1,689 720 1,478 194	Direct expenditure Labour oncost Overhead expenses Interest	Statement 10	£000 £000 ,615 719 ,508 176
4,081 28	Less increase in stock	_	4,018 15
4,053 520	Income		4,003 618
3,533	Recreation and Amenity subsidy	Note 3(b), (c) and (e)	3,385

Statement 3

COMMERCIAL RECREATION TRADING ACCOUNT FOR THE YEAR ENDED 31 MARCH 1981

Previous Year £000		See Notes/ Statements		£000	£000
(A)) Campsites and Forest Cabins				
683 97 152 26	Direct expenditure	Statement 10 Statement 11 Note 5		780 89 158 30	
958	Plus decrease in stock		·		1,057
958 1,117	Income				1 ,0 59 1 ,32 7
159 170	Balance (standard surplus £309,000) Interest on capital employed	Note 5	Surplus		268 206
(<i>11</i>) (6)	Balance in year after interest Balance from previous year	Note 12	Surplus Deficit		62 (17)
(17)	Balance to date		Surplus		45
(B)	Shooting and Fishing				
89 51 198 25	Direct expenditure Labour oncost Overhead expenses Interest	Statement 10 Statement 11 Note 5		81 46 208 19	
363 432	Income				354 477
69 33	Balance in year	Note 12	Surplus Surplus		123 102
102	Balance to date		Surplus		225
85	(A) and (B) Balance to date	Statement 8	Surplus		270

HARVESTING TRADING ACCOUNT FOR THE YEAR ENDED 31 MARCH 1981

Previous Year £000		ee Notes/ tatements	£000	£000
34,157	INCOME Sale of produce Value of produce used in Commis-		35,896	
2 25	sion's forests		235	
34,382				36,131
	EXPENDITURE Marking, measuring, harvesting, ex-			
11,301 2,873	traction and conversion		14,087 3,485	
14,174			17,572	
556	Deduct increase in stock and work in progress		507	
13,618				17,065
20,764 5,197 6,653 1,171		atement 10 atement 11 Note 5	6,221 8,641 1,263	19,066
13,021				16,125
7,743	BALANCE	Surp	lus	2,941
13,796		atement 1 d Note 13		18,224
(6,053) (5,014)	BALANCE	Defic Defic		(15,283) (11,067)
(11,067)	Balance to date Sta	atement 8 Defic	it	(26,350)

SURPLUS ESTATE TRADING ACCOUNT FOR THE YEAR ENDED 31 MARCH 1981

Previous Year £000		See Notes/ Statements		£000	£000
180 12 278 22	Operational Account Direct expenditure Labour oncost Overhead expenses Interest	Statement 10 Statement 11 Note 5		324 19 393 24	2000
492 14	Add decrease in stock				760
506 278	Income				760 495
(228) 858	Balance	Note 5	Deficit		(265) 1,412
(1,086)	Balance in year after interest		Deficit		(1,677)
(200)	Capital Adjustments Deficit on sale of properties	Statement 9			(44)
(1,286) (1,619)	Balance in year				(1,721) (2,905)
(2,905)	Balance to date	Statement 8	Deficit		(4,626)

AGENCY SERVICES TRADING ACCOUNT FOR THE YEAR ENDED 31 MARCH 1981

Previous Year £000 962 397 276 61	Direct expenditure Labour oncost Overhead expenses Interest	•••	See Notes/ Statements Statement 10 Statement 11 Note 5		£000 1,009 413 327 57
1,696 1,626	Income				1,806 1,935
(70) (30)	Balance Balance from previous year		Note 15	Surplus Deficit	129 (100)
(100)	Balance to date		Statement 8	Surplus	29

Statement 7

MISCELLANEOUS TRADING ACCOUNT FOR THE YEAR ENDED 31 MARCH 1981

Previous Year £000		See Notes/ Statements		£000	
151 220	Joint Management Scheme Income	•••	Note 16	156 371	
371			Statement 8 Surplus	527	

TRADING AND VARIANCE ACCOUNTS SUMMARY FOR THE YEAR ENDED 31 MARCH 1981

Previous Year					See	e Statemen	ts	
£000£								£000
(4,408)	Plantations					1	Deficit	(4,914)
(11,067)	Harvesting					4	Deficit	(26,350)
(15,475)	Sub-Total							(31,264)
`´ <i>85</i> ´	Commercial Recreatio	n				3	Surplus	270
(2,905)	Surplus Estate	••				5	Deficit	(4,626)
`(100)	Agency Services					6	Surplus	29
`371´	Miscellaneous	••	••		••	7	Surplus	527
·	Balance at 31 March 1	091 ha		umulat	ed to			
(18,024)	end of quinquenniu						Deficit	(35,064)

SALE OF LAND AND BUILDINGS ACCOUNT FOR THE YEAR ENDED 31 MARCH 1981

Previous Year £000 2,148	Sale price	See Notes Statements		£000	£000 3,642
1,650 221 1 344 30	Deduct Current valuation Disposal expenses Labour oncost Overhead expenses Interest	Statement 10 Statement 11 Note 5		2,659 314 1 659 40	
2,246					3,673
(98)	Balance in year		Deficit		(31)

	Analysed to					Transferred to £000
(200)	Surplus Estate	••	••	••	Deficit	(44) Surplus Estate Trading Account
102	Forest Estate	••	••	••	Surplus	(Statement 5) 13 Plantations Account (Statement 1)

STATEMENT OF LABOUR ONCOST FOR THE YEAR ENDED 31 MARCH 1981

Previous		
Year £000 4,396	National insurance, holidays and sick pay	<i>£000</i> 5,350
1.368	Wet time	1,671
3,644	Transport of workers and travelling and subsistence	4,287
391	Training	433
819	Miscellaneous	216
313	Protective clothing	385
3,434	Provision for pensions and gratuities	3,955
		<u> </u>
14,365		16,297
61	Less Miscellaneous income	126
14,304		16,171
7 0 7 2	Distribution See Statements	8 (()
7,823	L'ampating A	8,660
5,197	Harvesting	6,221
13,020	Sub-Total (Standard £14,479,000)	14,881
720	Forest Recreation and Amenity	719
/20	Commercial Recreation: Campsites and forest	/12
97	cabins 3	89
51	Shooting and Fishing 3	46
12	Surplus Estate	19
397	Agency	413
1	Sale of Land and Buildings 9	1
6	Debtors	3
14,304		16,171

STATEMENT OF OVERHEAD AND FOREST ESTATE EXPENSES FOR THE YEAR ENDED 31 MARCH 1981

Previous		
Year		
£000		£000
11 ,9 64	Salaries and national insurance	14,720
2,486	Travelling, subsistence and staff transfer expenses	2,745
1,785	Office expenses	2,292
276	Losses, compensation and bad debts	457
210	Legal expenses	203
197*	Depreciation on equipment	226
<i>83</i> 8	Miscellaneous expenses	947
2,250	Provision for pensions and gratuities	2,788
1,426*	Accommodation and estate expenses (Note 18)	2,104
	- · · · ·	<u> </u>
21,432		26,482
203	Less Miscellaneous income	359
		<u> </u>
21,229		26,123
	Distribution See Statements	
8,518	Plantations	10,391
1,478	Forest Recreation and Amenity	1,508
	Commercial Recreation: Campsites and forest	
152	cabins 3	158
<i>198</i>	Shooting and Fishing 3	208
6,653	Harvesting	8,641
278	Surplus Estate	393
276	Agency	327
344	Sale of Land and Buildings 9	659
3	Debtors	3
<u> </u>		
17,900	Total Forestry Enterprise	22,288
3,329	Forestry Authority	3,835
		·
21,229		26,123
24,023	Standard	29,063

*Previous year's figures incorporate a compensatory adjustment of £374,000 due to reclassification of certain expenses.

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 assets employed, which were revalued at 1 April 1977. Plantations, the main asset, were revalued on the basis of the sum of net incomes expected in the future discounted at the target rate. Subsidies were introduced into the account to record:

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

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

(c) Inflation Accounting

The general objectives of current cost accounting as promulgated in 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 reconstruction at five-yearly intervals. Specific published indices have been used to adjust the value of fixed assets, and also stock where appropriate, to current value to the business. There is, however, no specific published 'forestry' index and since one cannot be accurately constructed because of the varying weights of expenditures and incomes, a general price index (based on the GDP implicit price deflator) of the change in the purchasing power of the pound has been used instead to adjust the plantations valuation, the planting and restocking subsidies and the standards used in the measurement of performance. 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 in the funds tied up in 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. PRIOR YEAR ADJUSTMENT

An adjustment of \pounds 59,000 has been made to the Capital balance at 1 April 1980 to include for the first time the valuation of priced publications held for sale at various recreational centres throughout the Commission.

3. CAPITAL

Previous Year £000				£000	£000
463,534	Balance at 1 April 1980 Prior year adjustment				496,432 59
43,250 8,440	As restated Grant-in-Aid of the Forestry Fund for 1980–81 less Appropriated for the Forestry Authority	 		42,250 9,375	496,491
34,810 12,027	Grant-in-Aid of the Forestry Enterprise for 1980- less Subsidies etc (see analysis below in (b))	81 		32,875 11,634	
22,783 10,115	Addition of Grant-in-Aid to Capital for 1980-81 Notional interest on Capital (Note 5 below)	•••	••	<u> </u>	21,241 12,838
496,432	less Decrease in liability for assets acquired withou	t payı	nent		530,570 104
496,43 2	Balance at 31 March 1981				530,466

(a) The balance at 31 March 1981 includes:

- (i) A liability to the Crown Estate Commissioners of £1,247,000 (£1,371,000 in 1979-80) contingent upon the sale of property acquired without payment under Forestry (Transfer of Woods) Orders 1924-61.
- (ii) Gifts to the value of £174,000 (£153,000 in 1979-80). The increase relates to gifts of land for afforestation in England and Scotland.
- (b) The sum of £11,634,000 deducted for Subsidies etc. is made up of:

Previous Year £000				£0 00
8,406	Planting and restocking subsidies ((c) and (d) below) Forest Recreation and Amenity subsidy (Statement :		 d (e)	8,136
3,533 88	below) Notional sick and injury benefit and maternity pay	 	u (c) 	3,385 113
12,027		 		11,634

- (c) Details of subsidies (see page 86).
- (d) 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.
- (e) 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 £3,385,000 in 1980-81 (compared to £3,533,000 in 1979-80). The level of subsidy to date is substantially less than the amount foreshadowed annually for the current quinquennium in the 1976-77 Annual Report of £3 million in real terms.

(continued)
Accounts
on the
Notes on

\sim
5
90
~
d,
ø
See
ت
an)
ŭ
#
.¥
æ
Ξ.
ฉ
5
0
~
Ξ
Ð
ŏ
Η

			Planting			Restocking		Forest
		Area Planted (hectares)	Subsidy per hectare	Subsidy £80/81 (000)	Area Planted (hectares)	Subsidy per hectare	Subsidy £80/81 (000)	Amenity
Great Britain		11,634	£ 435	5,061	5,014	£ 613	3,075	£000 3,385
ENGLAND Total	:	470	537	252	1,902	1,142	2,171	1,751
Conservancy: North-West	:::::	158 242 51 19	765 342 596 1,560 962	121 83 30 18	323 464 413 235 235	1,192 711 775 1,485 1,485	385 330 443 693 693	203 224 224 203 289 289
Scort.AND Total Conservancy: North	: ::::	10,481 3,356 1,427 1,939 3,759	398 666 177 289	4,173 2,235 508 343 1,087	1,996 412 363 685 536	(131) 110 (35) (224) (262)	(261) 45 (13) (140) (140)	1,036 305 259 275 197
WALES Total Conservancy: North	: ::	683 337 346	931 767 1,090	636 259 377	1,116 455 661	1,044 1,134 982	1,165 516 649	598 390 208

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

4. 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:

Previous Year £000		£000
37,158	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 5 below) based on the average value of assets employed at the beginning and	45,163
22,706	end of the year	27,684
14,452	Difference being Forestry Subsidy	17,479

5. 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:

			1000
5 per cent on Surplus Estate assets 5 per cent on Commercial Recreation assets 3 per cent on all other assets The total interest of £27,684,000 has been follows:		within the acc	1,412 206 26,066 counts as
Ionows.		See Notes/	
		Statements	
		Sidiements	£000
Capital		Note 3	12,838
Superannuation Fund		Note 7	14,846
			27,684
Plantations		Statement 1	24,457
Forest Recreation and Amenity		Statement 2	176
Commercial Recreation: Camp sites and forest		Statement 3	236*
Shooting and Fishing	5	Statement 3	19
Harvesting	•• ••	Statement 4	1,263
Surplus Estate	•••	Statement 5	1,436*
Agency	••••••	Statement 6	57
Sale of Land and Buildings	•• ••	Statement 9	40
			27,684

*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.

6. CURRENT COST RESERVE

Previous Year £000		£000	£000
129,084 5,044	Balance at 1 April 1980 Prior year adjustment		248,411
134,128	As restated Increases arising from revaluation of assets at 31 March 1981		248,411
83,717	Standard value of plantations	128,361	
24,603	Land and buildings in Forest Estate	4,449	
3,954	Land and buildings in Surplus Estate	329	
1,549	Vehicles, machinery and equipment	1,406	
180	Furniture and equipment	136	
176	Stocks and work in progress	123	
114,179	Adjustments arising from reclassification of assets at		134,804
104	31 March 1981		470
248,411			383,685

The Current Cost Reserve consists mainly of the surpluses (or deficits) arising from the annual revaluation of assets within the quinquennium.

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 19 per cent in the year and 67 per cent since the beginning of the quinquennium. Other assets are revalued as described in notes 8 and 9 below.

Reclassification of properties between groups of assets (other than new planting which is dealt with in note 8 below) occasionally takes place within the quinquennium and this may result in a change of value. Such adjustments are reflected by an entry in the Current Cost Reserve.

7. NOTIONAL SUPERANNUATION FUND

Previous Year £000		£000
93,959	Balance at 1 April 1980	107,583
12,591	Interest at 13.8 per cent on opening balance	14,846
	Provision made during year (including £575,000 charged to Forestry	
6,146	Authority)	7,318
1,171	Contributions received during the year	1,183
113.867		130.930
6,284	Less Payments made during the year	7,309
107,583	Balance at 31 March 1981	123,621

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

8. Fixed Assets

Freehold and Leasehold Land and Buildings

	Forest Estate £000	Surplus Estate £000	Total £000
At 1 April 1980	97,199	28,629	125,828 1,375
Disposals and transfers at book value	1,348 4,847	27 1,097	5,944
Depreciation charge for year Revaluation adjustment	1,683 4,449	329	1,683 4,778
At 31 March 1981	96,466	27,888	124,354

Plant and Equipment

na Edubueur	Vehicles, Machines and Equipment	Furniture and Equipment	Total
	£000	£000	£000
Gross current replacement cost			
At 1 April 1980 Additions during year at cost Disposals and transfers at book value Revaluation adjustment	44,863 5,155 4,343 3,267	2,088 86 12 291	46,951 5,241 4,355 3,558
At 31 March 1981	48,942	2,453	51,395

	Vehicles, Machines and Equipment £000	Furniture and Equipment £000	Total £000
Depreciation	2000	2000	2000
At 1 April 1980	26,729 5,634 4,172 1,861	1,115 189 8 155	27,844 5,823 4,180 2,016
At 31 March 1981	30,052	1,451	31,503
Net current replacement cost	18,890	1.002	19,892
At 31 March 1981 At 1 April 1980	18,134	973	19,107
Total Fixed Assets			
At 31 March 1981 At 1 April 1980		_	144,246 144,935

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 valued by professionally qualified staff at 1 April 1977 generally on the basis of open market values with acquisition costs added for forest estate properties and disposal expenses deducted from surplus properties. Specialist buildings were, however, valued at net replacement cost. Forest recreation and amenity facilities are only included in the Balance Sheet at a nominal value of £1 per item for asset accounting purposes. The balance of the expenditure on the creation of these facilities is charged directly to the Forest Recreation and Amenity Subsidy Account as this is intended to embrace both the capital and current expenditure on these activities when incurred.
- (c) A further professional valuation of these assets will be carried out at the end of the quinquennium in March 1982. In the interim period the end of year valuations have been assessed as follows:
 - Land awaiting planting by use of an internal index based on the current cost of acquisitions indicating a decrease of 10 per cent over the year.
 - other land
 by application of a weighted index based on data published by MAFF and the Welsh Office for sales of agricultural land with vacant possession in England and Wales and by DAFS for sale of hill and upland equipped farms in Scotland (in previous years the data relating to sales of all agricultural and forestry land in Scotland was used in construction of the weighted index but this is now thought to be inaccurate and retrospective corrections have been made). The weighted index shows a decrease of 13 per cent over the year.
 - Buildings by application of an index relating to the cost of new construction as published by the Department of Industry. This index indicates a rise of 23 per cent in the year and a suitable adjustment was made thereto in respect of surplus buildings which are not depreciated.
- (d) Disposals and transfers include land afforested in the year with a corresponding entry in the Plantations account and also reclassification of land between Forest and Surplus Estate. 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. Differences arising from reclassification between Forest and Surplus Estate are reflected in the Current Cost Reserve.
- (e) Buildings are occasionally reclassified between Forest Estate and Surplus Estate during the quinquennium and an appropriate adjustment is made in such cases to the opening balances at the start of each year.

Plant, Machinery and Equipment

(f) These assets have been valued at gross current replacement cost calculated principally by reference to asset type indices issued by the Department of Industry (showing increases of up to 15 per cent) less aggregated depreciation on the basis stated below to reflect the expired proportion of the assets' working lives.

Depreciation

(g) 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 depreciated. The estimated useful lives used for depreciation calculations are as follows:

Buildings - 13-80 years or in the case of leasehold buildings the term of the lease, whichever is the shorter.

Vehicles, machinery and equipment - 3-16 years Furniture and equipment - 5-20 years

9. STOCKS AND WORK IN PROGRESS

Previous Year £000					£000
5,388 1,109 105 2,485	Timber Plants and seed Livestock Consumable mate	rials a	 nd sup;	 Dlies	5,895 1,111 103 3,046
9,087					10,155

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 last price paid or by application of a DOI index thereto.

10. Cash at Banks and in Hand

- .

				£000
Balance in banks	Payma	aster G	eneral	1,922 584
Cash in transit and in hand	••	• •	••	2,511
	Ralance in banks	Balance in banks	Balance in banks	Cash in transit and in hand

11. VARIANCE ON PLANTATIONS ACCOUNT

The increase in the valuation of plantations during the year (at 1980-81 standard costs and prices) is £39,189,000 while the actual net expenditures and transfer values amount to \pm 39,695,000, an adverse variance of \pm 506,000 which arises as follows:

			Standard at 1980–81 costs and prices £000	Actual £000	Variances £000
Plantations acquired			84	69	15
I and plantad	••		3,188	3,777	(589)
Formation			4,296	4,237	`59 ´
Protection			3,726	3,637	89
Crop improvement			2,639	3,105	(466)
Lease rents, supplies and misc	cellane	ous	670	684	(14)
Road construction			2,983	3,790	(807)
Road maintenance	••	••	2,031	1,807	224
			19,617	21,106	(1,489)
Sundry income			553	699	146
Net operational expenditure			19,064	20,407	(1,343)
Labour openet			7,409	8,660	(1,251)
Overhead expenses			12,136	10,391	1,745
Research and development	••		3,049	2,706	343
					(506)

The contributory reasons for the variances are detailed below:

- (a) The excess cost of £589,000 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 valuation is now very significant with acquisition costs of plantable land having risen by 124 per cent since the start of the quinquennium against an increase in the standard value of planted land of 67 per cent based on the GDP.
- (b) Additional expenditures on planting and beating up due to work on high cost areas, the purchase of imported plants and the prolonged drought in Spring 1980 was met by a reduction in the weeding programme and overall produced a net saving of £59,000 on Formation.
- (c) Considerably increased costs on fire protection caused by a prolonged danger period in the Spring of 1980 were more than offset by a switch of resources from fencing and resulted in an overall saving on Protection of £89,000.
- (d) The additional cost of £466,000 in Crop improvement stemmed mainly from increased programmes of cleaning to reduce arrears from previous years and also aerial fertilisation, a significant proportion of which is expected to increase the productivity of the plantations beyond the level envisaged in the valuation at the start of the quinquennium. These increases were, to some extent, financed by reductions in the brashing and drain maintenance programmes.
- (e) The excess cost of £14,000 on lease rents, supplies and miscellaneous is principally due to higher legal costs on the purchase of land than envisaged in the standard.
- (f) The excess cost of £807,000 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.
- (g) The reduction of £224,000 in Road maintenance expenditure is due to a transfer of resources to Road construction.
- (h) The £146,000 excess of income over standard is, in fact, due to larger deer culls and also to the recovery of large sums spent on extinguishing fires on private land.
- (i) The excess cost of £1,251,000 on Labour oncost is principally due to increases above the standard both in the provisions made for superannuation benefits to industrial staff and in transport costs and also to the inclusion of protective clothing costs previously treated as overheads (see also Note 21).
- (j) The reduction of £1,745,000 in Overhead expenses is due in part to the income received from mineral exploitation, together with the transfer of protective clothing costs to Labour oncost and the fact that staff costs, which form the bulk of overheads, have risen by a smaller margin since the beginning of the quinquennium than the GDP increase of 67 per cent.
- (k) Research and Development charges to the Enterprise were £343,000 less than anticipated partly due to savings in staff cost together with a programme reduction in work study.

12. 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 $\pounds 268,000$ on the year before interest on capital employed. This surplus is equivalent to a return of 6.5 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 shortfall against the internal standard is due both to the provision of facilities to combat the problem of "wild" camping, which will never achieve a commercial return, and the difficult economic conditions prevailing during the year. It is now highly unlikely that the overall return for the current quiquennium which ends next year will reach the internal standard but it should certainly exceed the 5 per cent target for public sector bodies.

No separate standard has been set for shooting and fishing. There is a surplus of £123,000 on the account in the year after charging interest for the use of vehicles and forest estate properties and a cumulative surplus of £225,000 since the beginning of the quinquennium.

13. HARVESTING TRADING ACCOUNT

There was a deficit of £15,283,000 in the year on the Harvesting Trading Account after charging $\pounds 18,224,000$ for the value of fellings and thinnings consumed at current standard values which allow for a 19 per cent increase for the year based on the GDP implicit price deflator. A nil balance would have indicated for the trees harvested no deviation from the 3 per cent target.

The deficit arose as follows:

at	Standard 1980–81		
	costs and prices £000	Actual £000	Variance £000
Income (after adjustment for increase in stock of £811,000)	54,817	36,942	(17,875)
work in progress of £304,000)	19,718	17,876	1,842
Net Harvesting Revenue Labour oncost	35,099 7,070	19,066 6,221	(16,033) 849
Surplus Overheads and interest	28,029 9,805	12,845 9,904	(15,184) (99)
Balance	18,224	2,941	(15,283)
		· · · · · · · · · · · · · · · · · · ·	

ο.

The standards are based on unit costs per cubic metre so that comparison with actual performance is not affected by changes in the volume of wood handled.

1980-81 standards allow for a 19 per cent increase in income and expenditure based on the GDP index.

Costs have been well held within revalued standards. Income however has remained at the same price level per cubic metre overall as obtained in 1979-80 (already below standard) and thus falls some £17.9 million short of the GDP (19 per cent) revalued income standard, reflecting the effects of the recession and the relative strength of sterling which favoured overseas producers.

14. SURPLUS ESTATE TRADING ACCOUNT

Surplus Estate comprises those properties apart from plantations which are not required for the Forestry Enterprise and are intended to be sold at the earliest opportunity whenever possible. The account shows an operational deficit on letting the properties of £1,677,000 after charging interest on capital employed at 5 per cent. In addition a deficit of £44,000 arose on sales during the year (see Statement 9 for details). The cumulative deficit since the beginning of the quinquennium is now £4,626,000 but this is more than balanced by the write-up of £9,327,000 in property values, arising from the annual revaluation by index, which has been credited to the Current Cost Reserve.

15. Agency Services Trading Account

Agency services covers the provision of staff and machinery to carry out tree planting and maintenance work on motorways and trunk roads on behalf of the Department of the Environment, forestry operations on private estates where no private contractors are available and occasionally the loan of labour to neighbouring farmers. The account should be in balance and charges were adjusted in 1980–81 to recover prior deficits and to meet in full the direct costs and overheads of current work. There is now an overall surplus of £29,000 during the first four years of the quiquennium.

16. 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.

17. LABOUR ONCOST

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

Standards are only set for the Plantations and Harvesting accounts and the respective variances are set out in Notes 11 and 13. The variances are principally related to the transfer of protective clothing from overheads to labour oncost and increases above the standard both in the provisions made for superannuation benefits to industrial staff and in transport costs (see also Note 21).

18. Overhead and Forest Estate Expenses

The actual cost of overheads and forest estate expenses amounted to $\pounds 26,123,000$ compared to an updated standard of $\pounds 29,063,000$ giving a favourable variance of $\pounds 2,940,000$.

The variance is due in the main to a lower rise in salaries and associated staff costs than the 67 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 direct cost in the year amounted to £2,104,000 and is analysed as follows with royalties and other income from mineral exploitation being detailed separately.

				Expenditure £000	Income £000	Net £000
Forest workers' houses a Foresters' houses Administration buildings	 oldings	 	••	1,086 440 2, 2 93	437 274 420	(649) (166) (1,873)
Agricultural properties accommodation Mineral exploitation	other	reside	ential	600	800 384	200 384
				4,419	2,315	(2,104)

19. FUTURE CAPITAL EXPENDITURE

Future capital expenditure on Fixed Assets in 1981-82 authorised by the Commission amounts to £12,683,000 (£11,727,000 for 1980-81).

20. CONTINGENT LIABILITIES

Contingent liabilities exist at 31 March 1981 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 £245,000 (£69,000 at 31 March 1980).

21. SPECIAL NOTE

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 full revaluation taking these points into account will be made at 1 April 1982.

Printed in England for Her Majesty's Stationery Office by Royle City Ltd 12319 Dd 0292759 C36 4/82