

COUNTRYSIDE RECREATION NETWORK

**Countryside Recreation Research:
Work Completed by the CRN Agencies**

1991/92

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CRN Manager**

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PREFACE

Countryside Recreation Network

CRN is a UK-wide network of the agencies concerned with countryside and related recreation matters—exchanging and spreading information to develop best policy and practice in countryside recreation. Formed in January 1993, CRN is the successor to CRRAG (Countryside Recreation Research Advisory Group). Membership is drawn from the national statutory organisations, the local authority associations and the research councils. The Network served extends to include the clients and customers of the member agencies.

CRN Aims

The Network aims to assist the working of the agencies concerned with countryside and related recreation research by

1. identifying and helping to meet the needs of CRN members for advice, information and research;
2. promoting co-operation between member agencies in formulating and executing research on countryside and related recreation issues;
3. encouraging and assisting the dissemination of the results of countryside research and best practice amongst the agencies and clients of the agencies.

CRN Membership

The Network spans the UK. Members are drawn from agencies who have an interest in countryside and related recreation. This interest might focus on research, policy planning, implementation, management, training or monitoring.

There are three kinds of membership: Associates, Member Agencies, and Sponsors and contributors.

* Associates are individuals and organisations, from the public, private and voluntary sectors, who are interested in the activities of CRN. They are welcome to take part in all CRN activities, except agency meetings. Membership is free and associates are kept informed of CRN's activities.

* Member Agencies are drawn from a wide circle of interested bodies—government departments, local authority associations, statutory service providers and a variety of regulatory, research and advisory bodies. There are currently 22 member agencies, representatives from whom attend regular agency meetings to discuss matters of common interest.

* The Sponsors and contributors are Agencies which provide the necessary support and funding. Current Sponsors include Countryside Commission, Countryside Council for Wales, Environment Service (DoE, NI), English Nature, Forestry Commission, Scottish Natural Heritage and the Sports Council. The Chairman and Vice-Chairman of CRN are drawn from these agencies.

CRN Activities

At the **Agency Meetings** which are held three or four times a year, countryside recreation research programmes are discussed, matters concerning policy and practice as well as the programme of the Network's activities.

Workshops generally take the form of one day events concentrating on a topical issue of common interest. The focus is upon the interface between research, experiment and practice. Past workshops have included Upland Footpath Management, Landscape Assessment, Cycling in the Countryside and Surveying People.

Countryside Recreation Conference. An annual two day Conference held in September for 150-200 delegates on a topical theme brings together researchers, policy-makers, managers and practitioners. The proceedings are published. Recent Conferences have considered: access to open land, people, trees and woods, and young people, adventure and the countryside.

Newsletter. CRN publishes a newsletter three times a year (February, June and October) bringing together material from member agencies to a readership with a common interest, thereby extending the Network.

Research Directory. Each year, CRN will publish Countryside and related Recreation Research: work completed by the CRN Agencies. This provides information on each agency's research programme for the past year.

For further information about CRN, or for further copies of this document, contact:

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Cardiff
CF1 3YN

Tel./Fax: 0222 874970

The Sponsors have contracted the Dept. of City & Regional Planning, University of Wales College of Cardiff to provide the CRN Secretariat.

ASSOCIATION OF METROPOLITAN AUTHORITIES

Introduction

The AMA is a voluntary association of unitary authorities in London and the other Metropolitan Counties. They have a keen interest in countryside recreation research carried out by other agencies as well as undertaking a limited amount of research within their own resources. A good deal of survey work is carried out in the preparation of strategies of various kinds (countryside recreation, wildlife, rights of way, landscape, interpretation, etc.), for Unitary Development Plans and environmental audits. There is a good deal of emphasis on the interface between countryside recreation (for all sectors of the community), landscape and wildlife. The potential multi-purpose use of community forests is a particular current interest.

Publications and Reports

AMA1 *Knowsley MBC: Conservation Management of Urban Grasslands*

A research project to develop methods to increase nature conservation interest of urban grasslands by modifying high-productivity rye grass swards. Three main approaches: sward management, substrate management and substrate replacement, including large-scale field trials. Practical recommendations. Funded for 1989/90 by NCC research grant and carried out by the Groundwork Trust on land owned by, and in partnership with, Knowsley MBC. Monitoring of trials continuing.

Published: "Flowers in the Grass"
Authors: Ash H, Bennett R, Scott R
Contact: Pete Black, Department of Planning and Development, Knowsley MBC, PO Box 26, Municipal Buildings, Archway Road, Huyton, Merseyside L36 9FB Tel: 051 443 2277.

AMA2 *Wakefield MBC: Study of Public Use and Enjoyment of the Countryside of Wakefield*

- Objectives:**
1. To establish levels of awareness of Wakefield residents of the Countryside Service, how it works and what it offers;
 2. To establish the level of informal countryside recreation undertaken by residents of the district (with some emphasis on those residents in lower income brackets);
 3. To highlight those barriers, both actual and perceived, which prevent the public from taking greater advantage of the facilities and opportunities provided;
 4. To assess which facilities presently provided are well known and visited by the public, and at what level;
 5. To discover which other appropriate facilities and opportunities the public wish to see provided.

The final report will include analysis of information gathered and recommendations for future development of the Wakefield Countryside Service.

Researcher: Sheffield City Polytechnic
Date: August/September 1991
Contact: Prof. Andrews Tel: 0324 296202

AMA3 *Dudley MBC: The Leasowes - A Survey of the Landscape*

Landscape research on a historic park: extensive archive and bibliography research, tree survey and production of restoration plans.

Unpublished

Author: Debois Landscape Survey Group
Date: November 1991
Contact: Sally Orton, Principal Landscape Officer, Dudley MBC, Leisure Services, Claughton House, Blowers Green Road, Dudley, West Midlands DY2 8UZ Tel: 0384 453617.

AMA4 *London Borough of Brent: Neutral Grassland Management*

Monitoring of neutral hay meadow grasslands and experimental trials to establish most appropriate management ie. to maximise floristic diversity at low management costs. Three main options under study: hay cutting and harvesting once annually; flail cutting once annually; no cutting.

Researcher: L R Williams
Date: 1985 and ongoing
Contact: Leslie Williams, Countryside Ranger, Brent Parks, Barham Park Offices, 660 Harrow Road, Wembley, Middlesex HA0 2HB Tel: 081 900 5194.

AMA5 *London Borough of Brent: Butterfly Monitoring in a Country Park*

Monitoring of butterfly populations to quantify success, or otherwise, of grassland and woodland management within a country park. NCC method is used, with the innovation of simultaneously monitoring public use of the park.

Published: "Butterfly Monitoring at Fryent Country Park, Middlesex, 1986/90"
Authors: Williams L , Kkwissa A, Browd D and Brown J
Date: 1991
Publisher: London Natural History Society
ISSN: 0076-0579
Price: £4.00
Contact: Leslie Williams as in AMA4 above.

AMA6 *London Borough of Newham: Nature Conservation in Newham*

Handbook documents wildlife in the borough and initiatives by the Council and others to protect and enhance habitats for wild plants and Animals.

Published: "Nature Conservation in Newham"
Author: Archer J - London Ecology Unit
Date: January 1992
Publisher: London Ecology Unit
Price: £4.00
Contact: Vanessa Simpson, Projects Officer, Leisure Services Department, London Borough of Newham

AMA7 *London Borough of Redbridge: Research into Viability of Re-pollarding Hornbeam Trees within SSSIs*

Three year research project into techniques of re-pollarding hornbeams within ancient woodland. Field trials established with London Ecology Unit as advisors at Hainault Forest Country Park. The aim is to determine successful techniques for re-pollarding with aim of introducing the technique throughout the woodland.
No published reports.

Contact: R G G Sidwell, Country Park Officer, London Borough of Redbridge. Tel: 081 500 7353

AMA8 *South Tyneside MBC: Field Penalty Assessment - South Tyneside Unitary Development Plan*

The project examined the farming problems encountered in the urban fringe of South Tyneside with a view to assessing agricultural potential.

Researchers: Agricultural Development and Advisory Service

Date: 1991

Contact: Simon Ellis, Department of Planning, South Tyneside MBC, Town Hall and Civic Offices, Westoe Road, South Shields, NE33 2RL Tel 091 427 1717

AMA9 *Greater Manchester Countryside Unit - the Greater Manchester Countryside Recreation Information Project*

A three year project to try out and evaluate innovative ways of communicating information on countryside recreation opportunities to an essentially urban population in Greater Manchester. Funded 75% by the Countryside Commission and 25% by the Association of Greater Manchester Authorities, and attached to the Greater Manchester Countryside Unit (which is itself attached to Tameside MBC).

Project report to Countryside Commission, AGMA and Project Steering Group in January 1992.
Not for sale.

Countryside Commission will consider publication of findings from this and other Information Projects.

Contact: At GMCU: Marion Raines, Senior Countryside Planner, Greater Manchester Countryside Unit, West End Offices, Jowetts Walk, Ashton under Lyne, OL7 0BB Tel: 061 343 3138.

BRITISH WATERWAYS

Introduction

British Waterways is the statutory authority responsible for the maintenance and control of much of the inland waterway network of Great Britain. Research is carried out into a wide range of subject areas, reflecting BW's interests, including engineering, ecology, water supply, freight transport, property and recreation. Recreation-related research is controlled, undertaken and co-ordinated by a central Planning and Research Unit. With increasing emphasis being placed upon revenue generation and customer care, market research and information provision is becoming an increasingly important element within the overall research programme. Also a regional structure has been introduced within British Waterways, leading to an increased devolvement of responsibilities to local management. This process has resulted in increased information needs at a local level and the current research programme reflects these requirements. Many of the issues raised in this programme are common with CRN agencies, including:

- The determination of visitor numbers, especially at remote sites. BW has developed a mechanical "people" counter to carry this out;
- Managing conflict e.g. between user groups (cyclists v. other towpath users); between users and the waterway environment;
- The valuation of indirect and non-quantified benefits and costs including consumer surplus, impact on property prices and employment generation;
- Customer care monitoring.

Publications and Reports

BW1 *Bingley Locks Visitor Survey, 1990*

To obtain preferences of informal visitors and visitor numbers at Bingley 5-Rise Locks on the Leeds & Liverpool Canal.

Published in-house: BW Planning & Research Paper No. 42
Date: January 1991
Price: £10.00

BW2 *Information Provision on the Regent's Canal*

To evaluate the use of information boards on the Regent's Canal in London.

Published in-house: BW Planning & Research Paper No. 43
Date: March 1991
Price: £10.00

BW3 *Weaver Navigation: Survey of Informal Users, 1989*

To obtain preferences of informal visitors at 5 sites on the Weaver Navigation and at Anderton Lift on the adjacent Trent & Mersey Canal.

Published in-house: BW Planning & Research Paper No. 44
Date: March 1991
Price: £10.00

BW4 *Perception and Use of BW Waterways, 1989*

To provide information by means of an omnibus survey of the overall perception of BW waterways, and the usage of these waterways by the various visitor groups - boaters, anglers and informal visitors.

Published: "Perception and Use of BW Waterways, 1989"
Date: 1991
Price: £20.00

BW5 *"Fishing for Facts" - A Survey of Anglers on Three BW-managed Fisheries*

To investigate the usage of 3 canals by anglers, together with implications for future waterway management. The canals are Ashton/Lower Peak Forest, the Leicester Arm of the Grand Union Canal, and the Gloucester & Sharpness Canal.

Published in-house: BW Planning & Research Paper No. 46
Date: 1991
Price: £10.00

BW6 *Boating Holidays on England's Canals: Customer Survey, 1990*

To obtain details of customer preferences of hire boaters throughout the BW network.

Published in-house: BW Planning & Research Paper No. 47
Date: April 1991
Price: £20.00

BW7 *East Midlands Navigations Boating Survey, 1990*

Phase II of a series of surveys to obtain details of customer preferences, visitor spend and levels of customer service on the River Trent and Fossdyke & Witham Navigations.

Published in-house: BW Planning & Research Paper No. 48
Date: January 1991
Price: £10.00

BW8 *Visitors to the Kennet & Avon Canal Towpath, 1990*

To provide market and visitor spend data at 8 sites along the Kennet & Avon Canal, and to supply base line data to monitor changes in usage, against which future progress can be measured.

Published in-house: BW Planning & Research Paper No. 49
Date: June 1991
Price: £10.00

BW9 "Days Away on the K & A": A Survey of Trip Boats on the Kennet & Avon Canal, 1990

To provide marketing, customer preference, and visitor data, and to measure levels of customer service on trip boats operating on the Kennet & Avon Canal.

Published in-house: BW Planning & Research Paper No. 50

Date: July 1991

Price: £10.00

BW10 "Boats and Boating": A Survey of Private Boaters on the Kennet & Avon Canal, 1990

To ascertain mooring requirements, market data and details of customer preferences and levels of service in respect of boatowners on the Kennet & Avon Canal.

Published in-house: BW Planning & Research Paper No. 51

Date: July 1991

Price: £10.00

BW11 Moorings on the Trent & Mersey Canal, 1990

To establish the demand for moorings and customer preferences regarding mooring types and facilities on the Trent & Mersey Canal.

Published in-house: BW Planning & Research Paper No. 53

Date: June 1991

Price: £10.00

BW12 Stourport Basin Visitor Survey, 1990

To determine the relationship between visitors to the town of Stourport and to the Stourport Basin, and obtain market data, customer preferences and satisfaction levels for informal visitors to the Basin; to ascertain the preferences of boaters visiting the Basin.

Published in-house: BW Planning & Research Paper No. 52

Date: July 1991

Price: £10.00

BW13 Midlands Waterways Site Surveys, 1989

To obtain preferences of informal visitors at 4 sites with development potential on the Midlands waterways.

Reports Published in-house

Research Report No.

Hatton Locks Site Survey, 1989	55
Worcester & Birmingham Canal Survey, 1989	56
Fradley Junction Site Survey, 1989	57
Hawkesbury Junction Site Survey, 1989	58

Price: £10.00 each

BW14 Valuation of Social Benefits Provided by Inland Waterways

To quantify the social and environmental benefits (consumer surplus) provided by inland waterways.

Published in: "Valuing Open Access Recreation on Inland Waterways": ESRC Countryside Change Initiative, Working Paper 12 by Willis K, Garrod G

Date: 1990
Price: £3.00

Contact: Countryside Change Unit, Dept. of Agricultural Economics & Food Marketing, University of Newcastle-upon-Tyne, NE1 7RU.

BW15 The Kennet & Avon Canal: A Plan for the Environment, Tourism and Leisure

A consultative draft plan for the future of the Kennet & Avon Canal, drawing on the results of information collected in the 1990 survey programme.

Published in-House
Price: £12.00

BW16 East Midlands Waterways Boating Survey, 1991

Phase III of a series of surveys to obtain details of customer preferences, visitor spend and levels of customer service on the River Trent and Fosdyke & Witham Navigations.

Published in-house: BW Research Paper No.59
Date: February 1992
ISSN: 0143-5154
Price: £10.00

BW17 Birmingham & Black Country Canals Boating Survey, 1991

To obtain details of customer preferences and perceptions of cruising and mooring on the canals of the West Midlands.

Published in-house: BW Research Paper No.60
Date: March 1992
ISSN: 0143-5154
Price: £10.00

BW18 Hire Boat Holidays on British Waterways: A Market Analysis Based on the 1991 Customer Survey

A profile of customer perceptions, motivations and characteristics regarding holidays on hire boats on canals.

Published in-house: BW Research Paper No.61
Date: April 1992
ISSN: 0143-5154
Price: £20.00

BW19 *Tring Reservoirs Visitor Survey, 1991*

To ascertain visitor profiles, satisfaction levels, preferences and spend at Tring Reservoirs, a country park-type site in Hertfordshire.

Published in-house: BW Research Paper No.62

Date: May 1992
ISSN: 0143-5154
Price: £10.00

BW20 *Lincoln Brayford Pool Visitor Survey, 1991*

To ascertain visitor profiles, satisfaction levels, preferences and spend at Brayford Pool, in the city of Lincoln.

Published in-house: BW Research Paper No.63

Date: June 1992
ISSN: 0143-5154
Price: £10.00

BW21 *Boating on British Waterways Canals and Rivers: Report of a Survey of Owners of Powered Boats, 1991*

To determine the market characteristics of private boatowners on the BW system, together with the characteristics of boats owned. The report also reviews the extent of boats coming on to and leaving the BW system each year, together with the reasons for loss of boats.

Published in-house: BW Research Paper No.64

Date: July 1992
ISSN: 0143-5154
Price: £20.00

BW22 *Customer Research: How Private Boatowners Rate the Performance of British Waterways*

To monitor perceptions of private boatowners with regard to the service provided by BW in relation to staff- and infrastructure-related issues.

Published in-house

Date: April 1992
Price: Free of Charge

Contact for Research Enquiries:

Glenn Millar, Research Manager, British Waterways, Willow Grange, Church Road, Watford WD1 30A
Tel: 0923 201356

CONVENTION OF SCOTTISH LOCAL AUTHORITIES

Publications and Reports

EAST LOTHIAN DISTRICT COUNCIL

Authority Contact: M. Johnston

ELDC1 *John Muir Country Park Management Plan*

John Muir Country Park aims to provide the opportunity for public recreation in an area with a high landscape quality, whilst at the same time conserving the range of geological and geomorphological features, plant and animal communities within the site. The Management Plan sets out the aims, objectives and policies of this Country Park to be implemented over a four year period.

Published: "John Muir Country Park Management Plan"
Authors: East Lothian District Council in consultation with the Countryside Commission for Scotland and the Nature Conservancy Council for Scotland.
Date: 1990 - 1994
Publisher: East Lothian District Council
Price: £2.50 + pp

ELDC2 *Aberlady Bay Local Nature Reserve Management Plan*

Aberlady Bay Local Nature Reserve aims to conserve the geomorphological and physiographical features, habitats, flora, fauna and resultant landscape character of the Reserve. The Management Plan sets out the aims, objectives and policies of the Local Nature Reserve to be implemented over a five year period.

Published: "Aberlady Bay Local Nature Reserve Management Plan"
Authors: East Lothian District Council. in consultation with the Nature Conservancy for Scotland
Date: 1992 - 96 (under review)
Publisher: East Lothian District Council.
Price: £2.50 + pp

ELDC3 *Traprain Law Management Plan*

Traprain Law has significant archaeological, nature conservation and recreational value. The Management Plan sets out the management objectives and policies for the site over a four year period.

Published: "Traprain Law Management Plan"
Authors: East Lothian District Council
Date: 1990 - 94
Publisher: East Lothian District Council
Price: £2.50 + pp

ELDC4 *Pencaitland Railway Walk Management Plan*

The objectives behind the Pencaitland Railway Walk are to develop it as a recreational and educational resource, to conserve and where appropriate to enhance its landscape and nature conservation value. The Management Plan sets out the objectives and policies for the railway walk to be implemented within a four year period.

Published: "Pencaitland Railway Walk Management Plan"
Authors: East Lothian District Council.
Date: 1990 - 1994
Publisher: East Lothian District Council
Price: £2.50 + pp

ELDC5 *Yellowcraig/Archerfield Management Plan*

The Management Plan allows Yellowcraig/Archerfield to be managed as per the aims and objectives for the site. It sets out the aims, objectives, policies and prescriptions for a four year period.

Published: "Yellowcraig/Archerfield Management Plan 1993 - 1996"
Author: East Lothian DC
Date: 1993
Price: £2.50

ELDC6 *Monitoring of Car Park Use at Coastal Visitor Sites*

The object of the project is to monitor the car park use by means of electronic car counters at Longniddry Bents, Gullane Bents, Yellowcraig and John Muir Country Park. The data retrieved and calibrated and used in conjunction with average car occupancy rates and visitor surveys, where applicable, to determine the number of visitors to each site as an annual and monthly total, is an aid to the management of the sites.

Unpublished report
Researcher: Ian Fullerton
Date: annual

BORDERS REGIONAL COUNCIL

BRC1 *Havlestanes Visitor Centre Visitor Survey*

Visitors to the centre were given a questionnaire to ascertain why they came to the centre and which facilities they used as well as obtaining suggestions for improving the centre.

Unpublished report
Researcher: T Hawkes
Date: May - October 1992

BRC2 *Southern Upland Way Users Survey*

Users of the long distance footpath were surveyed by questionnaires left out on the route to determine the level and type of use as well as obtaining users opinions of the route.

Unpublished report
Researcher: M Baker
Date: July 1991 - October 1992
Contact: Director of Planning, BRC

STRATHCLYDE REGIONAL COUNCIL

SRC1 *Habitat Survey 1992 Dumbarton District Lower Clyde River Valleys Project*

Habitat survey to identify the natural resource of the project area which will lead to a nature conservation strategy and countryside policies for the area.

Unpublished report

Researchers: Scottish Natural Heritage

Date: 1992

SRC2 *Leven Valley Dumbarton District Habitat Survey*

Habitat survey to identify the natural resource of the project area which will lead to a nature conservation strategy and countryside policies for the area.

Unpublished report

Researchers: Scottish Natural Heritage

Date: 1992

Contact: G Todd

SRC3 *Isle of Arran: A Local Forestry Strategy/Framework*

The Regional Council and Cunninghame DC have been concerned for some time about increasing afforestation, particularly in relation to the impact on sensitive natural assets and on the tourist industry which is of vital importance to the economy of Arran. Aspects such as landscape quality, wildlife conservation, archaeological conservation, hill walking opportunities and water supply are all important factors in maintaining the attraction of Arran as a significant tourist area. It is essential that a forest strategy is agreed to ensure that further forestry development takes place in harmony with the Island's natural resources.

Unpublished draft report

Contact: Richard Henry, Cunninghame DC

SRC4 *Greening the Conurbation*

A strategy aimed at breathing new life into the river valleys and urban fringe of the Glasgow conurbation by providing new informal recreational facilities, renewing derelict/despoiled land and taking care of existing areas of landscape or wildlife interest to ensure their continued survival. Six main aims: involving the community; improving the environment and local recreational opportunities; providing for education; job creation; reducing vandalism; and stimulating community care. Nine projects have now been established under the strategy: Clyde Calders; Clyde and Avon Valleys; Lower Clyde; Mid Clyde; Kelvin Valley; Forth and Clyde Canal; Kilpatricks; and the Carts River Valleys Project. Staff are in place for most of these - further details on request. Each project has produced strategies, annual reports and ad hoc reviews of particular subjects.

Contact: Alan Russell, SRC

EAST KILBRIDE DISTRICT COUNCIL

EKDC1 *Cycle Survey*

Questionnaires were distributed to various locations including schools, libraries, community halls and sports centres and bodies such as cycling clubs and community councils. The survey outlines where cyclists required facilities, principally with regard to cycle parking and cycle routes. Some information is also outlined on the level and type of existing use within the District. This has enabled the District Council to plan and investigate various routes and potential locations for cycle facilities.

Published: "Cycle Survey Results 1992"
Author: East Kilbride DC
Date: 1992

EKDC2 *Calderglen Country Park Development Plan*

Report by consultants on future development of a country park, looking at both visitor facilities and attractions, and the environment of the park, including woodlands and wildlife. The report contains has a strong emphasis on the environmental/conservation and educational role of the park.

Unpublished: "Calderglen Country Park Development Plan"
Researchers: Tourism Resources Company
Date: November 1992
Contact: Tim Cruttenden, Director of Leisure Services

WEST LOTHIAN DISTRICT COUNCIL

WLDC1 *The Farmsteadings of the Bathgate Hills*

A detailed survey of farm buildings to establish the level of use, historical importance, and potential for alternative use. Used as a record when dealing with large numbers of planning applications for residential conversion etc.

Published: "The Farmsteadings of the Bathgate Hills"
Author: WLDC (Nils White)
Date: 1991
Publisher: WLDC
ISBN: 0 907 952 038
Price: £1.95

WLDC2 *Cycling in West Lothian*

Leaflet describing cycle routes in the district, mostly following existing roads. Lists sights which are passed en route. Includes further advice on cycling.

Published: "Cycling in West Lothian"
Author: WLDC (Mags Pickett)
Date: 1992
Price: Free
Contact: Nils White, West Lothian District Council

DUNFERMLINE DISTRICT COUNCIL

DDC1 *Valleyfield Wood Repton Landscape Restoration Management Plan*

This study covers features and history of the designed landscape; their value and condition; aims and proposals for restoration, management and interpretation; uses of the walled garden; and costing of the proposals and suggested priorities. Informal recreational facility based on the interpretation of the area's historical and natural assets.

Published: "Valleyfield Wood Repton Landscape Restoration Management Plan"
Authors: Peter McGowan Associates
Date: February 1992
Contact: Joe Fitzpatrick
Agency Ref: 3.b.4/7

DDC2 *Dunfermline -Alloa Railway Path Study*

To investigate the potential of the disused Alloa-Dunfermline railway providing an off-road long distance leisure route. The route would form an important link in an Edinburgh - Stirling - Highlands long distance route.

Published: "The Dunfermline & Alloa Railway Path Study"
Author: SUSTRANS
Date: Nov. 1989
Contact: Joe Fitzpatrick
Agency Ref: 3.c.18

CITY OF EDINBURGH DISTRICT COUNCIL

EDC1 *Edinburgh Urban Nature Conservation Strategy*

3 documents: nature conservation policies and proposals;
technical report;
site descriptions for wildlife sites.

Aims to protect, improve and create new wildlife habitats as well as improve access to sites and increase interpretative facilities on site.

Published: "An Urban Nature Conservation Strategy for Edinburgh"
Author: CEDC (Planning)
Date: May 1992
Publisher: CEDC
ISBN: 1 85191 013 1
Price: £3.50 (+£1.50 p&p)

Databases

EDC2 *Edinburgh Wildlife Survey*

Wildlife habitat information on over 1,000 open-space sites in the City of Edinburgh. Regularly updated to Phase 1 standard. More detailed information available for the most important sites.

Held on computer disk. Not available to the public without prior discussion with David Jamieson, Dept. of Planning.

EDC3 *Water of Leith Invasive Species Survey*

Mapped coverage of the extent of Giant Hogweed, Japanese Knotweed, Himalayan Balsam and Russian Vine along the Water of Leith. Information on the eradication programme undertaken by CEDC.

Held on computer disk. Not available to the public without prior discussion with David Jamieson, Dept. of Planning.

MOTHERWELL DISTRICT COUNCIL

MDC1 *Ecological Survey*

A survey being conducted to SNH field survey specifications for Phase I and II habitat surveying.

Researchers: Conservation Unit, MDC

MDC2 *Countryside Recreation*

A project to form a strategic approach to recreation has been established. This will assess rights of way and access, guided walks and countryside events in order to publicise more countryside recreation within the District.

Researchers: Conservation Unit, MDC

MDC3 *Biological Records Centre*

A computerised database has been established as part of the first comprehensive centre in Lanarkshire to assess the range and distribution of species and plants, animals and birds.

Researchers: Conservation Unit, MDC

STRATHKELVIN DISTRICT COUNCIL

SDC1 *Survey of Footpaths/Rights of Way 1991/92*

Survey of all known footpaths and rights of way, using existing survey information, community consultation, aerial survey and ground survey. Survey undertaken by Kelvin Valley Countryside Project staff and results made available to Strathkelvin District Planning Department for further consideration. Each route assessed against common law criteria relating to rights of way. Existing policy document updated. Detailed text and map relating to each route surveyed and composite district-wide map available for public inspection.

Researchers: Strathkelvin DC Planning Department

Date: July 1991 - December 1992

Contact: Mark Whittaker

COUNTRYSIDE COMMISSION

Introduction

The Countryside Commission works to conserve and enhance the beauty of the English countryside and to help people enjoy it. It undertakes a wide range of activities to conserve the natural beauty of the countryside and to make it more accessible for the public enjoyment. The Commission acts as the government's adviser on countryside matters. In addition, it has special responsibility for designating National Parks and Areas of Outstanding Beauty, defining Heritage Coasts and establishing National Trails. The purpose of the Research and Experimental programme is to inform and support the development of the Commission's national policies and regional practice. There are three main types of research and experimental work:

1. Monitoring of social and environmental changes in the countryside as they affect the Commission's work, the main areas being in relation to public attitudes to the countryside, patterns of countryside recreation and changes in the rural landscape.
2. Evaluation of specific proposals or projects, both the projects of other agencies as they impact on the Commission's interests, and the effectiveness of the Commission's own programmes.
3. Developing and promoting new ideas and spreading good practice by means of experiment and demonstrations.

Publications and Reports

CC1 *British Social Attitudes: the 8th report*

Successive British Social Attitudes surveys have charted the gradual 'greening' of public opinion. In the British Social Attitudes the 8th report, Ken Young looks for evidence of a green 'world view'. He finds that although consumers are becoming better informed and more assertive in pursuit of green goals, many are notably reluctant to change some key aspects of their lifestyle that conflict with resource-conscious behaviour.

Published: "Shades of Green"
Authors: Edited by Jowell R, Brook L and Taylor B, Social and Planning Research, London.
Date: November 1991
Publisher: Dartmouth Publishing Company: The Gower Group
ISBN: 1 85521 258 7
Price: £22.45

CC2 *Rights of Way Local action Guide*

Draws together good practice and advice necessary to produce a local guide for parishes and groups who want to know how to maintain and promote their local Rights of Way.

Date: 1992

CC3 *Public Rights of Way: Notes for Guidance*

Development of a practical manual for Local Authority RoW staff and others on RoW maintenance, management and procedures.

Date: 1992
Publisher: Northamptonshire County Council

CC4 *National Parks Marketing and Conservation Strategy*

This report describes the findings of the first survey to cover tourism businesses in or near to National Parks. It describes the extent to which the tourism industry markets national parks and the extent to which tourism operators support conservation work. There are nine key recommendations for National Park Authorities, seven relating to marketing and two relating to conservation.

Author: Fielder Green Associates
Date: January 1992
Publisher: Countryside Commission (CCP 354)
ISBN: 0 86170 315 4
Price: £4.50

CC5 *Pennine Way Survey 1990: Use and Economic Impact*

This publication reports upon the 1990 economic and user survey of the Pennine Way carried out on behalf of the Countryside Commission by ASH. The results are interpreted as a series of issues for the future management of the Way to tackle.

Authors: ASH Partnership and DRV Research
Date: February 1992
Publisher: Countryside Commission (CCP 361)
ISBN: 086170 323 5
Price: £20.00

CC6 *Monitoring Landscape Change in National Parks*

Summary report of a research project carried out by Silsoe College on behalf of the Countryside Commission and National Park Authorities.

Title: "Monitoring Landscape change in the National Parks"
Author: Countryside Commission
Date: 1991
Publisher: Countryside Commission
ISBN: 0 86170 320
Price: £15.00

CC7 *Landscape change in the National Parks*

The first ever comprehensive survey of landscape change in the National Parks in England and Wales was commissioned in 1988 by the Countryside Commission and the National Park Authorities. The survey, carried out by Silsoe College, Cranfield Institute of Technology, compared landscape change from the 1970s to the 1980s, making use of a SPANS geographic information system for recording, analysing and mapping the data collected. The report summarises the findings at the national level and for each park and assesses their significance.

Author: Countryside Commission
Date: December 1991
Publisher: Countryside Commission/Countryside Council for Wales (CCP 359)
ISBN: 0 86170 320 0
Price: £15.00

CC8 *Wind Energy Development and the Landscape*

Current pressures for wind energy development have prompted the Commission to put forward what it believes to be an appropriate policy framework for wind energy development. In outlining the Commission's preferred options for the siting of wind farms, together with practical guidance based on recent research, this publication seeks to reconcile the development of an otherwise benign form of energy with the conservation of highly attractive and mainly undeveloped countryside.

Author: Countryside Commission.
Date: 1991
Publisher: Countryside Commission (CCP 357)
ISBN: 0 86170 3189
Price: £3.00

CC9 *Undergrounding Overhead Electricity Lines*

To provide an appraisal of the costs and environmental benefits of undergrounding electrical power lines. The consultants brief focused attention on the possible undergrounding local low voltage distribution networks and its potential for designated areas. However the report also discusses the potential for the undergrounding of higher voltage lines and the benefits of undergrounding for the wider countryside.

Unpublished final consultants report. Only available for use by appointment in the Commission's library.

Researchers: UK CEED.
Date: August 1991.

CC10 *Evaluation of Community Action Projects*

An appraisal of the Commission's experimental programme of community action, prepared for the Commission by consultants.

Date: 1992.
Publisher: Countryside Commission (CCP 307)

CC11 *Community Action: An Appraisal*

Author(s): BDO'R (Bristol).
Date: 1991.
Publisher: Countryside Commission.
ISBN: 0 86170 264 6.
Price: £4.50

CC12 *Rights of Way: An Action Guide*

The guide explains to individuals, local communities, farmers and landowners, voluntary groups and parish councils why rights of way are so important, how to assess what needs doing, where to go for help and advice, and how to involve others and take practical action.

Authors: Denman J & Clarkson S
Date: 1992
Publisher: Countryside Commission (CCP 375)
ISBN: 0 86170 255 7
Price: £5.00 (£6.50 in pack)
Contact: Jim Lennon

CC13 *Pennine Way Survey 1990*

In 1990 the Countryside Commission appointed the ASH Partnership and DRV Research to undertake a user and economic survey of the Pennine Way in order to inform future decisions on the development and management of the route.

Authors: ASH Partnership & DRV Research
Date: 1992
Publisher: Countryside Commission (CCP 361)
ISBN: 0 86170 323 5
Price: £20.00
Contact: Nick Holliday

CC14 *National Park Visitor Centres: Study of Good Practice*

The research on visitor centres in National Parks involved a programme of site visits, interviews and the collection and analysis of a wide range of information. This information was presented at a workshop attended by representatives from each National Park, the Countryside Commission and the Countryside Council for Wales. Following discussions at the workshop a final report was produced which put forward recommendations to improve the performance of National Park Visitor Centres.

Authors: A study team led by Professor Terry Stevens
Date: August 1992
Publisher: Countryside Commission
ISBN: 0 86170 346 4
Price: Free
Contact: Wendy Thompson

CC15 *Trends in Transport in the Countryside*

The Commission is currently examining the interface between transport policy and our concerns for a beautiful and accessible countryside. As part of this work the Transport Studies Unit of Oxford University (TSU) were contracted to analyse current trends in traffic growth and their implications for the countryside. The TSU report looks at transport's impacts on the countryside, and forecasts the impacts that increased traffic levels will have.

Author: University of Oxford Transport Studies Unit
Date: 1992
Publisher: Countryside Commission (CCP 382)
ISBN: 0 86170 336 7
Price: £5.00
Contact: Ken Robertson

CC16 *City Links with National Parks*

This advisory booklet offers advice based on the pioneering work in Birmingham and a number of National Parks. It provides details of how to forge links between cities and National Parks, covering promotional events and festivals, education programmes, school exchanges and networking between community projects.

Author: Douglas S
Date: 1992
Publisher: Countryside Commission (CCP 401)
ISBN: 0 86170 356 1
Price: £7.50
Contact: David Brooke

Contact: Countryside Commission, John Dower House, Crescent Place, Cheltenham, Glos. GL50 3RA
Tel. 0242 521381

DEPARTMENT OF THE ENVIRONMENT

Introduction

The Department sponsors policy related research in 7 programme areas, 3 of these relate to countryside and rural concerns although not all projects within the programme do so.

The Department's Countryside Research Programme (DRA) is designed to provide information on the state of the countryside and likely future trends; to investigate means of reconciling agriculture and forestry with conservation; and to find ways of regulator activities. The research programmes focusing on the Department's inner cities, planning and minerals responsibilities include projects on land use change, environmental aspects of the planning system, the restoration and aftercare of land worked for minerals and derelict land.

The Department's £4.9m water research programme (WRM) is designed to meet UK Government water development and monitoring of policy needs and is complemented by water industry research.

Publications and Reports

DoE1 *Integrated Rural development in the Peak District National Park*

To evaluate by experimental trials the application of an integrated programme of rural development in the Peak District National Park.

Title: "Two Villages, Two Valleys"
Authors: Parker K, Tricker M, Honey J
Date: August 1990
Publisher: Peak Park Joint Planning Board
ISBN: 0 907543 38 3
Agency Ref: RMIS 0010

DoE2 *Ecological Consequences of Land Use Change*

To develop guidelines for land management to build on previous work, highlighting the relationship of size and fragmentation of wildlife habitats to the preservation of a diverse species population.

Unpublished final report: "Ecological Consequences of Land Use Change"
Authors: Bunce R, Howard D, Hallam, Barr C, Benfield C
Date: Feb. 1992
Contractor: ITE, Merlewood
Agency Ref: RMIS 0025

DoE3 *Thatching Reed Habitats*

An Investigation into the factors contributing to the decay in Thatching Reed
Published Final Report: The quality of Thatching Reed and its impact on the Thatching Industry.

Authors: Boar R, Leeming D, Moss B
Date: March 1991
Publisher: Nature Conservancy Council, Peterborough
Agency Ref: RMIS 0026

DoE4 *Countryside Implications of Changes in CAP*

A study of the effects of the CAP on land use, employment and wildlife features in England and Wales.

Unpublished final report

Authors: Harvey D, Marshall B

Date: Sept. 1989

Contractor: Centre for Agricultural Strategy, Reading University

Agency Ref: RMIS 0030

DoE5 *Impacts of Pesticides Regimes*

To study the implications for nature conservation of changes in pesticide regimes.

Unpublished final report: "Pesticide Drift and Impact"

Author(s): Davis B for Institute of Terrestrial Ecology, Institute of Freshwater Ecology Eastern Rivers Group and the River Laboratory, University of Bristol, AFRC (Institute of Arable Crops Research)

Date: Oct. 1990

Contractor: Institute of Terrestrial Ecology (NERC)

Agency Ref: RMIS 0040

DoE6 *The Impact of Land-Use Change on Aquatic Communities*

To add a freshwater dimension to the Ecological Consequences of the Land Use Change study.

Unpublished final report: Mapping Land Cover Change in Water Catchments from Satellite Imagery

Authors: Griffiths G, Williams C

Date: July 1990

Contractor: National Remote Sensing Centre

Agency Ref: RMIS 0045

DoE7 *Environmental Consequences of Set Aside Land*

To examine the environmental consequences for wildlife and landscape of the set aside and countryside premium scheme.

Unpublished final report

Author: Hill N

Date: Oct. 1990

Contractor: Institute of Terrestrial Ecology (NERC)

Agency Ref: RMIS 0046

DoE8 *Bracken - Distribution and Management*

To prepare an environmental balance sheet of bracken habitat and to extend and improve current methodologies for mapping and assessing bracken distribution.

Unpublished final report: "An Environmental Balance Sheet for Bracken and its Control"

Author(s): Pakeman R, Marrs R

Date: March 1991

Contractor: Institute of Terrestrial Ecology (NERC)

Agency Ref: RMIS 0047

DoE9 ***De-icing Salt and Tree damage***

A study into the damage to roadside trees caused by de-icing salt.

Published: "Damage to Trees and Shrubs from De-icing Salt"
Author: Dobson M
Date: June 1991
Publisher: HMSO. Forestry Commission Bulletin No 101
ISBN: 0 11 710302 0
Agency Ref: RMIS 0048

DoE10 ***The Dynamics of the Rural Economy Phase 1***

To investigate and provide information on the rural economy and its relation to the wider economy.

Unpublished final report: "Dynamics of the Rural Economy Rural Areas"
Authors: ECOTEC Research and Consulting Ltd
Date: April 1990
Agency Ref: RMIS 0049

DoE11 ***Farm Forestry Programme***

To assemble a community of research workers in areas applicable to farm forestry, to initiate projects which will examine the inter-relationships between farm forestry and environmental and socio-economic factors, encourage collaboration between groups of research workers and report the findings.

Published: "Farm Forestry Research - a Summary of Research Projects Sponsored as a NERC Special Topics Programme" (Research Information Note 225).
Authors: Forestry Research Co-ordination Committee
Date: Sept. 1990
ISBN: 0267-2375
Agency Ref: RMIS 0050

DoE12 ***Hydrological Impact of Hardwood Plantations in Lowland Britain***

To be able to predict the effects on local hydrology eg. lowering of shallow water tables and reduced flow in small streams, of small-scale hardwood plantations.

Published: "Hydrological Impacts of Broadleaf Woodlands: Implications for Water Use and Water Quality"
Authors: Harding, Hall, Neal, Roberts, Rosier (IH), Kinnisburgh (BGS)
Date: Sept. 1992
Contractor: NERC (IH)
Publisher: NRA (Project 115/03/ST)
Agency Ref: RMIS 0052

DoE13 ***The Use of GIS in the Analysis of Countryside Data***

To explore the potential of GIS to analyse countryside data and for setting environmental assessments in national and regional perspectives.

Unpublished final report: "The Use of GIS in the Analysis of Countryside Data"
Authors: Harrison A, Dunn R, Brown L, Turton P
Date: October 1991
Contractors: Dept. of Geography, University of Bristol
Agency Ref: RMIS 0055

DoE14 ***Causes of Deer Mortality Phase 2***

A further study to offer a greater resolution of phase 1 and to refine suggestions for management

Published: "Factors Affecting Deer in Parks"
Authors: Putnam R, Langbein J
Date: Oct. 1990
Contractor: Dept of Biology, University of Southampton
Agency Ref: RMIS 0057

DoE15 ***Key Statistical Indicators for British Wildlife, Stage 2a***

To analyse the results of the previous study to produce a report that can be used to compile the first edition of a Wildlife Statistical Bulletin to be published by the Department in its statistical bulletin series.

Unpublished final reports: "Summary and Overview"
"Rare Plants in Great Britain"
"Butterfly Monitoring Scheme"
"Rothamsted Insect Survey Moth Data"
"Wintering Populations of Wildfowl and Waders in Great Britain"
"Rare Breeding Birds in Great Britain"
"The Red Squirrel and Grey Squirrel in Crown Forests"
"National Otter Surveys"

Authors: Banwell J, Crawford T
Date: January 1992
Contractor: Institute of Applied Biology, University of York
Contact: Richard Chapman, DRA 2E, Room 903, Tollgate House, Bristol.
Agency Ref: RMIS 0060

DoE16 ***Remote Sensing: The Extraction of Line Features from Spot Multispectral Data***

To investigate the potential of extracting linear feature information from SPOT Multispectral Data to improve the confidence level of sample based landscape surveys.

Unpublished final report
Authors: Barrison A, Dunn R
Date: March 1990
Contractor: Department of Geography, Bristol University
Agency Ref: RMIS 0061

DoE17 ***Recreation and Nature Conservation in Richmond Park***

To examine the relationship between recreation and nature conservation in Richmond Park.

Published: "Recreation and Nature Conservation in Richmond Park"
Author: Land Use Consultants
Date: Nov. 1990
Agency Ref: RMIS 0062

DoE18 Moorland Wilderness

To study the effects of the reduction of sheep grazing in upland areas on vegetation and wildlife.

Unpublished final report: "Moorland Wilderness: The potential effects of removing domestic livestock, particularly sheep"

Authors: Marrs R, Welch D
Date: Jan. 1991
Contractor: Institute of Terrestrial Ecology (NERC)
Agency Ref: RMIS 0063

DoE19 Environmental Value of Farm Regimes

To examine management techniques and environmental benefits of alternative farm regimes.

Unpublished final report: "Environmental Value of Farming Systems"

Author: CEAS, Wye College
Date: July 1991
Agency Ref: RMIS 0071

DoE20 Classification of SPAs Under the EC Birds Directives

To classify each SPA according to the part it plays in the survival and reproduction of species listed in Annex 1 of the EC Birds Directive

Unpublished final report: "Classification of SPAs"

Author: Environmental Advisory Unit Ltd, Liverpool University
Date: March 1992
Agency Ref: RMIS 0073

DoE21 The Management of Hedgerows

To investigate the economics of hedgerow management for nature conservation.

Draft final report: "Hedgerow Management" Vols. 1 and 2

Author: Institute of Terrestrial Ecology (NERC)
Date: May 1991
Agency Ref: RMIS 0074

DoE22 Assessment of the Benefits of Amenity Trees

To assess the benefits in monetary terms of the provision and maintenance of amenity trees.

Unpublished final Report: "The Benefits of Amenity Trees"

Author(s): Cobham Resource consultants, Colin Price of Univ.College of North Wales
Date: Oct. 1991
Contractor: Cobham Resource Consultants
Agency Ref: RMIS 0077

DoE23 *Silvanus 2*

To build upon the integrated programme of Phase 1 leading to the conservation and rehabilitation of many small and presently unmanaged woodlands in the South West region.

Interim published report: "Silvanus - the First Four Years"

Author: Silvanus Project
Date: February 1992
Publisher: Countryside Commission
ISBN: 0 86170 322 7
Price: £4.50
Agency Ref: RMIS 0079

DoE24 *Evaluation of the Rural Development Commission's Social Programme*

To assess and report on the extent to which the Rural Development Commission's individual social programmes are making an effective contribution to the original objectives of the scheme.

Published: "Managing Social and Community Development Programmes in Rural Areas"
Author: Public Sector Management Centre Centre, Aston Business School
Date: Nov. 1991
ISBN: 1 85449 028 1
Agency Ref: RMIS 0080

DoE25 *Wildlife Disease Investigation Review*

To investigate whether the current status of research into wildlife disease is adequate.

Published: "Wildlife Disease Investigation Review"
Author: Natural Environment Research Council
Date: Feb. 1991
Publisher: Natural Environment Research Council, ITE, Monks Wood
Agency Ref: RMIS 0081

DoE26 *Arboriculture V*

Support for the Arboriculture Advisory and information Service and support for DOE Tree Preservation Order appeals work.

Published: 1. "Research for Practical Arboriculture", proceedings of a seminar held at the University of York, 2 - 4 April 1990.
2. "Urban Trees, a survey of street trees in England"
Author(s): 1. Hodge S (ed)
2. Hodge S
Date: 1991
Publisher: HMSO. Forestry Commission Bulletins Nos 97 & 99
ISBN: 1. 0 11 710297 0
2. 0 11 710299 7
Price: 1. £17.50 2. £3.50
Agency Ref: RMIS 0082

There is also "The Countryside Disc" (Project RMIS 0056), an innovative presentation of the complex issues facing rural Britain. Side one consists of an extensive and sophisticated simulation covering the environment, farming and rural communities. These topics are extended in the massive database of films, photographs, text and data on side two.

Produced by the BBC for the BBC AIV System Copyright 1988

DoE27 *Countryside Survey 1990*

The provision of monitoring data to update the Monitoring Landscape Change Project.

Published: "Hedgerows in Great Britain"
Date: October 1991
Publisher: Institute of Terrestrial Ecology (NERC)
Agency Ref: RMIS 0084

DoE28 *Dynamics of the Rural Economy Phase 2*

A follow-up to the analysis of the dynamics of the rural economy by a sample of firms in rural areas in order to explore their relative performance and their linkages with urban areas.

Published: "In Search of a Rural Economy, Patterns and Differentiation in Non-Metropolitan England"
Authors: Bodge I, Monk S
Date: June 1991
Publisher: University of Cambridge, Department of Land Economy
ISBN: 0 906782 59 7
Agency Ref: RMIS 0086

DoE29 *Conservation Importance of National Parks*

To follow up NCC/CC/NPA report on nature conservation problems in National Parks.

Unpublished final report: "Nature Conservation in National Parks"
Author: CEAS Consultants, Wye College
Date: March 1991
Agency Ref: RMIS 0088

DoE30 *Performance of Firms in Rural Areas*

Assessment of critical business factors which ensure good performance by business in rural areas, identification of restraints to growth in the evaluation of the effects of stimulants to growth and diversification.

Published: "Business Success in the Countryside - the Performance of Rural Enterprise"
Authors: Keeble D, Tyler P, Broom G, Lewis J
Date: March 1992
Contractor: PA Cambridge Economic Consultants
Publisher: HMSO
ISBN: 0 11 752663 0
Agency Ref: RMIS 0093

DoE31 *Conservation Advice to Farmers Stage 2*

To assess the cost-effectiveness of farm conservation advice services in England and Wales and to make recommendations for future provisions of such advice.

Unpublished final report: "Assessment of Conservation Advice to Farmers"
Authors: PIEDA plc, George Black Associates, Public Attitudes Surveys Ltd.
Date: October 1991
Publisher: PIEDA plc, ref PW 06789/H
Agency Ref: RMIS 0095

DoE32 Hedgerow Diversity

To determine how the character and diversity of hedgerows and their flora is affected by changes in hedgerow management and adjacent land use. The work will inform the development and appraisal of the Countryside Commission's plans to introduce Hedgerow Management Grants.

Unpublished final report: "Diversity in British Hedgerows"

Authors: Cummins R, French D, Bunce R, Barr C

Date: September 1992

Contractor: ITE, Banchoory

Agency Ref: RMIS 0105

DoE33 Trees and Buildings Phase 3

To investigate patterns of soil drying in the vicinity of a range of different tree species growing on different clay soils.

Unpublished final report: "Patterns of Soil Drying and Moisture Deficit in the Vicinity of Trees on Clay Soils - Research Results 1991"

Author: Biddle P

Date: February 1992

Agency Ref: RMIS 0107

DoE34 UK Dependent Territories - RAMSAR Survey - Stage 1

To review the existing state of knowledge about wetland sites and administrative and legal structures in UK Dependent Territories with a view to recommending a programme of designation of sites for inclusion in the list of wetlands of international importance (RAMSAR sites) and identifying further ecological surveys to extend the designation programme.

Unpublished final report: "UK Dependent Territories - RAMSAR Survey - Stage 1"

Authors: Hepburn I, Oldfield S, Thompson K

Date: September 1992

Contractor: International Wildfowl and Wetlands Research Bureau and NGO Forum for Nature Conservation in UK Dependent Territories.

Agency Ref: RMIS 0108

DoE35 Co-ordinating of Biological Recording

The detailed investigation and assessment of resources presently devoted to biological recording including recommendations for the establishment and operation of an integrated, computerised national system.

Unpublished first report: "First Report of the Co-ordinating Commission for Biological Recording Programme for the Establishment of a National System for the Co-ordination of Biological Recording"

Authors: Copp C, Harding P

Date: August 1992

Agency Ref: RMIS 0110

DoE36 ***Environmental Balance Sheet for Setaside Management Operations***

To evaluate the environmental advantages and disadvantages of setaside management options proposed under the CAP arable support scheme, to assess the cost and practicality of each option and then identify their relative environmental benefit.

Unpublished final report: "Environmental Balance Sheet for Setaside Management Option Under the CAP Arable Support Scheme"

Authors: Hill M, Firbank L, Parish T, Treweek J
Date: August 1992
Contractor: NERC (ITE)
Agency Ref: RMS 0116

DoE37 ***Monitoring Environmental Assessment and Planning***

To monitor the implementation of the European Community Directive which requires environmental assessment to be carried out for certain types of major project that are likely to have significant effects on the environment.

Published final Report

Author(s): Manchester University
Date: Aug. 1991
Publisher: HMSO
ISBN: 0 11 752436 0
Price: £7.00
Agency Ref: PECD 7/1/356

DoE38 ***Permitted Development Rights for Agriculture and Forestry***

To examine the workings of the present system of permitted development rights for agriculture and forestry in England and Wales, and to discuss the implications of the possible changes included in the consultation paper.

Published final Report

Author: Land Use Consultants
Date: March 1991
Publisher: HMSO
Agency Ref: PECD 7/1/381

DoE39 ***Low Cost Housing in Rural Areas***

To assess the success of the Low Cost Housing initiative so far, to determine whether there are barriers to it being implemented, and whether there is a need for revised guidance

Published: "Low Cost Housing in Rural Areas"

Author: Manchester University
Date: November 1991
Publisher: HMSO
ISBN: 0 11 752547 2
Price: £12.50
Agency Ref: PECD 7/1/381

DoE40 *Land Use Change 1985 - 1988*

To investigate the quality and robustness of using land use change statistics at more disaggregated levels, to produce further detailed analysis for a number of policy applications, and to make recommendations for future analysis needs.

Date: 1992
Contractor: South West regional Research Laboratory/Halcrow Fox
Agency Ref: PECD 7/1/344

DoE41 *Southampton Soil Mapping Pilot Survey*

To evaluate methods and outputs for applied soil mapping in terms of their relevance to land use mapping and applied geological mapping.

Published final Report
Authors: Soil Survey and Land Resource Centre
Date: 1990
Publisher: HMSO
Price: £16.50
Agency Ref: PECD 7/1/242

DoE42 *Mineral Policies in Development Plans*

To examine the way Mineral Planning Authorities have handled minerals in their development plans.

Published: "Mineral Policies in Development Plans"
Author: Arup Economic Consultants
Date: 1991
Publisher: HMSO
Price: £25.00
Agency Ref: PECD 7/1/322

DoE43 *Reservoir Safety and Water Conservation*

Reservoir catchments - hydrological studies

Published: Report No. 116: "Effects of upland afforestation on water resources"
Author: NERC - Institute of Hydrology
Date: April 1991
Publisher: Institute of Hydrology
ISBN: 0948 540 29X
Agency Ref: RMIS CW0393 - PECD 7/7/281

DoE44 *Biology of Sandeels in the Vicinity of Seabird Colonies at Shetland*

To describe and compare the abundance, distribution, age, size and behaviour patterns of sandeels in two areas differing in their recent history of seabird breeding success.

Second annual report: "Biology of Sandeels in the Vicinity of Seabird Colonies at Shetland"
Authors: Wright P, Bailey M
Date: June 1992
Contractor: Scottish Office Agriculture and Fisheries Dept., Marine Laboratory
Agency Ref: CUE Jointly funded by DoE, SNH, SOED, Cadbury's plc. WWF, RSPB

DoE45 *Environmental Impact of Pesticide Spray Drift*

To investigate the effects on a variety of plants and animals of a number of different methods of spraying pesticides, and the potential pollution hazards of their run-off into the water system

Unpublished final report: "Environmental Impact of Pesticide Spray Drift"

Authors: Davies B et al

Date: April 1992

Contractor: ITE, Monks Wood

Agency Ref: EPTS Jointly funded by EPTS and DRA

DoE46 *1991 Census of Population - A Rural Definition*

To update the 1:10,000 map overlays showing the extent of areas of urban land for England and Wales from 1981 to 1991; to digitise the map overlays; to provide analysis of the EDs for each county and area of urban land in England and Wales.

Unpublished final report: "The Creation and Analysis of an Urban Area Polygon Data Set for DoE and the Welsh Office"

Author: Sharman D

Date: July 1992

Contractor: Ordnance Survey

Agency Ref: LGS Jointly funded by LGS, Welsh Office and DRA

DoE47 *Appraisal of Derelict Land and Mineral Workings Surveys*

To assess the current arrangements for conducting the Derelict Land and Minerals Surveys and the methods by which local authorities collect and collate information, with the aim of improving future surveys.

Unpublished final report: "Appraisal of Derelict Land and Minerals Workings Surveys"

Author: Ove Arup

Date: 1992

Agency Ref: 8304508

Contact for Research Enquiries:

Directorate of Rural Affairs, Research Branch, Room 925, Tollgate House, Houlton Street, Bristol
BS2 9DJ Tel. 0272 218871/218862

ENGLISH NATURE

Introduction

Created in 1991, English Nature is continuing the work of the Nature Conservancy Council, but now concentrating on the environment within England's national boundaries. English Nature is charged with the tasks protecting our environment and the wildlife within it, extending knowledge through research and promoting a greater understanding of the natural world. English Nature is a vital source of expertise and information on nature conservation for anyone who wants to know more about the environment we live in. Perhaps the most obvious aspects of our work are our National Nature Reserves and our Sites of Special Scientific Interest.

Research, Publications and Reports

EN1 *Survey of the Invertebrates of the East Anglian Fens*

To identify recurrent assemblages of invertebrates and analyse their association with fen vegetation communities, habitat structure, site management, hydrology etc. so that the management of SSSIs and other important fenland sites can take into account the needs of fen invertebrates. Results will enable future survey information to be set in a better ecological context.

Final report

Authors: Foster A, Proctor D

Agency Ref: IN306

EN2 *Autecology of the Chequered Skipper Butterfly*

To discover the habitat and management requirements needed to sustain remaining populations of the chequered skipper in Scotland. The findings will be relevant to any future attempts to re-establish the butterfly within its former range in England.

Final report

Agency Ref: IN411

EN3 *Effect of Nitrate fertilisers on the Peatlands of the Somerset Levels and the Claylands of the Gwent Levels*

To formulate advice for the efficient use of Nitrate fertilisers on peats and clays and to evaluate ditch management practices designed to minimise enrichment and eutrophication of watercourses.

Final report

Agency Ref: AG406

EN4 *Assessment of Change in the Saltmarshes of Essex and Kent*

To locate, describe and contribute to the explanation of saltmarsh erosion in south-east England and if possible provide an environmentally sympathetic solution to the sea defence problem.

Final report: "Erosion and vegetation change on the saltmarshes of Essex and north Kent between 1973 and 1988" Research and survey no 42

Author: Burd.F

Date: February 1992

Publisher: English Nature

ISBN: 0-86139-718-5

Agency Ref: CO404

EN5 *A Review of Habitat Conditions and Management Characteristics of Herbaceous Fen Vegetation Types of Rich and Poor Fens in Lowland Britain*

To assess and understand the relationship between fen types and their vulnerability to change.

Final report
Agency Ref: PE601

EN6 *Biological Survey of Common Land*

The aim of the project, started in 1987, is to provide, on a county by county basis, information about the nature conservation importance of commons. A large proportion of common land has escaped the worst effects of intensive agriculture and is a nationally important reservoir of wildlife. Only a small proportion of common land occurs within SSSIs or other protected sites and whilst in the lowlands common land is often neglected and becoming overgrown by scrub and woodland, in the uplands many commons are overgrazed and losing their heather. It is intended that the results of this project will be used to develop better management regimes on such sites. During 1991/92 survey work was completed in Somerset, Avon, Merseyside and Shropshire whilst further work was carried out in Wales under funding by CCW. In addition a review of the data gathered for 20 counties in England and Wales has been completed to guide common land policy and the development of the project.

Researchers: University College of Wales, Aberystwyth
Contact: Dr J Hopkins
Agency Ref: GSM305

EN7 *National Nature Reserve Book*

A programme of work has been agreed and initiated against an outline of the publication. Initial approaches have been made to publishers with a view to starting negotiations for commercial publication as soon as possible.

Researcher: Peter Marren
Agency Ref: GSM711

EN8 *Preparation work for Special Protection Area and RAMSAR Designation for the Avon Valley, Hampshire*

The Avon Valley (Hampshire and Dorset) is a proposed SPA and RAMSAR site and designation will involve consultations with owners and occupiers, statutory bodies, MAFF and NGOs. The scientific data that existed for the area was reviewed and there were changes in the current SSSI boundaries, extensions, amalgamations and one new SSSI designation. The Avon Valley is also awaiting designation as an ESA.

Researchers: The Nature Conservation Bureau Ltd.
Contact: C Tubbs
Agency Ref: GSM/S4

EN 9***Preparation of Management Programmes for 1992-93 and 1993-94 for the New Forest, Hampshire***

The Crown Lands and Manorial Wastes of the New Forest comprise the largest SSSI in England and are of international importance to nature conservation. In 1969 the then Nature Conservancy and the Forestry Commission signed a Minute of Intent which acknowledged the importance of the New Forest and opened the way for co-operation in the preparation of long-term management plans. English Nature is committed to collaboration in the planning of work programmes which lead to opportunities for positive management. In carrying out this work extensive discussions with the FC, NF Verderers and Commoners' Defence Association are required. Annual programmes are to be produced for drainage and the maintenance of drains, bridges, culverts, clearance of obstructions in rivers and streams, controlled heath burning and cutting, bracken and scrub control, silvicultural management in statutory Silvicultural Enclosures and management of unenclosed ancient pasture woods. Prepared reports will form the basis for consents under the Wildlife and Countryside Act 1981 to be given by English Nature.

Researcher: Westerhoff D
Contact: C Tubbs
Agency Ref: GSM/S5

EN10***Review of the Effects of Recreation in Woodlands***

A variety of recreational activities are pursued in woodland including walking, climbing, horse riding, bicycling, camping, shooting, orienteering and paintball and other combat games. Many of the activities have been enjoyed for a considerable period of time but with increasing leisure time and mobility the number of participants continues to rise. Game sports are not considered in this review. Generally the number of studies on the impact of recreation on woodland, particularly in this country, is limited. This review brings together available information relating to woodland but also draws on information from other habitats. Consideration is given to (1) the impact of trampling on vegetation, (2) the impact of trampling on soils, and (3) the disturbance effect on birds and other animals. Other recreational effects are presented separately.

Published: "A Review of the Effects of Recreation on Woodland Soils, Vegetation and Fauna", English Nature Research Report No. 27
Authors: Anderson P, Radford E
Date: 1992
Agency Ref: Wo703

Contact for Research Enquiries:

David Markham, Planning, Industry and Recreation Branch, English Nature, Northminster House, Peterborough PE1 1UA Tel. 0733 340345

ENGLISH TOURIST BOARD/BRITISH TOURISH AUTHORITY

Introduction

The Development of Tourism Act 1969 created the British Tourist Authority and National Tourist Boards for England, Scotland and Wales. BTA is responsible for encouraging overseas visitors to come to Britain, and maintains an extensive network of offices abroad. The English Tourist Board encourages British tourism within England and the provision of facilities and services for all tourists both overseas and domestic. The two agencies share certain services including a Research Services department. During 1992 government responsibility for BTA and ETB was transferred to the newly-created Department of National Heritage who undertook a review of the two boards. As a result greater emphasis is likely to be placed on supporting activities of the Regional Tourist Boards in England.

Publications and Reports

ETB1 *Digest of Tourist Statistics*

The Digest is a yearly compilation of information from all the main tourism surveys. It provides detailed information on overseas visitors to the UK, UK residents travelling abroad, and UK residents taking holidays within Britain. International tourism and the role of tourism in the economy are also included.

Published: Digest of Tourist Statistics No 15
Date: 1991
Price: £4.00
ISBN: 0 7095 4726 9

ETB2 *Green Tourism Manual*

The project was designed to give guidance to tourism operators on how to improve their environmental performance along with their profitability. It includes chapters on sustainable environmental policy, development, managing landscape and other resources, visitor management and marketing.

Published: "The Green Light: A Guide to Sustainable Tourism"
Authors: Countryside Commission, ETB, Rural Development Commission
Date: 1991
Price: £10.00 (p&p 70p)

ETB3 *Tourism in National Parks: A Guide to Good Practice*

A guide for people who have a tourism enterprise in a National Park or who are thinking of developing one. It identifies ways to support the objectives of National Parks whilst benefiting the business.

Published: "Tourism in National Parks: A Guide to Good Practice"
Date: 1991
Authors: Countryside Commission, Countryside Council for Wales, ETB, Rural Development Commission, Wales Tourist Board
ISBN: 0 86143 163 4
Price: Free

ETB4 *Tourism and the Environment Task Force*

The Secretary of State for Employment set up in 1990 a Task Force to examine the relationship between visitors and the environment and make specific proposals to ensure harmony between tourism and the resources on which the industry depends. Three Working Groups were established to study visitor management users in the countryside, historic towns and heritage sites. A series of visitor management case studies was conducted for the Task Force by PIEDA Tourism & Leisure.

Published: "Tourism and the Environment, Maintaining the Balance"

Authors: ETB/Employment Department

Date: 1991

ISBN: 0 7095 4805 2

Price: Free

Published: "Report of the Heritage Sites Working Group"

Authors: ETB/Employment Department

Date: 1991

ISBN: 0 7095 4809 5

Price: £10.00

Published: "Report of the Countryside Working Group"

Authors: ETB/Employment Department

Date: 1991

ISBN: 0 7095 4810 9

Price: £10.00

Published: "Report of the Historic Towns Working Group"

Authors: ETB/Employment Department

Date: 1991

ISBN: 0 7095 4808 7

Price: £10.00

Published: "Visitor Management Case Studies"

Authors: ETB/Employment Department

Date: 1991

ISBN: 0 7095 4811 7

Price: £10.00

ETB5 *United Kingdom Tourism Survey*

The survey measures the volume, value and characteristics of tourism by UK residents. Topics covered include purpose and month of trip, destination, transport, accommodation used, leisure activities, use of travel trade and categories of spending.

Published: "The UK Tourist: Statistics 1991"

Date: 1992

Authors: ETB and Tourist Boards for Northern Ireland, Scotland and Wales

ISBN: 0 86143 170 7

Price: £55.00

ETB6 *Overseas Visitor Survey*

The survey is conducted every year. Its purpose is to provide information on the behaviour and opinions of overseas visitors to the UK. The survey complements the International Passenger Survey which provides the basic statistics on the numbers, spending and main characteristics of overseas visitors.

Published: "Overseas Visitor Survey 1991"

Date: 1992

Price: £59.00

ETB7 *Sightseeing in the UK*

This presents a yearly analysis of the use of attractions, detailing trends in the number of visits to attractions, new attractions, opening periods, admission charges, overseas visitors, employment, investment and revenue trends.

Published: "Sightseeing in the UK 1991"
Authors: ETB and Tourist Boards for Northern Ireland, Scotland and Wales
Date: 1992
Price: £19.00

ETB8 *Visits to Tourist Attractions*

Visitor numbers of attractions are listed by country and category: historic houses, gardens, museums and galleries, wildlife attractions, country parks, leisure parks, steam railways, workplaces and miscellaneous attractions.

Published: "Visits to Tourist Attractions 1991"
Authors: BTA and National Tourist Boards
Date: 1992
Price: £12.50

ETB9 *English Heritage Monitor*

Examines ancient monuments, churches and historic buildings from a conservation and tourism viewpoint. Coverage includes: numbers of historic buildings, and conservation areas and conservation activity; properties open to the public, presentation, admission charges and other aspects by public access; and visitor trends.

Published: "English Heritage Monitor 1992"
Author: English Tourist Board
Date: 1992
Price: £15.00

ETB10 *Regional Facts of Tourism*

A series of reports for each of the English tourist regions providing regional information on the volume, value and characteristics of UK and overseas tourism; tourist accommodation, hotel occupancy, employment in tourism-related industries and attendance at visitor attractions.

Published: "Regional Facts of Tourism" (12 regional editions)
Date: 1992
Price: £10.00 each

ETB11 *British National Travel Survey*

This yearly survey measures holidays taken by GB residents in Britain and abroad as well as the characteristics of holidaytakers and non-holidaytakers and details of the holidays taken. The survey has been conducted annually since 1960 and therefore measures trends over a long period.

Published: "The British on Holiday 1991" (summary only, full results available to subscribers)
Date: 1992
Price: £12.50

Contact for Research Enquiries:

Iain Rickson, BTA/ETB Research Services, Thames Tower, Black's Road, Hammersmith, London W6 9EL
Tel: 081-563 3054

ENVIRONMENT SERVICE DEPARTMENT OF THE ENVIRONMENT FOR NORTHERN IRELAND

Introduction

Environment Service was established in 1991 to combine the government departments responsible for environmental protection and conservation in Northern Ireland. Environment Service aims to promote the wise use and enjoyment of the countryside, to conserve wildlife, habitats and landscape and increase awareness of the environment.

The research programme is designed to provide information for the statutory duties detailed in the Nature Conservation and Amenity Lands (NI) Order 1985, the Wildlife (NI) Order 1985, the Access to the Countryside (NI) Order 1983. These include site protection through the declaration of Areas of Special Scientific Interest (ASSIs) and Nature Reserves and the designation of Areas of Outstanding Natural Beauty (AONBs). In addition the Service provides advice to government departments, government agencies and local authorities, and is responsible for local implementation of international directives and conventions designed to protect the natural environment.

The research programme includes national resource inventories, scientific site evaluation, landscape assessments, habitat management studies, wildlife surveys and reviews, recreation and tourism studies and IT development projects.

Publications and Reports

ES1 *Landscape Assessment of Fermanagh District*

There are no protected landscapes in County Fermanagh despite some of the most remarkable scenery in Northern Ireland. This study aimed to describe and evaluate the different landscapes of Fermanagh and to identify their particular landscape, nature conservation and heritage interests. Sixteen landscape zones were identified. The report made recommendations for 2 Areas of Outstanding Natural Beauty - Fermanagh Cave land and Erne Lakeland.

Published: "Fermanagh: Its Special Landscapes"
Date: 1991
Publisher: HMSO, Belfast
ISBN: 370827 6 6
Price: £5.95
Contact: Andrew Stott and Joyce McCormick

ES2 *Coastal Erosion in NE Antrim*

The Antrim Coast and Glens and Causeway Coast AONBs were designated in 1988 and 1989. The coastlines of the AONBs comprise a series of hardrock headlands and intervening bays with extensive sandy beaches and sand dune systems. As part of the process of reviewing these AONBs the Department commissioned a review of coastal erosion. The researchers used historical maps and photographs, previous literature and reports to assess past changes in the coastline. The final report discusses the factors which contribute to coastal erosion and makes broad recommendations for coastal management at sites along the coast.

Published: "Shifting Sands: A study of the coast of Northern Ireland from Magilligan to Larne"
Authors: Carter W, Bartlett D, University of Ulster
Date: 1991
Publisher: HMSO, Belfast
ISBN: 0 337 082537
Price: £4.95

ES3 Northern Ireland Lake Survey

In 1987, Countryside and Wildlife Branch commissioned the Queen's University of Belfast to undertake a survey of the aquatic plants in the lakes within Northern Ireland. This major project involves sampling more than 600 lakes of between 1 hectare and 100 hectares surface area over a 3 year period. The project will be completed in 1992. An interim report with a comprehensive inventory of water bodies within Northern Ireland is now available.

Published: "The Lakes of Northern Ireland: An Annotated Inventory"
Authors: Smith S, Wolfe-Murphy S, Enlander I, Gibson C
Date: 1991
Publisher: HMSO, Belfast
ISBN: 0 337 0825 6 1
Price: £4.95.

ES4 Northern Ireland Sub-littoral Survey

A sub-tidal ecological survey of the Northern Ireland coastline undertaken by the Ulster Museum. The survey involved the production of descriptions of the various habitats found, the provision of information on rare and interesting species and other relevant information. Recommendations were also made regarding the conservation of both habitats and species including the identification of areas suitable for Marine Nature Reserve designation.

Published: "Inshore Marine Life of Northern Ireland"
Authors: Erwin D, Picton B, Connor D, Howson C, Gilleece P, Bogues J
Date: 1990
Publisher: HMSO Belfast
ISBN: 0 337082 68 5
Price: £19.95

ES5 Landscape Ecological Study of Fermanagh

This study provides an estimate of the ecological resources of Fermanagh - their extent, distribution, character and condition. The main aims of this project were: a) to describe the main elements of landscape variation using a multivariate land classification of NI; b) to carry out a stratified random field sampling programme to describe the current land use, ecological characteristics and linear features of a set of 25ha squares; c) to provide quantitative and qualitative information on ecological and landscape resources in the wider countryside. The results show that over a quarter of Fermanagh District has a seminatural vegetation type: mainly bog, heath, species-rich wet grassland and woodland. There is a very small area of crops and most the agricultural grassland is permanent, semi-improved pasture.

Published: "A Landscape Ecological Study of Fermanagh District"
Authors: Murray R, Cooper A and T McCann T, Department of Environmental Studies, University of Ulster
Date: January 1991
Publisher: University of Ulster
ISBN: 1 871209 60
Agency Ref: CP1149/15/4

ES6 Northern Ireland Leisure Day Trip Survey 1990/91

This collaborative study with Northern Ireland Tourist Board and Sports Council for Northern Ireland aimed to provide general information on the domestic leisure day trip market and countryside recreation in Northern Ireland. The study was based on household survey carried on a monthly omnibus at 4 intervals during the year. Leisure day trips were very popular with an average 42% of the adult population taking at least one trip in a 4 week period. Spending on the estimated 37 million trips amounted to over £300 million.

Published: "Northern Ireland Leisure Day Trips Survey 1990/91"
Authors: Stott A, McConaghy R, Ogle S
Contractor: Ulster Marketing Surveys
Date: 1992
Publisher: HMSO
ISBN: 0 337 08297 9
Price: £4.95
Agency Ref: CP1149/38

ES7 Buildings in the Fermanagh Countryside

The countryside of Fermanagh is characterised by dispersed rural settlement associated with farming activities. Many older buildings make a positive contribution to the landscape but houses of more recent construction tend to be intrusive because of inappropriate location, siting, design and treatment of boundaries. This study aimed to identify the characteristics of traditional buildings and to prepare design guidelines for new construction and renovation projects. A variety of simple traditional designs are described and illustrated in architectural drawings.

Unpublished final report: "Buildings in the Fermanagh Countryside"
Authors: Anderson C (Cobham Resource Consultants), Fitzgerald D (Queen's University of Belfast)
Date: March 1991

ES8 Environmental Effects of Blanket Peat Exploitation in Northern Ireland

An assessment of the impact of peat extraction on NI blanket bogs. The study was in 3 parts. The first part consisted of a survey of the extent and type of modern peat extraction throughout NI. The second part reviewed the likely effects of the main methods of extraction (hand cutting and mechanical extraction) and suggested future research. The third part investigated the socio-economic factors affecting peat extraction.

Contract reports have been presented to the Department and can be made available for inspection. Publication of the findings is envisaged in 1993.

Part 1: Survey of the scale, extent and rate of peat extraction from blanket bogs in Northern Ireland.
Authors: Cruickshank M, Tomlinson R, Bond D, Devine P, Cooper A, Murray R, Queen's University Belfast
Date: March 1991

Part 2: Ecological impacts of blanket peat extraction in Northern Ireland
Authors: Bayfield N, Picozzi N, Staines B, Crisp T, Tipping E, Carling P, Robinson M, Gustard A, Shipman P
Date: May 1991

Part 3: Socio-economic factors affecting extraction practices in Northern Ireland
Authors: Cruickshank M, Tomlinson R, Bond D, Devine P, Edwards C, Queen's University Belfast
Date: March 1991

ES9 Woodland Surveys VI - Fermanagh

The woodland survey aimed to provide an inventory of private woodlands, over 0.5 ha, in conservation and amenity recorded during a "walk over" field survey. Altogether 919 sites were visited, covering an area of 3125 ha. Around three quarters of the woodland was semi-natural, with Ash, Birch, Alder, Sycamore, Willow, Oak and Hazel. Over half the woods were grazed by farm livestock or feral goats and there was little evidence of positive woodland management. Sixty six sites were found to be of high nature conservation interest.

Unpublished final report: "Fermanagh Woodland Survey"

Author: Cousins G
Contractor: Environmental Advisory Unit
Date: April 1991
Agency Ref: CP1149/25

ES10 Monitoring Sand Removal in Antrim AONB

There is a long standing tradition of sand removal from beaches in Northern Ireland. Up until recently the scale of removal was limited by the labour required using a shovel and horse and cart. Sand removal has been implicated in coastal erosion and, in particular the loss of sandy beaches. This study aimed to quantify and evaluate the impacts of current sand removal activity. The results show that sand removal is operating on a scale which threatens the long term stability of some beaches. The study also considered local attitudes to sand removal and found a sharp dichotomy of views.

Unpublished final report: "Sand Removal from Beaches on the NW Coast of Ireland"

Authors: Carter W, Bradshaw P, Eastwood D
Contractor: Ulster University
Date: 1991
Agency Ref: CP1149/32/89

ES11 NI Countryside Survey

The NI Countryside Survey completes a series of landscape ecology studies for the whole Province. These surveys are based on a sample of 630 25ha grid squares. The sample is stratified according to the Northern Ireland Land Classification. For each grid square there is a detailed field survey which includes agricultural use, forestry, semi-natural vegetation, field boundaries and other features such as new buildings. From the sample an estimate is made of the total Northern Ireland resource. This survey is intended as a baseline for monitoring future changes in the countryside. The data will be included in a computer database with mapping facilities - the Countryside Information System - which is currently being developed for Northern Ireland. A summary report will be published in 1993.

Unpublished final report: "A Land Classification and Landscape Ecological Study of Northern Ireland"

Authors: Cooper A, Murray R, McCann T
Contractor: Ulster University
Date: 1992
Agency Ref: CP1149/50

ES12 UK Day Visits Survey - Pilot 1992

Environment Service collaborated with other UK agencies in the first comprehensive survey of leisure day trips across the whole of the United Kingdom. The results show that the Northern Ireland population has a broadly similar pattern of leisure activity to other parts of the UK.

Researcher: McLagan L
Contractor: Survey Research Associates
Agency Ref: CP1149/47

ES13 *Strangford Lough Wildfowl Ecology*

This study aims to improve our understanding of the feeding and roosting behaviour of Brent Geese and Widgeon on Strangford Lough and, in particular, the effects of shooting and recreational disturbance. The study will monitor the behaviour and distribution of birds in relation to wildfowl refuges and food availability. After the initial fully-funded first year of the project a co-operative studentship has been established to continue the work at Queen's University, Belfast.

Unpublished interim report: "Strangford Lough Wildfowl Research"

Authors: Fox A, Mathers R

Contractor: Wildfowl and Wetland Trust

Date: 1992

Agency Ref: CP 1149/58

ES14 *Causeway Coast AONB Access Strategy*

Since the designation of the Causeway Coast AONB in 1989 Environment Service has been seeking opportunities to further the objectives of countryside conservation and enjoyment. The provision of appropriate public access is an important aspect of AONB management. The strategy identifies a network of footpaths, including the North Coast section of the Ulster Way and associated links. There are recommendations for improvements to facilities and information provision.

Unpublished final report: "Causeway Coast AONB Access Strategy"

Authors: Greer J, Murray M

Date: 1992

Agency Ref: CP 1149/62

Databases

ES15 *Northern Ireland Woodland Surveys*

This database contains detailed survey information from woodland surveys in Northern Ireland. For each woodland site there are records on type of woodland, species composition, condition and management.

Geographic features: Each site is cross-referenced to a hard copy map.

Access: Supervised on-line access

Price: No charge

ES16 *Countryside and Wildlife Slide Collection*

This is a new database which will contain records of all 35mm transparencies archived at Countryside and Wildlife Branch. Details of location, date and content of slides are entered.

Geographic features: Locational information includes designated area, site, IG reference, District Council area.

Access: Supervised on-line access

Price: No charge

ES17

Countryside Management System (CMS), Northern Irish Nature Reserves

This is based on the AREV database. CMS provides a system for the planning and recording of projects carried out as part of site management plans. We are aiming to start using CMS for the management of thirteen nature reserves by 1 April 1991. The database will initially contain plans for work to be carried out on these nature reserves. As work progresses, records of work undertaken on nature reserves will also be entered on the database.

Geographic features: CMS 3.0 includes a simple mapping system which facilitates the drawing of maps for each site managed under the system .

Access: Branch staff only.

Contact for Research Enquiries:

Countryside and Wildlife Branch, Environment Service, Calvert House, 23 Castle Place, Belfast BT1 1FU
Tel.0232 230560

FORESTRY COMMISSION

Introduction

The Commission promotes good practice in multi-purpose forestry - in the industry as a whole and in the national forest estate - to realise the environmental, social and economic benefits of forestry.

From April 1992, these roles have been clearly allocated to the constituent parts of the Commission. Promotion of standards across the industry as a whole and associated activities such as research, training, the provision of incentives and regulatory functions are the concern of the Forestry Authority. Forest Enterprise is responsible for the management of the national forest estate. A small Policy and Resources Group at Headquarters provides both Authority and Enterprise with support in policy formulation for the Commission.

Much of the Commission's research interest is focused on the ecology of the forest environment and on forest science. In addition, in recent years a body of work has also been building up in forest economics concerned with the values and non-market benefits associated with visiting the forest. Projects have been selected on the basis of relevance to CRN agencies and those interested are urged to scan the 1992 report on forest research which is expected to be published by March 1993.

The traditional research report is now often complemented and sometimes replaced by the direct inclusion of new methods and techniques in management guidelines. This approach is favoured for more direct and speedier technology transfer. In some instances the best way to ensure early availability of results, sometimes interim, is through the publication of Research Information Notes which are crisp and brief summaries without frills.

Publications and Reports

FC1 *Roe Deer Ecology*

The continuing analysis of roe deer population data has revealed that the mortality rates are much higher than some people commonly supposed. The findings contradict the view that roe deer populations can seldom be controlled. The work has resulted in a number of papers as well as management advice given in the form of a Forestry Commission Bulletin.

Published: "Roe Deer Biology and Management", FC Bulletin No 105
Authors: Ratcliffe P, Mayle B
Date: 1992
Publisher: HMSO
ISBN: 0-11-710310-1

FC2 *Woodland Bat Ecology*

A body of work has been accumulating on the subject of woodland bat ecology since the earlier publication of the FC Research Information Note 165, "Habitat Management for Woodland Bats" by the same author.

Published: "A Biological Basis for Bat Conservation in British Forests", in Mammal Review 20(4)
pp.159-195
Author: Mayle B
Date: 1990

FC3 *Impact of Herbivores on Forest Plant Life*

A number of studies searching for causative factors have been concerned with the browsing on young forest trees by deer. Work carried out in upland restock sites revealed that there was less leader browsing on sites with more vegetation cover. This and other work is reported in a series of articles in "Forestry".

Published: "A review of damage by mammals in Northern Temperate forests - Deer", in Forestry.
Author: Gill R

Published: 'The influence of mammals on the regeneration of forest communities', in "Future Forests: lessons from experience", 3rd Wolverhampton Woodland Research Group Symposium.

Authors: Ratcliffe P, Gill R

Date: 1991

FC4 *Vegetation Management*

A series of projects under this banner have been under way for a number of years. Projects in the uplands range from work on the management of birch in upland conifer forests, encouraging heather on edges and in unplanted areas, and encouraging juniper. Another project is the design of new woodlands to encourage native plant communities.

Published: "Edge Management in Woodlands", FC Occasional Paper No 28

Authors: Ferris-Kaan R (ed)

Date: 1991

Publisher: Forestry Commission

ISBN: 0-85538-240-6

Price: £2.50

Published: "Monitoring vegetation changes in the conservation management of forests", FC Bulletin 108

Authors: Ferris-Kaan R, Patterson G

Date: 1992

Publisher: HMSO

ISBN: 0-11-710313-6

In press: "The value of birch for nature conservation in upland forests", FC Bulletin 109

Author: Patterson G

Date: 1993

Publisher: HMSO

In preparation: "Creating new native woodlands", FC Bulletin

Authors: Rodwell J, Patterson G

Date: 1993

Publisher: HMSO

FC5 *Nightjars*

A three year project has been completed. Run jointly with RSPB. Analysis of the distribution of singing males showed that these were more likely to occur where a substantial area of young trees were within 1 km. The population of singing males was estimated to be at about 300. This, along with similar work on the rare woodlark, has resulted in modifications to stand management and felling plans primarily to benefit these species and ensure their future survival at Thetford Forest.

Published: "The ecology of nightjars in Thetford Forest and the national nightjar survey in 1992", FC Research Information Note 213

Author: Petty S

Date: 1992

Price: Free

Publisher: Forestry Commission

FC6 *Conifer Seed as a Food Supply*

Work has been continuing on a project concerned with the use made of conifer seeds by vertebrates - crossbills, siskins, red squirrels and wood mice amongst others.

Interim report received by FC

Researchers: Ferns P, Cowie R, University of Wales (Cardiff)

Enquiries: Philip Ratcliffe, Forestry Commission Northern Research Station, Roslin, Edinburgh EH25 9SY

FC7 *Kestrel Nestboxes*

Summarising results of a project which demonstrates how nestboxes will support a population of kestrels within the forest.

Published: "Nestboxes for kestrels", FC Research Information Note 215

Author: Canham N

Date: 1992

Publisher: Forestry Commission

Price: Free

FC8 *Forest Birds*

An important benchmark review of the ecology and management of forest bird communities in relation to silvicultural practices in the British uplands.

Published: "Forest Bird Communities - a literature review", FC Occasional Paper No 26

Authors: Petty S, Avery M

Date: 1990

Publisher: Forestry Commission

ISBN: 0-85538-237-6

Price: £5.00

FC9 *Forest Fencing*

Many conservationists and managers of land used for recreation and conservation will be glad to see up-to-date techniques brought together in an authoritative piece of work.

Published: "Forest Fencing", FC Bulletin No 102

Author: Pepper H

Date: 1992

Publisher: HMSO

Price: £5.00

FC10 *Report on Forest Research*

A complete report on the research carried out by the Forestry Commission, the work of the individual branches and highlighted projects.

In preparation: "Report on forest research, 1992"

Author: Forestry Commission

FC11 *The Recreation Value of Woodland and Forest*

Through the use of Travel Cost Methods, values were derived for visits to a range of Forestry Commission forests. These forests were themselves representative of clusters which sought to describe the Commission's entire woodland and forest estate.

Published: "Valuing Informal Recreation on the Forestry Commission Estate", FC Bulletin No 104
Authors: Benson J, Mills K
Date: 1992
Publisher: HMSO
ISBN: 0-11-710308-X
Price: £7.50

FC12 *Forests and Water*

Updated to include recent findings, since the original guidelines were prepared following the water workshop organised by the Forestry Commission and the Water Research Centre at York in 1986.

Published: "Forests & Water Guidelines".
Author: Forestry Commission
Date: 1991
Publisher: HMSO
ISBN: 0-11-710296 2
Price: £5.25

FC13 *Forest Nature Conservation*

These guidelines are based on practical measures being taken by foresters, informed by research.

Published: "Forest Nature Conservation Guidelines".
Author: Forestry Commission
Date: 1991
Publisher: HMSO
ISBN: 0-11-710292-X
Price: £4.50

FC14 *The Design of Forest Landscapes*

This book describes principles and practice developed over the years by landscape architects and foresters within the Forestry Commission. The work demonstrates a rational approach which can be used to increase the enjoyment people obtain from forests and woods, both as elements in the landscape and as places to explore. (This is a major work, lavishly illustrated and this is reflected in the price. A summary of landscape principles and practice is available as "Forest Landscape Design Guidelines", published in 1989 by FC and currently being revised and to be published by HMSO).

Published: "The Design of Forest Landscapes".
Author: Lucas O
Date: 1991
Publisher: Oxford University Press
ISBN: 0-19-854280-1
Price: £95.00
Published: "Lowland Landscape Design Guidelines".
Author: Forestry Commission
Date: 1992
Publisher: HMSO
ISBN: 0-11-710303-9
Price: £9.95

FC15 *Community Woodland*

Drawing on the work described by Oliver Lucas and also the work in other countries, notably Holland and Germany.

Published: "Community Woodland Design Guidelines".
Author: Forestry Commission
Date: 1991
Publisher: HMSO
ISBN: 0-11-710300-4
Price: £9.75

FC16 *Forest Recreation*

Drawing on decades of practical experience of foresters in managing woodland recreation and complementing guidelines on forests and water, conservation and forest design.

Published: "Forest Recreation Guidelines".
Author: Forestry Commission
Date: 1992
Publisher: HMSO
Price: £7.00

FC17 *Forests, Woodlands and People's Preferences*

The aim of the project was to reveal people's attitudes and preferences for forests and woodlands, as components of the landscape and as places to explore and enjoy being in. The study involved the use of focus groups in 4 different areas of Britain, household survey in 4 different areas, a survey of visitors to 3 forest visitor centres and a study of how forest landscape architects assess the landscape. The project was jointly sponsored by Countryside Commission, Countryside Commission for Scotland (now succeeded by Scottish Natural Heritage) and Forestry Commission.

In preparation: "Forests, Woodlands and People's Preferences".

Databases

FC18 *Forestry Commission Subcompartment Database*

Contains crop and site details of land (eg SSSI, Scheduled Ancient Monuments, AONB) and also details of FC picnic sites and designated car parks. Annually updated. Each compartment has a reference number but grid reference centroids are also included. Access is provided to information which is not commercially sensitive. The charge will depend on the volume and nature of material required, available on tape and for small areas on disc.

Many of the research branches have their own databases which are currently being restructured on a common operating language. Scientists with an interest in this area are likely to know how to gain access to this information. Enquiries may be made however through The Forest Research Station at Alice Holt Lodge, Wrecclesham, Nr Farnham, Surrey GU10 4LH.

Contact for Research Enquiries:

Richard Broadhurst, Forestry Commission, 231 Corstorphine Road, Edinburgh EH12 7AT
Tel. 031 334 0303

Contact for Database Enquiries:

Bob Selmes, Forestry Commission, 231 Corstorphine Road, Edinburgh EH12 7AT
Tel. 031 334 0303

MINISTRY OF AGRICULTURE FISHERIES AND FOOD

Introduction

One of the aims of MAFF is to seek to achieve a reasonable balance between the interests of agriculture, the economic and social interests of rural areas, the conservation of the countryside and the promotion of its enjoyment by the public.

Projects were chosen for inclusion in the CRN Research Register if the research objectives clearly met any of the following criteria, which identify projects with a bearing on leisure and recreation activities:

- monitoring socio-economic and environmental impacts of MAFF policy and grant schemes;
- predicting the possible impact of new policies on the environment and land use change;
- assessing the effects of agricultural inputs and techniques of flora and fauna;
- establishing the most suitable management techniques to enhance and conserve the countryside and natural resources.

In addition to those projects listed, research work is undertaken in areas such as climatic change, the impact of pollution and pesticides on agriculture and land management techniques. Although many of these projects have a bearing upon the environment they are principally agronomic in their objectives and were, therefore, not included.

Research, Publications and Reports

MAFF1 *Management in Relation to Species Diversity in Herb-Rich Permanent Grassland*

To study the effect of long term application of low levels of nitrogen fertiliser on species diversity and the reversion of swards following high nitrogen applications; and to devise techniques for accelerating increases in botanical diversity in species poor swards.

Published: "Fifth annual report to the management group of the MAFF/NCC/DOE Tadham Moor Project"

Authors: Tallowin J, Thomas G

Date: 1991

Published: "The Effect of Nitrogen on Species Diversity and Agricultural Production on the Somerset Moors - An Executive Summary of the Tadham Moor Project 1986-1990"

Authors: Kirkham F, Tallowin J, Wilkins R, Mountford J, Lakhani K

Date: 1991

MAFF Dept: Chief Scientists Group

Contact: R Brand-Hardy

MAFF2 *The Impact of Alternative Agricultural Policies on the Rural Economy and Rural Environment of Two Scenic Areas in Scotland*

To provide base data on two scenic areas, one designated as environmentally sensitive, in order that evaluations may be made of the likely impact of alternative policies on farms, rural economies and rural environments.

Researchers: Edinburgh School of Agriculture

Date: 1987-1990

MAFF Dept: Economics (Resource Use)

Contact: Howard Fearn

MAFF3 *An Evaluation of Environmentally Sensitive Areas (Low Level) in England*

Policy assessment of the socio-economic impact of seven selected ESAs in England: Shropshire Borders, Breckland, Broads, West Penwith, Somerset Levels and Moors, Test Valley and the South Downs.

Researchers: Robertson Gould Consultants Ltd
Date: 1989-1990

MAFF Dept: Economics (Resource Use)
Contact: Howard Fearn

MAFF4 *Monitoring and Analysis of the Impact of the ESA Scheme: A Study of the North Peak and Suffolk River Valleys Areas*

A socio-economic policy assessment of the impact of the designation of the North Peak and Suffolk River Valleys as ESAs.

Researchers: University of Manchester
Date: 1988-1991

MAFF Dept: Economics (Resource Use)
Contact: Howard Fearn

MAFF5 *The Socio-economic Impact of the Pennine Dales ESA*

A socio-economic policy assessment of the impact of the designation of the Pennine Dales as an ESA.

Researchers: University of Newcastle
Date: 1988-1991

MAFF Dept: Economics (Resource Use)
Contact: Howard Fearn

MAFF6 *Evaluation of the Farm Woodland Scheme*

A socio-economic policy assessment of the Farm Woodlands Scheme

Published: "An Economic Evaluation of the Farm Woodland Scheme"
Authors: Gasson R, Hill P
Date: October 1990
Publisher: Wye College
FBU Occasional Paper No. 17

MAFF Dept: Economics (Resource Use)
Contact: Howard Fearn

MAFF7 *An Evaluation of the Five Year Set-aside Policy in England and Wales*

A socio-economic policy assessment of the five year set-aside scheme in England and Wales

Researchers: Centre for Agricultural Strategy, University of Reading

Date: 1989-1991

MAFF Dept: Economics (Resource Use)

Contact: Howard Fearn

MAFF8 *Erosion Monitoring and Control*

3 areas of research:

- maintaining erosion in small catchments in vulnerable zones - 12 sites
- erosion control - 4 sites - cereals
- erosion control - Gleadthorpe EHF - sugar beet

Date: 1992-1993

MAFF Dept: Cambridge Regional Office

Contact: B Davies

MAFF9 *An Economic Evaluation of Salmon Fisheries in Great Britain*

To estimate the direct and indirect effects of salmon fisheries, production and recreational aspects.

Published: "An economic Evaluation of Salmon Fisheries in Great Britain"

Researchers: Portsmouth Polytechnic

Date: 1991

Price: £50.00 (summary report £5.00)

Contact: Centre for Marine Resource Economics, Portsmouth Polytechnic

MAFF10 *Project Silvanus*

To establish management practices in neglected farm woodlands in Devon and Cornwall

Published: "Silvanus - the First Four Years"

Date: 1991

Publisher: Countryside Commission (CCP360)

ISBN: 0 86170 3227

Price: £4.50

MAFF Dept: LAUT (Land Use and Tenure Division)

Contact: Mr Nottage

MAFF11 *The Establishment and Maintenance of Farm Woodlands*

Main area of interest is in establishing woodland on former arable land. Several sites being used including Drayton, Boxworth, Terrington and Liscombe. to try and cover a wide range of areas. Other areas of research include weed control in new plantations and at Terrington the utilisation of poplar to dispose of pig slurry. Collaboration with CSL on pests in woodland. Work done in association with Forestry Commission.

MAFF Dept: Drayton Hall
Contact: C Brit

MAFF12 *The Effect of Farm Woodlands on Local Hydrology and Water Quality*

MAFF Dept: Anstey Hall
Contact: D Castle

MAFF13 *Management of Grassland Field Boundaries*

To monitor the effects of agricultural practices on hedgerow structure, composition and wildlife diversity so as to formulate strategies for the management of grassland field boundaries.

Published: "1990 IGER Report (Details of Research)"
Date: 1991
Publisher: Institute of Grassland and Environmental Research
ISSN: 0961 - 6071

MAFF14 *ESA Monitoring Reports*

The ESA Monitoring Reports summarise the results of the environmental and socio-economic monitoring of the first tranche of ESAs in England.

Published: "The Broads, West Penwith, Pennine Dales, South Downs, Somerset Levels ESA Report of Monitoring 1991"
Author: MAFF
Date: 1991
Price: £9.95
MAFF Dept: ADAS
Contact: N Blackburn

MAFF15 *The Effect of Stocking Rates and Grazing Pressure on Heather and Other Flora and Fauna in the Uplands*

Second year studies complete - vegetation, livestock and invertebrates.

Published
Date: 1992
MAFF Dept: Redesdale EHF
Contact: Mr Chalmers

MAFF16 *Effects of Different Field Boundary Strips on Environmental and Agronomic Aspects of the Field Margin of a Cereal Crop*

To examine the effect of barrier strips around the edge of cereal fields on floral and faunal diversity in the hedge and field edge.

Published: "The Effects of Boundary Strips on the Flora of Cereal Fields"
Authors: Feare C, Milsom T, Wright B, Lane P
Date: 1989

MAFF Dept: Worplesdon Laboratory
Contact: C Feare

MAFF17 *Evaluation of the Farm Diversification Grant Scheme*

A socio-economic policy assessment of the Farm Diversification Grant Scheme.

Published: "Evaluation of the Farm Diversification Grant Scheme"
Authors: Ilbery B, Bowler I
Date: February 1991

MAFF Dept: Economics (Resource Use)
Contact: H Fearn

MAFF18 *Evaluation of the Farm and Conservation Grant Scheme - Waste Handling Facility*

First part of the socio-economic policy assessment of the waste handling elements of the F and CGS

Unpublished
Researchers: University of Manchester
Date: 1990/1991

MAFF Dept: Economics (Resource Use)
Contact: H Fearn

MAFF19 *Heather Grazing in Hills and Uplands*

Development of methods of managing grassland in the hills and uplands consistent with healthy agriculture

Published: "1990 Hill and Upland Pasture R & D"
Author: Chalmers H
Date: 1990
Journal: "Grassland Farmer" (British Grassland Society)

Published: "The Dynamics of Vegetation Change and Flock Output on Hill Land"
Authors: Rushton S, Byrne J
Date: 1990
Publisher: Proceedings of the BGS

Published: "Environment and Management Factors Controlling the Cover of Calluna in Wet Moorland"
Author: Henderson D, Nolan A, Merrell B
Date: 1991
Publisher: Joseph Nickerson Foundation

Published: "The Effect of Sheep Grazing on the Rehabilitation of Degraded Dry Heather Moor"
Authors: Hulme P, Fisher J, Merrell B
Date: 1991
Publisher: Joseph Nickerson Foundation

Published: "Growth and Utilisation of Heather (*Calluna Vulgaris*) Under Contrasting Managements"
Authors: Byrne J, Wilding J, Rushton S
Date: 1991

MAFF Dept: Redesdale EHF
Contact: J Byrne

MAFF20 *Modelling Existing and Alternative Uses of Rural Land*

Development of a model to analyse the effects of policy changes that are significant for agriculture, and to provide results at a national and regional level for 4 policy scenarios.

Unpublished draft final report

Researchers: Centre for Agricultural Strategy, University of Reading
Date: October 1991

MAFF Dept: Economics (Resource Use)
Contact: R Young

Databases

MAFF21 *Land Information System (LandIS)*

A data retrieval system which enables the user to access information from the soil survey national map, the national soil inventory, agroclimatic databases and derived information about land potential.

Held at Soil Survey and Land Research Centre, Silsoe College

MAFF Dept: ADAS
Contact: A Hooper

MAFF22 *Register of Govt. Funded Agriculture/Environment R & D in the UK 1984/88*

MAFF Dept: CSG
Contact: R Brand-Hardy

Contact for Research Enquiries:

Nadia Blackburn, MAFF, Nobel House, 17 Smith Square, London SW1P 3JR Tel: 071 238 3000

NATIONAL PARKS ASSOCIATION

Introduction

National Parks are charged with the task of preserving and enhancing the natural beauty of the landscape and promoting its enjoyment by the public whilst having due regard to the needs of agriculture and to the social and economic interests of the area. The recent review by the Edwards panel recommended that National Parks should compile Environmental Inventories. This will highlight areas where research is needed. Recent legislation obliging local authorities to provide "freedom of access to environmental information", current financial constraints, new technology, and external agency initiatives will all influence the research which is undertaken.

Publications and Reports

Yorkshire Dales National Park

YDNP1 *Landscapes for Tomorrow: Interpreting Landscape Futures in the Yorkshire Dales National Park*

Landscapes are repositories of history and signposts of the future. Landscapes do not stay static yet, in British National Parks, public policy and public preferences try to keep them in a state of suspended animation. Over the next twenty to thirty years, agricultural and forestry policies in the European Community could transform the upland moor and meadow landscapes that make the UK National Parks so famous. The report describes and evaluates an interactive experiment in participatory interpretation in the Yorkshire Dales National Park. It suggests that interpretative techniques can be used to create images of possible future landscapes that promote awareness, understanding and concern amongst the participating population for landscape futures and for changes in policy and financing.

Published: Landscapes for Tomorrow"
Authors: O'Riordan T, Wood C, Shadrake A
Date: March 1992
Publisher: Yorkshire Dales National Park
ISBN: 0 905455 33 9
Price: £10.00 inc. p & p

YDNP2 *Yorkshire Dales Visitor Survey 1991*

To assess basic visitor profile (numbers, movements, origin, duration of stay, activities, spending); the nature and location of tourist pressure; attitudes of visitors and residents to changes in the area, to tourism and to alternative forms of visitor management.

Published: "Yorkshire Dales Visitor Study 1991 - Summary Report
Authors: PA Cambridge Economic Consultants
Date: 1992
Publisher: YHTB
Price: £2.50

Northumberland National Park

NNPI	<i>Pennine Way Management Programme</i>
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Pennine Way restoration. Laying flagstone paths on eroded, deep peat to create a new walking surface. Minimum disturbance and ground preparation; limited landscape intrusion; low/minimum maintenance; low cost compared to aggregate path. Helicopter logistics essential. Can be laid by skilled volunteers.

Published: "Pennine Way Management Programme"
Author: Northumberland National Park Authority
Date: 1991
Price: Free 3 page report plus background information on request.

Contact:

Mr C. Kirby, National Park Headquarters, Eastburn, South Park, Hexham, Northumberland NE46 1BS
Tel. 0434 605555

NATIONAL RIVERS AUTHORITY

Introduction

The National Rivers Authority's role is to protect, improve and manage the water environment throughout England and Wales. It undertakes its Recreational duties by:

- improving and promoting recreation in its own operational and regulatory activities;
- developing the amenity and recreational potential of waters and lands under NRA control;
- promoting the use of water and associated land for recreational purposes by liaising and co-operating with others.

To support the policy and operational needs of the above objectives the NRA makes arrangements to carry out research and related activities, whether by the Authority or others.

Research Projects

NRA1 *Bank Erosion on Navigable Waterways*

To conduct field trials to identify the most appropriate technique of bank erosion protection for navigable rivers under NRA responsibility.

Timescale: 7/91 - 6/93
Leader: University of Nottingham, A Brooks
Agency Ref: E01(91)2 336

NRA2 *Recreational Survey Methodology*

To develop a survey methodology for recreational uses that is compatible with proposed habitat and landscape modules of river corridor surveys.

Timescale: 1/92 - 2/93
Leaders: R P S Clouston, D Hickie
Agency Ref: E01(91)4 385

NRA3 *Impact of Recreation on Wildlife*

To assess how and to what extent recreational activities impact upon wildlife with particular emphasis on informal recreational and canoeing/slalom.

Timescale: 1992 - 95
Leader: J Pygott
Agency Ref: E01(91)1

NRA4 ***Participation Levels and Trends in Recreation Activities***

To establish in more detail the regional variations that exist in participation and in future demand for facilities.

Timescale: 1992- 94
Leader: R Johnstone
Agency Ref: E01(92)2

Contact for Research Enquiries:

David Jordan, Head of Fisheries, Recreation, Navigation & Conservation, Rivers House, Waterside Drive, Aztec West, Almondsbury, Bristol BS12 4UD Tel. 0454 624400

Brian Hughes, Recreation and Navigation Commission Topic Leader, NRA Thames Region.

NATURAL ENVIRONMENT RESEARCH COUNCIL

Introduction

The Institute of Terrestrial Ecology, as a component Institute of NERC, continues to develop research to improve our basic understanding of the ecology of organisms and systems, and to apply this understanding to assess the actual and potential impact of human activity on our natural resources. Collaboration between the northern and southern stations of ITE remains an important principle in developing a concerted approach to ecological research. The publication of the NERC Strategy for Terrestrial and Freshwater Sciences (The Green Light' - March 1989) has clearly identified the main research thrusts and the continuing emphasis on financing of research.

Although there is no specific programme of research directly focused on recreation, many of ITE projects are concerned with recreation management, eg effects of ski lifts, footpath rehabilitation, or with land use change, and with species of wildlife which are the focus of recreation. With the increasing change in land use, including recreation, an important priority area is in assessing actual and potential change in land use and in its ecological consequences. A developing aspect is on the potential effects of predicted climate change on land use and ecology.

Projects, Publications and Reports

NERC1 *Biological Records Centre Co-ordination*

- Objectives:**
1. To co-ordinate the work of constituent projects within the group.
 2. To negotiate and liaise with customers and ensure that contract requirements are met.
 3. To plan and ensure proper control of expenditure.
 4. To represent the project group at relevant meetings and on relevant committees and to publicise the work of BRC.
 5. To oversee publication of BRC output (Atlases etc).
 6. To report to NERC and NCC on the work of BRC.

Published: "Biological Recording of Changes in British Wildlife" (ITE symposium no.26).
Author: Harding, P.T., (ed.)
Date: 1992.
Publisher: HMSO.
Agency Ref: Project T02054e5

NERC2 *Butterfly Monitoring Scheme*

- Objectives:**
1. To maintain the Butterfly Monitoring Scheme liaison with recorders and data processing at approximately its present size for the 3-year period. This entails mainly liaison with recorders and data processing. Some change of emphasis, such as special provision for the representation of rare species, may be made.
 2. To produce brief annual reports for recorders and to NCC.
 3. To advise, on request, on population trends in relation to the management of specific sites.
 4. To encourage the use of the data in research projects and data analyses.

Published: "The Butterfly Monitoring Scheme: report to recorders"
Authors: Pollard E, Yates T.J.
Date: 1992.
Publisher: Abbots Ripton: Institute of Terrestrial Ecology.

Published: "The extinction and foundation of local butterfly populations in relation to population variability and other factors" *Ecological Entomology*, 17, 249-254.

Agency Ref: Project T02054h5

NERC3 *Historical Aspects of Environmental Perception*

To carry out historical research relevant to ecological studies of the natural environment. The topics arise from in-house and commissioned research programmes, and currently relate to: 1. land use studies: to explain the scale and character of changes in the distribution of wild species and communities; 2. environmental perception studies: to explain changes of attitude towards land and natural resources in the past, the environmental repercussions of policies formulated, and to investigate in an historical context the interface between ecological research and policy-making.

Published: "Opencast Coal Working and the Search for a National Land-Use Strategy in Post-War Britain" *Planning Perspectives*, 7, 47-63

Author: Sheail J

Date: 1992.

Published: "The amenity clause: an insight into half a century of environmental protection in the United Kingdom" *Transactions of the Institute of British Geographers*, 17, 152-165.

Author: Sheail J

Date: 1992.

Published: "Opencast coal working and the perceived threat to agriculture in post-war Scotland" *Scottish Geographical Magazine*, 108, 104-112.

Author: Sheail J

Date: 1992.

Published: "W.G.Hoskins - an appreciation" *Ecos*, 13 (1), 63.

Author: Sheail J

Date: 1992.

Published: "The Re-establishment of Wetland Habitats - a Search for Guidelines" *Agricultural Engineer*, 47, 71-73.

Author: Sheail J

Date: 1992.

Agency Ref: Project T02057a5

NERC4 *Nature Conservation in Upland Conifer Forests*

- Objectives:**
1. To determine if and how the design of plantations and the pattern of felling and restocking can be modified to improve them for selected groups of species.
 2. To determine if and how management during the forest rotation can be modified to improve forests as wildlife habitats. To achieve these objectives, the study has the following contributory objectives.
 3. To describe the habitats actually and potentially available in terms of successional stages and broad vegetation types.
 4. To relate the habitat requirements of bryophytes, vascular plants, lepidoptera and coleoptera, and birds to these categories.

Published: "Nature Conservation in Upland Conifer Forests" *Report on Forest Research* 1991, 69.

Author: Good J.E.G.

Date: 1992.

Published: "The effects of afforestation on upland plant communities: an application of the British National Vegetation Classification" *Journal of Applied Ecology*, 29, 180-194.

Authors: Wallace H L, Good J E G, Williams T G

Date: 1992

Agency Ref: Project T02060a2 ITE Monks Wood

NERC5 *The Role of Dispersal in Maintaining Bird Populations in Small Woods on Farmland (JAEP)*

- Objectives:**
1. To assess the extent to which island biogeography theory holds for bird populations found in isolated woods on farmland.
 2. To assess the extent to which population persistence is dependent on movements between woods.

Published: "Habitat fragmentation, landscape ecology and birds" Annual Report of the Institute of Terrestrial Ecology 1991/92, 19-21.

Authors: Hinsley S, Bellamy P, Newton I

Date: 1992.

Agency Ref: Project T02065k3

NERC6 *Habitat Change in the Llyn*

- Objectives:**
1. To identify changes in habitat in Llyn between 1972 and 1987.
 2. To compare the relationships between the habitats in 1972 and 1987.
 3. To compare habitat change with agricultural change.
 4. To examine the relationship between physical features and habitat change.
 5. To assess the feasibility and usefulness of using Llyn as an area for future studies on the ecological effects of land use change.

Published: "Environmental Effects of Land Use Change, as Identified by Habitat Recording: a case study in the Llyn Peninsula, Wales" Journal of Environmental Management, 35, 131-151.

Author: Buse A

Date: 1992.

Agency Ref: Project T03006f2

NERC7 *Spray Drift*

To determine the impact of drift on non-target species when spraying from the air with insecticides or the herbicide asulam. To advise what precautions may be necessary to protect sensitive sites or species when spraying nearby land with specific products.

Published: "Environmental Impact of Pesticide Drift"

Author: Davis B N K, (ed.)

Date: 1992.

Publishers: Department of the Environment; Nature Conservancy Council.

Published: "Buffer zones from insecticide spray drift, and the effect of hedges" Annual Report of the Institute of Terrestrial Ecology 1991/92, 50-52.

Authors: Davis B.N.K., Frost A.J., Brown,M.J.

Date: 1992.

Agency Ref: Project T07061d1

NERC8 *Media Biomonitoring Methodology*

- Objectives:**
1. To review biomonitoring methodologies.
 2. To select those methodologies best suited to Integrated Pollution Control (IPC).

Published: "Effects of accidents on terrestrial wildlife and its habitats" in: "Risk assessment of major accidents to the environment"

Authors: Osborn D , Hankard P., Treweek,J.R.

Date: 1992.

Publisher: IBC Technical Services.

Agency Ref: Project T07061j1

NERC9 *A Comparative Environment Index*

To develop a quality adjusted countryside index (QUACI) against which damage to the environment around CIMA sites might be judged.

Published: "The development of a comparative environment index" Interim report.
Authors: Osborn D., Treweek J.R., Hankard P., Howard P.J.A.
Date: November 1992.
Publisher: Department of the Environment.
Agency Ref: Project T07061p1

NERC10 *National Critical Loads Mapping Programme*

Objectives:

1. To draw critical levels/loads maps for the UK.
2. To represent DOE at international meetings.

Published: "A classification of acidified catchments in Britain" *Environmental Pollution*, 75, 323-332
Authors: Bull K.R., Hall J.R.
Date: 1992.
Agency Ref: Project T07062a1

NERC11 *Effects of Elevated CO₂ and Temperature on Ryegrass*

Objectives:

1. To assess the separate and interactive effects of elevated carbon dioxide and mean air temperatures on the growth, development and physiology of swards of *Lolium perenne*.
2. To interpret the data obtained in relation to field-based studies at Bangor and other European sites.

Published: "Research on effects of climate change on vegetation" *NERC News*, no.23, 8-9.
Author: Ashenden T.W.
Date: 1992.
Agency Ref: Project T07064s5

NERC12 *The Effects of Liming Moorland on Small Mammal Populations*

Objectives:

1. To investigate the effects of liming a water catchment area (the Migneint) and to compare small mammal population parameters (numbers, distribution, recruitment, etc) and to compare these with impact on invertebrates and vegetation.
2. To investigate longer-term impact of liming on small mammal populations by doing comparative studies at various sites, some limed and some unlimed.

Published: "Terrestrial Biology in Limed Catchments" in: *Restoring acid waters: Loch Fleet 1984-1990*, edited by G.Howells & T.R.K.Dalziel, 331-361. London: Elsevier Applied Science.
Authors: Shore R et al
Date: 1992.

Published: "Effects of liming on the abundance of moorland invertebrates. Final report"
Authors: Shore R.F., Mackenzie S.
Date: 1992.
Publisher: National Power.

Agency Ref: Project T07070e5

NERC13 *Population Regulation of Cycling and Non-cycling Tetraonids*

- Objectives:**
1. To test the proposition that core capercaillie populations in good habitat (Caledonian forest) are regulated by dispersal into sink habitats (commercial plantations).
 2. To test the proposition that emigrant red grouse disperse down a density gradient.
 3. To determine the relative performance (survival, breeding) of birds which disperse (emigrants) and those which do not.
 4. To see whether poor reproduction in core (high density) populations is associated with the extinction of sink (peripheral, low density) populations.

For red grouse, we aim:

5. To test by experiment the general proposition, of which the kin selection model is a special case, that changes in territorial behaviour can cause changes in density.
6. To continue present studies on trichostrongylosis in red grouse so as to evaluate the relative merits of the two main hypotheses concerning grouse cycles: the behaviour hypothesis and the grouse disease hypothesis.

Published: "A red grouse perspective on dispersal in small mammals" in: *Animal dispersal: small mammals as a model*, edited by N.C.Stenseth & W.Z.Lidicker, 260-273

Author: Watson A.

Date: 1992.

Publisher: Chapman & Hall.

Agency Ref: Project T08050a2

NERC14 *Demographic Effects of Nest Predation on Golden Plovers and Other Moorland Waders*

- Objectives:**
1. To kill crows and gulls, and destroy their nests on the moor at Kerloch, the experimental area.
 2. To record breeding densities of golden plovers at Kerloch, and to find their nests, mark adults and young, and record breeding success (expressed as chicks per breeding pair) and number of young returning after the winter.
 3. To record breeding densities, find nests and record breeding success (as above) of curlew, lapwing, redshank, oystercatcher and snipe at Kerloch.
 4. Repeat 3. for golden plovers and other waders on control areas.
 5. To record the numbers of crows and gulls each year on experimental and control areas.

Published: "The decline to extinction of a population of golden plover in north-east Scotland" in *Ornis Scandinavica*, 23, 152-158

Author: Parr R.

Date: 1992

Agency Ref: Project T08050b5

NERC15 *Population Ecology of Capercaillie*

- Objectives:**
1. Assist RSPB with studies of capercaillie at Abernethy Forest.
 2. Study capercaillie at Revack Forest for Eagle Star.
 3. Map capercaillie distribution and numbers for SOEnD.

Published: "Capercaillie ecology" in *Report on Forest Research 1991*, 69.

Authors: Moss R., Picozzi N. & Catt D.C.

Date: 1992

Agency Ref: Project T08050c5

NERC16 *Adaptation of Capercaillie to Novel Environments*

To examine the roles of habitat geometry and composition on the population dynamics of capercaillie in native and exotic woods. To study its adaptation to new diets (ie exotic conifers).

Published: "Habitat and winter nutrition of capercaillie in Scotland"
Authors: Moss R., Picozzi N. & Catt D.C.
Date: 1992.

Published: "Blaeberry and heather in conifer forests. Final report"
Authors: Picozzi N., Moss R., Catt D.C.
Date: 1992.
Publisher: Eagle Star.

Agency Ref: Project T08050f5

NERC17 *Interactions Between Populations of Fish Predators, and Fish and their Food Species*

- Objectives:**
1. To model effects of population size, composition and availability of fish species, on numbers and dispersion of their predators, in three adjacent lochs in Scotland.
 2. To describe the relationship between fish populations and the structure of food webs.
 3. To test the hypotheses by experimentally manipulating fish populations.

Objectives for contract with SNH: To study the role of contaminants in populations of otters and their food species in Scotland.

Published: "Otter predation on salmonid fishes" Annual Report of the Institute of Terrestrial Ecology 1991/92, 59-61.
Authors: Kruuk H., Carss D.N. & Conroy J.W.H.
Date: 1992.
Agency Ref: Project T08051c5

NERC18 *Piscivorous Birds in Scottish Salmon Rivers*

- Objectives:**
1. To monitor sawbill duck breeding populations, breeding success and winter abundance on the rivers Dee and North Esk, and the moulting concentrations at the main British saltwater site on the Beaully Firth.
 2. To investigate ways of measuring the foraging performance of sawbill ducks.
 3. To investigate the relationships between foraging performance and the abundance of small fish in a variety of habitats.

Published: "Avian predation at farmed and natural fisheries" In: Interactions between fisheries and the environment, edited by M.C.Lucas, I.R.Diack & L.Laird, 179-196. Holmer: Institute of Fisheries Management.
Authors: Carss D.N., Marquiss M.
Date: 1992.
Agency Ref: Project T08051d5

NERC19 *Population Ecology of Sparrowhawks (Accipiter nisus)*

- Objectives:**
1. To determine the causes of the variations in breeding density that occur between different districts and between different years.
 2. To monitor the expected population recovery in districts where numbers are still depleted by previous pesticide use.
 3. To assess, for two marked populations, the lifetime reproductive outputs of individuals.
 4. To study the genetic structure of two populations using the new technique of genetic fingerprinting.

Published: "Recovery of a sparrowhawk population in relation to declining pesticide contamination" *Journal of Applied Ecology*, 29, 476-484.

Authors: Newton I., Wyllie I

Date: 1992.

Agency Ref: Project T08054a2

NERC20 *Wildlife and Pollution*

- Objectives:**
1. To continue the monitoring of pollutant residues in livers and eggs of selected predatory species.
 2. To continue the investigation of any large-scale bird mortality incidents which might occur.

Published: "Wildlife and pollution: 1991/92 annual report"(JNCC report no.109)

Authors: Wright J., Wyatt C, Wyllie I

Date: 1992.

Publisher: Joint Nature Conservation Committee.

Agency Ref: Project T08054c5

NERC21 *Predator-Prey Interactions Between the Oystercatcher and Mussel*

To construct a model of the interaction between the populations of the predator (oystercatcher) and their mussel prey, in order to understand the role of each on the population dynamics of the other.

Published: "Predicting the consequence of habitat loss on shorebird populations" *Proceedings 20th International Ornithological Congress*, 2199-2207.

Authors: (Sutherland W.J.), Goss-Custard J.D.

Date: 1992.

Agency Ref: Project T08057a2

NERC22 *Birds in Estuaries*

To develop models to predict shorebird use of intertidal flats that are changed by man's activities, from changes in master variables that are, themselves, easy to forecast. To measure feedback from population density due both to interference and depletion competition.

Published: "Towards predicting the effect of salt-marsh reclamation on feeding bird numbers on the Wash" *Journal of Applied Ecology*, 29, 330-340.

Authors: Goss-Custard, J.D. & Yates, M.G.

Date: 1992.

Agency Ref: Project T08057h5

NERC23 *Squirrel Demography and Conservation*

- Objectives:**
1. To publish all data from grey squirrels in deciduous woodland. To prepare regression model based on food and weather parameters for predicting grey squirrel densities in deciduous woodland and in conifers.
 2. To compare the ecology of red and grey squirrels in pine woodland.
 3. To test, by introducing red squirrels to an area of pine forest which contains grey squirrels, (a) whether red squirrels have any competitive foraging advantage in this habitat, and (b) whether another mechanism exists to explain the displacement of red squirrels by grey squirrels.

Published: "Are tree species mixtures too good for grey squirrels?" in: The ecology of mixed-species stands of trees, edited by M.G.R.Cannell, D.C.Malcolm & P.A.Robertson, 243-253. (British Ecological Society special publication no.11).

Authors: Kenward R.E., Parish T., (Robertson,P.A.).

Date: 1992.

Publisher: Blackwell Scientific.

Published: "Conservation of red squirrels: first interim report"

Authors: Kenward R.E., Rose R.J.

Date: 1992

Publisher: WWF (UK) Ltd.

Agency Ref: Project T08058a5

NERC24 *Plant Genecology*

To investigate the distribution and maintenance of genetic variation within and between plant populations.

Published: "The ecological impact of estuarine barrages", edited by A.J.Gray. (Ecological issues no.3).

Authors: Goss-Custard J.D et al

Date: 1992.

Publishers: Shrewsbury: Field Studies Council, for the British Ecological Society.

Agency Ref: Project T08059-5

NERC25 *The Evolutionary Ecology of Interacting Populations*

- Objectives:**
1. To study the evolution and significance of strategies - (predation of ant larvae versus cuckoo relationship) - for parasitizing ants, evolved by the different *Maculinea* species and the consequence adaptation of the specific *Maculinea* parasitoids.
 2. To study the aspects of the ecology, social biology and adaptive speciation of *Myrmica* ants, which have led to their dominance and importance in many temperate ecosystems.
 3. To apply the results of 1 and 2 to practical conservation programmes, including the management and manipulation of semi-natural biotopes by changing management.

Published: "Butterflies of the British Isles" 3rd ed.

Author: Thomas J.A.

Date: 1992.

Publisher: Hamlyn.

Agency Ref: Project T08060-5

NERC26 *Field Tests of Butterfly/Ant Population Models*

To test population models by manipulating entire biotopes - by changing their management - so that the abundance and quality of defined habitats is altered. The size, age of social structure and dispersal of foodplant, ant, butterfly and (if possible) parasitoid populations will be measured on each site to see if they respond and interact as predicted.

Published: "Butterfly responses to coppicing" in: Ecology and management of coppice woodlands, edited by G.P.Buckley.
Authors: Warren M.S.), Thomas J.A.
Date: 1992.
Publisher: Chapman & Hall.
Agency Ref: Project T08060k5

NERC27 *Response of Sitka Spruce to Browsing and Bark-stripping Damage*

Objectives:

1. To determine the incidence of damage on Sitka spruce by red and roe deer.
2. To evaluate the response of individual Sitka spruce trees to such damage.
3. To monitor the long-term effects of deer damage on Sitka spruce stands and its significance to commercial forestry.

Published: "Leader browsing by red and roe deer on young Sitka spruce trees in western Scotland. II. Effects on growth and tree form." Forestry, 65, 309-330.
Authors: Welch D., Staines B.W., Scott D. & French D.D.
Date: 1992.
Agency Ref: Project T08073g2

NERC28 *Recreation and Red Deer*

To review the effects of disturbance on red deer from recreation in terms of physiological stress, behaviour and the impact on estate economics.

Published: "Recreation and red deer: a preliminary review of the issues"
Authors: Staines B.W, Scott D.
Date: 1992.
Publisher: Countryside Commission for Scotland.
Agency Ref: Project T08073o1

NERC29 *Red Deer at Mar Lodge*

Objectives:

1. To demonstrate losses in heather cover caused by deer.
2. To show any differences in impact between stags and hinds, and deer given supplementary food or unmanaged.

Published: "Study on effects of wintering red deer on heather moorland. Report on work done April 1992 - November 1992"
Authors: Welch D., Scott D., Staines B.W.
Date: 1992.
Published: "Study on the effects of wintering red deer on moorland"
Authors: Welch D., Staines B.W., Scott D.
Date: 1992.
Agency Ref: Project T08073p1

NERC30 *Climate Change, Sea Level Rise and the English Coast*

- Objectives:**
1. To study and predict the effects of sea level rise on coastal habitats in England and Wales.
 2. To study the effects of changing environmental factors on the dynamics of salt marshes, sand dunes and shingle banks.
 3. To study key processes in the physical and biological development of coastal habitats.
 4. To review and predict the effects of sea level rise and climate change on the conservation and management of wildlife in the coastal zone.

Published: "Coastal research" Coastal News, no.1, 17-19.

Authors: Boorman L.A. & Yates M.G.

Date: 1992.

Agency Ref: Project T08074b2

NERC31 *Bracken Distribution and Management*

To investigate the status and spread of bracken and our ability to control it.

Agency Ref: Project T08076e1

NERC32 *Upland Ecology*

- Objectives:**
1. To develop a viable, productive and revenue earning programme in montane ecology.
 2. To investigate the ecology of selected arctic alpine and upland biota.
 3. To conduct comparative studies between arctic alpine species and those of wider ecological amplitude.
 4. To use these studies to investigate and predict the consequences of change in environment (including soils, grazing and atmospheric environment).

Author: Good J.E.G.

Date: 1992.

Published: "Land use change and environmental quality" in: A new Countryside Act? - the way forward for Wales, edited by S.O'Reilly & T.Elies, 41-48. Bangor: Uned Adnoddau Gwledig.

Agency Ref: Project T08077-5

NERC33 *Dorset Heaths GIS*

To develop in conjunction with EIC at Monks Wood a Geographical Information System incorporating the data base comprising the Dorset Heathland Survey.

Published: "Locating and reconstructing former heathland" Report of the Institute of Terrestrial Ecology 1991/92, 66-69.

Authors: Pywell R.F., (Veitch N.), Webb N.R.

Date: 1992.

Agency Ref: Project T08079h2

NERC34 *Effects of Grazing in Snowdonia*

To determine effects of long-term exclusion of sheep from upland pasture.

Published: "Long-term effects of excluding sheep from hill pastures in north Wales" Journal of Ecology, 80, 1-13.

Authors: Hill M.O. Evans D.F., Bell S.A.

Date: 1992.

Agency Ref: Project T09052c2

NERC35 *Dorset Oilfields: Biological Monitoring*

To carry out ecological survey and monitoring of defined species groups in defined Arcas associated with existing facilities and proposed development.

Published: "The quality of coppice woods as habitats for invertebrates" in: Ecology and management of coppice woodlands, edited by G.P.Buckley, 271-296.
Authors: Greatorex-Davies J.N, Marrs R.H.
Date: 1992.
Publisher: Chapman & Hall.
Agency Ref: Project T08078b1

NERC36 *Autecology of Selected Species on Farm Woodland*

To summarise autecology of selected species in relation to new woodland development, concentrating on dispersal, colonizing ability and fertility effects.

Published: "Red squirrels on Furzey Island in 1991"
Authors: Kenward R.E. & Rose R.J.
Date: 1992.
Publisher: British Petroleum.
Agency Ref: Project T08076a2

NERC37 *Brathens Consultancies*

Published: "Cormorants and the Loch Leven Trout Fishery"
Authors: Carss D.N, Marquiss M.
Date: 1992.
Publisher: Scottish Natural Heritage.

Published: "Skye Bridge: revegetation prescriptions"
Authors: Bayfield N.G., McGowan G.M.
Date: 1992.
Publishers: Holford Associates.

Agency Ref: Project T13053c1

Contact for Research Enquiries:

Colin Barr, Institute of Terrestrial Ecology, Merlewood Research Station, Grange-over-sands, Cumbria
LA11 6JU Tel. 05395 32264

SCOTTISH NATURAL HERITAGE

Introduction

Scottish Natural Heritage was created in April 1992 by the merger of the Nature Conservancy Council for Scotland and the Countryside Commission for Scotland. SNH's prime functions are to promote the conservation, enjoyment and understanding of Scotland's natural heritage. We define the natural heritage as including the wild plants and animals, the rocks and physical features as well as the natural beauty and amenity of land and water. These elements combine with the wildness and the managed features in the landscape to create a countryside of great variety and quality, which is of high value for enjoyment by residents of Scotland and visitors from elsewhere. SNH's specific aims are to:

- safeguard and enhance Scotland's natural heritage, particularly its genetic and scenic diversity;
- foster awareness and understanding of the natural heritage;
- encourage enjoyment of the natural heritage and promote responsible public access to it in a way that does not damage it;
- engage public support and harness voluntary effort for the benefit of the environment;
- encourage environmental sustainability in all forms of economic development.

Most of the projects listed below were completed or undertaken by CCS in the year before merger.

Projects, Publications and Reports

SNH1 *A Survey of Attitudes to Walking*

A survey of public attitudes to walking and related access issues in the Scottish Countryside.

Unpublished final report: "A Survey of Attitudes to Walking"

Researchers: System Three Scotland

Date: March 1992

SNH2 *Scottish Leisure Day Trip Survey*

To collect information on leisure day trips undertaken by Scottish residents. Continuation of survey undertaken 1987-91.

Unpublished final report: "Scottish Leisure Day Trips Survey 1992"

Researchers: System Three Scotland

Date: November 1992

Published: "Day Trips to Scotland's Countryside 1987-1989"

Author: Countryside Commission for Scotland

Date: 1990

Publisher: CCS

ISBN: 1 85397 115 4

Price: £2.00

SNH3 *FWAG Farmers' Attitude Survey*

To survey farmers' perceptions of and views on conservation, access, and future changes in countryside policy to assist the preparation of a promotion strategy for FWAG in Scotland.

Unpublished final report: "Farmers, Conservation and the Countryside"*

Researchers: FWAG Trust

Date: March 1991

* An extract report on access was prepared for the Countryside Commission for Scotland under the title "Farmers, Access and the Countryside." Further information from SNH.

SNH4 *Identifying Sites with Consistent Snow Cover for Downhill Skiing*

A study to identify terrain with persistent snow cover for downhill skiing in Scotland, and possible constraints on development at the sites identified. Co-sponsors were Highland and Islands Enterprise, Scottish Sports Council, Scottish Tourist Board with the involvement of the Scottish National Ski Council.

Unpublished final report: "Terrain with Persistent Snow Cover for Downhill Skiing in Scotland"

Researchers: Dept. of Geography, University of Edinburgh

Date: June 1992

May be consulted at the SNH library; summary available free of charge.

SNH5 *Arran Visitor Survey*

To survey visitors to Arran, with emphasis on the use of Arran's countryside for outdoor recreation.

Unpublished final report: "Access on Arran - A Study of Visitors"

Researchers: Centre for Leisure Research

Date: March 1992

SNH6 *National Trust for Scotland Visitor Survey 1991*

A survey to update information on visitors to National Trust for Scotland properties last surveyed in 1983 and to provide a comparison with the previous survey. Survey done in partnership with National Trust for Scotland and Scottish Tourist Board.

Unpublished final report: "National Trust for Scotland Visitor Survey 1991"

Researchers: Survey Research Associates

Date: Nov. 1991

Further details from National Trust for Scotland

SNH7 *Review of Access Arrangements in Selected European Countries*

To provide an overview of access arrangements in Austria, Denmark, France, Germany, the Netherlands, Norway, Sweden and Switzerland, as part of a general review of access.

Unpublished final report: "Countryside Access in Europe"

Researchers: Peter Scott Planning Services

Date: October 1991

To be published in 1993

SNH8 *Visitor Monitoring Training Manual*

To prepare a training manual, on techniques for visitor monitoring, for use by staff at country parks and other countryside recreation sites.

Unpublished final report: "Visitor Monitoring Training Manual"

Researchers: Centre for Leisure Research/SNH

Date: 1992

To be published in 1993

SNH9 *Footpaths and Access Study*

To assess the extent and condition of access routes, and related access issues, in eight small study areas in Scotland as part of a general review of access.

Unpublished final report: "Footpaths and Access in the Scottish Countryside"

Researchers: Peter Scott Planning Services

Date: Sept. 1991

SNH10 *Access for Water-Based Recreation*

A legal review, as part of a general review of access, to provide a statement of the law of access to and on water and to identify issues that arise from applying the law in practice.

Unpublished final report: "The Law of Access for Water-Based Recreation"

Researchers: Brodies WS, Edinburgh

Date: June 1992

SNH11 *Review of Rights of Way Procedures*

To assess how local authorities administer rights of way and other access work.

Unpublished final report: "Rights of Way Study - Issues Report"

Researchers: Professor Rowan-Robinson, University of Aberdeen

Date: Sept. 1991

SNH12 *Survey of Walking*

To gather data on participation in walking, as part of a wide-ranging access review.

Unpublished final report: "A Survey of Walking in the Countryside in Scotland"

Researchers: System Three Scotland

Date: 1991

SNH13 *Economics of Countryside Access Study*

To review the overall economic benefits arising from outdoor recreation and identify economic costs and benefits to landowners and farmers.

Published: "The Economics of Countryside Access in Scotland" SAC Economic Report No. 37

Authors: Crabtree R, Appleton Z, Slee B, Chalmers N, Copus A

Date: June 1992

Publisher: Scottish Agricultural College

ISBN: 1 85482 307 8

Price: £15.00

SNH14 *A Review Attitudes to the Designation Review of the Pentland Hills Regional Park*

To assess changes in attitudes by landholders and others following designation of the Regional Park.

Unpublished final report: "Attitudes to the Designation of the Pentland Hills Regional Park"

Researchers: Sidaway R

Date: August 1991

SNH15 *A Review of Recreation and Red Deer*

To clarify the factors involved in the disturbance of red deer by public recreation, to assess the severity of the problem and consider implications for management.

Unpublished final report: "Recreation and Red Deer - A Preliminary Review of the Issues"

Researcher: Staines B, Institute of Terrestrial Ecology

Date: 1992

SNH16 *Managing the Impacts of Recreation on Vegetation and Soils*

A study to review the techniques available to manage the impacts of recreation on soils and vegetation. Prepared for the Countryside Commission, Countryside Commission for Scotland (now SNH), English Nature and the Countryside Council for Wales.

Unpublished final report: "Managing the Impacts of Recreation on Vegetation and Soils - A Review of Techniques"

Researchers: Bayfield N, Aitken R

Date: May 1992

SNH17 *Landscape Assessment - Principles and Practice*

A study to formulate procedures and criteria for use in the assessment and designation of National Scenic Areas and regionally important landscapes.

Published: "Landscape Assessment - Principles and Practice"

Authors: Swanwick C, Land Use Consultants

Date: February 1992

Publisher: CCS

ISBN: 1 85397 011 5

SNH18 *Public Opinion on National Parks*

To survey public attitudes in Scotland to National Parks and related matters.

Unpublished final report: "Public Opinion on National Parks"

Researchers: System Three Scotland

Date: 1991

SNH19 *Buildings in the Landscape*

A book based on a study carried out for the Countryside Commission for Scotland to advise on the design of buildings in the countryside.

Published: "Tomorrow's Architectural Heritage - Landscape & Buildings in the Countryside"

Authors: Fladmark J, Mulvagh G, Evans B

Date: 1991

Publisher: Mainstream Publishing Ltd

ISBN: 1 85158 378 5

Price: £14.99

SNH20 *Loch Lomond Visitor Survey*

A survey of visitors to various recreation sites in the Loch Lomond area. Project was managed by the Loch Lomond Regional Park Authority with financial assistance from the Countryside Commission for Scotland and Forth Valley Enterprise.

Unpublished final report: "Loch Lomond Visitor Survey"

Researchers: Centre for Leisure Research

Date: 1992

SNH21 *Lochshore Management Projects Storm Damage Review*

To review trials implemented under a past project on Lochshore management that had been badly damaged by a storm, and to report on whether advice generated under this project needs review.

Unpublished final report: "Lochshore Management Project Storm Damage Review"

Researcher: Alexander P

Date: Sept. 1991

SNH22 *Marketing and Promotion of Long Distance Routes in Scotland*

A study to review current marketing and promotion of long-distance routes in Scotland, the corporate style, potential for sponsorship and the potential for further economic activity related to the routes.

Unpublished final report: "Marketing and Promotion of the Scottish Long Distance Routes"

Researchers: Fielder Green Associates

Date: July 1991

SNH23 *The Application of Contingent Variation to the Economic Valuation of Environmental Resources*

A review of the CV methodology, outlining its potential and limitations, with a case study (Marlodge) and recommendations.

Unpublished final report: "The Application of Contingent Variation to the Economic Valuation of Environmental Resources" NCCS Research Service Report No.1

Researchers: University of Aberdeen, Dept. of Agriculture

Date: April 1992

Contact for Research Enquiries:

Richard Davison, Recreation and Access Officer, Scottish Natural Heritage, 2 Anderson Place, Edinburgh EH6 5NP Tel: 031 446 2467

THE SCOTTISH OFFICE ENVIRONMENT DEPARTMENT

Introduction

The Scottish Office Environment Department is the Government Department responsible for all aspects of development, land use planning, and co-ordination of policies on rural and environmental issues in Scotland.

The Rural Affairs Research Programme and the Planning Research Programme cover a wide range of research relating to rural land use topics. The main purpose of the research is to provide information to the Department to assist in policy formulation, monitoring and evaluation and is designed to complement research sponsored by other agencies in Scotland and other Scottish and UK Departments.

Reports and Publications

SOEND1 *Development Opportunities In The Natural Environment*

This project assessed the potential of the wildlife and natural environmental resources of Highland Region in Scotland for creating employment and business opportunities. The work focussed on the enhanced interpretation and conservation of natural resources. It comprised an audit of the resource base, an analysis of opportunities and constraints within a sustainable development framework, leading to proposals for a series of demonstration projects.

Published: "Development Opportunities In The Natural Environment"
Authors: Walker S, Cousins P
Date: 1991
Publisher: Highland Regional Council
Price: £10.00 (executive summary), £100.00 (full report)

SOEND2 *Socio-Economic Profile of Rural Scotland*

This project assembled and analysed all available (published) material on the demographic, economic and social characteristics of rural Scotland, including historic change data. The analysis was principally conducted at the level of local authority districts to ensure compatibility between different data sets.

Internal report: "Socio-Economic Profile Of Rural Scotland"
Author: Scottish Office Central Research Unit & Economics and Statistics Unit
Date: 1991

SOEND3 *Public Attitudes to the Environment In Scotland*

This survey of 1000 adults aimed to identify the principal concerns and opinions of the Scottish public on key environmental issues. It examined attitudes towards pollution, sewage disposal, water quality, nuclear waste, and a range of countryside and development issues. It also looked at peoples' willingness to take responsibility or pay for resolving environmental problems, and the needs for information on the environment.

Published: "Public Attitudes to the Environment In Scotland"
Authors: Wilkinson D, Waterton J
Date: 1991
Publisher: Scottish Office Central Research Unit Papers
ISBN: 0950-2254
Price: £4.00

SOEND4 *Land Cover Change Studies*

This project provides a retrospective analysis of land cover change in two case study areas - the Cairngorm Mountains and part of Central Scotland. The work compares interpreted and digitised historic air photos from 1946, 1964 and 1988/89 in order to identify the nature and scale of the principal changes.

Report on the Cairngorms case study available: *The Measurement and Analysis of Land Cover Changes in the Cairngorms*

Authors: Gauld J, Bell J, Towers W, Miller D
Date: 1991
Publisher: Macaulay Land Use Research Institute, Aberdeen

SOEND5 *Accommodation Signposting in Scotland*

This project investigated the attitudes of visitors to a sample of hotels, guesthouses and B & Bs towards the available signing to their destination. It looked at how they chose their accommodation, how easy it was to find and whether there was any need for change.

Internal report: "Accommodation Signposting"
Authors: Scottish Office Central Research Unit
Date: 1991

SOEND6 *Scottish Rural Life: A Socio-Economic Profile of Scotland*

A detailed analysis of demographic, economic and social change in rural Scotland, including accessibility, migration, employment and unemployment. The Report covers those 31 District and Island Authorities defined as rural by their population density of less than one person per hectare.

Published: "Scottish Rural Life: A Socio-Economic Profile of Scotland"
Authors: Scottish Office Central Research Unit & Economics and Statistics Unit
Date: 1992
Price: £5.00
Agency Ref: DOEND 1/92

SOEND7 *The Implications of Recent and Prospective Changes in EC Policies for Rural Scotland*

A review of the impact of European legislation and funding on rural parts of Scotland. It aims to assist agencies and intermediaries working with and on behalf of rural communities.

Report forthcoming: "The Implications of Recent and Prospective Changes in EC Policies for Rural Scotland"
Reserchers: The Arkleton Trust with Rural Forum
Date: 1992
Agency Ref: SOEND 2/92

SOEND8 *RSPB Planscan Scotland: A Study of Development Plans in Scotland*

The Scottish Office contributed to this research by the RSPB on the conservation "performance" of development plans. The work examined whether the policy content of structure and local plans provides an adequate protection for conservation interests.

Published: "RSPB Planscan Scotland: A Study of Development Plans in Scotland"
Authors: Davies C, Pritchard D, Austin L
Date: 1992
Publisher: RSPB
Agency Ref: SOEND 3/92

SOEND9 *The Measurement and Analysis of Land Cover Changes*

A retrospective study of land cover change in part of the Central Valley of Scotland between the 1940s and the 1980s using interpreted aerial photography and digital mapping analysis.

Published: "The Measurement and Analysis of Land Cover Changes in Part of the Central Valley of Scotland"
Authors: Dry F, Richman A, Hipkin J, Miller D
Date: 1993
Publisher: Macaulay Land Research Institute
Agency Ref: SOEND 4/92

SOEND10 *Review of Research on Rural Issues*

A review of research conducted since 1990 structured according to the themes of the Scottish Office Rural Framework: community involvement; diversity; quality; local added value; effective service delivery; networks and communications; Europe and sustainability.

Report forthcoming
Authors: MacNee K, Central Research Unit, Scottish Office
Date: 1993
Agency Ref: SOEND 5/92

SOEND11 *Assessment of Water Tolerances to Changes of Use in Loch Lomond*

A broad analysis of the physical and chemical characteristics of each loch and catchment area to assess the tolerances to change arising from recreational activity etc.

Internal report
Researchers: Institute of Freshwater Ecology
Date: 1992
Agency Ref: SOEND 6/92

SOEND12 *Loch Lomond and the Trossachs Working Party "Public Safety"*

A review of current information on accident trends and responsibility for public safety related to outdoor recreational activities on land and water.

Internal report: "Loch Lomond and the Trossachs Working Party 'Public Safety'"
Researchers: Dr R Sharp, Jordanhill College
Date: 1992
Agency Ref: SOEND 7/92

SOEND13 Cairngorms Working Party Community Consultations

A series of public consultations to promote the work of the Secretary of State's Working Party and to seek local views on issues and on draft recommendations.

Internal report: "Cairngorms Working Party Community Consultations"

Researchers: CEI Consultants and Blake Stevenson

Date: 1992/93

Agency Ref: SOEND 8/92

Database

SOEND14 The Land Cover of Scotland

In response to concern about the rate of land use change and the incomplete nature of existing data, the Scottish Office has sponsored an initiative to provide information on land cover for the whole of Scotland. This will serve both as an inventory of existing land cover and as a baseline against which changes may be measured and monitored. Information is being interpreted from aerial photographs and digitised to form a land cover database.

Access: Macaulay Land Use Research Institute

Charge: on application

Agency Ref: LCS88

Contact for Research Enquiries:

Diana Wilkinson, Central Research Unit, the Scottish Office, New St Andrew's House, Edinburgh EH1 3SZ
Tel: 031 244 4402

SCOTTISH SPORTS COUNCIL

Introduction

The Scottish Sports Council has four main aims:

- to raise standards of performance;
- to encourage wider participation;
- to increase the provision of sports facilities; and
- to promote general understanding of the importance of sport and physical recreation in society.

The Council's research is carried out within the fields of its four main aims. Resources are concentrated on projects with practical applicability in Scotland. The research projects and list of publications given below exclude a number of projects, such as sports science studies which are not relevant to CRN.

Publications and Reports

SSC1 *Sport and the Economy of Scotland*

Research Report No. 18

Authors: PIEDA plc

Date: November 1991

ISBN: 1 85060 178

Price: £25.00

SSC2 *Study of Golf in Scotland*

Research Report No. 19

Authors: Cobham Resource Consultants in association with System Three Scotland

Date: December 1991

ISBN: 1 85060 180 1

Price: £25.00

Appendices:

ISBN: 1 85060 182 8

Price: £20.00

SSC3 *Sports Halls in Rural Towns in Scotland (SHIRTS)*

Research Report No. 25

Authors: Drew Mackie Associates

Date: June 1992

ISBN: 1 85060 198 4

Price: £5.00

SSC4 *Trends in Sports Participation*

A summary of key findings from the General Household Survey 1977-1986 for Scotland and England/Wales.

Research Report No. 26

Authors: ASH Partnership

Date: July 1992

ISBN: 1 85060 199 2

Price: £5.00

SSC5 *Financially Assisted Transport for Rural Swimming Pools*

Research Report No. 30

Date: November 1992

ISBN: 1 85060 208 5

Price: £5.00

SSC6 *Sports Participation in Scotland*

Research Digest No. 3

Date: June 1992

ISBN: 1 85060 195 X

Price: £1.00

SSC7 *Sport and the Economy of Scotland*

Research Digest No.21

Date: November 1991

ISBN: 1 85060 179 8

SSC8 *Tayside Pitch Sports Study*

Research Digest No.27

Author: Kit Campbell Associates

Date: October 1992

ISBN: 1 85060 202 6

Price: £1.00

SSC9 *Charges for Sports Facilities: Scotland 1992/93*

Information Digest FM6

Date: December 1992

ISBN: 0140 2803

Price: £1.00

SSC10 *Financially Assisted Transport for Rural Swimming Pools*

Information Digest FM19

Date: November 1992

ISBN: 1 85060 210 7

Price: £1.00

SSC11 *The Flexible Pool, Loch Leven Leisure, Kinross*

Information Digest FP20

Date: November 1992

ISBN: 1 85060 211 5

Price: £2.00

Databases

SSC12 *Scottish Sports Facilities*

Description: A major database which seeks to provide information on all built facilities for sport in Scotland, now being extended to include both natural and man-made countryside resources. A major data collection exercise has recently commenced to update and extend the built facilities database and create the countryside resources database.

Geographic features: This database is held on a GIS run on behalf of the Council by the Planning Data Management Service at Edinburgh University, and includes comprehensive geographic referencing and mapping facilities.

Access: On-line access only available for in-house users; hard copy data are accessible to external users, particularly local authorities and private sector planning for development of sports facilities in Scotland. Charges vary according to the nature of the work.

Contact: R L Cousins

SSC13 *Countryside Sports*

Description: Facilities database containing information on sporting facilities for outdoor/countryside sports.

Geographic Features: Region, District, Address (inc. postcode) and Grid Reference.

Access: Hard copy

Charge: for commercial, public and charity sectors.

Contact: David Kerr, Database Administrator

SSC14 *Masterfile*

Description: Facilities database containing information on sports facilities in Scotland.

Geographic features: Region, District Address (inc. postcode) and Grid Reference

Access: Hard copy

Charge: for commercial, public and charity sectors.

Contact for Research Enquiries:

Kirsty Noble, Scottish Sports Council, Caledonia House, South Gyle, Edinburgh EH12 9DQ
Tel. 031 317 7200

SCOTTISH TOURIST BOARD

Introduction

The Scottish Tourist Board (STB) was established by the 1969 Development of Tourism Act. Overseas marketing powers were granted to the STB by the 1984 Overseas Promotion (Scotland) Act. The aim of the STB is to develop and promote tourism to and within Scotland. Further details of STB's aims are set out in "A Prospect for Prosperity", and in the Board's 1992 Annual Report. In late 1992 the Scottish Office announced a review of the structure of the public sector tourism industry in Scotland, and has asked for comments to be submitted by January 1993.

Publications and Reports

STB1 *Overseas Visitor Survey*

This report examines the frequency participation rates of about 20 recreation activities undertaken by overseas visitors to Scotland.

Published: "Overseas Visitors Holiday Activities"
Author: STB
Date: 1991
Price: free

STB2 *National Trust for Scotland*

National Trust for Scotland (NTS) properties are some of Scotlands most important tourist attractions and as such, are promoted by the STB. NTS commissioned Survey Research Associates to conduct a visitor survey at nine of these properties, and the STB and CCS co-sponsored this study. The properties surveyed are Culzean Castle, Crathes Castle, Inverewe Gardens, Threave Garden, House of Dun, Falkland Place, and Bannockburn, Ben Lawyers and Glencoe Visitor centres. This research provides useful profile information on the characteristics of visitors to these attractions.

Published: "National Trust for Scotland Visitor Survey"
Authors: Survey Research Associates
Date: 1992

STB3 *North Sea Ferries Passenger Survey*

Over the last few years, STB has been working very closely with North Sea Ferries (NSF) in developing tourism from Europe to Scotland via its Rotterdam/Zeebrugge to Hull routes. STB and NSF have jointly commissioned the Netherlands Centre for Tourism and Traffic (DTV) to conduct a survey of passengers using ferries. STB is keen to monitor the effectiveness of its involvement with NSF and the information obtained will give an indication of the volume, value and characteristics of European visitors to Scotland using these routes. Survey work ran from February 1991 to January 1992.

Published: "North Sea Ferries Passenger Survey"
Authors: Netherlands Centre for Tourism and Traffic
Date: 1992.

STB4 *Edinburgh Festivals Study 1990-1991*

The nine Edinburgh festivals which takes place each year are some of Scotland most important attractions. Research has been undertaken at all of the festivals during 1990 and 1991 to evaluate their economic impact in terms of income and employment generation, and to obtain visitor profile information about each festival's audience. The study was commissioned by STB, Lothian and Edinburgh Enterprise Limited (LEEL), Lothian Regional Council, and Edinburgh District Council.

Published: "Economic Impact of the Edinburgh Festivals:
Authors: Scotinfo m Limited
Date: 1992
Price: £20.00

STB5 *The International Passenger Survey (IPS)*

The International Passenger Survey provides the monitoring information required by the Board on the volume, value and profile of overseas visitors to Scotland. The data derived from this survey complements that from UKTS, thus together, IPS and UKTS give an overall picture of the value of tourism in Scotland. IPS is conducted by the Office of Population Censuses and Surveys (OPCS) for the Department of employment. STB and the other national tourist Boards commission jointly the regional computer data analysis which provides the information on Scotland's overseas markets. The latest full year statistics available are for 1990.

Published: "Overseas Visitors to Scotland: 1990"
Date: 1991
Price: free

STB6 *Cycling Study*

STB commissioned Cobham Resource Consultants to conduct an examination of the tourism potential of cycling and cycle routes in Scotland. As a result, a pilot scheme was set up in Dumfries and Galloway identifying a cycle route network and encouraging the provision of facilities for cyclists in that area. The lessons from this pilot scheme will be available to assist similar developments in other parts of Scotland.

Published: "Tourism Potential of Cycling and Cycle Routes in Scotland"
Author: STB
Date: 1991
Price: free

STB7 *Accommodation Occupancy Studies*

This report gives details of the occupancy of hotels, self catering accommodation and camping and caravanning parks in Scotland. It provides an analysis by area, tariff bands, grading and classification of the property, month of the year etc.

Published: "Scottish Accommodation Occupancy Studies"
Author: STB/Centre for Leisure Research
Date: 1992
Publisher: Centre for Leisure Research
Price: £50.00 for full report, £30.00 for twelve monthly

STB8 *Visitor Attraction Survey*

This is a report of over 700 visitor attractions in Scotland. Information is collected on visitor numbers by month, admission charges, seasonality and is analysed by type of attraction, paid or free admission. and region.

Published: "Visitor Attraction Survey"
Author: STB
Date: 1992
ISBN: 0-85419-373-1
Price: £15.00

STB9 *The Supply of Tourist Accommodation in Scotland*

This report provides information on the distribution by District of tourist accommodation (Hotels, Guest Houses, B & B's, Camping and Caravan Parks) in Scotland. It provides an analysis of accommodation stock by size (number of rooms).

Published: □ "The Supply of Tourist Accommodation in Scotland:"
Date: 1992
Author: STB
Price: free

STB10 *Scottish Tourism Multiplier Study*

Estimates of Tourism Multipliers are needed for project investment appraisal. For many years appraisals have used the findings of a 1975 Multiplier Study in Tayside Region. In 1991/92 the STB, Scottish Office Industry Department, Scottish Enterprise, and Highlands and Islands Enterprise and a number of LECs commissioned the University of Surrey to produce more up to date Multipliers. The study incorporates business surveys as well as secondary expenditure data. The study develops tourism multipliers for six very different areas of Scotland, namely Edinburgh, Tayside, Lanarkshire, Skye, Inverness and Nairn, Dundee. The study also develops hypothetical multipliers for urban, rural and remote rural areas in Scotland.

Published: "Scottish Tourism Multiplier Study"
Author: University of Surrey
Date: 1992
Publisher: STB, SOID, HIE, SE
ISBN: Vol 1 0-85119-377-4
Vol 2 0-85419-378-2
Vol 3 0-85419-379-0
Price: £10.00 Volume 1 - Main Report
£10.00 Volume 2 - Technical Manual
£10.00 Volume 3 - Expenditure Manual
(£25.00 for all volumes)

STB11 *The Impact of Business Rating Reform*

The study assesses the impact of the effect of Business Rates on Tourism Accommodation in Scotland. A comparison is made with between similar properties in England and Scotland.

Published: "The Impact of Business Rate Reform"
Author: STB/Graham & Sibbald
Date: 1992
Publisher: STB
ISBN: 0-85419-374-X
Price: Summary free, Full Report £20.00

STB12 *United Kingdom Tourism Survey*

This survey is the STB's main means of monitoring the volume, value and market characteristics of British tourism in Scotland. The survey also publishes information on recreation activities undertaken while on holiday.

Published: "The UK Tourist: Statistics 1991"
Authors: MAI Ltd
Date: 1992
Publishers: ETB, STB, WTB, NITB
ISBN: 0-86143-170-7
Price: £55.00

STB13 *STB Research Newsletter*

The Research Newsletter is produced twice per year (May and June) and provides details of the latest statistics on tourism in Scotland. Each issue also contains 4 - 6 articles on various aspects of tourism in Scotland.

Published: "STB Research Newsletter"
Author: STB
Date: May and November 1992
Publisher: STB
ISBN: 0-85419-375-8
Price: £15.00/Issue

STB14 *Research Handbook*

This publication of between 12 - 15 reports each year provides annual and trend information on tourism in Scotland. In 1992 titles of the reports includes, Visitors to National Trust Properties, British Tourism in Scotland, Edinburgh Festivals Study etc.

Published: Research Handbook
Author: STB
Date: 1992
Price: £50.00/Year

Databases**STB15 *Visitor Attraction Survey***

This data base contains information on over 700 tourist attractions in Scotland. The data for each attraction includes visitor numbers, admission prices, monthly attendance, investment in facilities etc, type of attraction eg castles, monuments etc.

Geographic Features: Based on regions in Scotland
Access: On Line and Hard Copy
Price: £15.00 for Hard Copy

STB16 *Accommodation Supply*

This data base contains information on all accommodation stock registered in Scotland, and includes Hotels, Guest Houses, B & B's, Camping and Caravan Parks.

Access: On Line and Hard Copy
Price: £120.00/1000 Names

STB17 <i>United Kingdom Tourism Survey</i>
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This data base (as at the end of 1992) contains information on about 100,000 trips taken by UK residents, and recreation activities undertaken while on these trips. The data base also contains information on such variables as life style, place of residence, expenditure, purpose of trip, length of trip etc.

Geographic Features: Information available on a regional basis.

Access: On Line

Price: On Application

Contact for Research Enquiries:

Dr Brian Hay, Research Manager, Scottish Tourist Board, 23 Ravelston Terrace, Edinburgh, EH4 3EU
Tel: 031 332 2433 Fax: 031 343 1513

SPORTS COUNCIL

Introduction

The Sports Council is an independent body established in 1972 by Royal Charter. It has the twin aims of promoting Sport for all and improving sporting performance and levels of excellence. It has a remit for some British issues, but it is mainly concerned with English matters as there are separate Councils for Scotland, Wales and Northern Ireland. It has 14 members and around 600 permanent employees in its Headquarters, Regional Offices and five National Sports Centres. Its 1992/93 budget is approximately £49 million, provided by grant in aid from the Department of National Heritage.

The 1992/93 research budget of The Sports Council is in the region of £800,000. Research projects are closely aligned to Sports Council priorities and policy requirements as defined in its Strategy and Corporate Plan. The Research Unit serves its 'clients' in other HQ units, Regional Offices and National Centres by commissioning work, but it seeks co-sponsors from the public and private sectors wherever possible and appropriate. Research projects are divided between three teams - Facility Planning, Design and Management (including Countryside and Water); Participation, Performance and Excellence; and Demonstration Projects and the Register of Recreational Land (based in the North West Regional Office).

Publications and Reports

SC1 *Local Information Feasibility Study*

The Sports Council in partnership with the Countryside Commission contracted Whiteley International to carry out a feasibility study for the provision of local sport and recreation information in England. The study looked at the demand for local information and examined the technical options and organisational framework that would allow for a cost effective service. The possibility of working with other partners was examined as were the opportunities for a combined service providing information on wider leisure opportunities, tourism and health.

Report: The consultants submitted a confidential report to the Countryside Commission and Sports Council in October 1991. The policy implications will be explored with other agencies in 1992.

SC2 *Good Conservation Practice for Sport and Recreation*

Roger Sidaway was commissioned jointly by The Sports Council, Countryside Commission, Nature Conservancy Council and Worldwide Fund for Nature to put together a guide of examples of good conservation practice from a wide range of sports and recreational activities. The guide, aimed at providers managers and users of countryside, shows that conflict is rarely inevitable and co-operative always preferable.

Published: "Good Conservation Practice for Sport and Recreation", Study 37
Date: 1991
Price: £10.00 Available from the Sports Council, Information Centre, London

SC3 *Outdoor Areas of Special Importance for Sport (OASIS)*

This project was commissioned to advise the Sport Council on the conceptual and technical feasibility of a preferred system for classifying and safeguarding outdoor areas of special importance for Sport. The consultants, at the Institute of Sport and Recreation Planning and Management the University of Loughborough with the assistance of Roger Sidaway, sought the opinions of a wide range of public agencies and governing bodies of sport. They concluded that a case could not be made for a statutory or formal designation but that the Sports Council should publish a listing of important sites and establish a natural resource database that included recreational as well as competitive sites

Report: A comprehensive brief for the project is available on request from the Sports Council Research Unit.
Date: 1992

SC4 *Study of Dry Ski Slopes*

This project involves a study of the supply of dry ski slopes in England, Scotland and Wales; an assessment of current participation in dry-skiing and likely future trends, and an analysis of economic/financial, management and safety issues. The study is being conducted by the ASH Partnership.

Date: 1992

SC5 *Sport and Tourism*

A literature review to consider the relationship between sport and tourism is being undertaken by the Institute of Sport and Recreation Planning and management at the University of Loughborough. This will identify priority issues for Sports Council research and policy and involves the compilation of an extensive bibliography of relevant publications and a catalogue of unpublished sources.

Note: The report will not be published but a copy will be available on request.

SC6 *National Register of Recreational Land*

The Sports Council has commissioned the development of a National Register of Recreational Land for the major team pitch sports which will enable identification of facility availability, quality and capacity and assist the plotting of gains and losses at the local level.

Researchers: Coopers and Lybrand Associates
Date: 1/7/91 and ongoing

SC7 *Public Attitudes to Activities on and Around Lake Windermere*

The Sports Council has commissioned a study seeking attitudinal information concerning the public's reactions (both residents and visitors) to the various sport and leisure activities carried out on and around Lake Windermere.

Researchers: Survey Research Associates
Date: 1/8/92 - 31/12/92

SC8***Lake Windermere: Noise Measurements***

The Sports Council has commissioned a series of noise tests at Lake Windermere in the Lake District, to ascertain the impact of water ski and power boats on the lake, comparing these noise emissions with other activities on and around Lake Windermere.

Researchers: Martec Environmental Engineering

Date: 1/8/92 - 31/12-92

SC9***Water Skiing and the Environment: A Literature Review***

The Sports Council together with the International Water Ski Federation and the British Water Ski Federation have commissioned a literature search to establish what information exists in relation to water-skiing's effect on the environment. The review, inter alia, identifies research findings and gaps in existing research and good planning and management practice emerging from the above.

Researchers: Harbinson J, Selwyn J, UK Centre for Economic and Environmental Development

Date: 1/6/92 - 31/12/92

SC10***Study of Golf in England***

This project involved a study of the supply of golf courses in England, an assessment of demand and participation in golf and an analysis of management, economic and planning issues relating to golf course development.

Published: "Study of Golf in England" (scheduled for Mid-February 1993)

Author(s): Cobham Resource Consultants

Date: February 1993

ISBN: 1-872158366

Price: £50.00

Also: Planning and Provision Factfile.

2 datasheets: "Planning for Golf"

"Demand for Golf"

Author(s): Fytche I, Williamson M

SC11***Study of Dry Ski Centres in Britain***

This project involved a study of the supply and use of dry ski centres in Britain, an assessment of current participation in dry skiing and likely future trends and an analysis of economic/financial, management and safety issues.

Researchers: ASH Consulting Group

Date: August 1990 - December 1992

SC12***Sport and Tourism: A Literature Review***

A literature review to consider the relationship between sport and tourism. This has identified priority issues for Sports Council research and policy and involved the compilation of an extensive bibliography of relevant publications and a catalogue of unpublished sources.

Researchers: GlyptisS, Jackson G (Institute of Sport and Recreation Planning and Management, University of Loughborough)

Date: March 1992

SC13 ***Natural Resource GIS (Feasibility Study)***

A study of the feasibility of developing a GIS of natural resources used for sport and recreation in England.

Researchers: Coopers & Lybrand

Date: Feasibility study report due 31/3/93

SC14 ***Mountain and Cave Rescue: A Study***

A study of the organisation, operation and training programme of the mountain and cave rescue organisations in England and Wales.

Researchers: Judith Annett & Kit Campbell Associates

Date: Final Report Due 30/4/93

SC15 ***Plas y Brenin***

A study of the economic and social costs and benefits arising from the operation of the National Mountain Centre at Plas Y Brenin.

Researchers: Sheffield University, Leisure Management

Date: Final report due 30 Sept., 1993

Database

SC16 To follow up the recommendations of the OASIS project the Sports Council will be commissioning in the early part of 1992 a project to examine the feasibility of establishing a natural resource database or geographic information system for countryside sport and recreation. As part of the feasibility study the researcher will be examining databases provided by other relevant agencies such as the National Rivers Authority, English Nature and Countryside Commission.

Contact for Research Enquiries:

Arthur Dye, Head of Research Unit, The Sports Council, 2 Tavistock Place, London WC1H 9RA
Tel 071 837 2658

SPORTS COUNCIL FOR WALES

Introduction

The Sports Council for Wales, established by Royal Charter in 1972, aims to increase participation in sport in Wales, raise standards of performance, improve facilities and provide a research and information service. In 1991 the Council published 'Changing Times Changing Needs: A Strategy Review'. This Strategy Review will form the basis for the Council's future work programmes.

Publications and Reports

SCW1 *Sports Club Membership in Wales*

To analyse sports club membership in Wales through the use of the Welsh Omnibus Survey.

Published: "Sports Club Membership in Wales 1991/92"
Researchers: Beaufort Research Ltd. biennial survey
Date: 1992
Price: free

SCW2 *Sports Participation in Wales*

To analyse the sports participation by those aged 15 and over in Wales through the use of the Welsh Omnibus Survey.

Published: "Participation in Sport and Leisure in Wales 1991/92"
Researchers: Beaufort Research Ltd. biennial survey
Date: 1992
Price: free

SCW3 *Natural Facilities Database*

To establish a database on natural facilities in Wales for land-based and water-based sport and physical recreation.

Published: Two Sports Studies and a map detailing natural facility sites.

Authors: 1. Sports Study 4 - "Sport and recreation in the natural environment: a digest for Wales"
Aitchison J, Lloyd-Jones P
Date: 1991
Price: £15.00

Authors: 2. Sports Study 6 - "Sport, recreation and protected areas in Wales"
Aitchison J, Lloyd-Jones P
Date: 1992
Price: £15.00

SCW4 *Children's Sports Participation in Wales*

Biennial survey of sports participation by secondary and tertiary age group children.

Researchers: Sports Study to be published in 1993.
Beaufort Research Ltd./ Sports Council for Wales

SCW5 *Sport in National Parks*

Aims to provide information on the perceptions of the general public regarding encounters and conflicts in the national parks and where sport stands in relation to these.

Sports Update to be published in 1993.

Researchers: Beaufort Research Ltd.

Databases

SCW6 *Facilities Database*

Geographic features: Post code Grid reference

Access: Regularly updated via Information Centre and Welsh Office map.

Currently covers sports centres, swimming pools, squash courts and golf courses

SCW7 *Planned Facilities Database*

Geographic features: County and district

Access: continuous updating via Information Centre

Currently covers stages of development of planned sports facilities

SCW8 *Sports Participation*

Geographic features: County based information

Access: Biennial surveys include 1987/88, 1989/90 and 1991/92 Information provided through publications

Covers all main sports

SCW9 *Sports Club Participation*

Geographic features: County based information

Access: Biennial survey 1989/90 and 1991/92. Information provided through publications and on enquiry basis

Covers 18 individual sports

SCW10 *Natural Facilities*

Geographic features: County based information

Access: hard copy/floppy disc

Covers all major countryside activities

SCW11 Surfaces Currently Available for Sport

Access: Regularly updated via Information Centre

Sports specific

SCW12 Water Privatisation

This is a new database containing limited data covering access agreements at inland water sites between owners of sites and water-based sports clubs. Database will be updated biennially for monitoring purposes.

Geographic features: Water site-based information. Currently covers angling, sailing, rowing and water skiing sites

Access: Some information available by arrangement

Contact for Research Enquiries:

John Hinton, Information Officer, Sports Council for Wales, Sophia Gardens, Cardiff, South Glamorgan.
Tel. 0222 397571

THE WALES TOURIST BOARD

Introduction

The Wales Tourist Board is an independent statutory agency, set up in 1969 to develop and market tourism, working in partnership with the tourist industry and with other bodies. The policies of the Wales Tourist Board are directed towards yielding the optimum economic and social benefit to the people of Wales; implicit within them is a concern to protect and enhance the environment, and to sustain and promote the culture and the language of Wales. Research is a major WTB activity, being used to measure the effectiveness of our programmes and to identify new policy priorities.

Publications and Reports

WTB1 *United Kingdom Tourism Survey (UKTS)*

This monthly home interview survey measures the levels and characteristics of travel by UK residents, for one night or more, for any purpose. This survey began in 1989.

Published: "The UK Tourist - Statistics 1991"*
Researchers: NOP Market Research Ltd
Authors: ETB/NITB/STB/WTB
Date: July 1992
Publisher: ETB/NITB/STB/WTB
ISBN: 0-96143-162-6
Price: £55.00

* Information from UKTS is also used by the WTB to produce a series of factsheets on Tourism in Wales together with three detailed regional profiles on tourism in North, Mid and South Wales. Factsheets are available from the Research and Corporate Planning Department at no charge.

WTB2 *Survey of Occupancy in Welsh Hotels*

Undertaken since 1972 this monthly survey is based upon a postal enquiry among a representative sample of hotels throughout Wales. Occupancy rates are calculated as a ratio of available bedspace and rooms, and are analysed according to such factors as region, hotel size and tariff. In addition, overseas arrivals are expressed as a percentage of total hotel users.

Published: "Welsh Hotel Occupancy Survey"
Authors: Pannell Kerr Forster, WTB
Date: 1993
Price: £50.00

WTB 3 *Demand Monitoring Survey*

The purpose of this annual monitoring exercise is to track occupancy levels in self-catering accommodation in Wales and to record volumes of visitors to attractions in Wales. Other useful visitor data is collated in the process. The survey operates during the peak tourism months of May through to September. 1992 was the sixth year of operation.

Published: "Survey of Tourism Trends in Wales 1992 - Management Summary"
Authors: Beaufort Research Ltd.
Date: 1993
Price: £10.00

WTB4 ***Survey of Attendance at Visitor Attractions***

The purpose of this annual survey is to monitor numbers of visitors to the main tourist attractions in Wales. The survey is undertaken by means of an annual postal enquiry, covering all significant attractions throughout Wales. Information is held on a database which provides time-series data for a 15 year period.*

Published: "Survey of Attendance at Visitor Attractions"
Author: WTB
Date: annual

* Equivalent surveys are undertaken in England, Scotland and Northern Ireland and the results are published jointly in "Sightseeing in the UK", price £19.00.

WTB5 ***Farm Tourism Study***

This study examines the significance, structure and impact of Farm Tourism in Wales. Future market prospects will be considered and recommendations will be made regarding the future development and marketing of farm tourism enterprises.

Ongoing ad hoc survey - final report to be published on completion
Researchers: John Brown & Co.

WTB6 ***Tourism and the Community***

The Wales Tourist Board is preparing a new medium term strategy for tourism in Wales. In order to assist with the preparation of the strategy the Board has commissioned an independent report on tourism and the community. The study considers the interrelationship between tourism and the community with a view to promoting discussion and highlighting policy options.

Published: "Tourism and the Community - a Paper for Discussion"
Author: Stevens T
Date: October 1992
Price: £5.00

WTB7 ***Tourism and the Environment***

In order to assist with the preparation of the new medium term strategy the Board has commissioned an independent report on tourism and the environment. The study considers the interrelationship between tourism and the physical and built environment.

Published: "Tourism and the Environment - a Paper for Discussion"
Author: Denman R
Date: October 1992
Price: £5.00

WTB8 ***The Future for Wales' Coastal Resorts***

In order to assist with the preparation of the new medium term strategy the Board has commissioned an independent overview of the future of Wales' coastal resorts.

Published: "Prospects for Coastal Resorts - a Paper for Discussion"
Author: PA Cambridge Economic Consultants
Date: October 1992
Price: £5.00

WTB9 *Tourism Infrastructure in Wales*

This discussion paper is concerned with the provision of basic tourism infrastructure and covers roads, public transport, information provision and visitor facilities.

Published: "Infrastructure Services for Tourism - a Paper for Discussion"
Author: WTB
Date: November 1992
Price: £5.00

WTB10 *Consumer Issues*

This discussion paper examines the concept of customer care across a breadth of the industry and highlights issues of concern to the consumer.

Published: "Customer Care and Customer Issues - a Paper for Discussion"
Author: WTB
Date: November 1992
Price: £5.00

WTB11 *Training in the Tourism Industry*

This discussion paper deals with the topic of human resource development for the tourism industry in Wales.

Published: "Tourism Training - on Target?"
Author: WTB
Date: November 1992
Price: £5.00

WTB12 *Tourism 2000: A Perspective for Wales*

This report analyses the current market position of tourism in Wales and considers the industry's future strengths and weaknesses in relation to expected future demand trends.

Published: "Tourism 2000: A Perspective for Wales"
Author: Wanhill S
Date: April 1992
Price: £5.00

WTB13 *Tourism 2000: A Strategy for Wales*

Tourism 2000: a Strategy for Wales is designed to take tourism in Wales into the next century. It is an integrated strategy, one which covers development, marketing and organisational issues. It is designed to be a strategy for Tourism as a whole, not just for the WTB.

To be published: "Tourism 2000: A Strategy for Wales"
Author: WTB
Date: Autumn 1993

Contact for Research Enquiries:

Elwyn Owen, Director of Research and Corporate Planning, Wales Tourist Board, Brunel House, 2 Fitzalan Road, Cardiff CF1 9LJ Tel: 0222 499909